

A wide-angle photograph of a vast field of flowers. The foreground and middle ground are filled with numerous purple, spiky flowers and yellow, daisy-like flowers with dark brown centers. The field extends to a distant treeline under a cloudy, overcast sky. The overall scene is a lush, natural landscape.

ATLAS OF THE VASCULAR PLANTS OF ARKANSAS

EDITED BY

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GEORGE P. JOHNSON

BRENT T. BAKER

C. THEO WITSELL

JENNIFER D. OGLE



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OF ARKANSAS**

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A PUBLICATION OF THE ARKANSAS VASCULAR FLORA PROJECT

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COVER PHOTOGRAPH: Rattlesnake-master (*Eryngium yuccifolium*), large coneflower (*Rudbeckia grandiflora* var. *grandiflora*), and prairie gayfeather (*Liatris pycnostachya* var. *pycnostachya*) in bloom at Cherokee Prairie Natural Area near Charleston in Franklin County. At 584 acres, this natural area represents one of the largest tallgrass prairie remnants in the state and provides a rare glimpse into the presettlement landscape of the western Arkansas Valley. Cherokee Prairie is protected by the Arkansas Natural Heritage Commission (ANHC) and is home to hundreds of native plant species, including 14 species of state conservation concern. For more information visit www.naturalheritage.com.

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GENERAL INTRODUCTION

The *Atlas of the Vascular Plants of Arkansas* is the second publication of the Arkansas Vascular Flora Committee (AVFC); the first was a *Checklist of the Vascular Plants of Arkansas* (AVFC 2006). The AVFC was organized on September 17, 1999, to provide direction and coordination for the Arkansas Vascular Flora Project. The AVFC includes personnel from many of the state's institutions of higher education, a state agency, and private industry. The ultimate goal of the AVFC is to publish a definitive treatment of the vascular flora of Arkansas. The *Atlas* is the second step toward accomplishing that goal and is intended to provide the most up-to-date knowledge of the geographic distribution of native and naturalized vascular plants in the state.

The *Atlas* contains a general history of botanical exploration and investigations in Arkansas, as well as an explanation of the geology and natural divisions of the state and how each relates to the state's vegetation. Also included is a summary of Arkansas' known flora.

This introductory material is followed by the main body of the *Atlas*, which consists of county-level distribution maps of the 2,892 native and naturalized taxa (species, subspecies, varieties, and a few widely recognized hybrids) of vascular plants known to occur outside of cultivation in Arkansas, representing 2,715 species, 936 genera, and 187 families. The main body of the *Atlas* is organized into four major sections: Pteridophytes (ferns and fern allies), Gymnosperms (conifers), Angiosperm Dicots, and Angiosperm Monocots. Within each of these sections, the maps are further arranged hierarchically and alphabetically by the scientific name of the family, genus, species, subspecies, variety, and a few selected putative hybrids (denoted with a multiplication symbol [×]). To aid the user, each map page has a heading that consists of the family and genus names corresponding to the top, left map of each page.

Each map is presented with county dots representing one or more voucher specimens deposited at an herbarium and authenticated by a member of the AVFC or by botanists at herbaria outside of Arkansas. In a few instances, taxa listed in the *Atlas* are supported by literature citations that specifically reference a voucher specimen and the herbarium at which it is deposited. There are numerous reports, not included in the maps, of additional taxa for the state, as well as a multitude of additional county reports for included taxa, for which a voucher specimen either does not exist or cannot be located for confirmation. Additionally, the absence of a dot in a county does not imply the absence of that particular taxon but merely that a voucher specimen has not been located or confirmed at any of the reviewed herbaria. It is the hope of the AVFC

that some of these distribution gaps will continue to be filled as botanists are spurred by this new *Atlas* to seek out and collect appropriate voucher specimens. The AVFC requests that botanists or herbarium curators send appropriate data (taxon name, collector name, collection number, and herbarium of deposit) on such county record voucher specimens to the coordinating office of the Arkansas Vascular Flora Project for inclusion in future updates of the *Atlas* and in an online version that will be available within a couple years.

Below each map, the family name, the taxon's scientific name, and the authority are listed. The standard forms and abbreviations for the authorities of scientific names follow those recommended by Brummitt and Powell (1992), when available.

Common names for each taxon are listed below the scientific names. An effort has been made to provide the most common vernacular names within Arkansas or the region. In many cases, more than one name is listed for a taxon; however, the lists are by no means comprehensive. An effort has also been made to somewhat standardize the use and application of common names for Arkansas plants, roughly following the guidelines set forth by Kartesz and Thieret (1991). It should be noted that multiple and sometimes unrelated taxa may share the same common name.

To the right of some maps is a numerical code indicating special status for that taxon. Special status can include the following:

- 1 – introduced (non-native) to Arkansas;
- 2 – endemic to Arkansas;
- 3 – non-native invasive; and/or
- 4 – of special conservation concern in Arkansas.

All taxa without a "1" designation are herein considered native to Arkansas; in other words, these plants are believed to have occurred in the state prior to European settlement. Taxa with a "1" designation are considered introduced, or non-native, to Arkansas, regardless of continent, country, or state(s) of origin. Some such plants have been naturalized as a direct result of cultivation, such as the planting of Japanese honeysuckle (*Lonicera japonica*) for ornamental purposes. Others have been passively or accidentally introduced, often as a result of human alteration of the environment; this has sometimes been followed by naturalization, as in the case of Japanese stilt grass (*Microstegium vimineum*).

The designation of plants as native to Arkansas is based on the best available data and information reviewed while researching and preparing the *Atlas*. There

are, however, a number of taxa for which data are insufficient to make a definitive call on native status within the state—or even, occasionally, within the country. One such example is saltbush (*Baccharis halimifolia*), also called groundsel-tree or sea-myrtle. Saltbush, which tolerates brackish water, is native to the Atlantic and Gulf Coastal Plain of the United States, primarily to wet habitats such as marshes and stream banks. In the 1930s (the dates of the oldest Arkansas herbarium specimens), saltbush was known in only a few extreme southern counties of Arkansas, often in association with brine and disturbances near oil wells, which had only been in place since the early 1920s. The species has subsequently expanded its range northward, often following avenues of disturbance such as highway and railway ditches. It is now frequently encountered throughout the southern two-thirds of the state, and scattered occurrences have been documented in the Ozark Plateaus. Saltbush very well may have naturally occurred in marshes or along rivers in the Coastal Plain of extreme southern Arkansas, but it is just as possible that it did not spread to the state until the advent of the Arkansas oil industry, initially occupying the brackish waters in disturbed areas around wells and then spreading to semi-natural and natural areas from there. Saltbush is given the benefit of the doubt in the *Atlas* and is assumed to be native to extreme southern Arkansas. This and other ambiguously native taxa are not explicitly indicated as such in the *Atlas* and may currently be treated as either native or introduced by the AVFC. Further research may help elucidate their true status, but a definitive answer will likely not be forthcoming for some taxa.

It should be noted that in most cases, introduced taxa have been included in the *Atlas*—and, therefore, formally recognized as members of the Arkansas flora—only if they are naturalized, which we somewhat simply define as “spontaneously reproducing without human assistance.” Although it is not strictly followed in the present work, Nesom (2000) provided a more detailed definition that includes the additional qualifier that such taxa not only reproduce without human assistance but also “[maintain] viable populations from year to year (more than just one or a few seasons), and [disperse] without deliberate human assistance beyond the population or populations of original establishment.” A few taxa that have been included in the *Atlas* might be better classified as “waifs” or “persisting” following Nesom’s (2000) definition. Demonstrably “cultivated” taxa have not been included and are not considered members of the Arkansas flora.

The eleven taxa with a special status designation of “2” are those that are currently known to occur only within the borders of Arkansas (see also Appendix II for a list of Arkansas endemic taxa). A few of these are

known from border counties and even from localities very near the state line; thus, they may eventually be found in neighboring states.

A special status designation of “3” indicates that the taxon is both non-native and considered invasive to the point of ecological and/or economic concern. Although Arkansas does not have an officially recognized invasive-species list that ranks the most problematic or potentially problematic plants in the state, various federal, regional, and state lists were consulted by the AVFC in order to establish a working list that was originally presented in the *Checklist*. Many of the “invasive” designations in the *Atlas* are based on that list, and they are applied only to taxa that are non-native to North America. It is important to note, however, that some native taxa, such as eastern red-cedar (*Juniperus virginiana* var. *virginiana*), can be quite invasive under certain circumstances, often with ecological consequences similar to those of some non-native invasive plants (see discussion on page 25).

A special status designation of “4” indicates that a taxon is of conservation concern at the state and/or global level on the basis of its rarity or restricted range, as designated by the Arkansas Natural Heritage Commission (see Appendix VI for a consolidated list of Arkansas vascular plant taxa of conservation concern).

Classification and nomenclature in the *Atlas* generally follow published treatments in *Flora of North America North of Mexico* (Flora of North America Editorial Committee 1993+) and recent floras of adjacent states (e.g., Diggs et al. 1999, 2006; Yatskievych 1999, 2006) and regions (e.g., Weakley 2008), as well as national electronic checklists and databases (e.g., Kartesz 2009; PLANTS Database [USDA 2008]; Tropicos 2008) but also reflect more recently published and scientifically sound taxonomic and nomenclatural changes.

Results of phylogenetic analyses using molecular techniques have led to the realignment of many once established taxonomic groups. The AVFC has accepted a number of these recent realignments for the *Atlas*; some differ significantly from the traditional alignments accepted by Smith (1988, 1994). A few of the most notable changes since Smith are as follows. Many members of the traditional Polypodiaceae have been segregated into the families Aspleniaceae, Blechnaceae, Dennstaedtiaceae, Dryopteridaceae (of which some members have been further divided into Lomariopsidaceae, Onocleaceae, and Woodsiaceae), Pteridaceae, and Thelypteridaceae. Within the Asteraceae, all Arkansas members of the genus *Aster* are segregated into four additional genera: *Doellingeria*, *Eurybia*, *Ionactis*, and *Symphotrichum*. The genus *Aster*, being primarily a genus of the Old World in its strictest circumscription, is no longer recognized as a member of the state flora. Additionally, several species formerly placed within the genus *Senecio*

are now treated in *Packera*, while some species formerly placed within the genus *Eupatorium* are segregated into four additional genera: *Ageratina*, *Conoclinium*, *Eutrochium*, and *Fleischmannia*. The members of the traditional families Aceraceae and Hippocastanaceae are now treated within Sapindaceae. *Hydrocotyle* has been transferred from Apiaceae to Araliaceae. The traditional Asclepiadaceae is now being treated in Apocynaceae. *Polypremum* is now recognized in Tetrachondraceae; thus, Buddlejaceae is now excluded from the Arkansas flora. Some members of Caprifoliaceae have now been placed in Adoxaceae. The genera *Cleome* and *Polanisia*, traditionally treated in Capparaceae, are now segregated into Cleomaceae. The genera *Leptopus* (*Andrachne*) and *Phyllanthus*, traditionally treated in Euphorbiaceae, are now separated into Phyllanthaceae. Fumariaceae is now treated within Papaveraceae. Hydrophyllaceae is now treated within Boraginaceae, with the exception of *Hydrolea*, now treated in Hydroleaceae. *Leimeria* is now treated as a member of Simaroubaceae. Within Polygonaceae, many members of the genus *Polygonum* are now segregated into the genera *Fallopia* and *Persicaria*. Some members of Primulaceae are now treated in Myrsinaceae and Theophrastaceae. Some members of Saxifragaceae are now separated into four additional families: Grossulariaceae, Hydrangeaceae, Iteaceae, and Penthoraceae. Many members of the traditionally transcribed Scrophulariaceae are now segregated into Linderniaceae, Orobanchaceae, Phrymaceae, and Plantaginaceae. The families Sterculiaceae and Tiliaceae are now treated within Malvaceae. The genus *Celtis*, traditionally treated within Ulmaceae, is now treated within Cannabaceae. Some members of Liliaceae and Amaryllidaceae are now classified within 13 additional families: Agavaceae, Alliaceae, Asparagaceae, Colchicaceae, Hemerocallidaceae, Hyacinthaceae, Hypoxidaceae, Melanthiaceae, Nartheciaceae, Ruscaceae, Smilacaceae, Themidaceae, and Trilliaceae. Lemnaceae is now treated within Araceae. Within Poaceae, 12 additional generic names are recognized: *Bothriochloa*, *Coelorachis*, *Dichantherium*, *Luziola*, *Pascopyrum*, *Phanopyrum*, *Piptochaetium*, *Saccharum*, *Schedonorus*, *Schizachyrium*, *Steinchiisma*, and *Urochloa*. Sparganiaceae is now treated within Typhaceae.

Nomenclatural and family alignment changes are continually occurring as new research is conducted and new literature is published. This *Atlas* represents a mere snapshot in time and the most prudent judgment on the part of the editors with regard to recognized nomenclature and family alignments. Changes were incorporated until a certain stage of the compiling and editing process. Subsequent updates and future publications will certainly reflect additional changes.

In some cases, infraspecific taxa that are recognized by some botanists within certain species have been re-

ported for Arkansas. However, because of inconsistencies in their recognition or inadequate understanding of their delimitations in the state, such infraspecific taxa are not currently recognized in this treatment. Perhaps, with more research and a more detailed review of Arkansas specimens, some of these infraspecific taxa may be added to the state flora list in the future.

Additionally, because of uncertainty about the exact distributions within Arkansas of some other, recognized infraspecific taxa of certain species, it was necessary to combine such taxa for mapping purposes. Complete scientific names, common names, and status codes for the infraspecific taxa of the combined maps are provided in Appendix I.

In the taxonomically challenging and perplexing genus *Rubus*, additional maps are required for subgenus *Rubus* sections *Arguti* (high-bush blackberries) and *Flagellares* (dewberries). To aid in the identification of these brambles, it is necessary to make proper collections of both florican and primocane from the same rootstock (Bailey 1932, 1941). Although at least usually identifiable to section, because many of our *Rubus* specimens do not represent the aforementioned collection method, they are, unfortunately, not identifiable to species. In order to at least partially represent the geographic distribution of these Rubi within Arkansas, it is necessary to include two additional maps based on those collections only identifiable to section. These section maps can be found following the *Rubus* species maps.

Following the appendix of combined infraspecific taxa are a list of Arkansas endemic taxa (Appendix II) and an index of all vascular plant families treated in this *Atlas*, along with their common names (Appendix III). Appendix IV is an annotated list of additional taxa that are reported for the state by various sources but for which voucher specimens have yet to be located and/or reviewed for confirmation. Appendix V consists of an annotated list of taxa that have either been erroneously attributed to Arkansas or are not currently recognized as valid taxa. Appendix VI consists of a list of Arkansas vascular plants of conservation concern as designated by the Arkansas Natural Heritage Commission.

The appendices are followed by a complete list of literature cited or otherwise referenced in the *Atlas* and a full index. The index includes accepted scientific names and common names for all families and taxa, as well as synonyms used by Smith (1988, 1994) or in the *Checklist* (AVFC 2006), with direction as to the currently accepted name. However, given the more limited scope of the *Atlas*, complete synonymy is not provided. Smith (1988) and other state and regional manuals and databases should be consulted for more complete synonymy.

The *Checklist* and *Atlas* serve as a foundation for the planned definitive treatment of Arkansas' vascular flora, the *Manual of the Vascular Plants of Arkansas*. The

Manual will include keys to plant families, genera, and species; morphological descriptions; habitat information; geographic distribution maps; pertinent synonymy; and illustrations for the nearly 2,900 Arkansas vascular plant taxa, including color photographs of about 250 species. In addition, the *Manual* will include a comprehensive introduction to the natural divisions, geology, soils, climate, vegetation, and botanical history of Arkansas. Species status (native and introduced, invasive, special

concern, endemic, and poisonous) will also be presented.

The AVFC actively solicits information concerning additions, deletions, or corrections to the *Atlas*, as well as general comments about the publication. Send comments to Johnnie L. Gentry at the coordinating office of the Arkansas Vascular Flora Project. Contact information is available on the Flora Project's website (www.uark.edu/~arkflora).

HISTORY OF BOTANICAL EXPLORATION IN ARKANSAS

By GARY E. TUCKER

Arkansas has six major river systems: the Arkansas, Mississippi, Ouachita (including the Saline), Red, St. Francis, and White. Each system has numerous tributaries, some of which are quite large. From the beginning of historical times, many of these larger streams were navigable, and they served as roads for the early explorers of our region. Hernando de Soto (ca. 1500–1542) is believed to have been the first European explorer to reach Arkansas. His exact route is unknown, and often contested, but de Soto and approximately 400 Spanish troops apparently reached the Mississippi River at a site near present-day Memphis, Tennessee, in the spring of 1541. The expedition crossed the river and continued its travels westward into parts of the present states of Arkansas, Oklahoma, and Texas, exploring northeastern Arkansas, the Arkansas River and Arkansas River Valley, the Caddo River, and the area of present-day Hot Springs. De Soto is believed to have died in May 1542 near the Mississippi River in southeastern Arkansas.

Spanish conquistadors were followed, well over a century later, by French explorers in the Mississippi River Valley searching for minerals and furs. Early explorers established settlements along the Mississippi River at the confluence of large tributaries, including the Arkansas River. Jacques Marquette (1637–1675) and Louis Joliet (1645–1700) reached the mouth of the Arkansas River in the fall of 1673, and Henri de Tonti (1649–1704) established Arkansas Post, known as “Poste de Arkansaw,” a trading post at the Quapaw village of Osotouy, in 1686. That early settlement near the confluence of the White and Arkansas rivers was the first semi-permanent non-Native American settlement in the lower Mississippi River Valley. Jean-Baptiste Bénard de La Harpe (1683–1765), after stopping at Arkansas Post in February 1722, was among the first Europeans to ascend and explore the Arkansas River, founding a trading post near “La Petite Roche,” the site of present-day Little Rock. Arkansas Post played an important role in the long struggle between France, Spain, and England over which country would control the interior of the North American continent.

The Spanish government took control of Louisiana, which at the time included the area of present-day Arkansas, from the French in 1762 with the Treaty of Fontainebleau. The French regained Louisiana in 1800 with the Treaty of San Ildefonso. The United States acquired Arkansas Post as a part of the Louisiana Purchase in 1803. Because Arkansas Post was a thriving port on the Arkansas River and the largest city in the region, it was selected as the first capital of Arkansas Territory in 1819.

By the time the territorial capital was established at Arkansas Post, explorers had entered other areas of what is now Arkansas. Thomas Jefferson, wanting to know more about the lands acquired through the Louisiana

Purchase, encouraged explorations throughout the former Louisiana Territory. William Dunbar (1749–1810) and George Hunter (1755–1823) ascended the Red River and the “Washita” (Ouachita) River and explored the area of “the hot springs” in late 1804 and early 1805. Thomas Freeman (died 1821) and Peter Custis (1781–1842), the first trained naturalist appointed to a United States government exploring party, led an additional expedition up the Red River in 1806. Both expeditions made notes on the plants, habitats, and geologic features that were observed, which serve as the earliest botanical accounts for the state.

Some of the bounty lands awarded for military service in the War of 1812 were located in Arkansas, and that brought settlers from eastern states and a need for surveyed lands. The Government Land Office surveys initiated in 1815 for the lands of the Louisiana Purchase opened the territory for more widespread population growth and development. Arkansas Territory existed from July 1819 until June 1836, when Arkansas became the 25th state. The establishment of territorial government may have served as a stimulus for visits by a number of talented observers of natural history.

Henry Rowe Schoolcraft (1793–1864) was a geologist who visited the Ozark region of the Missouri and Arkansas territories in 1818–1819. In his *Journal of a Tour into the Interior of Missouri and Arkansas* (1821), he wrote excellent descriptive accounts of the landscape, including some of the earliest descriptions of the prairies of the White River country of the Ozark Plateaus.

Thomas Nuttall (1786–1859) came to Arkansas Territory at approximately the same time as Schoolcraft. Nuttall was an Englishman who traveled up the Arkansas River from Arkansas Post to eastern Oklahoma in 1818–1819. His *A Journal of Travels into the Arkansa Territory during the Year 1819, with Occasional Observations on the Manners of the Aborigines* (1821) provides great insight into the vegetation of the area prior to extensive European settlement. One of the first trained botanists to visit the region, Nuttall described many species new to science from what is now Arkansas. Many of the plants he lists for the Arkansas Territory (Nuttall 1835) were observed or collected in the present state of the same name.

In 1820, Major Stephen H. Long (1784–1864) was commissioned to explore the West in search of headwaters of the Red and Arkansas rivers. The botanist Edwin James (1797–1861) was a member of that expedition, which ended without meeting its objectives, though it greatly increased knowledge of the geography of the West. James and other members of that expedition returned from the West through Oklahoma, entered Arkansas Territory at Fort Smith, and continued to Hot Springs. James kept a detailed journal of the plants and habitats they encountered on their trek, increasing our botanical knowledge of

Arkansas at the time of early European settlement (James 1823). Near Hot Springs, James and his traveling companions picked up the Southwest Trail for the final leg of their trip to Cape Girardeau, Missouri. The Southwest Trail stretched from Illinois to Texas, with the Arkansas portion closely following the geologic fall line along an old Native American trail that ran from Randolph County south to modern-day Searcy and on to Little Rock, Benton, Old Washington, and Fulton on the Red River.

The English geologist George William Featherstonhaugh (pronounced “Fanshaw”) (1780–1866) made his way through Arkansas in 1835 along the Military Road, which generally followed the path of the Southwest Trail. He made a side trip to visit Magnet Cove and Hot Springs, where he made observations on relationships between vegetation and rock types.

A resident botanist and physician of St. Louis, George Engelmann (1809–1884) played an important role in the layout and development of the Missouri Botanical Garden at St. Louis. Engelmann visited and made plant collections in central Arkansas, including Hot Springs, during 1835–1837.

Another St. Louis botanist of approximately the same period who had ties to Arkansas was the Prussian botanist Augustus Fendler (1813–1883). Having first moved to St. Louis in 1839, Fendler moved between Missouri and other areas to the south and southwest numerous times in the following years. He made a significant discovery at Camden in 1850 with his collection of the rare silky-camellia (*Stewartia malacodendron*).

By the time of Arkansas statehood in 1836, its infrastructure included several well-traveled roads. The most important was the previously discussed Military Road (or Southwest Trail) used in movements of military personnel. Other well-used routes during the territorial period included roads extending from Memphis to Little Rock, from Little Rock to Fort Smith, from present-day Chicot County to Camden to Washington, and from Jackson, near present-day Imboden, to Fayetteville to Fort Smith. The years leading up to the Civil War and then the period of Reconstruction brought prolonged difficulties to Arkansas and were a period of few improvements in infrastructure. A train ride across the generally swampy landscape from Little Rock to Memphis in 1862 averaged 32 hours for a distance of about 140 miles. Rail lines from St. Louis to Texarkana and from Little Rock to Fort Smith were completed by 1874, but most travel at that time was still by horseback or stagecoach.

By the time of the Civil War, many explorers from outside Arkansas had visited the state. With the exception of Thomas Nuttall and Edwin James, however, few of those visitors were trained botanists. Moreover, almost none of the numerous early expeditions focused primarily or even secondarily on accurate descriptive accounts of vegetation or plant species.

Arkansas Industrial University (now the University

of Arkansas) was established at Fayetteville in 1871. In 1875, Francis LeRoy Harvey (1850–1900) came from Iowa to join the Natural Sciences faculty. He established the herbarium at the university in 1875, and his specimen labels provide ample evidence of his many visits to numerous regions of the state. University faculty members traveled on a pass from the railroad, which Harvey used to reach areas far from Fayetteville. He published widely in the recognized scientific journals of his day and maintained active correspondence with many of the country’s leading botanists, including Asa Gray at Harvard University. Harvey remained at Fayetteville until 1885, when the state legislature removed all faculty members from the institution. After leaving, he moved to Maine and worked at what is now the University of Maine at Orono, where he served as an entomologist until his death at the age of 50. The University of Arkansas awarded its first Ph.D. to Harvey in 1890.

Although Harvey made extensive collections and published numerous papers, he did not attempt a checklist of the entire flora of the state. The earliest checklist of Arkansas plant species is the 1860 work of government scientist Leo Lesquereux (1806–1889), who visited parts of the Ozark region in the winter of 1859. Although employed primarily as a geologist, Lesquereux was a trained bryologist and paleobotanist. While in Arkansas, he studied both the fossilized and living floras. However, Lesquereux’s checklist is meager and, because his field work was performed during the dormant season, heavily biased toward woody species.

The first attempt at a comprehensive, statewide checklist is the 1891 work of Branner and Coville. John Casper Branner (1850–1922), State Geologist, discovered bauxite in Arkansas in 1887. Frederick Vernon Coville (1867–1937) was a longtime U.S. Department of Agriculture botanist. Their list, like Lesquereux’s and those of some subsequent authors, contained a fair number of erroneous reports for the state but nonetheless was a milestone in Arkansas botany. In 1926, John T. Buchholz and Ernest Jesse Palmer (see full discussion of these two men below) published a long list of additions to Branner and Coville’s checklist.

Delzie Demaree (1889–1987) began studying the Arkansas flora in the 1920s and published a checklist of the woody flora of the state in 1932. He had come from Ohio to join the faculty of Hendrix College in Conway in 1922. He remained at Hendrix until 1926, when he became a faculty member at the University of Arkansas at Fayetteville. Demaree then left Arkansas in 1930 to attend Stanford University, where he completed his Ph.D. in plant physiology in 1932. He returned to Arkansas in 1936 as a faculty member of the Arkansas Agricultural and Mechanical College at Monticello (now the University of Arkansas at Monticello), where he stayed until 1946. He then moved to Arkansas State College at Jonesboro (now Arkansas State University). Following retirement from

Arkansas State College in 1953, he learned that his employment history was inadequate to qualify him for Social Security benefits. He enrolled at Henderson State Teachers College in Arkadelphia (now Henderson State University) and completed teacher certification requirements, which enabled him to teach on a Navajo Indian reservation in Arizona long enough to complete the Social Security requirements. He then returned to his home in Hot Springs, where he lived until not long before his death. Demaree's 1943 catalogue of the vascular plants of Arkansas was self-published as the first and only issue of his journal *Taxodium*, distributed primarily among friends. That checklist was based on determinations he had received from botanical specialists to whom he had sent specimens. Demaree's work was sometimes controversial, with some botanists charging that his reliance on public transportation instead of driving his own car meant that he failed to collect many species. Others decried his habit of giving the location of the nearest post office as adequate location data for herbarium specimen labels. Despite those shortcomings, however, the fact remains that no other worker has come close to matching his Arkansas plant collections in terms of specimen numbers. It has been estimated that he distributed approximately 300,000 specimens to numerous herbaria.

Dwight Munson Moore (1891–1985), an Ohio native and holder of a Ph.D. in plant physiology from Ohio State University, came to the University of Arkansas as a faculty member in 1924. Although trained as a plant physiologist, he began collecting botanical specimens for the university herbarium soon after arriving in Arkansas. He was especially interested in woody flora, and his collections include many rare or otherwise unusual members of the state's flora. Moore published a number of papers on Arkansas' flora, including checklists of the woody plants (1941) and grasses (1961) of the state. After retiring from the University of Arkansas in 1950, Moore taught forestry at the Arkansas Agricultural and Mechanical College at Monticello (now the University of Arkansas at Monticello). He was a visiting professor at universities in Saigon and Hue, South Vietnam, in 1958–1959. During 1961–1967, he was a Biology Department chairman and botany teacher at Arkansas Polytechnic College in Russellville (now Arkansas Tech University). He worked at establishing the South Arkansas Arboretum at El Dorado during 1967–1970. Finally, he retired with his second wife, Clementine, to her home in Rudy until his death in 1985. During his long career, Moore provided botanical training to many individuals who either became professional botanists or served as state and federal agency personnel. He was extremely active in the garden club movement and was very effective at taking botany to many segments of the lay public. He revised *Trees of Arkansas* (1960), a book that made his name familiar to schoolchildren throughout the state; it is still widely distributed by the Arkansas Forestry Commission. Moore

also described *Delphinium newtonianum* (Moore's delphinium), an Arkansas endemic species.

Ernest Jesse Palmer (1875–1962) was a self-trained botanist, born in England but a long-time resident of Webb City, Missouri. During his long career, he made many botanical field trips to Arkansas and published numerous papers related to the Arkansas flora. He was first employed by the Arnold Arboretum at Harvard University in 1915 as a plant collector working throughout the South and Southwest from his Missouri home base. In 1921, Palmer moved to the Arnold Arboretum to assume a resident botanist position. After his retirement in 1948, he returned to Webb City. He co-authored with John T. Buchholz a major paper in 1926 that added numerous species to the Branner and Coville 1891 checklist of Arkansas' flora. Palmer was a mentor of Julian Alfred Steyermark (1909–1988), with whom he collaborated on various botanical projects, many of which were related to the Missouri flora. An extremely talented floristic botanist, Palmer also worked on more traditional monographic studies of certain woody plant groups considered difficult by many botanists (e.g., *Crataegus* [hawthorns] and *Quercus* [oaks]). He was a contemporary of several other plant collectors active in Arkansas and Missouri.

George W. Letterman (1841–1913), a public school teacher at Allenton, Missouri, made many collecting trips into Arkansas. He discovered the rare two-wing silverbell (*Halesia diptera*) in the state in Nevada County in 1887.

Benjamin Franklin Bush (1858–1937) was an early collector for the Arnold Arboretum. He studied the genus *Crataegus* and made numerous early collections in Arkansas and neighboring Missouri. Bush was older than Palmer and had begun his plant collecting in 1882. He encouraged Palmer to study many of the same difficult genera on which he himself had worked, and he probably played a role in the employment of Palmer at Harvard University.

William Trelease (1857–1945) was another botanist of Palmer's time who extensively collected plants in the Ozarks region of Arkansas and Missouri. During his earlier years, he served as Director of the Missouri Botanical Garden in St. Louis, a location that allowed him to make many trips into Arkansas.

William Willard Ashe (1872–1932) frequently visited Arkansas during a professional career that spanned the years from 1892 to 1932. He began work with the U.S. Forest Service in 1905. One of Ashe's largest contributions to forest conservation was his field work toward, and coordination of, national forest land acquisitions in the eastern United States, from before the passage of the Weeks Act in 1911 until the time of his death in 1932. Ashe made significant contributions to botany, dendrology, and ecology in the eastern United States. During his years of Forest Service employment, he made collections over much of northern Arkansas and was particularly interested in woody flora. In 1923 he described the Ozark chinquapin (as *Castanea ozarkensis*, herein treated as *C.*

pumila var. *ozarkensis*), which was new to science.

John Theodore Buchholz (1888–1951), a collaborator of Palmer's on the 1926 additions to Branner and Coville's checklist, came to Arkansas in 1909 as one of the original faculty members at Arkansas State Normal School in Conway (now the University of Central Arkansas). He remained in Conway until 1918, when he moved to Fayetteville, where he served as a botany faculty member at the University of Arkansas until 1926. Buchholz is perhaps best remembered as an outstanding plant morphologist with a major expertise in gymnosperms. During his years in Arkansas, he conducted extensive field work and described Ashe's juniper, or Ozark white-cedar (*Juniperus ashei*), as a new species. He had a major interest in woody plants and was co-author of *Common Forest Trees of Arkansas* with Wilbur R. Mattoon (1875–1941), extension forester with the U.S. Forest Service, in 1924.

Flora A. Haas came to Arkansas State Teachers College in Conway (now the University of Central Arkansas) in 1930 and remained active as a field botanist until her departure in 1945.

In the years following World War II, several veteran botanists long associated with the Arkansas flora retired, and a new generation began botany investigations in the state. Ernest Jesse Palmer retired from Harvard in 1948, Dwight Moore from the University of Arkansas in 1950, and Delzie Demaree from the Arkansas State College in 1953. Jewel E. Moore (born 1918) came to Arkansas State Teachers College in Conway as a botanist and ecologist in 1947, when she became a member of the tiny cadre of the state's resident botanists. The community ecologist Edward Everett Dale, Jr. (1920–2009), and plant taxonomist Hugh Hellmut Iltis (born 1925) came to the University of Arkansas in the period following Dwight Moore's retirement, and Dale served as an interim herbarium curator. Few Arkansas botanists have matched Dale in terms of publications on the state's flora and on community structure and composition.

Edwin Burnell Smith (born 1936) came to the University of Arkansas in 1966 and remained there until his retirement in 1998. During that period, he published widely on *Coreopsis* (tickseeds), the subject of his doctoral dissertation at the University of Kansas. Smith did not personally conduct many floristic field studies, but he made huge contributions to Arkansas botany when he published two editions of *An Atlas and Annotated List of the Vascular Plants of Arkansas* (1979 & 1988) as well as *Keys to the Flora of Arkansas* (1994). He served as herbarium curator and directed thesis studies of numerous graduate students until his retirement in 1998, when he was succeeded in that position by Johnnie L. Gentry (born 1939), who later initiated and became the director of the Arkansas Vascular Flora Project.

The Arkansas Natural Heritage Commission was formed in 1973 and has played an important role in discovering

and tracking rare species and in purchasing and protecting natural areas. Some of the state's most significant habitats for rare plant species have been preserved by the commission's efforts. Commission botanists and plant ecologists have made important contributions toward improved knowledge of Arkansas' vascular flora, with commission botanists finding numerous species that were new to the state and several that were new to science.

Working on his doctoral dissertation at Southern Illinois University, W. Carl Taylor (born 1946) investigated the pteridophytes of Arkansas in the mid-1970s. That work resulted in *Arkansas Ferns and Fern Allies*, which was published in 1984.

The Arkansas Native Plant Society was organized in 1980 to promote preservation, conservation, and study of the wild plants and vegetation of Arkansas; to educate the public about the value of the native flora and its habitats; and to publish related information. The society serves as a bridge between the professional botanist and the non-professional with intense botanical interests. In several instances, nonprofessionals have developed their talents to a high level of excellence. Perhaps foremost among those individuals was Carl Glenn Hunter (1923–2005), a former assistant director of the Arkansas Game and Fish Commission. Hunter published three widely distributed works, all illustrated with his superb photography: *Wildflowers of Arkansas* (six editions); *Trees, Shrubs, and Vines of Arkansas* (three editions); and *Autumn Leaves and Winter Berries in Arkansas*.

Robert Kral (born 1926), botanist at Vanderbilt University for many years until his retirement, has long been involved with investigations related to the Arkansas flora. Many of his studies have concentrated on taxonomically difficult monocot families (e.g., Xyridaceae, Cyperaceae, and Juncaceae).

Another out-of-state botanist who has studied Arkansas flora for many years is R. Dale Thomas (born 1936). Through the years, Thomas has made extensive collections in Arkansas, especially in the southern part of the state. His personal collections total more than 175,000 specimens, including some 52,000 collected in Arkansas. Before retiring from the University of Louisiana at Monroe (formerly Northeast Louisiana University) in 2003, he directed the work of several graduate students who completed county flora projects in southern Arkansas.

Currently, a new group of Arkansas botanists, including the members of the Arkansas Vascular Flora Committee, are carrying on the botanical endeavors and investigations of the many explorers, botanists, ecologists, and plant enthusiasts who have preceded them. The *Checklist* (AVFC 2006) and this *Atlas*, as well as the future *Manual*, are the culmination of the efforts of all these people. These works will certainly not be the end of Arkansas' botanical history but merely a stepping-stone to the next chapter of botanical exploration, investigation, and conservation.

AN OVERVIEW OF THE GEOLOGY OF ARKANSAS

BY CURTIS L. NUNN

Arkansas is known as “The Natural State” in no small part because of its diverse geology. From the towering bluffs that line the rivers of the Ozark Plateaus to the expansive flatlands of the Mississippi Alluvial Plain, Arkansas’ geology comprises rocks and landforms created by a wide variety of geologic processes acting over hundreds of millions of years. In turn, this geologic diversity, in association with variations in soil and climate, influences the diversity of plants and vegetation communities in the state.

Geologic Time

The geologic history of Arkansas can best be understood in terms of geologic time. Geologic time encompasses the entire history of the Earth, from its formation approximately 4.5 billion years ago to the present. With the advent of modern scientific techniques capable of identifying chronological ages of rock samples, geologic time is now commonly discussed in terms of years (e.g., the aforementioned age of the Earth). However, the original concept of geologic time was indefinite, known only to include the vast amounts of time necessary to shape Earth’s landscapes as we see them today. Geologic time in this sense was developed by establishing an order of events necessary to create these landscapes, an order of events deciphered by analyzing relative age relationships within the “rock record.” The rock record is a comprehensive inventory of all rocks on Earth that belong to one of three principal classes: igneous, sedimentary, and metamorphic. Igneous rocks form from molten material either on the Earth’s surface or beneath it. Sedimentary rocks form from loose sediments deposited in layers, or strata, which are compacted and cemented together over time to form new rocks. Metamorphic rocks are derived from igneous or sedimentary rocks subjected to intense heat, pressure, or chemical influences that physically or mineralogically alter the rock.

The geologic time scale (Figure 1) organizes the rock record into divisions of geologic time based on relative ages of rocks. Relative ages of rocks are established by studying their physical relationships and compositional characteristics. While relationships among rocks of all types are useful to some degree in establishing relative ages, the study of sedimentary rock strata, called stratigraphy, provides the organizational framework of the geologic time scale. Sedimentary rocks are the key to organizing geologic time for a number of reasons: sedimentary rocks cover approximately 80 percent of

Earth’s land surface (Blatt 1994), which makes them relatively easy to study; their strata are layered younger upon older, which makes their relative physical positions equivalent to relative age; and geographically separated sedimentary rock units can be correlated across great distances based on similar rock composition or fossil content. These characteristics provide a means to categorize sedimentary rocks into packages called “stratigraphic units,” each of which represents a particular period of geologic time during which the sediments that compose the rocks were deposited.

Eon	Era	Period	Age ¹
Phanerozoic	Cenozoic	Quaternary	2.6
		Tertiary	
	Mesozoic	Cretaceous	66
		Jurassic	146
		Triassic	202
	Paleozoic	Permian	251
		Pennsylvanian	290
		Mississippian	318
		Devonian	359
		Silurian	416
		Ordovician	444
		Cambrian	488
		Precambrian	542

¹ Millions of years before present

FIGURE 1. GEOLOGIC TIME SCALE. MODIFIED FROM WALKER AND GEISSMAN 2009.

The most common types of sedimentary rocks are sandstone and shale, which are silicate rocks composed of material eroded from preexisting rocks; and limestone, dolomite, and chalk, which are carbonate rocks formed from the accumulation of calcareous sediments in ocean waters. With only minor exceptions, rocks in Arkansas are sedimentary. They range in age from the late Ordovician Period of the Paleozoic Era to the present, spanning a period of more than 400 million years. The geologic map of Arkansas displays the distribution of surficial rocks in the state according to geologic age (Figure 2; see also map in Haley et al. 1993).

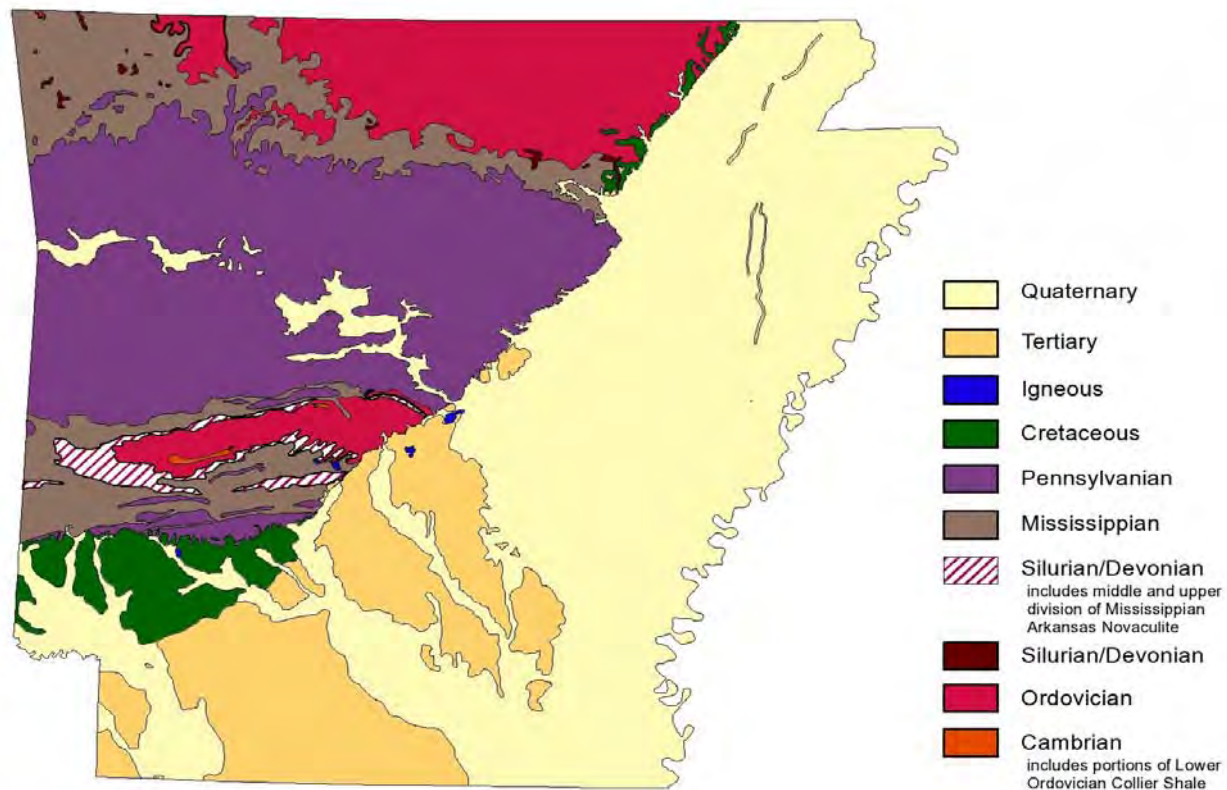


FIGURE 2. GEOLOGIC MAP OF ARKANSAS. MODIFIED FROM CHANDLER 2009. USED WITH PERMISSION.

Plate Tectonics

Study of the rock record has revealed evidence of numerous geologic processes that have worked to shape the rocks on Earth's surface into the landscapes we see today. Foremost among those processes is plate tectonics. In the early 1900s, Alfred Wegener, a German meteorologist, correlated sedimentary rocks between continents and noted that the shapes of the continents fit together like pieces of a jigsaw puzzle. He hypothesized that all continents were at one time part of a single supercontinent he called "Pangaea," which broke apart, leaving each individual continent to move independently across the surface of the Earth in a process termed "continental drift" (Hallam 1975). Wegener was not able to accurately describe a driving force for continental drift, but in the 1960s, geologists developed the theory of plate tectonics to explain his early observations (Frankel 1988).

Plate tectonics describes the movement of discrete sections of Earth's crust, or plates, in response to convective heat flow within the mantle of the Earth. Some tectonic plates contain continental masses, whereas others are composed only of oceanic crust. Arkansas resides on the continental mass of the North American Plate. Driven relentlessly by the mantle's convective patterns, plates are shuffled and rotated until eventually continen-

tal masses collide and unite as a single supercontinent. Tectonic forces then tear the supercontinent apart, creating multiple smaller continents that migrate over the surface of the Earth until they again converge and collide to form another supercontinent, at which point the cycle begins again. Geologic evidence has shown that this supercontinent cycle has been completed several times over the history of the Earth, operating on the order of hundreds of millions of years (Rogers 1996). Plate tectonics is the accepted mechanism for a wide variety of geologic processes, including mountain building, continental rifting, and most seismic activity. Because plate tectonics shifts continents around and pushes them up and down, it also controls where various depositional environments are created and the types of rocks that will form within them.

Physiographic Divisions

Demarcated by overall patterns of topographic relief, Arkansas can be divided into two broad physiographic regions, the Interior Highlands and the Gulf Coastal Plain (Figure 3). The Interior Highlands generally comprise the northwestern half of the state. Paleozoic rocks in this region have been exposed to weathering and erosion processes since the end of the Pennsylvanian

Period, producing significant topographic relief. The Gulf Coastal Plain generally comprises the southeastern half of the state. Paleozoic rocks of the Interior Highlands extend beneath Mesozoic and Cenozoic rocks of this region. Rocks of the Gulf Coastal Plain have been exposed to weathering and erosion processes for a much shorter period; thus, the region is characterized by relatively flat topography. The two physiographic regions are separated by the Fall Line (Figure 3), an abrupt contact between Paleozoic and younger strata (Chandler 2009) as seen on the geologic map of Arkansas (Figure 2). The Fall Line corresponds to the western margin of a buried rift valley, the Reelfoot Rift, which formed beneath eastern Arkansas during the late Precambrian and early Phanerozoic eons. At that time all land masses were united as the supercontinent Rodinia. Tectonic forces initiated breakup of the supercontinent, and, as the North American and South American plates were forced apart, rifting spread briefly toward the center of the North American Plate, creating the rift valley (Burke & Dewey 1973).

Each physiographic region in Arkansas is divided into three physiographic provinces based on stratigraphic content and landscape morphology (Figure 3). Physiographic provinces of the Interior Highlands region include the Ouachita Mountains, Arkansas Valley, and Ozark Plateaus. Paleozoic rocks that dominate the region are divided into these separate physiographic provinces based on landscapes that have been folded and faulted, depressed, or uplifted and tilted, respectively, in response to continental collision and the formation of the supercontinent Pangaea during the late Paleozoic Era. Physiographic provinces of the Gulf Coastal Plain region include the West Gulf Coastal Plain, Mississippi Alluvial Plain, and Crowley's Ridge. Relatively young rocks of this region are divided into separate provinces based on landscapes characterized by rolling hills, flat topography, or a prominent ridge, respectively, that were formed by more geologically recent erosional processes.

Geologic differences among Arkansas' physiographic provinces provide a variety of foundations upon

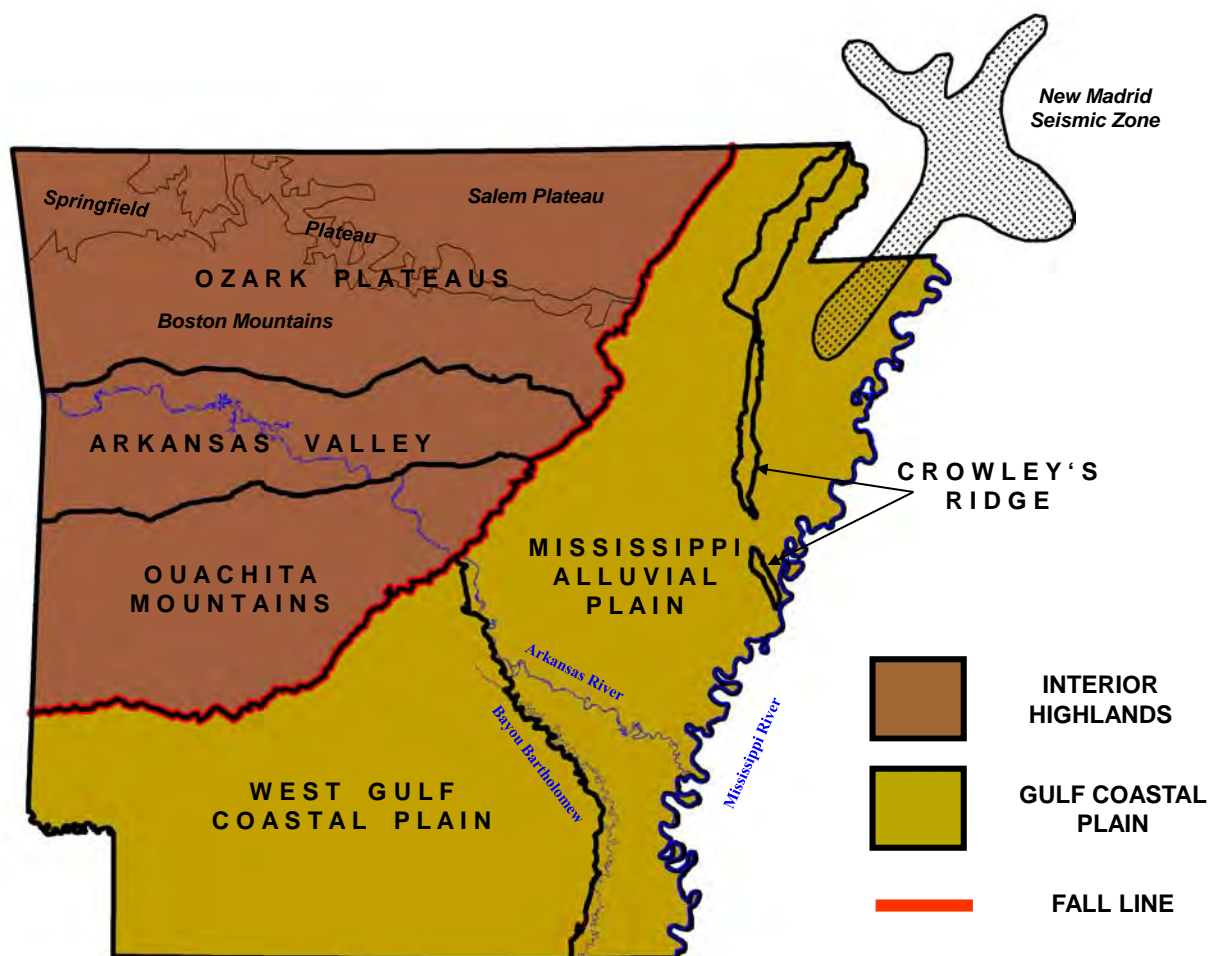


FIGURE 3. PHYSIOGRAPHIC REGIONS AND SIX PROVINCES (NATURAL DIVISIONS) WITHIN ARKANSAS.

which diverse modern environments have developed. In the same way that geologic differences define physiographic provinces, environmental differences across the state define natural divisions. Despite minor differences in nomenclature, Arkansas' physiographic provinces and natural divisions describe the same geographic areas. The following sections provide summarized geologic histories of Arkansas' physiographic divisions.

INTERIOR HIGHLANDS PHYSIOGRAPHIC REGION

At the end of the Precambrian, rising heat from the Earth's mantle was confined beneath the supercontinent Rodinia with no means of escape. The mantle continued to warm and expand, causing overlying continental rock to bulge above it. Eventually, the bulging crust fractured, and mantle heat was released through continental rifts. Dispersing continents settled as the cooling mantle contracted, and relative sea levels began to rise on the continental masses. By the Ordovician Period, more of the North American continent was covered by seas than at any other time in Earth's geologic history, and the entire area of present-day Arkansas was submerged. The northern half of the state was covered by warm, shallow seas in a continental shelf setting. The southern half of the state was located in a deep ocean basin separated from the shelf by a steep continental slope.

Ouachita Mountains Physiographic Province

The Ouachita Mountains physiographic province comprises west-central and central portions of the state between the Arkansas Valley and the West Gulf Coastal Plain (Figure 3). The Ouachitas are a highly eroded and largely buried mountain chain extending more than 2,400 kilometers (1,500 miles) from Mexico across Texas, Oklahoma, Arkansas, and Mississippi, where it links to the Appalachian Mountain chain in the subsurface. Less than 20 percent of this distance is visible in outcrops of the Marathon Mountains in Texas and the Ouachita Mountains of eastern Oklahoma and Arkansas (Viele 1989).

Rocks of the Arkansas Ouachitas are dominated by silica-rich sandstones, cherts, and shales that were deposited in the deep ocean basin extending across the southern half of Arkansas during the Paleozoic Era. Deposits in the basin produced sedimentary rock thicknesses of about 8,200 meters (27,000 feet) (Thornbury 1965). Sandstone and shale sediments were eroded from elevated regions and transported to the basin, where they were deposited along massive slopes. The slopes fre-

quently became unstable under their own weight and repeatedly collapsed, producing underwater landslides that flowed onto the flat bottom of the basin. Sediments were reorganized during transport, producing a series of thin, alternating sandstone and shale strata termed "flysh" (Morris 1974).

As tectonic forces again shifted and the continental masses of North and South America began to converge, the southern edge of the North American Plate was forced beneath the overriding South American Plate. The subducted crust was pushed into the mantle where it heated up, melted, and rose to the surface to create volcanoes on the South American Plate. The volcanoes ejected silicate ash that settled to form layers of chert at the bottom of the ocean basin. The basin continued to narrow, and the South American Plate scraped rocks off the bottom of the basin and pushed them inland. The rocks were compressed tightly, raising them up above the shallow seas and producing the complex east—west oriented folds and faults of the Ouachita Mountains. During this process, increased temperatures caused some chert strata to partially recrystallize, forming novaculite, a rare sedimentary rock commonly referred to as "whetstone" that is found almost exclusively in the Ouachitas. Heated, silica-rich fluids were also forced along faults in the Ouachitas, forming veins of quartz (the state mineral of Arkansas) throughout the mountains. Faults in the Garland County area of the Ouachitas also provide avenues for infiltrated surface water to descend to great depths, where it is heated by surrounding rock and then circulated quickly back to the surface, where it emerges as hot springs.

As the ocean basin closed and the North American and South American continental masses were united in the supercontinent Pangaea at the end of the Pennsylvanian Period, the Ouachitas may have reached heights rivaling parts of the Rocky Mountains. Today, after hundreds of millions of years of erosion, the Ouachitas are a shadow of their former grandeur. A mountainous topography still remains, however, as rocks resistant to erosion (sandstone, chert, and novaculite) form ridges between valleys underlain by more easily eroded shale (Figure 4).

Arkansas Valley Physiographic Province

The Arkansas Valley physiographic province lies west of the Fall Line, between the Ozark Plateaus and Ouachita Mountains (Figure 3). As the Ouachitas are characterized by multiple east—west trending folds and faults in an overall uplift, the Arkansas Valley is characterized by less intense east—west folds in an overall depression. Paleozoic rocks of the valley are slightly



FIGURE 4. THE OUCHITA MOUNTAINS NATURAL DIVISION IS CHARACTERIZED BY EAST-WEST TRENDING RIDGES AND VALLEYS. THE RIDGES OFTEN CONSIST OF MORE RESISTANT ROCKS SUCH AS CHERT, NOVALICITE, OR SANDSTONE, AS SEEN HERE ON NORTH FORK PINNACLE NEAR THE SALINE/PERRY COUNTY LINE, THE LAYERS OF WHICH ARE SOMETIMES NEARLY VERTICAL DUE TO THE INTENSE FOLDING DURING FORMATION OF THE OUCHITA MOUNTAINS. PINE AND PINE-HARDWOOD FORESTS TYPICALLY DOMINATE THE SOUTH-FACING SLOPES, GRADING INTO DRY HARDWOOD WOODLANDS ON THE UPPER SOUTH-FACING SLOPES AND RIDGE TOPS.

younger than those exposed in the Ouachitas. These rocks are equivalent to rocks that had been present in the Ouachitas before being eroded away at higher elevations. The province is heavily influenced by the Arkansas River, which flows generally west to east through the valley.

As continental collision thrust the Ouachitas upward, ocean-basin and continental-margin rocks north of the mountains were bowed downward in front of the continental shelf extending across northern Arkansas, forming the Arkoma Basin (Manger 1983). The basin continued to receive sediments eroded from the rising Ouachitas and exposed rocks of the shelf, accumulating additional thicknesses of sandstone and shale strata and adding greater weight to the basin. The basin sank under the increased weight, and extensional faults formed along its northern margin, creating the boundary with the Ozark Plateaus. The Arkoma Basin closed with the formation of Pangaea, and since that time the valley province has been above sea level and exposed to erosional processes that have removed thousands of feet of rocks across the valley. Some isolated ridges of resistant sandstones have remained topographically elevated, including Mount

Nebo, Petit Jean Mountain, and Magazine Mountain, Arkansas' highest point.

Over time the Arkansas River has carved its course through a section of the valley, draining portions of the Rocky Mountains and High Plains before traversing Oklahoma and Arkansas on the way to its confluence with the Mississippi River. Sandstone outcrops tightly constrict the river's course through much of the valley; however, in areas where the river's course flows through outcrops of softer shale, the river can meander more freely and the valley is wider (Figure 5).

Ozark Plateaus Physiographic Province

The Ozark Plateaus physiographic province comprises northwestern and north-central Arkansas (Figure 3). Rocks of the Ozarks are dominated by three main periods of continental-shelf deposition in the Paleozoic Era, which produced three distinct, slightly tilted plateaus: the Salem Plateau, the Springfield Plateau, and the Boston Mountains Plateau (McFarland 1998). The exposed surface of each plateau corresponds to a dominant stratigraphic unit deposited on the continental shelf of northern Arkansas during a particular period of the Paleozoic Era.

As sediments of the Ouachitas and Arkansas Valley were accumulating in the deep ocean basin and con-

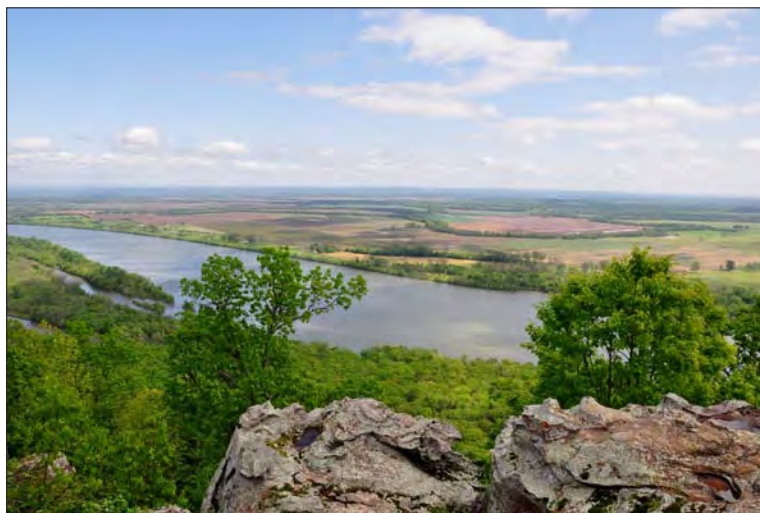


FIGURE 5. THE BROAD VALLEY OF THE ARKANSAS RIVER, AS SEEN HERE FROM PETIT JEAN MOUNTAIN IN CONWAY COUNTY, WAS CREATED AS THE RIVER MEANDERED THROUGH AND ERODED SOFTER ROCKS IN A PORTION OF THE ARKANSAS VALLEY NATURAL DIVISION. HILLS AND RIDGES OF THIS NATURAL DIVISION, SUCH AS PETIT JEAN MOUNTAIN, ARE CAPPED BY SANDSTONES (FOREGROUND) THAT ARE MORE RESISTANT TO EROSION.

tinental slope areas of southern Arkansas during the Ordovician Period, dolomite rocks of the Salem Plateau were forming in the warm, shallow waters of the continental-shelf region of northern Arkansas. Seas withdrew and then returned, and calcareous sediments again began to accumulate during the Mississippian Period, forming the limestone rocks of the Springfield Plateau. Similar to strata in the Ouachitas, chert layers interbedded with limestone rock of the Springfield Plateau were produced by deposition of ash erupted from volcanoes on the South American Plate. Other chert layers and the elaborate cave systems typical of the plateau are products of groundwater interactions with limestone rock. As sea level retreated in the Pennsylvanian Period, sediment delivered to the Ozarks was primarily derived from weathering and erosion of exposed continental rocks to the north. These siliceous sediments accumulated on top of the Mississippian limestone in alternating layers of Pennsylvanian sandstones and shales that form the Boston Mountains Plateau.

As continental collision produced the Ouachita Mountains, compressive forces caused igneous bedrock beneath the Ozarks to bulge ahead of the collision zone, forming the Ozark Dome (Hudson 2000). The dome consists of a core of uplifted igneous rocks that are exposed in the St. Francis Mountains of southern Missouri and slightly tilted rocks of the Ozarks that accumulated along the flanks of the dome. With the completion of Pangaea, weathering and erosional processes began to wear away the higher elevations of the Ozarks. Eventually the Ozarks were worn flat, exposing a south-to-north gradient of increasingly older strata, with the principal strata composing the three recognized plateaus. Intricate drainage systems were carved into the horizontal plateau surfaces, creating the Ozarks we see today (Figure 6).

GULF COASTAL PLAIN PHYSIOGRAPHIC REGION

After the formation of Pangaea, Arkansas remained above sea level through the end of the Permian Period, and erosion continued to wear away exposed Paleozoic rocks. Beneath the massive lid of the supercontinent, heat trapped within the mantle caused it to expand, causing the overlying land mass to bulge until it began to split apart at the beginning of the Triassic Period. As the supercontinent rifted and confined heat was released, land masses subsided into a cooling mantle. During the

Cretaceous Period, the new southern margin of the North American continent was submerged beneath waters of the Gulf of Mexico, and Arkansas was flooded south of the Ouachitas. Advancing waters also filled the trough of the Reelfoot Rift valley, forming a marine protrusion into the North American continent called the Mississippi Embayment (Manger 1983). These inundated areas



FIGURE 6. THE OZARK PLATEAUS NATURAL DIVISION CONSISTS OF UPLIFTED, HORIZONTAL PLATEAUS, DISSECTED BY INTRICATE STREAM SYSTEMS CARVED INTO THE PLATEAU SURFACES, AS SEEN NEAR JASPER IN NEWTON COUNTY.

of eastern and southern Arkansas today constitute the Gulf Coastal Plain physiographic region. Rocks of the Interior Highlands remained above sea level and served as a source of eroded sediments that were deposited atop submerged Paleozoic strata of the region.

West Gulf Coastal Plain Physiographic Province

The West Gulf Coastal Plain physiographic province comprises the western and central portions of southern Arkansas. It borders the Mississippi Alluvial Plain to the east and the Ouachita Mountains to the north. The region is generally characterized by low rolling hills between wide river valleys that drain to the Mississippi River.

As Cretaceous seas flooded the southern and eastern parts of Arkansas, the elevated area of the coastal plain in the southwestern corner of the state was submerged beneath shallow ocean waters. This environment was conducive to the precipitation of carbonate sediments and formation of calcareous sedimentary rocks. As Arkansas transitioned into the Tertiary Period, shallower seas left these Cretaceous deposits exposed to erosion. Waters in the remaining parts of the West Gulf Coastal Plain continued to receive eroded gravel, sand, silt, and clay sediments from the Interior Highlands, and siliceous marine

deposits accumulated to levels approximating today's landscape. The Gulf of Mexico receded southward to its present extent at the end of the Tertiary, and unconsolidated marine deposits were easily eroded by Quaternary streams, creating a network of wide, terraced valleys filled with alluvial deposits and separated by low rolling hills (Figure 7).



FIGURE 7. THE WEST GULF COASTAL PLAIN NATURAL DIVISION IS GENERALLY CHARACTERIZED BY LOW, ROLLING HILLS, AS SEEN NEAR CHIDESTER IN OUACHITA COUNTY, BETWEEN WIDE, TERRACED RIVER VALLEYS. PINE AND PINE-HARDWOOD FORESTS ARE PREDOMINANT THROUGHOUT MUCH OF THIS NATURAL DIVISION OUTSIDE OF THE WIDE BOTTOMLANDS ALONG THE RIVERS.

As tectonic forces continued to spread continental masses apart in the Cretaceous Period, faults of the Reelfoot Rift along the Fall Line were reactivated, providing pathways for molten masses from the mantle to rise and emplace themselves in the overlying rocks. Today, small areas of the West Gulf Coastal Plain and Ouachita Mountains display isolated outcrops of rare igneous rocks like nepheline syenite (Pulaski and Saline counties), carbonatite (Hot Spring County), and lamproite (Pike County) that have been exposed by erosion (McFarland 1998). Intense weathering chemically converted some nepheline syenite into bauxite, a very important ore of aluminum and Arkansas' state rock. Carbonatite is unusual in that it is the only igneous rock with a chemical composition typical of calcareous sedimentary rocks like limestone and chalk. Lamproite exposures in Arkansas are home to the only active mines for diamonds, the state gem of Arkansas, open to the public in the world (Howard & Hanson 2008).

Mississippi Alluvial Plain Physiographic Province

The Mississippi Alluvial Plain physiographic province comprises much of the eastern third of Arkansas. It borders the Ozark Plateaus, Arkansas Valley, and Ouachita Mountains along the Fall Line and is separated from the West Gulf Coastal Plain by the Arkansas River and Bayou Bartholomew (Figure 3). This region is commonly referred to as "The Delta," though that description is a geological misnomer. Sediments of a plain are deposited within a river valley; sediments of a delta are deposited at the mouth of a river. Tertiary marine sediments accumulated in the province along with those of the West Gulf Coastal Plain. They too were exposed to erosion by numerous river systems, most notably the Ohio and Mississippi, when sea levels dropped at the end of the period. The region is essentially flat and contains numerous tributaries of the Mississippi River (Figure 8).

In the early Quaternary Period, North America entered an ice age, during which glaciers extended southward from polar regions into the heart of the continent in a series of advances and retreats. Ice sheets reached as far south as central Missouri, but Arkansas was never directly glaciated. During glacial times, the Mississippi and Ohio rivers flowed as broad, shallow, braided-stream systems draining glacial meltwater from the north, across the alluvial plain, and southward to the Gulf of Mexico (Saucier 1994).



FIGURE 8. THE MISSISSIPPI ALLUVIAL PLAIN NATURAL DIVISION IS CHARACTERIZED BY A RELATIVELY FLAT SURFACE WITH NUMEROUS MEANDERING STREAMS AND RIVERS SUCH AS THE WHITE RIVER, SHOWN HERE AT FLOOD STAGE NEAR DE VALLS BLUFF IN PRAIRIE COUNTY. LAND ALONG THESE STREAMS AND RIVERS NOT CLEARED FOR CULTIVATION OFTEN SUPPORTS BOTTOMLAND HARDWOOD FORESTS.

Braided-stream courses changed rapidly, and the rivers migrated throughout the plain, eroding Tertiary sediments and depositing enormous volumes of sand and gravel in a series of glacial outwash terraces (Fisk 1944).

About 10,000 years ago, glaciation of North America ceased. In response, the Mississippi and Ohio rivers changed from braided-stream glacial outwash systems to contemporary meandering-stream systems. Their paths also settled into their current configuration, with the Ohio entering the Mississippi north of Arkansas (Blum et al. 2000). The modern Mississippi River has wandered along the eastern border of Arkansas, depositing sand and gravel in the river channel and silt and clay across the plain during flood events (Autin et al. 1991). The river is constantly reshaping itself as it reacts to rising flood waters by diverting flow through cut-off channels, creating oxbow lakes, and inundating adjacent flatlands.

Along with portions of southeastern Missouri, western Kentucky, and western Tennessee, the extreme northeastern part of the Mississippi Alluvial Plain of Arkansas lies within the New Madrid Seismic Zone (NMSZ) (Stauder 1982; Figure 3). The NMSZ is the most seismically active region in the United States east of the Rocky Mountains (Schweig & Van Arsdale 1996), and small movements within the zone are recorded almost daily. Geological evidence shows a past characterized by numerable large earthquakes, including some of the strongest earthquakes ever noted in North America (Jackson 1979). Contemporary seismic activity in the NMSZ is a product of modern compressive tectonic stresses across central North America and the New Madrid region (Zoback & Zoback 1981) acting on buried faults of the Reelfoot Rift (Hildenbrand & Hendricks 1995).

Crowley's Ridge Physiographic Province

Crowley's Ridge is a narrow, elevated strip of land extending from southeastern Missouri through the Mississippi Alluvial Plain of eastern Arkansas to the Mississippi River in Phillips County (Figure 3). The ridge stands about 30 to 60 meters (100 to 200 feet) higher than the surrounding ter-

rain (Figure 9) and is no wider than 18 kilometers (11 miles) at any point along its 300-kilometer (186-mile) length (Guccione et al. 1986). The ridge formed during the early Quaternary Period as braided-stream systems of the Mississippi and Ohio rivers flowed on the west and east sides of the ridge, respectively, carrying glacial meltwater to the Gulf of Mexico. As the rivers reworked Tertiary deposits of the alluvial plain and created terraces on the surrounding terrain, sediments composing the ridge remained undisturbed. Faults of the Reelfoot Rift have been linked to seismic uplift of the ridge concurrent with erosional activity (Van Arsdale et al. 1995), though this is not generally accepted at present.

Rocks of Crowley's Ridge comprise Tertiary marine deposits exposed at its base and capped by early Quaternary, braided-stream sands and gravels. On the southern part of the ridge, braided-stream sediments are blanketed by loess, a very fine silt transported and deposited by wind and, in the case of Crowley's Ridge, derived from pulverized rocks at the leading edges of ice sheets. Although loess deposits are capable of maintaining relatively steep stable slopes, outcrops of unconsolidated ridge deposits have been heavily modified by erosion and landslides (McFarland 1992).



FIGURE 9. CROWLEY'S RIDGE, AS SHOWN HERE NEAR HARRISBURG IN POINSETT COUNTY, IS A RELATIVELY NARROW, ELEVATED STRIP OF LAND RISING FROM 30 TO 60 METERS (100 TO 200 FEET) ABOVE THE FLAT MISSISSIPPI ALLUVIAL PLAIN AND EXTENDS FROM SOUTHEASTERN MISSOURI TO PHILLIPS COUNTY, ARKANSAS. IT IS COMPRISED VARIOUSLY OF TERTIARY MARINE DEPOSITS AND LOESS.

EFFECTS OF PHYSICAL FACTORS ON THE DISTRIBUTION OF NATIVE FLORA AND VEGETATION IN THE NATURAL DIVISIONS OF ARKANSAS

BY THOMAS FOTI AND C. THEO WITSELL

Physical Factors Important to Arkansas Flora and Vegetation

Maps and descriptions of the natural divisions or ecoregions of Arkansas provide context for understanding the distribution of plant species in the state. Although county dot maps are very helpful in demonstrating documented distribution at a fairly fine spatial scale, knowledge of the relationships of species to natural divisions or ecoregions can provide insight into distribution both within counties and on a broader regional scale. It can also help predict presently undocumented occurrences of species and plant communities.

The presence of particular plants and plant communities in a given place depends on many factors, including physical conditions, disturbances of several kinds, interactions with other organisms, and changes in these factors over time. This discussion concentrates on the effects of varying physical conditions, specifically geology, geomorphology (sometimes referred to as physiography), soil, and climate, on the distribution of plant communities in Arkansas. Studies over the past several decades have demonstrated that such variations are organized into distinct geographic regions that have been referred to as “natural divisions” (Foti 1974, 1976, 1978) or “ecoregions” (Omernik 1987; Woods et al. 2004). This section will examine the distribution of plants and plant communities within the state in relation to these natural divisions. Terminology will follow Foti (1978) but will often refer to the more detailed regions mapped by Woods et al. (2004; Figure 10).

Climate and geology are the two fundamental physical factors that determine the nature and distribution of vegetation. The term “climate” generally refers to long-term (decades to centuries) patterns of annual and seasonal temperature, precipitation, and related phenomena, whereas “weather” emphasizes shorter-term conditions. Effects of extreme events, such as droughts or ice storms, on vegetation might be considered either as disturbances (when thought of in terms of weather) or as climate (if considered as an event expected to occur at a given frequency). Arkansas has a humid subtropical climate, with ranges of temperature and precipitation typical of that zone (Figures 11 & 12). Considering climate alone, one might suppose that the vegetation of the state would be relatively uniform, but that is certainly not the case. Some areas are covered with upland hardwood forest and woodland (i.e., thinly wooded areas with an open tree canopy and a diverse, prairie-derived herbaceous

ground layer). Others support bottomland hardwood forest, prairie, pine forest, or some other characteristic vegetation. In many cases these differences are caused primarily by variations in geology, geomorphology, or soil, as influenced by climatic and vegetational history.

As explained in a previous section, geology is the rock or sediment that underlies a place. This discussion will emphasize the influence of geology on vegetation, primarily with respect to its acidity and its texture, which in turn influences moisture. Most plants occur in a specific range of soil acidity, usually expressed as pH, with 7 being neutral, smaller values being acidic, and larger values being alkaline.

Geomorphology, or physiography, in simplest terms, is the shape of the land (landform) and the processes that shape it. Flat sites affect plants differently than rolling or hilly or mountainous sites; south-facing and west-facing slopes are drier and warmer than north-facing and east-facing slopes (Figure 13). Elevation exerts an important influence as well, with 305 meters (1,000 feet) of elevation equating to 1.66° C (3° F) or 965 kilometers (600 miles) of north-south distance. In Arkansas, Newton County is 322 kilometers (200 miles) north of the Louisiana state line and is up to 762 meters (2,500 feet) higher. This equates to over 4.44° C (8° F) average temperature difference. Such differences in elevation also affect precipitation by forcing moisture-laden air to rise and cool, which increases precipitation in areas with higher elevations. This occurs because warm air can retain more moisture than cool air. In contrast, as air descends to lower elevations it warms, decreasing precipitation.

Soil is composed of weathered geologic parent material, usually also with organic remains incorporated. It is usually distinctively different from the parent material in more mature soils, whereas in younger soils (such as recently deposited riverine soils) there may be little difference. Soil is often considered to exert an overriding influence on vegetation, but, in fact, it is as much a product of vegetation as a physical determinant of it. Soil combines the erosional remnants of the geologic substrate weathered by climate with organic remains from plants and animals. Therefore, it can be thought of as a product of local or regional ecological processes rather than an independent entity.

In a broader sense, all physical and biotic features are interrelated. Climate affects geology and geomorphology, for example, as it wears away mountains. Plants and plant communities affect climate by shading

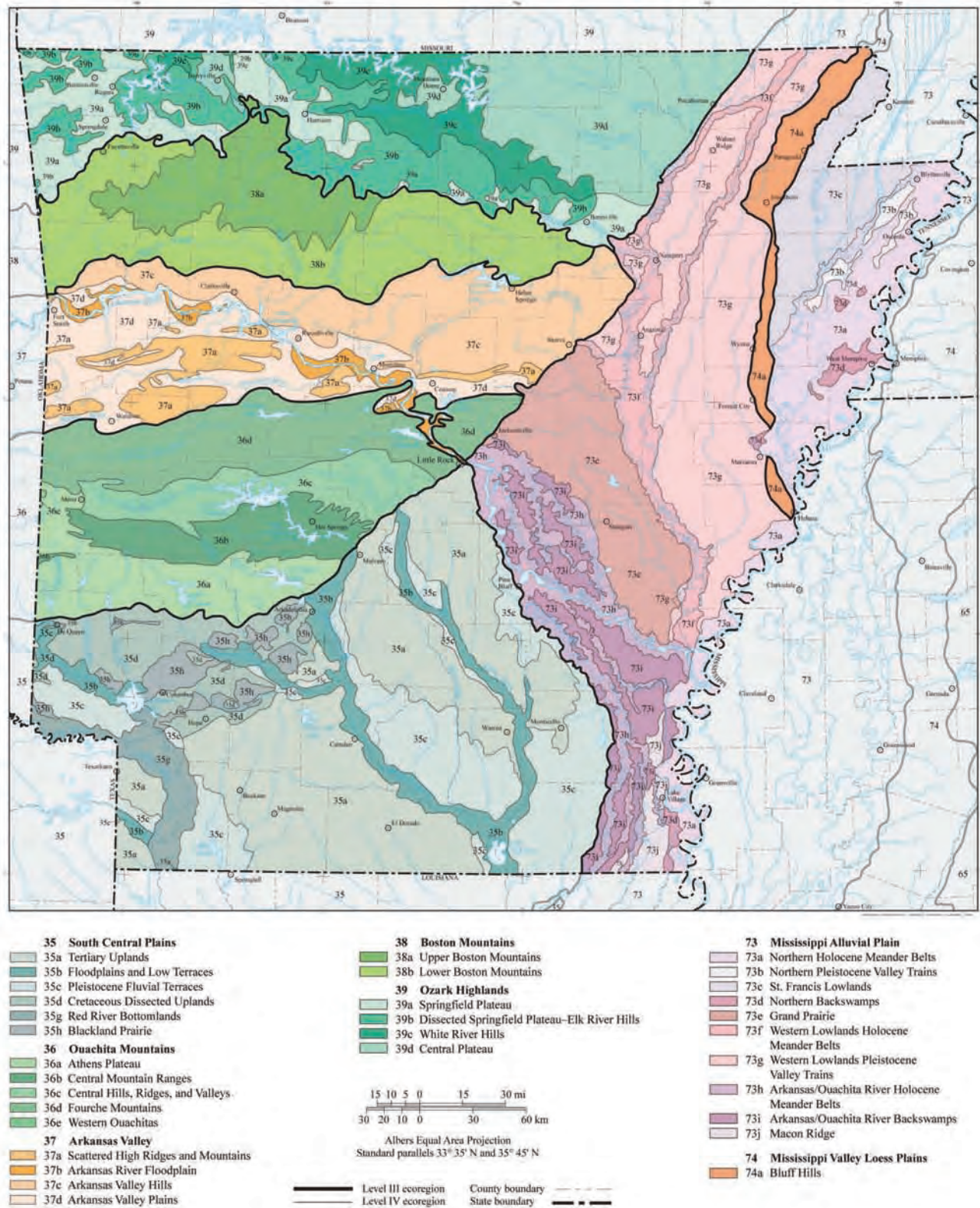


FIGURE 10. EPA LEVEL IV ECOREGIONS OF ARKANSAS. FROM WOODS ET AL. 2004.

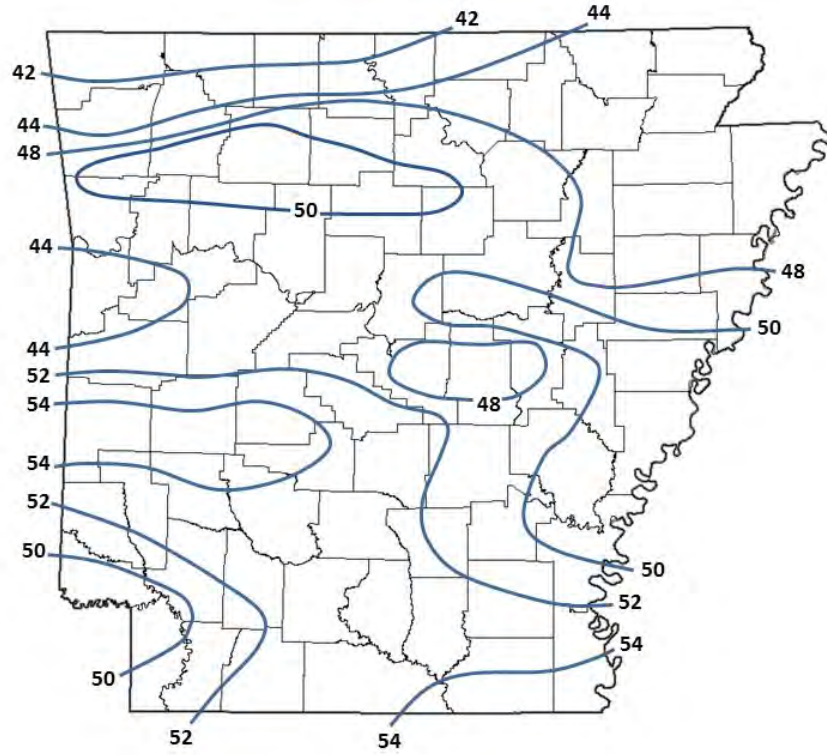


FIGURE 11. AVERAGE ANNUAL PRECIPITATION (IN INCHES). MODIFIED FROM FERGUSON 1984. USED WITH PERMISSION.

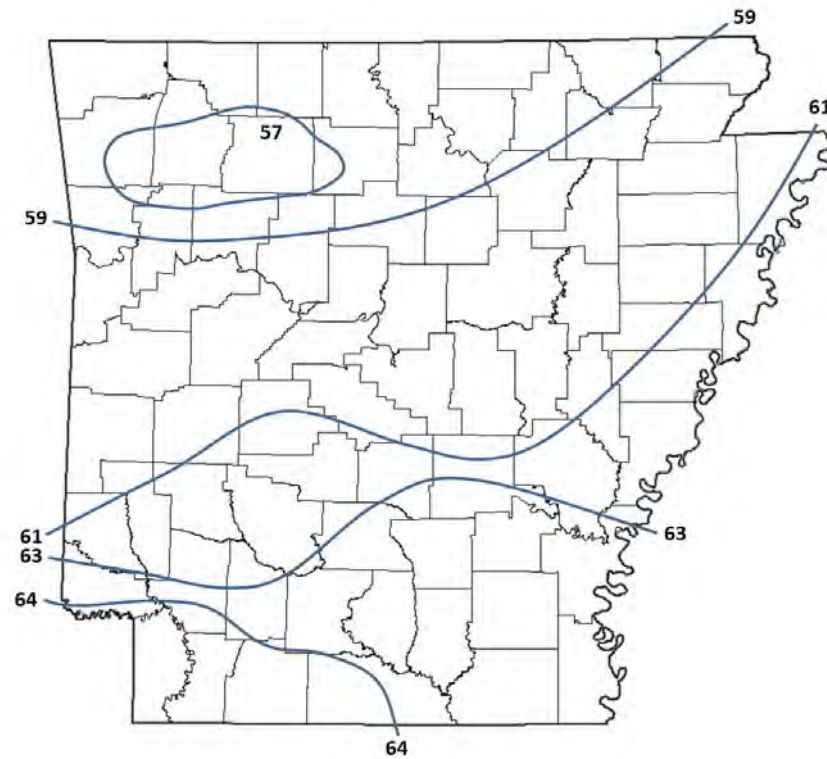


FIGURE 12. AVERAGE ANNUAL TEMPERATURE (IN °F). MODIFIED FROM FERGUSON 1984. USED WITH PERMISSION.

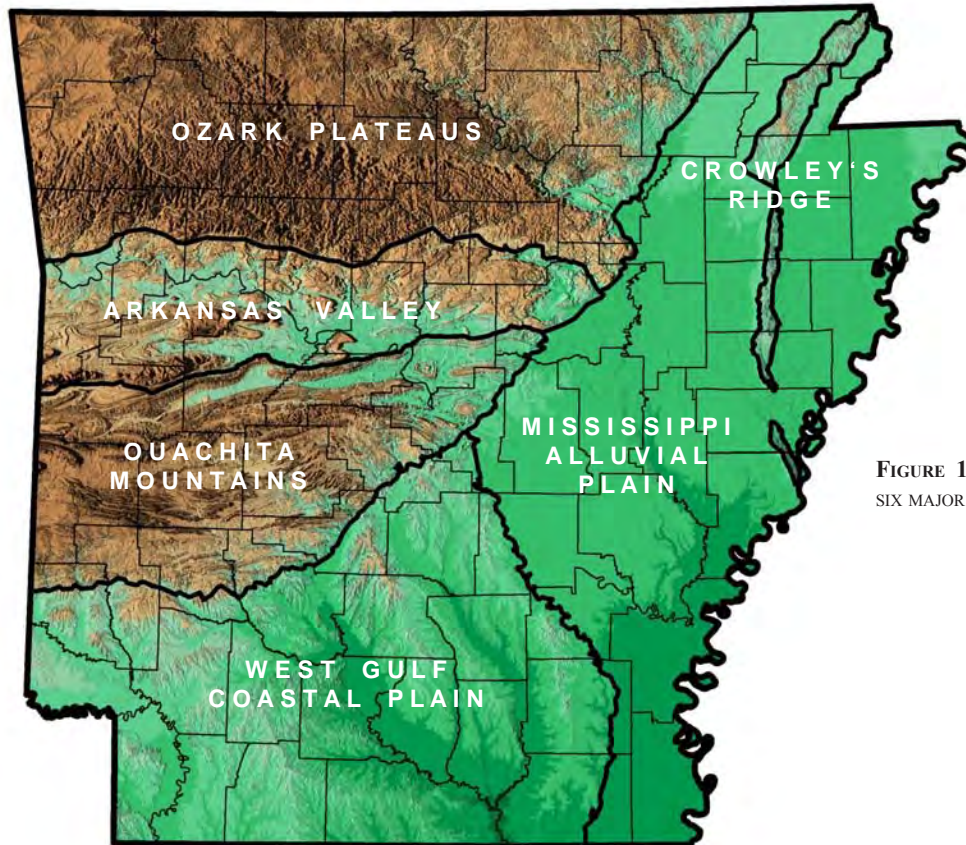


FIGURE 13. SHADED RELIEF MAP SHOWING SIX MAJOR NATURAL DIVISIONS OF ARKANSAS.

the land surface and affect geology and soil by, for example, slowing erosion and transpiring water from the ground.

Changes in Arkansas Flora and Vegetation over Time

It is impossible to understand some features of the current natural flora and vegetation of Arkansas without knowledge of the variation in its past climate and vegetation. For instance, fire and droughty sites can maintain prairies indefinitely, but how did these prairies become established in our area with its 127 centimeters (50 inches) of average annual precipitation? The simple answer is that they became established during a drier interval in the past that allowed the Midwestern prairies to move eastward. The natural vegetation of Arkansas is a product of environmental and genetic change occurring over thousands to millions of years. The numerous different habitats provided by mountains, valleys, and bottomlands support a rich and diverse flora whose origins go back in time and to distant places. Both ancient and more recent changes in climate have caused waves of different vegetation types to successively blanket the state. During these changes, some species and communi-

ties were altogether eliminated and replaced by others, while a few elements of older floras persisted in isolated habitats such as glades (naturally treeless openings in a forested matrix where bedrock outcrops or comes near to the surface of the ground), prairies, seeps, protected ravines, and upland depression wetlands. Because of its floristic diversity, Arkansas has been referred to as a meeting ground of both ancient and recent plant assemblages originating from north, south, east, and west.

It is difficult to obtain definitive information about vegetation of the past (paleovegetation). The nature of paleovegetation can only be deduced by specialized studies of such indicators as pollen, fossils, radiocarbon ratios, tree ring widths, fire scars in ancient trees, plant and animal remains, and sediments. Insight into past vegetation can be inferred by comparing past conditions with vegetation types present today and noting similarities or differences in conditions and presumably vegetation.

Very few studies have been made in Arkansas on paleovegetation. Most of what we know is inferred from studies of similar areas in Missouri, Tennessee, Oklahoma, and other nearby places. An exception is a study of microfossils in an Arkansas peat deposit lo-

cated in a former swamp in North Little Rock (Sears & Couch 1932). A review of the work of Mehringer et al. (1968), Cole (1971), King (1973), Delcourt et al. (1980), Delcourt and Delcourt (1981), and others suggests that most of the vegetation assemblages in the Mississippi Alluvial Plain of Missouri and Arkansas have been extant here for less than 20,000 years, although important elements may have been present for at least 40,000 years or much longer.

A series of paleovegetation maps by Delcourt and Delcourt (1981) show that 40,000 years ago Arkansas was occupied mostly by oak savanna with oak–hickory–pine in the central and western part of the state and with mixed hardwoods bordering “cypress–gum” forest along the Mississippi River. This reference to gum probably refers to “tupelo gum” (*Nyssa aquatica*), more commonly called water tupelo or just tupelo. These conditions lasted until ca. 18,000 years ago, when, at the peak of the Late Wisconsin Continental Glaciation, the climate became cooler and much of western and central Arkansas was dominated by a spruce–jack pine forest. A white spruce (*Picea glauca*) forest with associated northern hardwoods extended even farther south in the Mississippi Alluvial Plain at that time.

Between about 14,000 and 10,000 years ago the climate became warmer, the spruce forest declined, and most of Arkansas was again dominated by oak–hickory forest or woodland, with oak–hickory and “southern pine” [short-leaf pine (*Pinus echinata*) and loblolly pine (*P. taeda*)] in the southern part of the state. The present-day oak–hickory forest developed after the decline of the spruce forest and, thus, is no older than the end of the last glacial period (King 1973). However, important elements from earlier forests no doubt remained, both in cool, moist, protected sites during dry times and in warm, dry, exposed sites during more moist times. These sites served as refugia, probably helping to account for the endemic species that are present in the Interior Highlands of northwestern Arkansas and adjacent states. The Mississippi Alluvial Plain of eastern Arkansas became dominated by cypress–tupelo forests in the wettest sites, with mixed bottomland hardwoods along the edges of swamps.

Major vegetation changes occurred between 8,000 and 5,000 years ago when the climate became warmer and drier, a period known as the mid-Holocene warm interval or the Hypsithermal Period. Prairie, oak savanna, and oak–hickory forest, characteristic of today’s Oklahoma, shifted eastward, replacing the mixed hardwood forests that occupied the region before that time (except for the cool, moist refugia mentioned before). Droughty sites within Arkansas—flat and exposed to the wind, especially those with thin soil over clay subsoil or rock—became desert-like, with scattered clumps of veg-

etation providing the only groundcover. Wind removed (deflated) soil between the clumps and accumulated it within and under them, creating a mounded surface that remains in such sites today. These mounds have been called “nebkhas” (Seifert et al. 2009) but are often referred to as “pimple mounds” or “prairie pimples.”

During or immediately after the Hypsithermal Period, “southern pine” moved northward from the West Gulf Coastal Plain into the Ozark and Ouachita mountains. After that, the climate ameliorated, becoming moister, and eventually developed into the climate of today. However, even during this most recent period, severe droughts have periodically occurred, creating desert-like areas of bare soil on particularly droughty sites such as glades, prairies, and barrens, and allowing western elements of the biota to reoccupy favorable areas (Seifert et al. 2009). Recent research has demonstrated that there were intervals xeric enough to reduce vegetative land cover and destabilize soils on droughty sites as recently as 700 years ago (Seifert et al. 2009).

Persistence of western and xerophytic species and communities during the intervening moister intervals has been facilitated through fires ignited by lightning or by humans. These fires have maintained prairie and woodland communities and the species dependent on their more open structure. Such fires have also maintained elements of both western and southeastern flora in Arkansas. It is interesting and important to realize that, because of the importance of the Hypsithermal, the plant communities of the present and recent past only assembled within the last ca. 5,000 years (though some elements were already present as discussed above), and that humans and human-set fires have been an important factor in this assembly process. It may reasonably be concluded therefore that it is not possible to consider Arkansas vegetation in the absence of people. However, during most of this time, the tools available to people for manipulating vegetation were limited and therefore they were, in a real sense, operating as a part of the system, not dominating and disrupting it as they often do today.

Only recently has the importance of fire (frequent and relatively low-intensity, in general) in the maintenance of many plant species and communities in Arkansas and surrounding states been recognized. Today, public and private conservation land managers frequently employ prescribed (intentionally set and managed) fires to restore and maintain composition and structure of plant communities that represent what has existed over the past several thousand years.

Arkansas Vegetation Today

The vegetation of Arkansas today reflects these past changes in climate as well as more recent and current

conditions and processes. Most of the upland areas are covered with oak–hickory or oak–hickory–pine forests and woodlands. Lowland areas of the Mississippi Alluvial Plain, West Gulf Coastal Plain, and Arkansas Valley are covered with bottomland hardwood forest. Prairie vegetation persists in patches on drier, frequently burned areas, as remnants of the western prairies that became dominant during past dry periods. By contrast, relict stands of sugar maple (*Acer saccharum*), beech (*Fagus grandifolia*), white oak (*Quercus alba*), northern red oak (*Q. rubra*), and basswood (*Tilia americana*) forests similar to those found in New England are present in moist coves, protected places, and some high elevation sites, particularly in the Interior Highlands and on Crowley’s Ridge. These are remnants of the more northern, cooler forests that once covered much of Arkansas and retreated to these refugia during the dry periods.

The community types mentioned in this section are meant to indicate the general vegetation of the state, rather than to present a rigorous classification and description of Arkansas plant communities. Such a classification is underway, being led by NatureServe, a private, nonprofit organization formed to identify and develop data on species and communities of conservation concern worldwide. In Arkansas, NatureServe is working with state and federal agencies as well as private organizations to develop a detailed classification of plant communities and to assist in locating and protecting exemplary occurrences of each. For more information on this classification process, visit www.natureserve.org/explorer/classseco.htm.

The Natural Divisions of Arkansas and Related Maps of Natural Regions

In a specific area like Arkansas, physical factors affect flora and vegetation in microsites that may occur in characteristic repeating patterns within geographic regions. In Arkansas these geographic regions have been called “natural divisions” (Foti 1974, 1976, 1978) or “ecoregions” (Woods et al. 2004). Within a given natural division, the physical sites and the resulting vegetation are generally consistent or predictable, whereas the patterns are consistently different between two divisions.

There are six major natural divisions of Arkansas: the Ozark Mountains*, the Ouachita Mountains, the Arkansas Valley, the West Gulf Coastal Plain, the Mississippi Alluvial Plain, and Crowley’s Ridge (Foti 1976, 1978; Pell 1983; Figure 3). The first three of

these are part of the Interior Highlands Physiographic Region, and the latter three are part of the Gulf Coastal Plain Physiographic Region. Even though the natural divisions often occupy areas that have previously been defined by geologists as physiographic regions, the natural divisions were categorized on the basis of characteristic biotic patterns. They are thus ecological regions, or ecoregions, not merely geologic or physiographic regions. Originally, the Ouachita Mountains and the Arkansas Valley were considered one natural division, following classical geological maps (Foti 1974), but these were later recognized as separate divisions because of ecological differences described below (Foti 1976, 1978). Later classifications, (e.g., Omernik 1987; Keys et al. 1995; Woods et al. 2004) recognized generally the same regions as Foti (1976, 1978) but separated the Ozark Mountains into two major ecoregions, the Ozark Plateaus and the Boston Mountains. Omernik and Woods et al. termed these 7 regions “Level III Ecoregions” and Woods et al. subdivided these Level III Ecoregions into 32 “Level IV Ecoregions” (Figure 10). Similarly, Foti (1978) subdivided the Natural Divisions into Subdivisions and Sections (Figure 14), which are similar to but not identical with the Level IV Ecoregions and far fewer. In this discussion, we will describe the natural divisions and subdivisions of Foti (1978), slightly modified, but will often refer to Woods et al. (2004) where the additional detail provides improved understanding of vegetation patterns.

At a more general scale, the Interior Highlands Region has long been recognized as a distinct physiographic and natural region (Fenneman 1938; Braun 1950; Thornbury 1965). It is generally characterized by hilly to mountainous topography on Paleozoic rock substrates dominated by upland hardwood and upland pine–hardwood forests and woodlands, with extensive prairies in the north. It includes portions of Missouri, Arkansas, Oklahoma, and Kansas, and a small disjunct area occurs in southern Illinois. It is surrounded by plains that are lower in elevation, have more recent geologic substrates, and have distinctively different vegetation.

The Gulf Coastal Plain Physiographic Region (Figure 3) is a belt of land up to about 970 kilometers (ca. 600 miles) wide extending from Texas to Florida. The portion of the Gulf Coastal Plain lying to the west of the Mississippi River, including a portion of Arkansas, is known as the West Gulf Coastal Plain. It was inundated by the Gulf of Mexico since the Cretaceous Period (ca. 145–65 million years ago), most of it during the Cenozoic (Tertiary) Era (ca. 65–2.5 million years ago) or more recently (Fenneman 1938). The surficial geology includes areas of hard rocks (sandstone, limestone, chalk) but is more typically unconsolidated sand, gravel, or clay, sloping gently from its northern, inland boundary

* Editors’ note: While also referred to as the Ozark Plateaus, this natural division is commonly called the Ozark Mountains. These terms are synonymous for the purposes of this discussion.

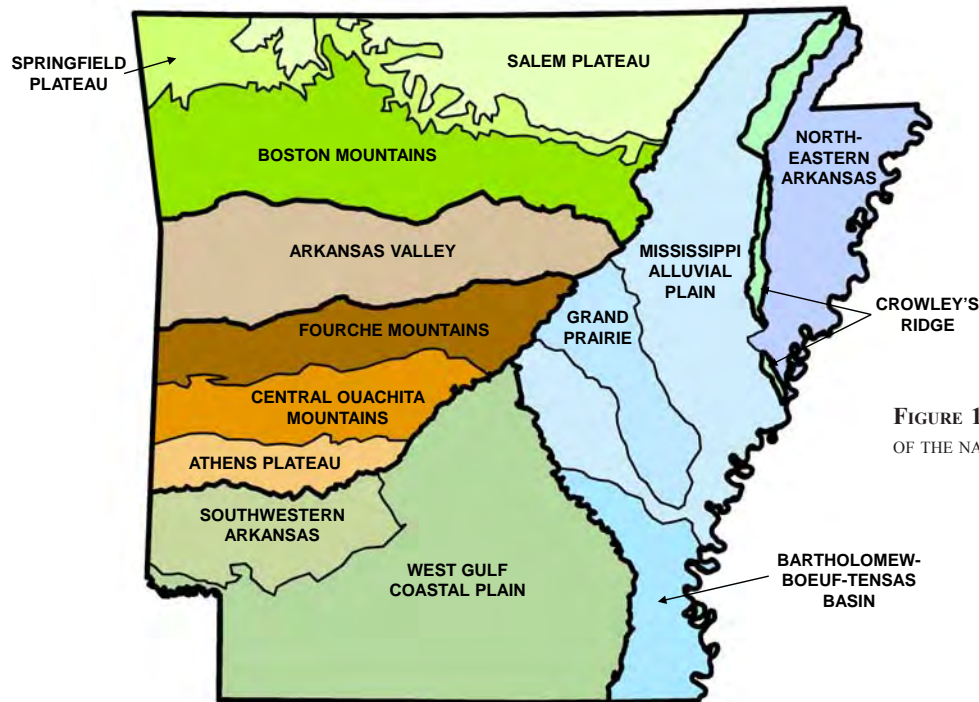


FIGURE 14. SUBDIVISIONS AND SECTIONS OF THE NATURAL DIVISIONS OF ARKANSAS.

to the gulf. Typical plant cover is pine or pine–hardwood forest on sandy hills and bottomland hardwood forest along streams and rivers (Braun 1950). It is bounded to the north by older deposits not derived from the ancient Gulf of Mexico.

The definitions of the original divisions of the Interior Highlands (Foti 1974) followed those of Croneis (1930; Figure 15), and therefore the Arkansas Valley was considered a subdivision of the Ouachita Mountains. Its status was later elevated to that of a natural division because it contained features and natural communities characteristic of both the Ouachitas and the Ozarks, as well as some unique to it (Foti 1976, 1978; Pell 1983). In a similar vein, both the West Gulf Coastal Plain and the Mississippi Alluvial Plain have traditionally been considered distinct physiographic regions within the Gulf Coastal Plain Physiographic Region, but Crowley's Ridge was not recognized as a separate region. However, because of its distinctive flora and vegetation, Crowley's Ridge was also elevated to the status of natural division (Foti 1974).

The U.S. Forest Service developed a new national regionalization (Keys et al. 1995) as an extension of a map of ecosystems of North America by Bailey et al. (1994). As part of a Forest Service Ozark–Ouachita Highlands Assessment, the Keys et al. (1995) map was revised (Foti & Bukenhofer 1998) to correct several errors and omissions in the Arkansas portion of the Interior Highlands. A somewhat different national map was developed by the Environmental Protection Agency

(Omernik 1987), and more detailed levels have been developed for Arkansas (Woods et al. 2004; Figure 10). These new maps are hierarchical like earlier efforts but are based on a more holistic consideration of landscape properties than some earlier maps, with climate and soil playing prominent roles along with geomorphology. The new maps have been subdivided to more detailed lower levels than older maps.

Through these decades of development of definition and description of the natural regions of Arkansas, basic boundaries and concepts have changed little. The six natural divisions first defined (Foti 1976) are still often recognized as the basic natural regions of Arkansas, although, as discussed before, one of these has been split into two. Details have been added to allow more precise understanding of Arkansas' natural geography. Finer regions have been recognized to provide greater understanding where needed, and in some maps a particular region is placed higher or lower in the hierarchy than in others. Some of this additional detail will be referred to in the discussions of the natural divisions of Arkansas that follow.

The Ozark Mountains Natural Division

The Ozark Mountains Natural Division (Figures 3 & 6) is formed from uplifted plateaus composed of Paleozoic rocks (Croneis 1930). Streams have incised valleys into these plateaus, and in some cases the plateau surface is only visible as the flat tops of the mountains at

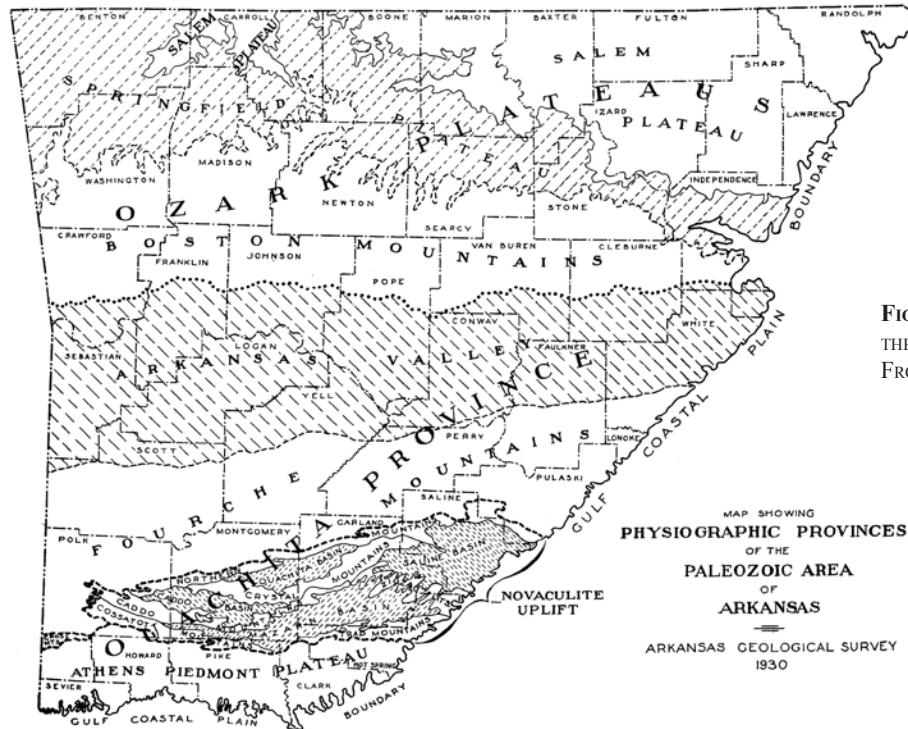


FIGURE 15. PHYSIOGRAPHIC PROVINCES OF THE INTERIOR HIGHLANDS OF ARKANSAS. FROM CRONEIS 1930.

equal elevations (Figure 6). Three distinct plateaus differ in topography, geology, and vegetation.

The Boston Plateau Subdivision (Figure 14), universally referred to as the Boston Mountains because of its dissected ruggedness, is the highest at about 790 meters (ca. 2,600 feet). It extends as a belt across the southernmost Ozarks from Oklahoma to the Mississippi Alluvial Plain. It is usually composed of sandstone and shale. Steep south-facing sandstone slopes are occupied by the most extensive short-leaf pine–upland hardwood forests and woodlands of the Ozarks. Elsewhere, upland hardwood forests and woodlands dominate, varying according to soil moisture. Although considered here a subdivision of the Ozark Mountains Natural Division, in some ecoregional maps it is placed at the same level in the hierarchy as the Ozark Plateaus (Level III) Ecoregion (Omernik 1987; Keys et al. 1995; Woods et al. 2004; Figure 10).

Although the tops of the mountains within any given locality are at nearly the same elevation, the highest mountains are in the vicinity of Newton County and are high enough to cause higher precipitation and lower temperatures than elsewhere in the Ozarks (Figures 11 & 12). This area appears to create a rain-shadow effect to its north by forcing moisture from air brought northward by south winds from the Gulf of Mexico through the process of orographic lifting. As this air continues to the north of the Boston Plateau, it drops to a lower elevation over the Springfield and Salem plateaus and warms, causing reduced precipitation (Figure 11). This more

elevated and rugged area centered on Newton County has been termed the Upper Boston Mountains (Level IV) Ecoregion, while the rest of the ecoregion is termed the Lower Boston Mountains (Level IV) Ecoregion (Foti & Bukenhofer 1998; Woods et al. 2004; Figure 10). As a result of the high elevation and abundant precipitation, the headwaters of many rivers are located here, including the White, Buffalo, Mulberry, Big Piney, and Kings. The cool, moist conditions of the Upper Boston Mountains support mesic upland hardwood forests, such as beech–oak forest and sugar maple–oak forest, which are of limited extent elsewhere in the Ozarks (Figure 16). These mesic forests, especially those in protected ravines and canyons, support a number of notable rare species including yellow mandarin (*Prosartes lanuginosa*), sharp-lobe hepatica (*Anemone acutiloba*), hairy wood mint (*Blephilia hirsuta*), Hitchcock’s sedge (*Carex hitchcockiana*), blue cohosh (*Caulophyllum thalictroides*), blue-eyed Mary (*Collinsia verna*), butternut (*Juglans cinerea*), Ozark spiderwort (*Tradescantia ozarkana*), celandine-poppy (*Stylophorum diphyllum*), Canadian white violet (*Viola canadensis* var. *canadensis*) and the Arkansas endemic Moore’s delphinium (*Delphinium newtonianum*). Glades (usually occurring on sandstone) are relatively limited in this subdivision but often include seasonally wet areas that support rare wetland plants such as small-head pipewort (*Eriocaulon koernickianum*) and zigzag bladderwort (*Utricularia subulata*). Oak woodlands (Figure 17), savannas, and barrens were once common, though they are usually degraded today because of



FIGURE 16. MESIC FORESTS OCCUR IN MOIST, PROTECTED SITES IN THE INTERIOR HIGHLANDS, SUCH AS THIS BOX CANYON AT SWEDEN CREEK FALLS NATURAL AREA IN MADISON COUNTY IN THE UPPER BOSTON MOUNTAINS ECOREGION.

a recent history of fire suppression. As a result of lower precipitation, woodlands were more extensive in the Lower Boston Mountains in the early nineteenth century, prior to extensive alteration and development, and short-leaf pine forests and woodlands were restricted to the Lower Boston Mountains (Foti 2004). Sandstone bluffs in the Boston Mountains and adjacent mountainous parts of the Arkansas Valley support a number of rare plants such as Arkansas alumroot (*Heuchera villosa* var. *arkansana*), hairy mock orange (*Philadelphus hirsutus*), Alabama snow-wreath (*Neviusia alabamensis*), ovate-leaf catchfly (*Silene ovata*), and Ozark spring-beauty (*Claytonia ozarkensis*). One very notable western species found in



FIGURE 17. OPEN POST OAK WOODLAND IN THE BOSTON MOUNTAINS ECOREGION WITH A DIVERSE HERBACEOUS LAYER INCLUDING BIG BLUESTEM (*ANDROPOGON GERARDII*), BALDWIN'S IRONWEED (*VERNONIA BALDWINII*), AND HAIRY WOODLAND SUNFLOWER (*HELLANTHUS HIRSUTUS*).

somewhat moist microsites on some bluffs in the Boston Mountains is yellow monkey-flower (*Mimulus floribundus*), which is otherwise disjunct from the Rocky Mountains. Sandstone overhangs, commonly called rock-houses or bluff shelters, provide habitat for a few highly specialized species such as French's shooting-star (*Primula frenchii*), dwarf bristle fern (*Trichomanes petersii*), and Appalachian filmy fern (*T. boschianum*). Uncommon and localized depressions in sandstone caps of mountains form unusual upland depression wetlands dominated by overcup oak (*Quercus lyrata*), willow oak (*Q. phellos*), or pin oak (*Q. palustris*) and contain other plant species more typically found in the lowland forests and swamps of the West Gulf Coastal Plain, Arkansas Valley, and Mississippi Alluvial Plain natural divisions.

The Springfield Plateau Subdivision is usually separated by an abrupt escarpment from the Boston Plateau (Figure 18). In many areas the plateau surface, at an elevation of about 550 meters (ca. 1,800 feet), is extensive rather than simply consisting of mountaintops at concordant elevations as with the Boston Plateau. In the Springfield Plateau, as in the rest of the Ozarks, hills are below the plateau surface, cut down by streams and rivers. Some prominent hilly areas include the Elk River Hills around Bella Vista and the Dissected Springfield Plateau east of Rogers, both included within the Dissected Springfield Plateau – Elk River Hills (Level IV) Ecoregion (Woods et al. 2004; Figure 10). The Springfield Plateau is underlain by limestone and chert. South-facing, cherty (acidic) slopes are occupied by short-leaf pine–hardwood forests and woodlands, whereas areas underlain by limestone (calcareous) rock are occupied by dry to mesic hardwood forests and woodlands. With limestone common throughout the subdivision, cave and solution (karst) features are prominent (Figure 19). Glades with exposed limestone or chert are extensive and characteristic, though today many are nearly covered by eastern red-cedar (*Juniperus virginiana* var. *virginiana*) as a result of widespread fire suppression. Prairies on thin soils over these substrates were also once extensive but have been decimated by human development, making many grassland species and communities that were once common very rare today (Figure 20).

Remaining prairies and open glades in



FIGURE 18. ESCARPMENT BETWEEN THE BOSTON PLATEAU SUBDIVISION (BACKGROUND) AND SPRINGFIELD PLATEAU SUBDIVISION (FOREGROUND) NEAR JASPER.

FIGURE 19. AERIAL VIEW (LOOKING SOUTH) OF THE SPRINGFIELD PLATEAU SUBDIVISION OF THE OZARKS SOUTHEAST OF HARRISON, NEAR THE JUNCTION OF BOONE, NEWTON, AND MARION COUNTIES. THE OPEN FIELDS IN THE FOREGROUND WERE HISTORICALLY PRAIRIE AND SAVANNA. NOTE THE PRESENCE OF SEVERAL UPLAND SINKHOLE PONDS. THE FORESTED BAND IN THE CENTER MARKS THE DISSECTED SPRINGFIELD PLATEAU ECOREGION AND THE HILLS IN THE DISTANCE ARE THE BOSTON MOUNTAINS. EACH ECOREGION SUPPORTS DISTINCT PLANT COMMUNITIES AND SPECIES.



FIGURE 20. BAKER PRAIRIE NATURAL AREA NEAR HARRISON IN BOONE COUNTY PROTECTS ONE OF THE FEW SURVIVING REMNANTS OF THE ONCE EXTENSIVE TALLGRASS PRAIRIES OF THE SPRINGFIELD PLATEAU SUBDIVISION OF THE OZARKS.

the Springfield Plateau are rich in plant species, including many found in few, if any, other ecoregions in the state. These species include naked-stem sunflower (*Helianthus occidentalis* subsp. *occidentalis*), prairie sunflower (*H. pauciflorus* subsp. *pauciflorus*), royal catchfly (*Silene regia*), lead-plant (*Amorpha canescens*), Illinois tick-trefoil (*Desmodium illinoense*), Skinner's false foxglove (*Agalinis skinneriana*), prairie violet (*Viola pedatifida*), Bicknell's sedge (*Carex bicknellii*), brown bog sedge (*C. buxbaumii*), open-field sedge (*C. conoidea*) and pointed broom sedge (*C. scoparia* var. *scoparia*).

The Salem Plateau Subdivision is often separated by an abrupt escarpment from the Springfield Plateau. Like the Springfield Plateau, the Salem Plateau surface, at an elevation of about 460 meters (ca. 1,500 feet), is extensive. Several distinct areas of hills have been cut into the plateau by rivers, most prominently the White River Hills (Level IV) Ecoregion along that river (Woods et al. 2004; Figure 10). The Salem Plateau is primarily underlain by dolomite with clay residuum and is covered with open oak woodlands and dry-mesic oak forests, prairies, and calcareous glades. Extensive areas were described in the nineteenth century as "barrens," a term that implied rock exposures with thin soil and some herbaceous and scattered woody plant cover.

Bluffs of the Salem and Springfield Plateaus (Figure 21), especially those in the White River Hills, support a distinct flora and appear to have served as refugia for many species at various times in the past. These bluffs range from very dry to permanently wet, depending on

bluffs in the Ozarks. Such species include Texas Indian-mallow (*Abutilon fruticosum*), tassel-flower (*Brickellia grandiflora*), stick-leaf (*Mentzelia oligosperma*), cedar sedge (*Carex planostachys*), Ashe's juniper (*Juniperus ashei*), Eaton's lip fern (*Cheilanthes eatonii*), slender lip fern (*C. feei*), golden currant (*Ribes aureum* var. *villosum*), American smoke-tree (*Cotinus obovatus*), plains muhly (*Muhlenbergia cuspidata*), western prickly-pear (*Opuntia macrorhiza*), and powdery cloak fern (*Argyrochosma dealbata*). Other unusual plants of dry bluffs are typically found farther north, such as velvety chickweed (*Cerastium velutinum* var. *velutinum*), or farther south, such as Ozark grass (*Limnodea arkansana*). Still others are endemic to the Interior Highlands, such as Church's wild rye (*Elymus churchii*) and MacKenzie's blue wild rye (*E. glaucus* subsp. *mackenzii*). Mesic, protected bluffs also appear to have served as refugia for a more northern and eastern flora. Examples of such northern and eastern species found on these sites include shining fir-moss (*Huperzia lucidula*), Hitchcock's sedge, running strawberry-bush (*Euonymus obovatus*), large-leaf grass-of-Parnassus (*Parnassia grandifolia*), showy lady's-slipper (*Cypripedium reginae*), miterwort (*Mitella diphylla*), hay-scented fern (*Denmstaedtia punctilobula*), pale gentian (*Gentiana alba*), celandine-poppy, hairy mock orange, and barren-strawberry (*Waldsteinia fragarioides*).

Calcareous glades of the Salem and Springfield Plateaus also provide habitat to a number of restricted species that are well adapted to the high pH and desert-like conditions of these communities. Several of these glade species are endemic to the Ozarks, including yellow coneflower (*Echinacea paradoxa* var. *paradoxa*), Bush's skullcap (*Scutellaria bushii*), and Trelease's larkspur (*Delphinium treleasei*). Others not endemic to the Ozarks but restricted or nearly restricted to Ozark glades in Arkansas include narrow-leaf milkweed (*Asclepias stenophylla*), Gattinger's goldenrod (*Solidago gattingeri*), glade cress (*Leavenworthia uniflora*), rock sandwort (*Minuartia michauxii*), Gattinger's prairie-clover (*Dalea gattingeri*), prairie-turnip (*Pedimelum esculentum*), Missouri-primrose (*Oenothera macrocarpa* subsp. *macrocarpa*), knotweed leaf-flower (*Phyllanthus polygonoides*), and sand phlox (*Phlox bifida*). Other calcareous glade and prairie species such as false gaura



FIGURE 21. CALCAREOUS BLUFFS IN THE SALEM PLATEAU SUBDIVISION OF THE OZARKS IN STONE COUNTY.

aspect, exposure, landscape position, and the presence or absence of groundwater. A number of uncommon species typically found in arid habitats farther west and/or southwest are known in Arkansas primarily from dry

(*Stenosiphon linifolius*), showy beardtongue (*Penstemon cobaea*), big-head rabbit-tobacco (*Diaperia prolifera* var. *prolifera*), ear-leaf gerardia (*Agalinis auriculata*), celestial-lily (*Nemastylis geminiflora*), yellow false mallow

(*Malvastrum hispidum*), fringed puccoon (*Lithospermum incisum*), Nuttall's milk-vetch (*Astragalus nuttallianus* var. *nuttallianus*), cedar sedge (*Carex planostachys*), shaggy dwarf morning-glory (*Evolvulus nuttallianus*), and crested-coralroot (*Hexalectris spicata* var. *spicata*) occur in both the Ozarks and in the calcareous prairies and glades of the Blackland Prairie (Level IV) Ecoregion (Figure 10) in the West Gulf Coastal Plain of southwestern Arkansas, which has similar dry calcareous soils.

Calcareous, groundwater-fed wet meadows, or fens (Figure 22), are occasionally found in the Salem and Springfield Plateau subdivisions, often along seepy streambanks, and are the only sites in Arkansas for a number of plant species typically found to the north. Such species include Riddell's goldenrod (*Solidago riddellii*), Virginia mountain-mint (*Pycnanthemum virginianum*), linear-leaf yellow-loosestrife (*Lysimachia quadriflora*), swamp lousewort (*Pedicularis lanceolata*), Allegheny monkey-flower (*Mimulus ringens* var. *ringens*), silky willow (*Salix sericea*), porcupine sedge (*Carex hystericina*), inland star sedge (*C. interior*), bristly-stalksedge (*C. leptalea*), tussocksedge (*C. stricta*), prairie straw sedge (*C. suberecta*), capillary beaksedge (*Rhynchospora capillacea*), fen rush (*Juncus subcaudatus*), and shining ladies'-tresses (*Spiranthes lucida*). Other rare species confined or nearly confined



FIGURE 22. THIS MARION COUNTY FEN, IN THE SALEM PLATEAU SUBDIVISION OF THE OZARKS, IS DOMINATED BY ORANGE CONEFLOWER (*RUDBECKIA FULGIDA* VAR. *UMBROSA*) AND LARGE-LEAF GRASS-OF-PARNASSUS (*PARNASSIA GRANDIFOLIA*) WITH SCATTERED CLUMPS OF BRISTLY-STALK SEDGE (*CAREX LEPTALEA*), CAPILLARY BEAKSEDE (*RHYNCHOSPORA CAPILLACEA*), AND FEN RUSH (*JUNCUS SUBCAUDATUS*).

to Ozark fens in Arkansas are disjunct from other regions including small-fruit primrose-willow (*Ludwigia microcarpa*), from the southeast, and creeping western umbrella sedge (*Fuirena simplex* var. *simplex*), from the southwest. Upland sinkhole ponds, natural karst features

formed by solution of bedrock or by the past collapse of subterranean caverns, are another important habitat for rare plants in these ecoregions. Plants restricted in Arkansas to these isolated upland wetlands include lowland yellow-loosestrife (*Lysimachia hybrida*) and creeping manna grass (*Glyceria acutiflora*). Sinkhole ponds also contain a number of wetland plant species more typically found in the Mississippi Alluvial Plain or West Gulf Coastal Plain natural divisions.

The Ouachita Mountains Natural Division

The Ouachita Mountains Natural Division (Figures 3 & 4) is an area of folded rock formed by tectonic compression from south to north (Croneis 1930). In contrast to the Ozarks, streams of the Ouachitas generally flow in structural valleys within folds, rather than having created the valleys by erosion. Consequently, the valleys are often wider than those of Ozark streams and trend east-west rather than in the dendritic pattern typical of streams in the Ozarks. Sandstone and shale are the ubiquitous rocks of the division, which weather into sandy soils that support the short-leaf pine that is the characteristic dominant species of the division.

The Fourche Mountains Subdivision, the northernmost subdivision of the Ouachitas (Figures 10, 14 & 15), is also the most typical; one ridge extends with few breaks from Oklahoma east to near Searcy. The characteristic pattern of vegetation in the Ouachitas is clearest here as well, with pine and pine-hardwood forests dominant on lower south-facing slopes, grading to dry post oak-blackjack oak forest or woodland on upper south-facing slopes (Figures 4 & 23). Dry-mesic hardwood forests dominated by white oak and northern red oak occur on north-facing slopes. Sometimes there is another belt of pine on lower, gentle, north-facing slopes that get considerable sun. Some very protected, generally steeper, moist areas on north-facing slopes, such as on Rich Mountain and Blackfork Mountain, may have mesic forests of sugar maple, umbrella magnolia (*Magnolia tripetala*), cucumber magnolia (*M. acuminata*), and basswood, sometimes with beech. One of the most interesting features of the vegetation of this region is the prominence of the "Pine-Bluestem Ecosystem," plant communities on gentle slopes heavily influenced by fire, where short-leaf pines are widely spaced enough to allow a groundcover of grasses and forbs typical of prairies. A federally endangered bird species, the Red-cockaded Woodpecker



FIGURE 23. AERIAL VIEW (LOOKING WEST) OF NORTH FORK PINNACLE NEAR THE SALINE/PERRY COUNTY LINE, SHOWING TYPICAL VEGETATION OF THE FOURCHE MOUNTAINS SUBDIVISION OF THE OUACHITA MOUNTAINS – SHORT-LEAF PINE-HARDWOOD FOREST AND WOODLAND ON SOUTH-FACING SLOPES AND HARDWOOD FOREST AND WOODLAND ON NORTH-FACING SLOPES.

(*Picoides borealis*), occurs in these open woodlands.

The Central Ouachita Mountains Subdivision (Figure 14) is more complex than the Fourche Mountains in that the mountains are not always oriented east–west (the appropriately named Zig-Zag Mountains near Hot Springs are certainly not). In fact, there are several distinct basins and mountain ranges within this subdivision (Croneis 1930; Foti 1974; Figure 15). Woods et al. (2004) divide this subdivision into the Central Mountain Ranges, Western Ouachitas, and Central Hills, Ridges, and Valleys (Level IV) ecoregions (Figure 10). Geologically, the subdivision is bounded by, and includes within it, novaculite, a flint-like rock, in addition to the typical sandstone and shale. Glades and woodlands occur on all three substrates. The lowlands along the Ouachita River, by far the largest river of this division, once added distinctiveness, including the most extensive natural loblolly pine stands of the division, but large reservoirs have drowned most of these, making natural stands of loblolly pine very rare in the Ouachitas. Vegetation of this subdivision displays the patterns typical of the Fourche Mountains, but glades occurring on novaculite and shale (Figures 24 & 25) add greatly to the diversity of the flora and vegetation. Both of these substrates can be either acidic or calcareous, leading to substantial floristic diversity even within one general kind of glade. Both of these glade types contain a number of plant species endemic to the Ouachita Mountains. West of Hot Springs, groundwater seepage areas are

numerous, with diverse plant communities rich in orchids, ferns, sedges, grasses, and many other species otherwise uncommon in the region, many of which have their main ranges to the north and/or east of Arkansas today and are considered relicts of cooler climatic periods in the past. Such species include log fern (*Dryopteris celsa*), swamp thistle (*Cirsium muticum*), false bugbane (*Trautvetteria caroliniensis*), tussock sedge (*Carex stricta*), bristly-stalk sedge (*C. leptalea*), brome sedge (*C. bromoides* subsp. *bromides*), smooth-sheath sedge (*C. laevivaginata*), prickly bog sedge (*C. atlantica* subsp. *atlantica*), leafy bulrush (*Scirpus polyphyllus*), New York fern (*Thelypteris noveboracensis*) and fen orchid (*Liparis loeselii*).

The Athens Plateau Subdivision, often called the Athens Piedmont (Figures 10 & 14), is the southernmost subdivision of the Ouachita Mountains. This region displays the simple east–west ridge structure of the Fourche Mountains but with a distinctive feature: in this subdivision the rivers, such as the Cossatot and Little Missouri, typically flow north to south, crossing each ridge, a phenomenon that occurs only rarely in the other subdivisions. At some point in time these ridges may have dropped below ocean level, the valleys filled with sediment, and when they rose again with a gentle north-to-south slope, southward-flowing rivers were able to continue their direction of flow by cutting through the ridges they encountered. At each crossing, a steep rapids or series of waterfalls occurs, most notably Cossatot Falls on the Cossatot



FIGURE 24. NOVACULITE GLADE AND ADJACENT SHORT-LEAF PINE-OAK WOODLAND IN THE CENTRAL OUACHITA MOUNTAINS SUBDIVISION OF THE OUACHITA MOUNTAINS AT THE SIMPSON PRESERVE AT TRAP MOUNTAIN NEAR THE HOT SPRING/GARLAND COUNTY BORDER.



FIGURE 25. SHALE BARRENS IN THE CENTRAL OUCHITA MOUNTAINS SUBDIVISION OF THE OUCHITA MOUNTAINS IN GARLAND COUNTY. THIS COMMUNITY SUPPORTS A HIGH NUMBER OF RARE PLANT SPECIES, INCLUDING MORE ENDEMIC SPECIES THAN ANY OTHER HABITAT IN THE STATE.

River (Figure 26) and Little Missouri Falls on the Little Missouri River. Ridges here are lower than those elsewhere in the Ouachitas. Vegetation patterns are similar to those of the Fourche Mountains, except that conversion of natural forests to pine plantations has been much more extensive in the Athens Piedmont Plateau than in the rest of the Ouachitas.



FIGURE 26. COSSATOT FALLS AT THE COSSATOT RIVER STATE PARK-NATURAL AREA IN HOWARD COUNTY.

The Ouachita Mountains are notable for a number of endemic or near-endemic plant species. Most (though not all) of these are restricted to glades, barrens, open woodlands, or “scour-prairies” (rocky prairie-like areas along high-energy mountain streams).

Examples of such endemic or near-endemic species include Ouachita bluestar (*Amsonia hubrichtii*), Ouachita blazing-star (*Liatris compacta*), Cossatot leafcup (*Polymnia cossatotensis*), Ouachita goldenrod (*Solidago ouachitensis*), Letterman’s ironweed (*Vernonia lettermannii*), Browne’s waterleaf (*Hydrophyllum brownei*), Arkansas twistflower (*Streptanthus maculatus* subsp. *obtusifolius*), Ouachita twistflower (*S. squamiformis*), Ouachita indigo-bush (*Amorpha ouachitensis*), Ouachita beebalm (*Monarda fistulosa* var. *stipitatoglandulosa*), Ouachita hedge-nettle (*Stachys iltisii*), Church’s wild rye (*Elymus churchii*), hairy-flower Arkansas bedstraw (*Galium arkansanum* var. *pubiflorum*), Ouachita bluet (*Houstonia ouachitana*), Nuttall’s cornsalad (*Valerianella nuttallii*), Palmer’s cornsalad (*V. palmeri*), and Waterfall’s sedge (*Carex latebracteata*).

Shale barrens in the eastern part of the Ouachitas (Saline County) contain Pelton’s rose-gentian (*Sabatia arkansana*), a species also known from nearby igneous glades in the northern West Gulf Coastal Plain, but apparently endemic to Saline County. The Ouachita Mountains are also notable for a number of rare species (from north, south, east, and west) that have disjunct occurrences in

the Ouachitas. Many of these species are found in specific, and often rare, patch communities. Many northern and eastern species occur in wooded seeps and are described above. Other significantly disjunct species are found in rocky upland woods, often at high elevation. These include Georgia holly (*Ilex longipes*) and rayless crownbeard (*Verbesina walteri*), disjunct from the south and east, and black huckleberry (*Gaylussacia baccata*) and Porter’s reed grass (*Calamagrostis porteri* subsp. *insperata*), disjunct from the north and east. Still others occur in rocky stream channels and associated scour-prairies along streams. These include the federally endangered harperella (*Ptilimnium nodosum*), as well as plantain-leaf sunflower (*Helianthus occidentalis* subsp. *plantagineus*)

and Cumberland sand-reed (*Calamovilfa arcuata*). Still others, such as three-flower hawthorn (*Crataegus triflora*) and dwarf spiderwort (*Tradescantia longipes*), are found in shale barrens.

The Arkansas Valley Natural Division

The Arkansas Valley Natural Division (Figures 3 & 5) is defined as a structural synclinorium (trough) lying between the anticlinorium (hump) of the Ouachitas and the uplifted plateaus of the Ozarks. As such, there is no clearly defined boundary at the surface between the Valley and the Ouachitas; the definitional distinction occurs underground. The identity of the Valley is further confused by the presence within it of features that are characteristic of both the Ouachitas and the Ozarks, such as folded ridges and uplifted plateaus. Croneis (1930) considered the Arkansas Valley a subdivision of the Ouachita Physiographic Region, but it was elevated to a full natural division (Foti 1976; Pell 1983; Figure 3) because of its transitional character between the Ouachitas and Ozarks and because it has features within it that are unique to it, such as isolated mountains that are erosional remnants of an older, higher land surface, once probably continuous with the Boston Mountains. In general, such remnants are known as “monadnocks,” but those of a particular shape—flat-topped and steep-sided—are mesas, like Magazine Mountain. The fact that the Arkansas River passes through, not around, the only mountainous region between its source and the Gulf of Mexico gives a hint of an interesting geologic history. The Arkansas River played a dominant role in shaping the surface features of the valley, directly or indirectly, and caused Foti (1974) to call it the “Arkansas River Valley.” However, most subsequent discussions have referred to it as the “Arkansas Valley,” and that term is used here.

Although the earlier maps of the Arkansas Valley (Foti 1976) did not subdivide it, it has considerable landscape diversity, and several distinct Level IV Ecoregions have been recognized (Woods et al. 2004; see also Keys et al. 1995; Foti & Bukenhofer 1998; Figure 10). The characteristics of these Level IV Ecoregions are described below.

The Arkansas Valley Plains (Level IV) Ecoregion (Woods et al. 2004) includes flat Pleistocene terraces, rolling uplands, and isolated, generally small, ridges. Vegetation of this ecoregion is diverse. The rolling uplands are generally dominated by hardwood communities with poorly drained flats occupied by willow oak flatwoods. Ridges and monadnocks are covered with upland pine and hardwood forests and woodlands in the same patterns described for the Fourche Mountains. Prior to European settlement, extensive tallgrass prairies occurred in Franklin and Sebastian counties and

graded into oak savannas and woodlands (Figure 27). Floristically, these prairies are similar in many respects to those of the midwestern United States but they also contain a number of Coastal Plain elements such as short-leaf skeleton grass (*Gymnopogon brevifolius*), Muhlenberg’s nut-rush (*Scleria muehlenbergii*), sundew (*Drosera brevifolia*), zigzag bladderwort, big carpet grass (*Axonopus furcatus*), and twist-leaf goldenrod (*Solidago tortifolia*). In some areas these prairies contain inclusions of saline soils which have developed a unique saline barrens community (Figure 27) with a number of salt-tolerant rare plants that are restricted or nearly restricted to this community type in Arkansas. Examples of such species found in Arkansas Valley saline barrens include woolly cotton-flower (*Gossypianthus lanuginosus* var. *tenuiflorus*), tumble grass (*Schedonnardus paniculatus*), purple three-awn (*Aristida purpurea* var. *purpurea*), geocarpon (*Geocarpon minimum*), and whorled dropseed (*Sporobolus pyramidatus*). The juxtaposition of these prairies, post oak woodlands, and savannas demonstrates that this area is related to the Cross Timbers of Oklahoma and Texas.



FIGURE 27. SALINE SOIL BARRENS (FOREGROUND) SURROUNDED BY TALLGRASS PRAIRIE AND OAK SAVANNA ON FORT CHAFFEE IN THE ARKANSAS VALLEY PLAINS ECOREGION NEAR THE FRANKLIN/SEBASTIAN COUNTY LINE.

The Arkansas Valley Hills (Level IV) Ecoregion (Figure 10) is very different from the Plains. Flat to rolling uplands are less extensive, and the landscape is typically characterized by hills and small mountains. In many areas it is difficult to decide where the Arkansas Valley ends and the Boston Mountains begin. The differences between the Arkansas Valley Hills and Plains exist because the Arkansas River has not shaped the Hills Ecoregion but rather cuts southward through the eastern Ouachita Mountains from about Conway. Forests and woodlands of this subdivision are typically the hard-

wood and pine–hardwood communities that are typical of the southern Ozarks and Ouachitas.

The Scattered High Ridges and Mountains (Level IV) Ecoregion (Woods et al. 2004; Figure 10) includes the highest mountain and greatest local relief in Arkansas at Magazine Mountain in Logan County (Figure 28). Although the mountains are sometimes high, their underlying strata are warped down into a trough; these are synclinal mountains. Within this subdivision are both folded ridges and monadnocks or mesas such as Petit Jean Mountain. The upland hardwood and pine–hardwood communities are like those of the adjacent Fourche Mountains. Magazine Mountain is an especially unique and floristically important feature of the Arkansas Valley and supports a number of notable plant



FIGURE 28. A CLUMP OF YELLOW NAILWORT (*PARONYCHIA VIRGINICA*) GROWING ON A BLUFFTOP GLADE ALONG THE NORTH RIM OF MAGAZINE MOUNTAIN IN LOGAN COUNTY.

species, including several that are significantly disjunct from the north, east, and west. Examples of more northern elements on Magazine Mountain include spreading dogbane (*Apocynum androsaemifolium*), Pennsylvania sedge (*Carex pensylvanica*), blue cohosh, hay-scented fern (*Dennstaedtia punctilobula*), spinulose wood fern

(*Dryopteris carthusiana*), wavy hair grass (*Deschampsia flexuosa*), northern blazing-star (*Liatris scariosa* var. *nieuwlandii*), prickly gooseberry (*Ribes cynosbati*), and red-fruit horse-gentian (*Triosteum aurantiacum* var. *illinoense*). In xeric habitats on the top of the mountain are several western and southwestern species including Ashe’s juniper (*Juniperus ashei*), western wallflower (*Erysimum capitatum* var. *capitatum*), and yellow nailwort (*Paronychia virginica*). Eastern elements include button sedge (*Carex bullata*), Turk’s-cap lily (*Lilium superbum*), and perhaps most notably Appalachian cliff fern (*Woodsia appalachiana*), which is a long-range disjunct from the Blue Ridge Mountains in the southern Appalachians.

Some of the most interesting plants in the Arkansas Valley Natural Division are found within the Arkansas River Floodplain (Level IV) Ecoregion (Woods et al. 2004; Figure 10). Prior to the navigation project that created a series of dams on the Arkansas River (there are 13 within Arkansas’ borders), there were extensive sandbar areas along the river that collectively supported a distinctive flora. Most of this habitat was flooded by impoundments behind these dams, but remaining sandbar areas, usually occurring just downstream from the dams, provide refuge for a number of plant species dependent on this habitat type and not known from other areas of the state. Examples include Hooker’s scratch-daisy (*Croptilon hookerianum* var. *validum*), phlox heliotrope (*Heliotropium convolvulaceum*), six-angle spurge (*Euphorbia hexagona*), woolly prairie-clover (*Dalea lanata* var. *lanata*), catchfly prairie-gentian (*Eustoma exaltatum*), and four-point evening-primrose (*Oenothera rhombipetala*).

The West Gulf Coastal Plain Natural Division

The West Gulf Coastal Plain Natural Division, or simply Coastal Plain (Figures 3 & 7), is often referred to as “The Pineywoods” since that is its dominant character. Omernik (1987) and Woods et al. (2004) referred to it as the South Central Plains (Level III) Ecoregion (Figure 10). Pine, usually loblolly, with short-leaf pine on drier sites, is ubiquitous, except in the wide bottomlands along streams. The upland geology here, most often sand and gravel, is often derived from beaches, shores, and bottoms of the ancient Gulf of Mexico, laid down since the Cretaceous Period. There is a high degree of biological diversity in the Coastal Plain, but it has been greatly reduced by human activity in the past century. All forests in the division are accessible and have been heavily cut over or managed. Fire, which was an important source of the region’s diversity, has generally been suppressed. Pines were naturally dominant here because of frequent fire, and those fires sustained other communities as well, including prairies, pine savannas, sand barrens, glades, herbaceous seepage wetlands (seeps), marshes, and sa-

line soil barrens. The Coastal Plain may have had, prior to European settlement, the greatest landscape diversity of any of the natural divisions, but that has been reduced to limited areas of natural vegetation scattered across an expanse of pine plantations, pastures, and other developed land cover types. Subdivisions of the Coastal Plain that are described here generally follow Woods et al. (2004).

The Tertiary Uplands (Level IV) Ecoregion is the most typical part of the Coastal Plain (Woods et al. 2004; Figure 10). It occupies the areas throughout the Coastal Plain that are derived from marine sediments of Tertiary age deposited by the Gulf of Mexico. This and adjacent portions of Louisiana are the typical piney hills and are the heart of the loblolly pine range west of the Mississippi River. This species dominated the natural forests in this part of the state, particularly on north-facing slopes, lower slopes, and in well-drained bottoms. Short-leaf pine dominated on drier sites (generally south-facing sandy slopes). Short-leaf pine may have replaced loblolly in natural succession as well; that is, there may have been a loblolly-to-short-leaf pine succession as well as the more often described pine-to-hardwood succession, given that short-leaf pine is longer-lived and more fire-tolerant than loblolly. It is impossible to think of the vegetation of the Coastal Plain in the absence of fire. In the 1720s, Le Page du Pratz (1774) described the Coastal Plain, in areas of present-day Louisiana and Arkansas, in detail, noting the importance of annual fall burning by Native Americans. In many cases the distinctive vegetation found on both typical and unusual physical sites is unrecognizable in the absence of fire. Suppression of fire has had impacts comparable to those of human conversion of natural forests to a loblolly pine monoculture.

These piney hills are, in general, among the least species-rich communities of the Coastal Plain, with few rare species. However, within the general matrix of sandy hills dominated by pine-hardwood forests are sites with special conditions that greatly add to the diversity of this region. Extremely sandy sites, or sandhills, have excessive drainage of precipitation and unique sand barrens vegetation that is typified by scattered scrubby oaks and pines, with an herbaceous ground layer rich in rare or uncommon plant species (Figure 29). These sandhill communities are best developed in Ouachita, Nevada, and Miller counties but are found scattered in other areas of the Tertiary Uplands Ecoregion. Within both the overstory and understory are dozens of species that occur in Arkansas only in these communities. These include dwarf pawpaw

(*Asimina parviflora*), silver rabbit-tobacco (*Diaperia candida*), woolly-white (*Hymenopappus artemisiifolius* var. *artemisiifolius*), Robbins' prairie scorpion-weed (*Phacelia strictiflora* var. *robbinsii*), sandhill twist-flower (*Streptanthus hyacinthoides*), Georgia rock-rose (*Crocianthemum georgianum*), sandhill clammy-weed (*Polanisia erosa* subsp. *erosa*), Patterson's dawnflower (*Stylisma pickeringii* var. *pattersonii*), narrow-leaf rush-foil (*Croton michauxii*), heart-leaf spurge (*Euphorbia cordifolia*), slim-pod milk-vetch (*Astragalus leptocarpus*), Soxman's milk-vetch (*Astragalus soxmaniorum*), buried Indian-breadroot (*Pediomelum hypogaeum* var. *subulatum*), Arkansas oak (*Quercus arkansana*), blue-jack oak (*Q. incana*), eastern sandhill evening-primrose (*Oenothera heterophylla* subsp. *orientalis*), sand blue toadflax (*Nuttallanthus canadensis*), scarlet beardtongue (*Penstemon murrayanus*), many-flower wild buckwheat (*Eriogonum multiflorum* var. *multiflorum*), pinewoods larkspur (*Delphinium carolinianum* subsp. *vimineum*), squirrel-tail six-weeks grass (*Vulpia sciurea*), Louisiana yucca (*Yucca louisianensis*), Reverchon's spiderwort (*Tradescantia reverchonii*), fringe-leaf hairsedge (*Bulbostylis ciliatifolia* var. *coarctata*), Illinois flatsedge (*Cyperus grayoides*), bristly flatsedge (*C. hystericinus*), curly three-awn (*Aristida desmantha*), and downy oat grass (*Danthonia sericea*). An area of sandhill habitat in Miller County south of Texarkana has a number of rare sandhill plants typically found in Texas and restricted in Arkansas only to this western-most area of sand barrens. These species include milkvine (*Matelea cynanchoides*), sandhill green-eyes (*Berlandiera pumila* var. *pumila*), golden-wave tickseed (*Coreopsis intermedia*), sanguine purple coneflower (*Echinacea sanguinea*), Oklahoma plum (*Prunus gracilis*), Texas ragwort (*Senecio ampullaceus*), Louisiana squarehead (*Tetragonotheca ludoviciana*), yellow-disk greenthread (*Thelesperma*



FIGURE 29. SANDHILL BARRENS AT MILLER COUNTY SANDHILLS NATURAL AREA.

flavodiscum), spreading pygmyleaf (*Loefflingia squarrosa*), Small's noseburn (*Tragia smallii*), little-leaf prairie-clover (*Dalea phleoides* var. *microphylla*), silky prairie-clover (*D. villosa* var. *grisea*), palm-leaf scurf-pea (*Pediomelum digitatum*), sandhill evening-primrose (*Oenothera heterophylla* subsp. *heterophylla*), and hairy grama (*Bouteloua hirsuta* subsp. *hirsuta*).

As water draining through subsurface sands reaches a layer of tighter silt or clay, it is forced to travel laterally and exit at the base of the hills as springs or, more interestingly, as broad areas of groundwater seepage. The vegetation of these "seeps" can take several forms, including herbaceous-dominated communities with orchids and scattered overstory pines and hardwoods, or, more commonly in the Tertiary Uplands, as forested seeps dominated by ferns and sweet-bay magnolia (*Magnolia virginiana*), a northern extension of the "bay-head" or "baygall" community of Louisiana and Texas. Species found almost exclusively in these forested seeps and groundwater-fed seepage swamps in Arkansas include the Louisiana wood fern (*Dryopteris ludoviciana*), kidney-leaf grass-of-Parnassus (*Parnassia asarifolia*), black chokeberry (*Photinia melanocarpa*), swamp goldenrod (*Solidago patula* subsp. *strictula*), and coral greenbrier (*Smilax walteri*).

Sandy, moist ravines and occasionally flooded bottomlands within the Tertiary Uplands Ecoregion have a beech-holly dominated community (Figure 30) that is probably a northern extension of the beech-magnolia community of Louisiana.



FIGURE 30. MATURE BEECH-HOLLY FOREST ALONG A SMALL STREAM IN THE TERTIARY UPLANDS ECOREGION OF THE GULF COASTAL PLAIN IN DALLAS COUNTY.

The Pleistocene Fluvial Terraces (Level IV) Ecoregion (Figure 10) was probably the region within the Coastal Plain that was naturally most heavily dominated by loblolly pine. These terraces, up to about 32 ki-

lometers (20 miles) wide on either side of the Ouachita, Saline, and Red rivers, were formed within the past 100,000 years but are now generally above the current floodplain and receive their primary hydrologic input from precipitation rather than overbank flooding of streams. The topography is flat, and the substrate is poorly drained silt or clay. These terraces typically consist of pine flatwoods, sometimes with a forest (closed canopy) structure but often with an open woodland structure with an herbaceous ground layer (Figure 31). Often these areas, while not flooded, are poorly drained enough to be wetlands, and embedded depressions as well as larger, very poorly drained flats may be occupied by hardwood flatwoods (Figure 32). Because they have poor external drainage due to their flatness and poor internal drainage due to a tight clay subsoil, soil moisture varies within a typical year from very wet in the winter and spring to very dry in the summer and fall. This "hydroxic" moisture regime has important implications for the distribution of species, both directly through the effects of wetness or dryness of a particular microsite, and indirectly through its influence on the fire regime of such areas. Because these sites are very dry during the summer-fall dry season, they burn with high frequency and intensity. However, low flats and vernal pools may remain moist even during the typical dry season, causing fire to burn around or with lower intensity through these moist areas. Therefore, fire intensity is regulated by edaphic conditions in these terraces, rather than by slope and aspect as in more rolling or hilly areas. These conditions favored plant communities dominated by

open stands of pine with a diverse, prairie-like herbaceous ground layer (Figure 31).

The Pleistocene Terraces have their own characteristic patch communities that increase plant diversity in the overall landscape of the ecoregion. These communities include seeps, tallgrass prairies, lowland sand prairies, and saline barrens. Where a higher terrace abuts a lower one, groundwater may move laterally and exit in seeps where uncommon species are concentrated. These are similar to the seepage communities described for the Tertiary Uplands but were, at least historically, generally more open due to the higher incidence of fire in the Pleistocene Terraces. These open, herbaceous-dominated seeps (Figure 33) are typically richer in rare species than forested ones and provide habitat

for a number of rare or restricted plants, including blue-flower eryngo (*Eryngium integrifolium*), pink sundew (*Drosera capillaris*), Virginia marsh-St. John's-wort (*Triadenum virginicum*), horned bladderwort (*Utricularia*



FIGURE 31. OPEN PINE FLATWOODS WITH A DIVERSE UNDERSTORY CHARACTERISTIC OF THE PLEISTOCENE FLUVIAL TERRACES ECOREGION OF THE WEST GULF COASTAL PLAIN. WARREN PRAIRIE NATURAL AREA, DREW AND BRADLEY COUNTIES.



FIGURE 32. WET HARDWOOD FLATWOODS WITH DWARF PALMETTO (*SABAL MINOR*) UNDERSTORY ON A PLEISTOCENE TERRACE OF THE RED RIVER AT PALMETTO FLATS NATURAL AREA IN LITTLE RIVER COUNTY.



FIGURE 33. HERBACEOUS SEEPAGE WETLAND AT THE CONTACT BETWEEN THE TERTIARY UPLANDS ECOREGION AND THE PLEISTOCENE FLUVIAL TERRACES ECOREGION NEAR HARDIN IN JEFFERSON COUNTY.

cornuta), swamp hornpod (*Mitreola sessilifolia*), twisted spike-rush (*Eleocharis tortilis*), Bush's umbrella sedge (*Fuirena bushii*), slender beaksedge (*Rhynchospora gracilentia*), few-flower beaksedge (*R. rariflora*), plumed beaksedge (*R. plumosa*), large-head pipe-wort or hatpins (*Eriocaulon decangulare*), rose pogonia (*Pogonia ophioglossoides*), tuberous grass-pink (*Calopogon tuberosus* var. *tuberosus*), crested fringed orchid (*Platanthera cristata*), tall swamp panic grass (*Dichantherium scabriusculum*), and three species of yellow-eyed-grass (*Xyris ambigua*, *X. baldwiniana*, and *X. difformis*).

Additionally, within the past 20,000 years, a blockage of the Ouachita River near present-day Monroe, Louisiana, created a lake that extended into the area of present-day southern Arkansas. Sandy deposits within the Ouachita River floodplain that may have been beaches along the former shores of this lake (Lake Monroe) support a lowland sand "prairie" community dominated by switch grass (*Panicum virgatum*), but the community lacks most species typical of tallgrass prairies and is more like barrens than true prairies. Water dawnflower (*Stylisma aquatica*) is a species more or less restricted to this habitat in Arkansas.

Some of the terraces are capped with loess, which gives them the character of the Pleistocene Terraces of the Mississippi Alluvial Plain. Indeed, there historically were prairies on these terraces similar to the Grand Prairie and other prairies of the Mississippi Alluvial Plain. These and other areas with calcareous soils had either herbaceous prairie groundcover, with a thin woody overstory, sometimes referred to as barrens, or were small, relatively treeless prairies. In the West Gulf Coastal Plain, these prairies were best developed in Drew and Ashley counties but have been almost entirely destroyed since the time of European settlement.

Another distinctive feature of the Pleistocene Terraces is the presence of saline soil areas with a distinctive prairie or barrens vegetation. Although these areas have a few species in common with the true tallgrass prairies of Arkansas, they are not prairies as typically meant by the term. Generally, they are difficult areas for plants to survive in; there are areas within them that are so salty that patches of bare soil, called "slicks" occur. The dominant species around these slicks may in fact be "weeds," such as poor-Joe (*Diodia teres*) and three-awn grasses (*Aristida oligantha* and *A. dichotoma*), that are tolerant of the extreme salinity of these areas, a condition toxic to many

plants. A number of rare species, however, occur in Arkansas only on these sites, including silver dwarf morning-glory (*Evolvulus sericeus*), barrens silky aster (*Symphotrichum pratense*) Texas sunnybell (*Schoenolirion wrightii*), and the federally threatened species geocarpon (*Geocarpon minimum*). In situations where the soil is a bit thicker, species such as little bluestem (*Schizachyrium scoparium*) may dominate, sometimes with a scattering of shrubby post oaks, often delta post oak (*Quercus similis*), and dwarf palmetto (*Sabal minor*).

The Blackland Prairie (Level IV) Ecoregion (Figure 10), also referred to as the Blackland Prairie Section (Foti 1976), is quite different from the rest of the Coastal Plain. The geologic parent material is older and is often calcareous, in contrast to the acidic sands and gravels found elsewhere. The parent material is often calcareous clay or chalk, but there are also two narrow belts of limestone within the region. Typical Coastal Plain sands and gravels also occur here, but short-leaf pine is more abundant within the pine–hardwood forests on such sites than in the rest of the Coastal Plain. The sites here tend to be higher and drier than prairies farther east in Arkansas, and the climate here is more influenced by dry winds from Texas and Oklahoma. On calcareous substrates, distinctive prairies, forests, and woodlands are found (Figure 34). The blackland prairies themselves are on shallow soils over chalk or marl (calcareous clay). Because they are drier than other prairies in Arkansas, they are dominated by Indian grass (*Sorghastrum nutans*) and little bluestem (*Schizachyrium scoparium*) rather than big bluestem (*Andropogon gerardii*) and switch grass (*Panicum virgatum*). There are a number of species that are restricted, or

nearly so, in Arkansas to the blackland prairies. These include little-tooth sedge (*Carex microdonta*), which may be locally very abundant, slender bladderpod (*Physaria gracilis* subsp. *gracilis*), Great Plains ladies'-tresses (*Spiranthes magnicamporum*), false gaura (*Stenosiphon linifolius*), Dakota vervain (*Glandularia bipinnatifida* var. *bipinnatifida*), purple ground-plum (*Astragalus crassicaarpus* var. *crassicaarpus*), big-head rabbit-tobacco (*Diaperia prolifera* var. *prolifera*), Drummond's wild onion (*Allium drummondii*), plains larkspur (*Delphinium carolinianum* subsp. *virescens*), Reverchon's false pennyroyal (*Hedeoma reverchonii*), few-flower false dandelion (*Pyrrhopappus pauciflorus*), and hairy cornsalad (*Valerianella amarella*). On outcrops of chalk with even thinner soil are glades and woodlands dominated by Ashe's juniper (*Juniperus ashei*) and Durand's white oak (*Quercus sinuata*), a community similar to that of the Edwards Plateau in Texas. These chalk glades are the only sites in Arkansas for a number of plants such as bluewood (*Condalia hookeri*), scarlet-pea (*Indigofera miniata*), Texas grama (*Bouteloua rigidiseta*), annual wild buckwheat (*Eriogonum annuum*), Texas bindweed (*Convolvulus equitans*), compact prairie-clover (*Dalea compacta* var. *compacta*), Engelmann's daisy (*Engelmannia peristenia*), and skunk-bush sumac (*Rhus trilobata* var. *trilobata*). On deeper calcareous soils occur upland hardwood forests that may include bluff oak (*Quercus austrina*) and Durand's white oak as well as other species unusual in Arkansas. The Red River bottomlands and terraces also may have forests dominated by Durand's white oak and may have an open structure with a sedge and palmetto understory that is very distinctive.

Along watercourses in the Coastal Plain are expansive bottomlands; even small streams have bottomlands that are often up to 3 kilometers (1 to 2 miles) wide. These areas are substantial enough to be considered another Level IV Ecoregion, the Floodplains and Low Terraces Ecoregion (Woods et al. 2004; Figure 10). Major rivers like the Red and Ouachita have bottomlands several kilometers wide. The unconsolidated deposits along these streams are easy to remove and rework even by small streams. Woods et al. (2004) distinguished the Red River Bottomlands (Level IV) Ecoregion from all others in the Coastal Plain because of its width, the fact that the soils here are transported from the west rather than being derived from within the Coastal Plain or Ouachita Mountains, and the fact that the land use here today is predominantly row-crop agriculture, the only large area within the region where that is the case.

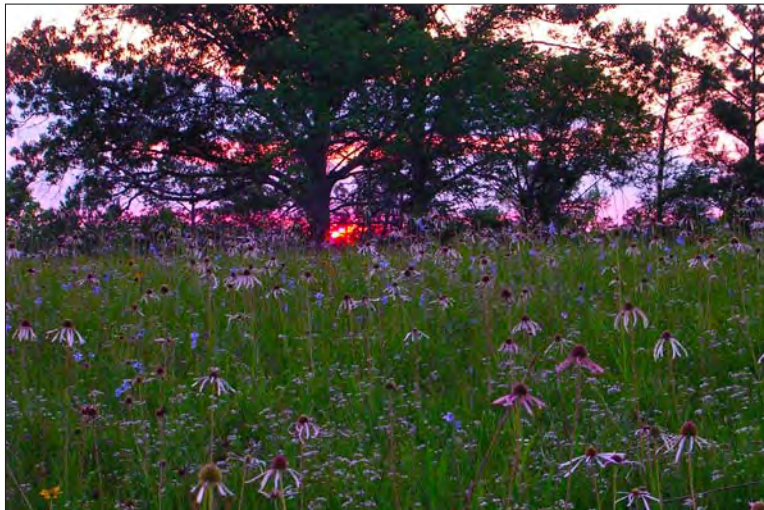


FIGURE 34. THE BLACKLAND PRAIRIE ECOREGION HISTORICALLY SUPPORTED A DIVERSE MOSAIC OF CALCAREOUS PRAIRIES, SAVANNAS, AND OPEN WOODLANDS LIKE THIS ONE AT TERRE NOIRE NATURAL AREA IN CLARK COUNTY.

The Mississippi Alluvial Plain Natural Division

The Mississippi Alluvial Plain Natural Division, often referred to as the Lower Mississippi Valley, Mississippi Alluvial Valley, or Delta, is a region where the surface layers of Gulf of Mexico deposits have been removed and replaced by alluvial deposits of the rivers that traverse it (Figures 3 & 8). Although the typical vegetation is bottomland hardwood forest, there is much greater community diversity here than is often assumed, including upland hardwood forest, oak flatwoods, prairie, woodland or savanna, and pine flatwoods. In the floodplains of the rivers, seasonal inundation is the dominant physical factor influencing the composition and structure of vegetation. Whether in the floodplains or not, the rivers have played pre-eminent roles in shaping the land and developing its physical properties (Saucier 1994). As a result, fluvial geomorphic settings (landforms created by past actions of the rivers) provide a framework for understanding the geographic biological diversity of the Mississippi Alluvial Plain (Klimas et al. 2004). The geomorphology of the Mississippi Alluvial Plain has been well delineated (Saucier 1994) and played a major part in the development of that section of the Woods et al. (2004) map (Figure 10).

That portion of the St. Francis Basin (referred to by Foti (1976) as the Northeast Arkansas Section) east of Crowley's Ridge, fits most people's conception of the Mississippi Alluvial Plain. Before levees were built, almost all of this region was inundated by the Mississippi River during extreme flood events. The underlying geomorphology caused Woods et al. (2004) to divide it into several ecoregions. Most of the basin is composed of point bars and backswamps created by meanderings of the Mississippi River within the last 10,000 years and is mapped by Woods et al. (2004) as the Northern Holocene Meander Belts and Northern Backswamps (Level IV) ecoregions (Figure 10). The area along the St. Francis River north of Marked Tree was also laid down by the Mississippi River, but as a braided stream carrying glacial outwash 20,000 years ago. Woods et al. (2004) mapped this area as the St. Francis Lowlands (Level IV) Ecoregion (Figure 10). One of the areas within the Mississippi Alluvial Plain most altered by human activity, the St. Francis Basin was once almost entirely covered with bottomland hardwood forest but is now almost completely drained and cleared for cropland. Former braided-stream channels in the St. Francis Lowlands Ecoregion remain very wet and contain much of the remaining forest in the basin, along with swamps and lakes in more recent channels and meander scars in the Northern Holocene Meander Belts Ecoregion. Other notable forested areas include swamps like Big Lake, which was created or expanded by the New Madrid

earthquakes of 1811–1812.

The Grand Prairie (Level IV) Ecoregion (Figure 10), also referred to as the Grand Prairie Section (Foti 1976), is an anomaly within the Mississippi Alluvial Plain: it is older, higher, flatter, and much of it was covered with different vegetation (grassland) than the rest. In contrast to the bulk of the Mississippi Alluvial Plain, where alluvium has been deposited within the past 20,000 years or so, and often much more recently, the Grand Prairie has not been reworked by rivers within the past 100,000 years (Saucier 1994). It is a high, flat terrace underlain by deep deposits of clay built by the Arkansas River. Its western border is typically about 3 to 9 meters (ca. 10 to 30 feet) higher than the adjacent Bayou Meto bottomlands, but its eastern border is up to about 30 meters (100 feet) higher than the adjacent White River bottomlands. Tributary streams, in cutting down to the White River, have in places dissected the terrace into a series of hills up to 16 kilometers (10 miles) wide. In some areas the White River cuts into the Grand Prairie terrace and forms notable bluffs. A thin layer of loess caps the terrace and provides its fertile topsoil, and the thick, impermeable clay layer provides a waterproof bottom for irrigated fields that make this the center of rice production in Arkansas and one of the leading rice-producing areas in the country. As a result of the conversion of prairie to agricultural fields, 99.9 percent of the prairie within the Grand Prairie has been lost.

The vegetation of the Grand Prairie terrace is highly diverse, reflecting its physical character. The broad expanses of the flat terrace surface, with thin soil over clay subsoil, cause droughty conditions that favored prairie grasses and forbs over trees (Figure 35). At the same time, these large contiguous areas of terrace surface covered with grasses ensured that a fire started by lightning or humans could burn thousands to tens of thousands of acres. Therefore the frequency of fire at any point was increased, and these fires could help maintain the prairie. The prairie probably originated during the hot, dry Hypsithermal Period, about 8,000 to 5,000 years ago. The droughty soils and frequent fire allowed the prairie to persist even under the moister conditions of more recent times.

In the Grand Prairie, with its extremes of wetness and drought, switch grass (*Panicum virgatum*) is often the dominant prairie species. However, Indian grass (*Sorghastrum nutans*), little bluestem (*Schizachyrium scoparium*), and big bluestem (*Andropogon gerardii*) are abundant as well. Wet prairie communities occur in poorly drained areas of the prairie, dominated by prairie cord grass (*Spartina pectinata*) and eastern gama grass (*Tripsacum dactyloides*) or even cat-tail-sedge marshes. In extensive areas slightly lower than the terrace surface, generally along moderate-sized drainages (often ancient



FIGURE 35. INDIAN-PAINTBRUSH (*CASTILLEJA COCCINEA*) IN BLOOM AT DOWNS PRAIRIE NATURAL AREA NEAR DE VALLS BLUFF IN PRAIRIE COUNTY. NATIVE GRASSLANDS IN THE GRAND PRAIRIE ECOREGION OF THE MISSISSIPPI ALLUVIAL PLAIN OCCUPIED APPROXIMATELY 400,000 ACRES AT THE TIME OF EUROPEAN SETTLEMENT, BUT ONLY ABOUT 400 ACRES REMAIN TODAY.

channels of the Arkansas River that formed the terrace), water accumulates by sheet flow from the adjacent higher prairie land and supports flatwoods often dominated by delta post oak, cherrybark oak (*Quercus pagoda*) and willow oak but also with many other upland and bottomland species present in response to slight differences in elevation (Heitmeyer et al. 2000). These flatwoods are in many ways similar to those of the West Gulf Coastal Plain and of those elsewhere in the Mississippi Alluvial Plain to the east. Where slope is greater, along streams that have cut deeply into the terrace, there is an upland hardwood (white oak–black oak–southern red oak) forest. Within the relatively narrow floodplain of the streams are true bottomland hardwood forests. Where fires burned from the prairies into the surrounding flatwoods or upland forest, trees would be thinned, allowing the prairie vegetation to occur under a scattering of trees, creating woodland or post oak savanna. Of the 500,000 acres of Grand Prairie terrace, approximately 80 percent was prairie grassland at the time of European settlement; most of the rest was open flatwoods.

The grasslands of the Grand Prairie support a rich diversity of prairie grasses and forbs, including many rare and uncommon species, some disjunct from larger prairie regions in both the Ozark Plateaus and Gulf Coastal Plain. It is the only region of the state known to support some species, such as sand cherry (*Prunus pumila* var. *susquehanae*) and Stern's medlar (*Crataegus × canescens*). Historically, the wet prairies of the Grand Prairie region were known to support the snowy orchid (*Platanthera nivea*), a species not documented from Arkansas since the early 1880s.

The Western Lowlands Pleistocene Valley Trains (Level IV) Ecoregion lies between Crowley's Ridge to the east and the Ozarks, Arkansas Valley, and Grand Prairie terrace to the west (Figure 10). In this area, glacial deposits were moved as a mass by multiple channels or large overflows of the Mississippi—hence the term “valley train.” Much of the land surface is terraces, similar to those of the Grand Prairie but are younger, about 20,000 years old, smaller, and not as high. The same combination of prairie, savanna, flatwoods, upland hardwood forest, and bottomland hardwood forest covers this region, but the prairies were not as extensive as those on the Grand Prairie terrace and have been almost entirely destroyed. Furthermore, it has a few distinctive geomorphic and vegetational features. The most unique is a set of Pleistocene sand dunes that occur from the Missouri state line south to Holly Grove, east of the Black

and White rivers. These accumulated during the late Wisconsin glacial advance when the Mississippi River was flowing where the White and Black rivers do today. At present, these sand dunes are usually not extremely sandy; enough fine material has been added to create fairly productive soils. In some cases, though, the sands were pure enough to support barrens with scattered post oaks over sparse groundcover. Apparently all of these in Arkansas have been destroyed, but a few examples remain in Missouri. Between the dunes are perched depression wetlands that collect surface water from small areas. These wetlands are often dominated by overcup oak, willow oak, and other water-tolerant tree species and provide habitat for rare shrubs such as corkwood (*Leitneria floridana*) and the federally endangered pond-berry (*Lindera melissifolia*). Wetlands in these areas historically supported populations of other rare plants such as spreading bulrush (*Scirpus divaricatus*), which has not been documented from Arkansas since the early twentieth century. This species and perhaps others may have been extirpated from the state as sandponds were cleared, filled, and converted to agriculture—a process that continues today.

The Bartholomew-Boeuf-Tensas Basin (Figure 14) of southeastern Arkansas (not generally recognized as a separate subdivision or ecoregion) is composed principally of recent (Holocene) alluvial deposits. As a consequence, the surficial deposits of the basin are almost entirely point bar ridge and swale, with extensive areas of poorly drained backswamp flats. There is a substantial area along the Mississippi River in the eastern part of the basin that Woods et al. (2004) mapped as the Northern

Holocene Meander Belts (Level IV) Ecoregion, the same ecoregion that occupies much of the St. Francis Lowlands (Figure 10). There is a large area in the western part of the basin along Bayou Bartholomew and its tributaries that was laid down by the Arkansas River at a time when it did not join the Mississippi until farther south, in present-day Louisiana. Woods et al. (2004) mapped this area as the Arkansas/Ouachita River Holocene Meander Belts (Level IV) Ecoregion and the Arkansas/Ouachita River Backswamps (Level IV) Ecoregion (Figure 10). The reference to the Ouachita River in the names above is because Bayou Bartholomew now drains this area into the Ouachita. Pleistocene valley outwash deposits are uncommon in the Bartholomew-Boeuf-Tensas Basin, limited to the Macon Ridge (Level IV) Ecoregion and its outliers (Figure 10). Macon Ridge is extensive in Louisiana, but only its northern tip reaches Arkansas. There are loess deposits on its slopes that give small portions the character of Crowley's Ridge, but in general it is more like the Western Lowlands Pleistocene Valley Trains Ecoregion but higher and more distinctively different from the surrounding landscape. Abandoned channels of the Mississippi and Arkansas rivers form common natural lakes (Figure 36) of the Bartholomew-Boeuf-Tensas Basin. Almost all of its forest has been cleared, and virtually every watercourse other than Bayou Bartholomew and its major tributary, Cutoff Creek, has been channelized. Only along Cutoff Creek do extensive bottomland forest areas remain.



FIGURE 36. SCATTERED BALD-CYPRESS (*TAXODIUM DISTICHUM* VAR. *DISTICHUM*) AND TUPELO (*NYSSA AQUATICA*) WITH FLOATING MATS OF SMOOTH BUR-MARIGOLD (*BIDENS LAEVIS*) IN HILL LAKE NEAR GALLOWAY IN EASTERN PULASKI COUNTY. OXBOW LAKES, LIKE THIS ONE IN THE BARTHOLOMEW-BOEUF-TENSAS BASIN, ARE TYPICAL OF THE ARKANSAS/OUACHITA RIVER HOLOCENE MEANDER BELTS ECOREGION.

Crowley's Ridge Natural Division

Crowley's Ridge Natural Division (Figures 3 & 9) is the exception to the character of eastern Arkansas in that it is an upland area, though only a series of low hills, seldom more than about 30 meters (ca. 100 feet) above the surrounding Mississippi Alluvial Plain. In addition, because of its eastern location, it has some native species, such as tulip-tree (*Liriodendron tulipifera*), that typically occur farther east and occur naturally nowhere else in Arkansas. It was formed in two stages: first, the rivers that reshaped the rest of the Mississippi Alluvial Plain did not remove the Tertiary marine deposits from this area; second, winds deposited glacier-ground silt (loess) primarily on the southern half of the ridge, giving it its rugged, hilly upland character (Figure 9).

Although neither Foti (1976) nor Woods et al. (2004) subdivided Crowley's Ridge into smaller ecoregions or divisions, it does have two geographic areas with distinct differences. The southern ridge, from about Jonesboro southward, fits the general description better, in that it stands higher than the surrounding Mississippi Alluvial Plain, has deep loess deposits, and is highly dissected. Mesic forests, dominated by beech, basswood, cucumber magnolia, and white oak, are numerous and fairly extensive (Figure 37). Tulip-tree successional forests are established when later-successional oak or beech forests are cleared by humans, wind, or other stand-replacing agents. Climbing-magnolia (*Schisandra glabra*) and Virginia pennywort (*Obolaria virginica*) occur in Arkansas only in this region. Historically, butternut trees were probably widespread on southern Crowley's Ridge but have all but disappeared in recent decades following the arrival of butternut canker (*Sirococcus clavignenti-juglادacearum*), an introduced fungal pathogen which kills the trees.

The northern ridge lacks the deep loess of the southern ridge and some of its distinct characteristics but has others of its own. Instead of loess, this subdivision is sometimes capped with alluvial deposits of sand, gravel, and silt, with an occasional outcrop of Tertiary substrate, such as sandstone. On these sandy soils occur the only natural short-leaf pine forests in eastern Arkansas. These forests include a few species, such as small woodland sunflower (*Helianthus microcephalus*) not known from elsewhere in the state. At the bases of

some of these sandy deposits are ground-water seepage areas that have high plant diversity. These seeps and adjacent forests on the northern part of the ridge are the principal habitat in the state for rare species such as white turtlehead (*Chelone glabra*), and once supported rose turtlehead (*C. obliqua* var. *speciosa*) and big-leaf magnolia (*Magnolia macrophylla*), two species no longer known to occur in the region.



FIGURE 37. LOESS SOILS, HARDWOOD FORESTS, AND DEEPLY DISSECTED TERRAIN TYPIFY SOUTHERN CROWLEY'S RIDGE, AS SHOWN IN THIS PHOTO FROM WITTSBURG NATURAL AREA IN CROSS COUNTY.

FLORISTIC SUMMARY

Table 1. Number of genera, species, additional infraspecific taxa (subspecies and varieties), hybrids, total taxa (species, infraspecific taxa, and hybrids), taxa of special concern, Arkansas endemic taxa, introduced taxa, and invasive taxa by family within each major group.

Pteridophytes									
Families	Genera	Species	Additional Infraspecific	Hybrids	Total	Special Concern	Endemic	Introduced	Invasive
Aspleniaceae	1	6	0	3	9	4	0	0	0
Azollaceae	1	2	0	0	2	1	0	0	0
Blechnaceae	1	2	0	0	2	0	0	0	0
Dennstaedtiaceae	2	2	1	0	3	1	0	0	0
Dryopteridaceae	4	9	0	3	12	6	0	3	0
Equisetaceae	1	3	0	1	4	1	0	0	0
Hymenophyllaceae	1	2	0	0	2	2	0	0	0
Isoetaceae	1	3	0	0	3	1	0	0	0
Lomariopsidaceae	1	1	0	0	1	0	0	1	0
Lycopodiaceae	5	7	0	3	10	5	0	0	0
Lygodiaceae	1	1	0	0	1	0	0	1	1
Marsileaceae	2	3	0	0	3	0	0	1	1
Onocleaceae	1	1	0	0	1	0	0	0	0
Ophioglossaceae	2	9	0	0	9	0	0	1	0
Osmundaceae	2	3	0	0	3	1	0	0	0
Polypodiaceae	2	2	0	0	2	0	0	0	0
Psilotaceae	1	1	0	0	1	1	0	0	0
Pteridaceae	5	11	0	0	11	2	0	1	0
Salviniaceae	1	1	0	0	1	0	0	1	0
Selaginellaceae	1	4	0	0	4	1	0	0	0
Thelypteridaceae	3	5	0	0	5	0	0	1	1
Woodsiaceae	5	9	1	0	10	1	0	0	0
Subtotal:	44	87	2	10	99	27	0	10	3

Gymnosperms									
Families	Genera	Species	Additional Infraspecific	Hybrids	Total	Special Concern	Endemic	Introduced	Invasive
Cupressaceae	2	3	0	0	3	0	0	0	0
Pinaceae	1	6	0	0	6	0	0	3	0
Subtotal:	3	9	0	0	9	0	0	3	0

Angiosperm Dicots

Families	Genera	Species	Additional Intraspecific	Hybrids	Total	Special Concern	Endemic	Introduced	Invasive
Acanthaceae	3	7	0	0	7	0	0	0	0
Adoxaceae	2	10	1	0	11	4	0	0	0
Aizoaceae	1	1	0	0	1	0	0	1	0
Altingiaceae	1	1	0	0	1	0	0	0	0
Amaranthaceae	6	18	0	0	18	1	0	9	2
Anacardiaceae	3	7	1	0	8	1	0	0	0
Annonaceae	1	2	0	0	2	1	0	0	0
Apiaceae	35	54	1	0	55	12	0	12	2
Apocynaceae	9	30	0	1	31	6	0	3	2
Aquifoliaceae	1	7	0	0	7	2	0	1	0
Araliaceae	4	11	0	0	11	1	0	3	1
Aristolochiaceae	2	4	0	0	4	0	0	0	0
Asteraceae	103	321	38	2	361	56	2	62	7
Balsaminaceae	1	3	0	0	3	0	0	1	0
Berberidaceae	4	5	0	0	5	1	0	3	1
Betulaceae	5	5	1	0	6	0	0	0	0
Bignoniaceae	3	4	0	0	4	0	0	1	0
Boraginaceae	17	40	2	0	42	7	1	14	0
Brassicaceae	35	71	1	0	72	11	1	37	2
Cabombaceae	2	2	0	0	2	0	0	0	0
Cactaceae	1	2	0	0	2	0	0	0	0
Campanulaceae	4	11	1	0	12	0	0	1	0
Cannabaceae	3	6	0	0	6	1	0	2	0
Caprifoliaceae	3	10	0	0	10	1	0	4	4
Caryophyllaceae	17	44	1	0	45	8	0	27	0
Celastraceae	2	7	0	0	7	1	0	3	3
Ceratophyllaceae	1	2	0	0	2	0	0	0	0
Chenopodiaceae	6	14	1	0	15	0	0	8	0
Cistaceae	2	6	0	0	6	2	0	0	0
Cleomaceae	2	4	1	0	5	1	0	2	0
Convolvulaceae	8	29	1	0	30	8	0	7	0
Cornaceae	1	6	0	0	6	0	0	0	0
Crassulaceae	3	6	0	0	6	1	0	2	0
Cucurbitaceae	6	8	1	0	9	0	0	3	0
Dipsacaceae	2	3	0	0	3	0	0	3	3
Droseraceae	1	2	0	0	2	1	0	0	0
Ebenaceae	1	1	0	0	1	0	0	0	0
Elaeagnaceae	1	2	0	0	2	0	0	2	2
Elatinaceae	2	2	0	0	2	1	0	0	0
Ericaceae	5	14	0	0	14	1	0	0	0
Euphorbiaceae	12	47	0	0	47	8	0	12	1
Fabaceae	53	158	5	0	163	25	0	58	9
Fagaceae	3	33	3	0	36	5	1	3	0
Gelsemiaceae	1	1	0	0	1	0	0	0	0
Gentianaceae	7	14	0	0	14	6	1	0	0

Angiosperm Dicots

Families	Genera	Species	Additional Intraspecific	Hybrids	Total	Special Concern	Endemic	Introduced	Invasive
Geraniaceae	2	8	0	0	8	1	0	5	0
Grossulariaceae	1	4	0	0	4	1	0	0	0
Haloragaceae	2	5	0	0	5	0	0	2	2
Hamamelidaceae	2	3	0	0	3	1	0	0	0
Hydrangeaceae	4	7	0	0	7	2	0	2	0
Hydroleaceae	1	2	0	0	2	0	0	0	0
Hypericaceae	2	19	1	0	20	4	0	2	0
Iteaceae	1	1	0	0	1	0	0	0	0
Juglandaceae	2	12	0	0	12	2	0	0	0
Lamiaceae	28	70	4	2	76	12	0	27	2
Lauraceae	3	4	0	0	4	2	0	0	0
Lentibulariaceae	1	7	0	0	7	4	0	1	0
Linaceae	1	5	0	0	5	0	0	2	0
Linderniaceae	2	3	0	0	3	0	0	1	0
Loasaceae	1	1	0	0	1	1	0	0	0
Loganiaceae	2	3	0	0	3	1	0	0	0
Lythraceae	7	11	1	0	12	1	0	4	1
Magnoliaceae	2	6	0	0	6	1	0	1	0
Malvaceae	13	25	2	0	27	7	0	10	0
Martyniaceae	1	1	0	0	1	0	0	0	0
Melastomataceae	1	2	1	0	3	0	0	0	0
Meliaceae	1	1	0	0	1	0	0	1	1
Menispermaceae	3	3	0	0	3	0	0	0	0
Menyanthaceae	2	2	0	0	2	1	0	1	1
Molluginaceae	2	3	0	0	3	0	0	3	0
Moraceae	4	5	0	0	5	0	0	3	2
Myricaceae	1	2	0	0	2	0	0	0	0
Myrsinaceae	2	8	0	0	8	1	0	2	0
Nelumbonaceae	1	2	0	0	2	0	0	1	0
Nyctaginaceae	2	4	0	0	4	0	0	2	0
Nymphaeaceae	2	2	0	0	2	0	0	0	0
Nyssaceae	1	3	0	0	3	0	0	0	0
Oleaceae	4	12	0	0	12	0	0	5	4
Onagraceae	6	36	2	0	38	7	0	5	0
Orobanchaceae	10	22	0	0	22	5	0	1	0
Oxalidaceae	1	6	0	0	6	1	0	1	0
Papaveraceae	6	9	1	0	10	1	0	3	0
Parnassiaceae	2	3	0	0	3	1	0	0	0
Passifloraceae	1	2	0	0	2	0	0	0	0
Paulowniaceae	1	1	0	0	1	0	0	1	1
Penthoraceae	1	1	0	0	1	0	0	0	0
Phrymaceae	3	5	0	0	5	2	0	1	0
Phyllanthaceae	2	6	0	0	6	1	0	3	0
Phytolaccaceae	1	1	0	0	1	0	0	0	0
Plantaginaceae	17	53	0	0	53	10	0	16	0

Angiosperm Dicots

Families	Genera	Species	Additional Intraspecific	Hybrids	Total	Special Concern	Endemic	Introduced	Invasive
Platanaceae	1	1	0	0	1	0	0	0	0
Podostemaceae	1	1	0	0	1	0	0	0	0
Polemoniaceae	3	10	2	0	12	3	0	3	0
Polygalaceae	1	8	0	0	8	2	0	0	0
Polygonaceae	8	35	4	0	39	2	0	15	1
Portulacaceae	4	10	0	0	10	2	1	2	0
Primulaceae	3	4	0	0	4	2	0	0	0
Ranunculaceae	13	50	3	0	53	11	1	9	0
Rhamnaceae	5	6	0	0	6	1	0	0	0
Rosaceae	26	102	0	2	104	16	1	28	6
Rubiaceae	11	37	2	0	39	4	1	10	0
Rutaceae	3	4	0	0	4	0	0	1	1
Salicaceae	2	11	1	0	12	1	0	3	0
Santalaceae	2	2	0	0	2	0	0	0	0
Sapindaceae	5	11	6	0	17	2	0	4	0
Sapotaceae	1	2	0	0	2	0	0	0	0
Saururaceae	2	2	0	0	2	0	0	1	0
Saxifragaceae	3	7	1	0	8	3	1	0	0
Schisandraceae	1	1	0	0	1	1	0	0	0
Scrophulariaceae	2	4	0	0	4	0	0	3	0
Simaroubaceae	2	2	0	0	2	1	0	1	1
Solanaceae	6	23	1	1	25	3	0	10	0
Sphenocleaceae	1	1	0	0	1	0	0	1	1
Staphyleaceae	1	1	0	0	1	0	0	0	0
Styracaceae	2	4	0	0	4	1	0	0	0
Symplocaceae	1	1	0	0	1	0	0	0	0
Tamaricaceae	1	1	0	0	1	0	0	1	1
Tetrachondraceae	1	1	0	0	1	0	0	0	0
Theaceae	1	1	0	0	1	1	0	0	0
Theophrastaceae	1	1	0	0	1	0	0	0	0
Thymelaeaceae	1	2	0	0	2	1	0	0	0
Ulmaceae	2	8	0	0	8	1	0	1	0
Urticaceae	5	8	0	0	8	0	0	2	0
Valerianaceae	1	7	0	0	7	4	0	1	0
Verbenaceae	4	19	0	0	19	1	0	7	0
Violaceae	2	15	1	0	16	3	0	1	0
Vitaceae	4	12	0	0	12	1	0	1	1
Zygophyllaceae	1	1	0	0	1	0	0	1	0
Subtotal:	674	1842	92	8	1942	310	11	496	65

Angiosperm Monocots

Families	Genera	Species	Additional Infraspecific	Hybrids	Total	Special Concern	Endemic	Introduced	Invasive
Acoraceae	1	1	0	0	1	0	0	1	0
Agavaceae	4	8	0	0	8	2	0	2	0
Alismataceae	3	11	0	0	11	2	0	0	0
Alliaceae	3	11	2	0	13	3	0	6	0
Amaryllidaceae	6	10	1	4	15	1	0	11	0
Araceae	9	16	0	0	16	0	0	3	0
Arecaceae	1	1	0	0	1	0	0	0	0
Asparagaceae	1	1	0	0	1	0	0	1	0
Bromeliaceae	1	1	0	0	1	0	0	0	0
Burmanniaceae	1	1	0	0	1	1	0	0	0
Colchicaceae	1	3	0	0	3	1	0	0	0
Commelinaceae	3	19	0	0	19	7	0	5	1
Cyperaceae	18	238	11	0	249	81	0	22	1
Dioscoreaceae	1	2	0	0	2	0	0	1	1
Eriocaulaceae	1	2	0	0	2	2	0	0	0
Hemerocallidaceae	1	1	0	0	1	0	0	1	0
Hyacinthaceae	2	5	0	0	5	0	0	5	0
Hydrocharitaceae	7	9	0	0	9	1	0	4	3
Hypoxidaceae	1	3	0	0	3	2	0	0	0
Iridaceae	5	21	0	0	21	6	0	4	1
Juncaceae	2	27	1	0	28	4	0	1	0
Liliaceae	3	8	0	0	8	3	0	2	0
Marantaceae	1	1	0	0	1	0	0	0	0
Melanthiaceae	5	7	0	0	7	3	0	0	0
Nartheciaceae	1	2	0	0	2	1	0	0	0
Orchidaceae	18	37	3	1	41	18	0	1	0
Poaceae	99	280	39	1	320	46	0	102	18
Pontederiaceae	3	7	0	0	7	0	0	1	1
Potamogetonaceae	3	10	1	0	11	1	0	1	0
Ruscaceae	4	5	0	0	5	1	0	2	0
Smilacaceae	1	12	0	0	12	2	0	0	0
Themidaceae	1	1	0	0	1	0	0	1	0
Trilliaceae	1	5	0	0	5	2	0	0	0
Typhaceae	2	5	0	0	5	1	0	1	0
Xyridaceae	1	6	1	0	7	4	0	0	0
Subtotal:	215	777	59	6	842	195	0	178	26

Totals

	Genera	Species	Additional Infraspecific	Hybrids	Total	Special Concern	Endemic	Introduced	Invasive
Total:	936	2715	153	24	2892	532	11	687	94

Table 2. Number of families, genera, species, additional infraspecific taxa (subspecies and varieties), hybrids, total taxa (species, infraspecific taxa, and hybrids), taxa of special concern, Arkansas endemic taxa, introduced taxa, and invasive taxa by major group.

Major Group	Families	Genera	Species	Additional Infraspecific	Hybrids	Total	Special Concern	Endemic	Introduced	Invasive
Pteridophytes	22	44	87	2	10	99	27	0	10	3
Gymnosperms	2	3	9	0	0	9	0	0	3	0
Angiosperms:										
Dicots	128	674	1842	92	8	1942	310	11	496	65
Monocots	35	215	777	59	6	842	195	0	178	26
TOTAL:	187	936	2715	153	24	2892	532	11	687	94

Table 3. Total taxa documented from each county, arranged in order of decreasing totals; counties with tied totals are listed alphabetically.

Rank	County	Taxa	Rank	County	Taxa	Rank	County	Taxa
1	Saline	1519	26	Madison	927	51	St. Francis	769
2	Washington	1444	27	Hot Spring	925	52	Prairie	754
3	Pulaski	1435	28	Searcy	920	53	Lafayette	752
4	Benton	1239	29	Izard	918	54	Lawrence	738
5	Montgomery	1211	29	Miller	918	55	Pike	736
6	Pope	1209	31	Logan	915	56	Clay	727
7	Faulkner	1177	32	Clark	905	57	Randolph	716
8	Baxter	1173	33	Conway	903	58	Greene	711
9	Union	1172	34	Carroll	896	59	Chicot	705
10	Franklin	1160	35	Howard	880	60	Nevada	692
10	Independence	1160	36	Perry	875	61	Lonoke	665
12	Stone	1154	37	Craighead	864	62	Cleveland	654
13	Yell	1132	38	Scott	857	63	Columbia	643
14	Ashley	1116	39	Sharp	833	64	Lee	637
14	Garland	1116	40	Lincoln	829	65	Grant	611
16	Drew	1106	41	Calhoun	823	66	Dallas	597
17	Cleburne	1082	42	Johnson	821	67	Jackson	595
18	Van Buren	1075	43	Arkansas	813	68	Phillips	594
19	Jefferson	1072	44	Boone	802	69	Poinsett	584
20	Polk	1042	45	Little River	798	70	Monroe	583
21	Ouachita	1025	46	Crawford	797	71	Cross	578
22	Bradley	1020	46	Sebastian	797	72	Desha	555
23	Newton	1018	48	Sevier	793	73	Mississippi	487
24	Hempstead	1006	49	White	788	74	Woodruff	467
25	Marion	999	50	Fulton	770	75	Crittenden	349

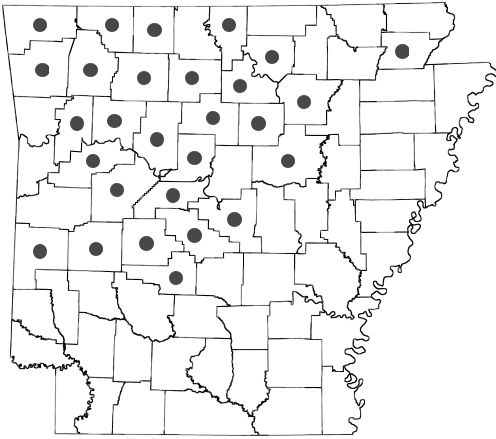
Table 4. Total taxa documented from each county, arranged alphabetically.

County	Taxa	Rank	County	Taxa	Rank	County	Taxa	Rank
Arkansas	813	43	Garland	1116	14	Newton	1018	23
Ashley	1116	14	Grant	611	65	Ouachita	1025	21
Baxter	1173	8	Greene	711	58	Perry	875	36
Benton	1239	4	Hempstead	1006	24	Phillips	594	68
Boone	802	44	Hot Spring	925	27	Pike	736	55
Bradley	1020	22	Howard	880	35	Poinsett	584	69
Calhoun	823	41	Independence	1160	10	Polk	1042	20
Carroll	896	34	Izard	918	29	Pope	1209	6
Chicot	705	59	Jackson	595	67	Prairie	754	52
Clark	905	32	Jefferson	1072	19	Pulaski	1435	3
Clay	727	56	Johnson	821	42	Randolph	716	57
Cleburne	1082	17	Lafayette	752	53	St. Francis	769	51
Cleveland	654	62	Lawrence	738	54	Saline	1519	1
Columbia	643	63	Lee	637	64	Scott	857	38
Conway	903	33	Lincoln	829	40	Searcy	920	28
Craighead	864	37	Little River	798	45	Sebastian	797	46
Crawford	797	46	Logan	915	31	Sevier	793	48
Crittenden	349	75	Lonoke	665	61	Sharp	833	39
Cross	578	71	Madison	927	26	Stone	1154	12
Dallas	597	66	Marion	999	25	Union	1172	9
Desha	555	72	Miller	918	29	Van Buren	1075	18
Drew	1106	16	Mississippi	487	73	Washington	1444	2
Faulkner	1177	7	Monroe	583	70	White	788	49
Franklin	1160	10	Montgomery	1211	5	Woodruff	467	74
Fulton	770	50	Nevada	692	60	Yell	1132	13

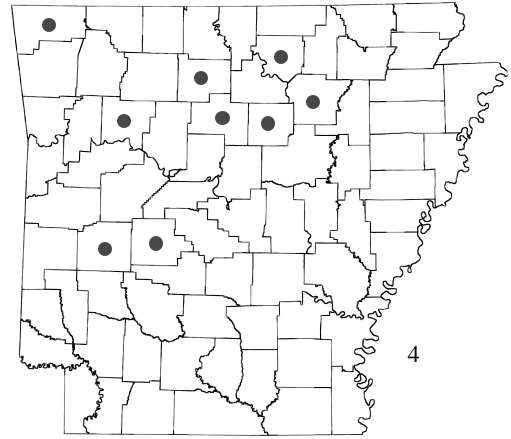


Pteridophytes

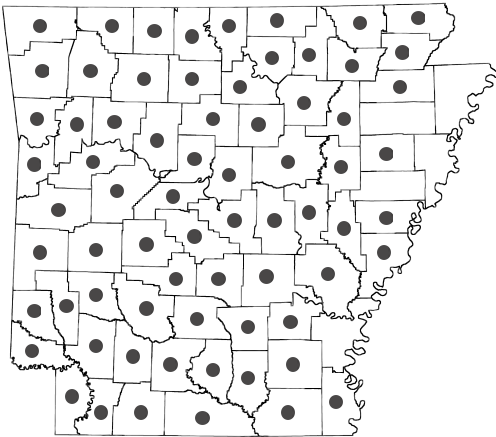




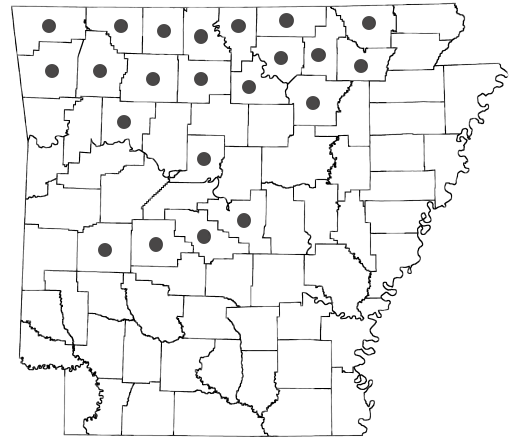
ASPLENIACEAE
Asplenium bradleyi D.C.Eaton
 Bradley's spleenwort



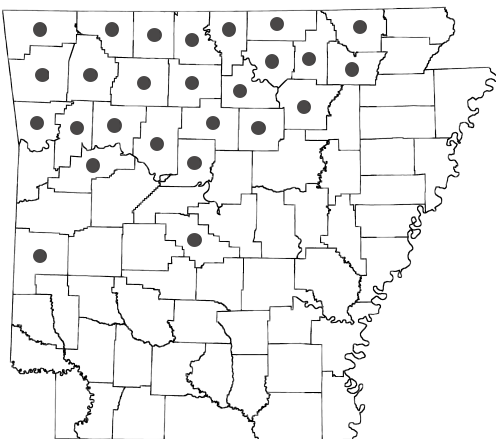
ASPLENIACEAE
Asplenium pinnatifidum Nutt.
 lobed spleenwort



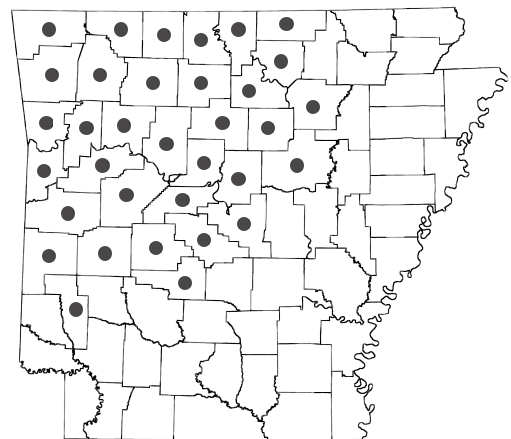
ASPLENIACEAE
Asplenium platyneuron (L.) Britton, Sterns & Poggenb.
 ebony spleenwort



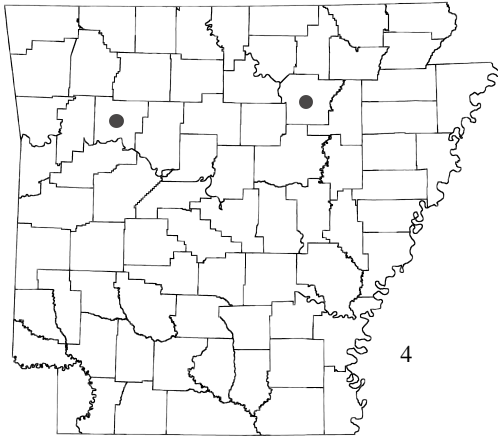
ASPLENIACEAE
Asplenium resiliens Kunze
 black-stem spleenwort, little ebony spleenwort



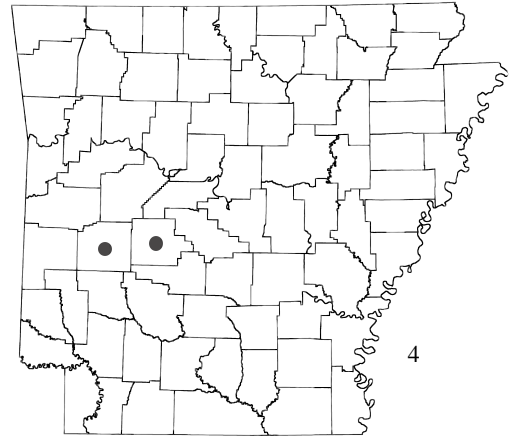
ASPLENIACEAE
Asplenium rhizophyllum L.
 walking fern



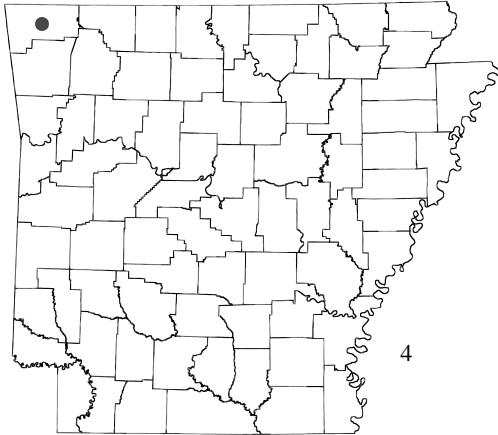
ASPLENIACEAE
Asplenium trichomanes L.
subsp. trichomanes
 maidenhair spleenwort



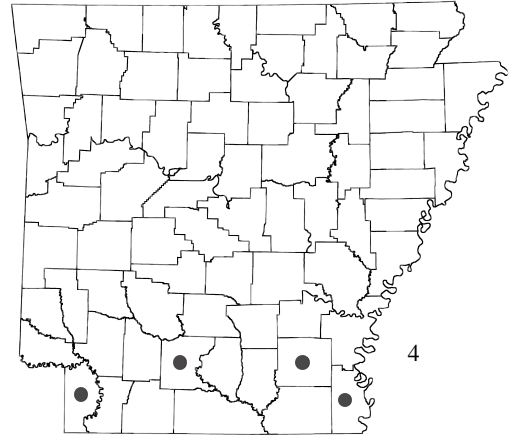
ASPLENIACEAE
Asplenium x ebenoides R.R.Scott
Scott's spleenwort



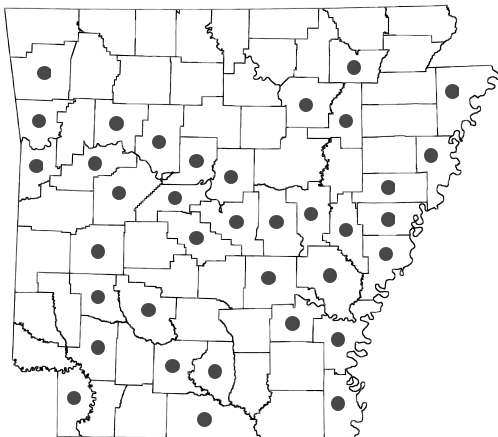
ASPLENIACEAE
Asplenium x gravesii Maxon
Graves' spleenwort



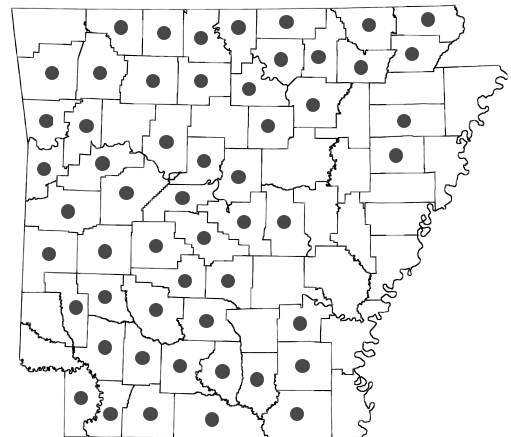
ASPLENIACEAE
Asplenium x kentuckiense T.N.McCoy
Kentucky spleenwort



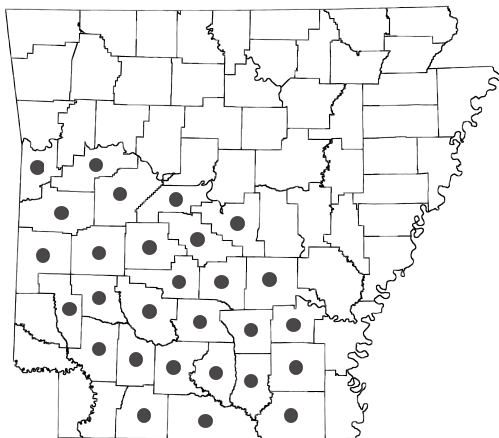
AZOLLACEAE
Azolla caroliniana Willd.
Carolina mosquito fern



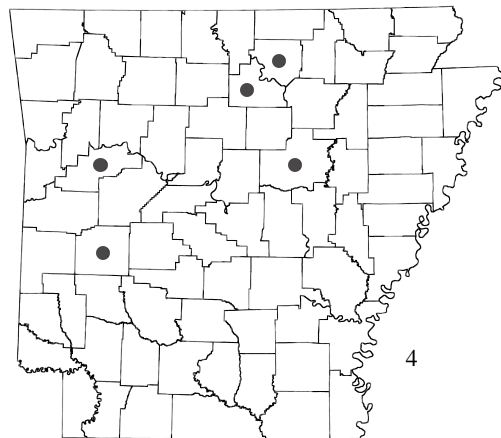
AZOLLACEAE
Azolla mexicana C.Presl
Mexican mosquito fern



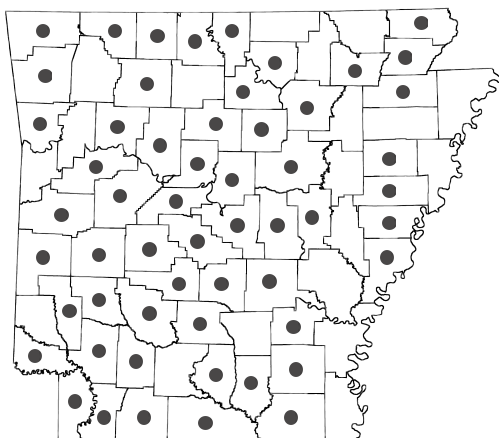
BLECHNACEAE
Woodwardia areolata (L.) T.Moore
netted chain fern



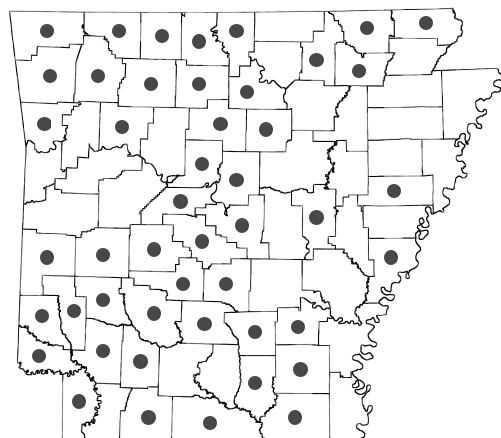
BLECHNACEAE
Woodwardia virginica (L.) Sm.
 Virginia chain fern



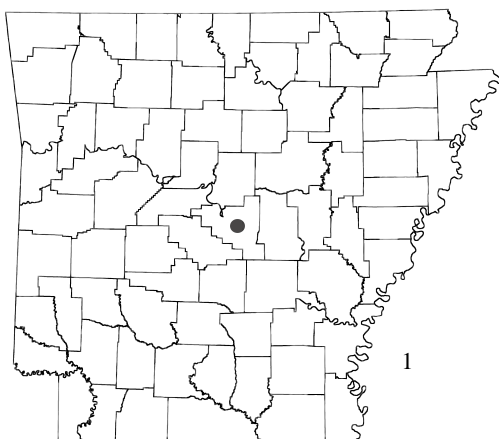
DENNSTAEDTIACEAE
Dennstaedtia punctilobula (Michx.) T.Moore
 hay-scented fern



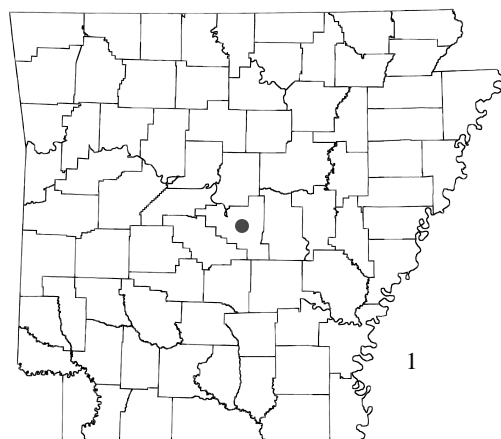
DENNSTAEDTIACEAE
Pteridium aquilinum (L.) Kuhn in Decken
var. latiusculum (Desv.) Underw. ex A.Heller
 eastern bracken fern



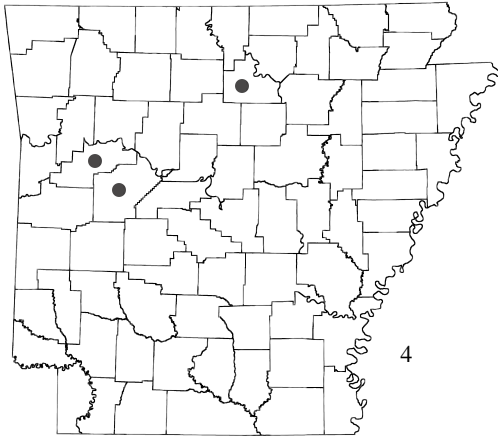
DENNSTAEDTIACEAE
Pteridium aquilinum (L.) Kuhn in Decken
var. pseudocaudatum (Clute) A.Heller
 southern bracken fern



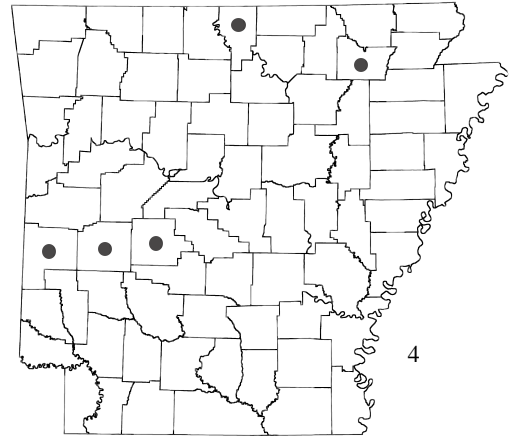
DRYOPTERIDACEAE
Arachniodes simplicior (Makino) Ohwi
 simpler holly fern



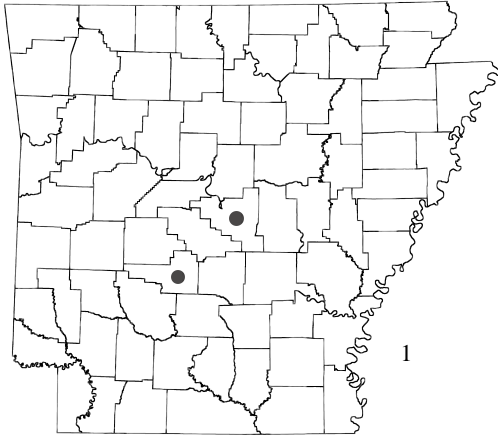
DRYOPTERIDACEAE
Cyrtomium falcatum (L.f.) C.Presl
 net-vein holly fern



DRYOPTERIDACEAE
Dryopteris carthusiana (Vill.) H.P.Fuchs
 spinulose wood fern



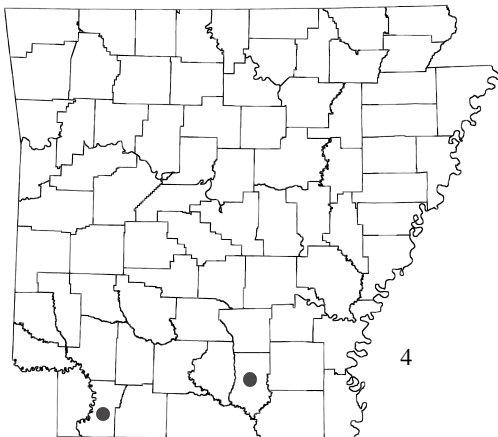
DRYOPTERIDACEAE
Dryopteris celsa (W.Palmer) Knowlt., T.S.Palmer & Pollard
 log fern



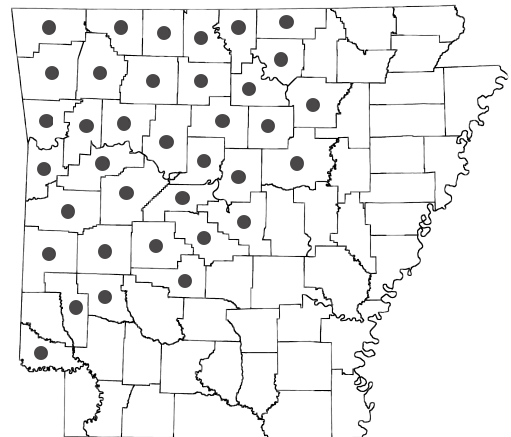
DRYOPTERIDACEAE
Dryopteris erythrosora (D.C.Eaton) Kuntze
 autumn fern, Japanese shield fern



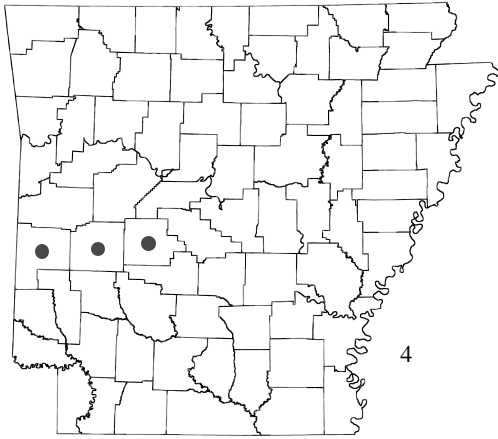
DRYOPTERIDACEAE
Dryopteris goldiana (Hook. ex Goldie) A.Gray
 Goldie's wood fern, giant wood fern



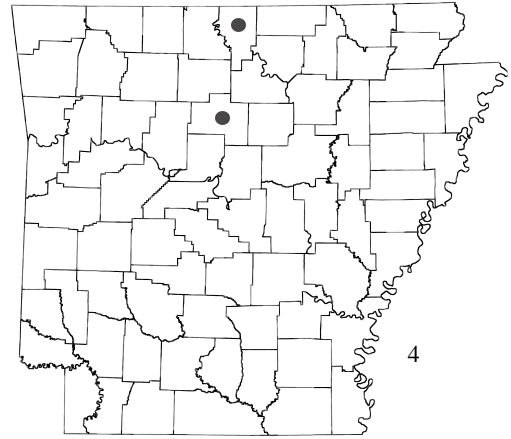
DRYOPTERIDACEAE
Dryopteris ludoviciana (Kunze) Small
 southern wood fern, Louisiana wood fern



DRYOPTERIDACEAE
Dryopteris marginalis (L.) A.Gray
 marginal wood fern



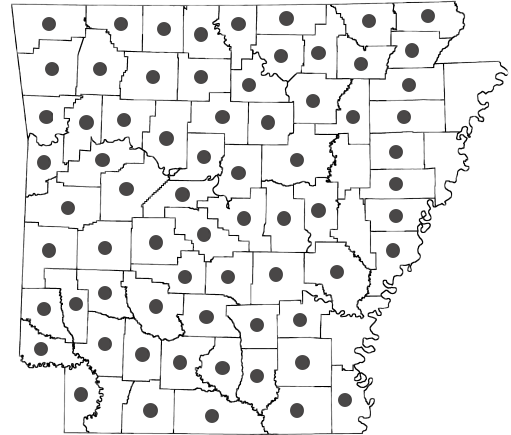
DRYOPTERIDACEAE
Dryopteris x australis (Wherry) Small
 Dixie wood fern



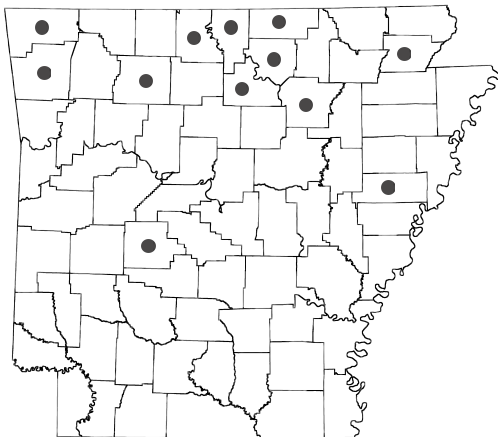
DRYOPTERIDACEAE
Dryopteris x leedsii Wherry
 Leed's wood fern



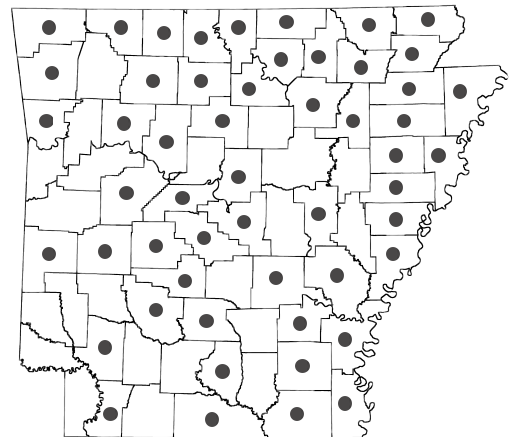
DRYOPTERIDACEAE
Dryopteris celsa (W.Palmer) Knowlt., T.S.Palmer & Pollard
 x **D. goldiana (Hook. ex Goldie) A.Gray**
 hybrid wood fern



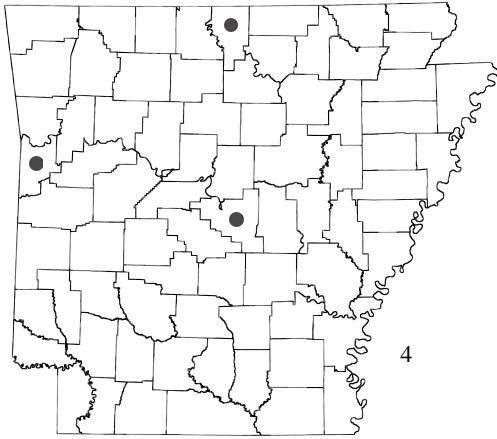
DRYOPTERIDACEAE
Polystichum acrostichoides (Michx.) Schott
 Christmas fern



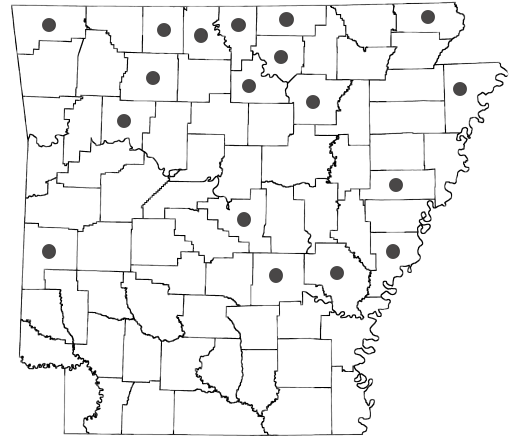
EQUISETACEAE
Equisetum arvense L.
 field horsetail



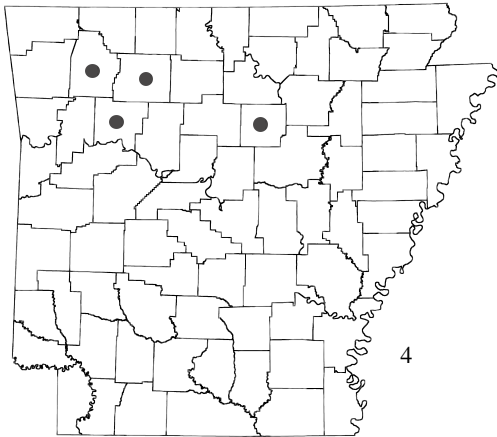
EQUISETACEAE
Equisetum hyemale L.
 subsp. **affine (Engelm.) Calder & Roy L.Taylor**
 common scouring-rush



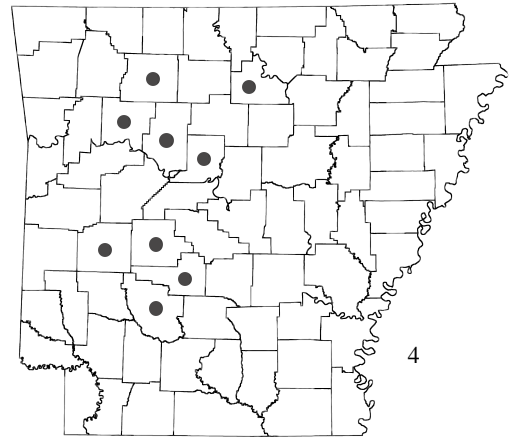
EUISETACEAE
Euiisetum laevigatum A. Braun
smooth scouring-rush



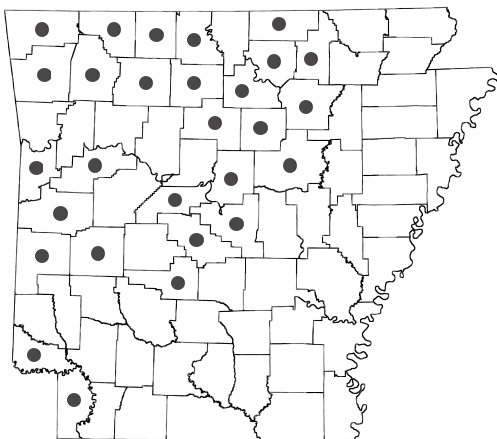
EUISETACEAE
Euiisetum x ferrissii Clute
Ferriss' scouring-rush



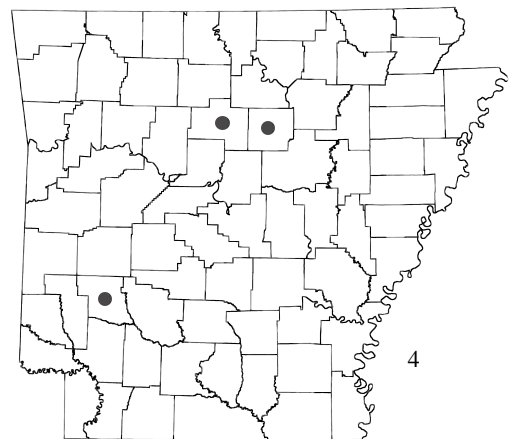
HYMENOPHYLLACEAE
Trichomanes boschianum Sturm
Appalachian filmy fern



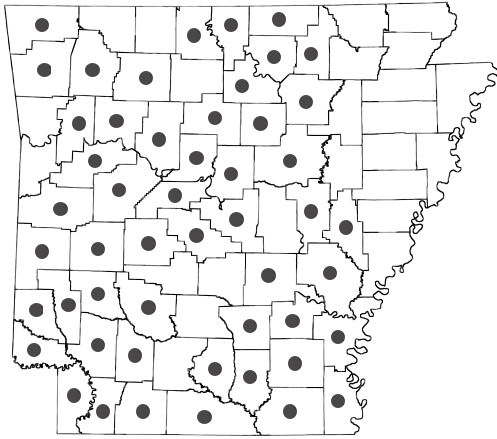
HYMENOPHYLLACEAE
Trichomanes petersii A. Gray
dwarf bristle fern



ISOETACEAE
Isoetes butleri Engelm.
Butler's quillwort



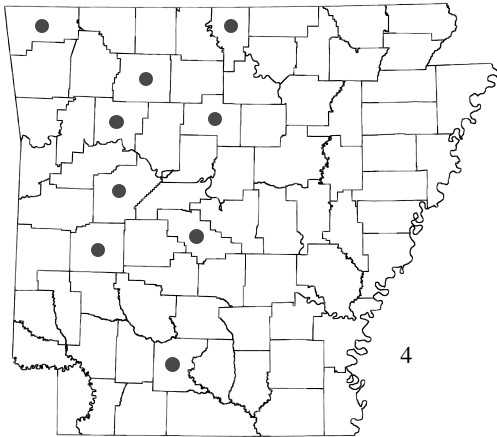
ISOETACEAE
Isoetes engelmannii A. Braun
Engelmann's quillwort



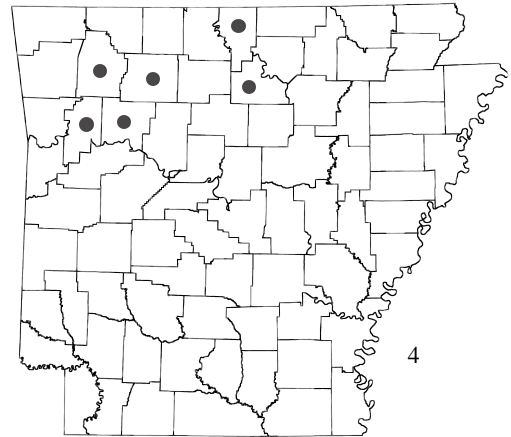
ISOETACEAE
Isoetes melanopoda Gay & Durieu ex Durieu
 black-foot quillwort



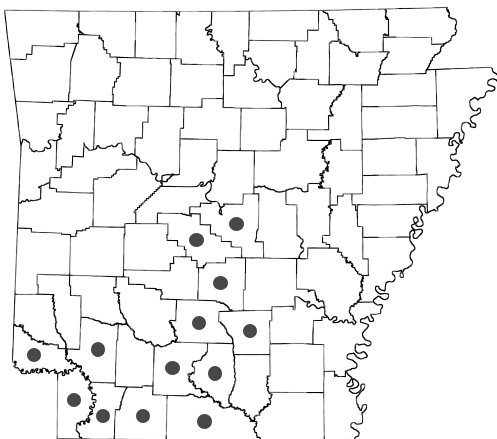
LOMARIOPSIDACEAE
Nephrolepis exaltata (L.) Schott
 Boston sword fern



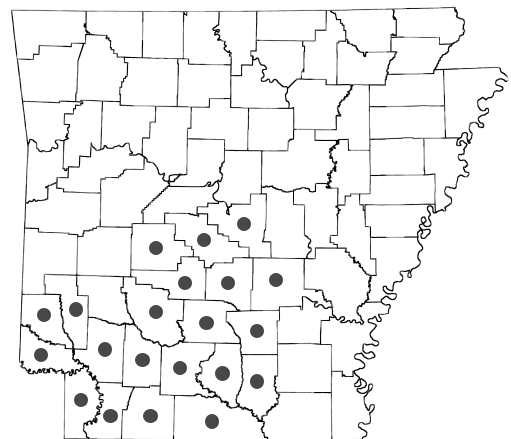
LYCOPODIACEAE
Diphasiastrum digitatum (Dill. ex A.Braun) Holub
 southern running-pine, fan ground-pine



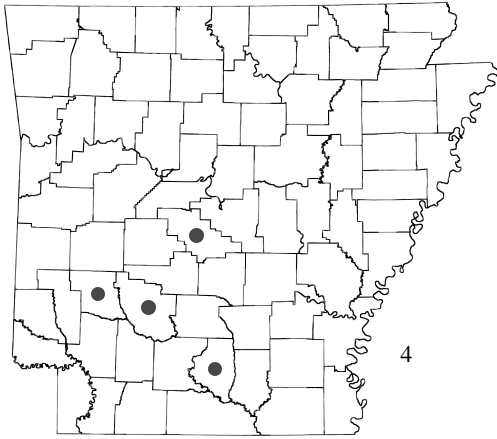
LYCOPODIACEAE
Huperzia lucidula (Michx.) Trevis.
 shining fir-moss



LYCOPODIACEAE
Lycopodiella alopecuroides (L.) Cranfill
 fox-tail bog club-moss



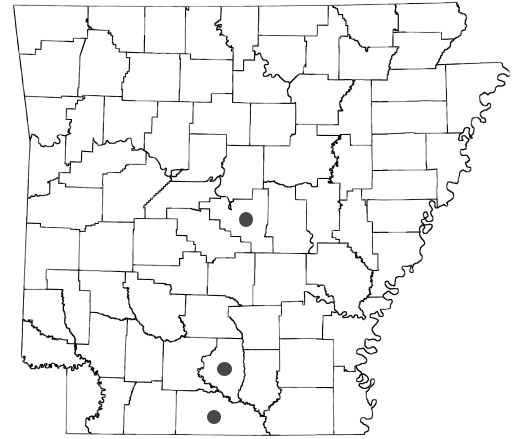
LYCOPODIACEAE
Lycopodiella appressa (Chapm.) Cranfill
 southern bog club-moss



LYCOPODIACEAE

***Lycopodiella prostrata* (R.M.Harper) Cranfill**

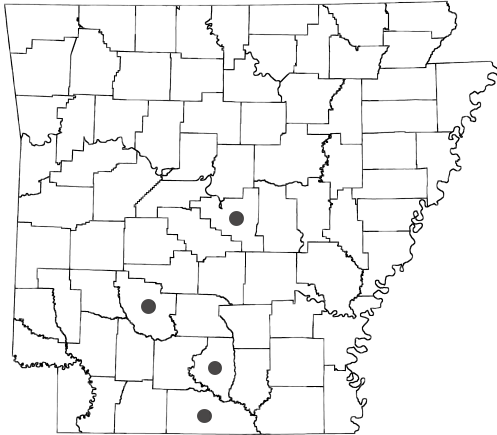
prostrate bog club-moss, feather-stem bog club-moss



LYCOPODIACEAE

***Lycopodiella* × *brucei* Cranfill**

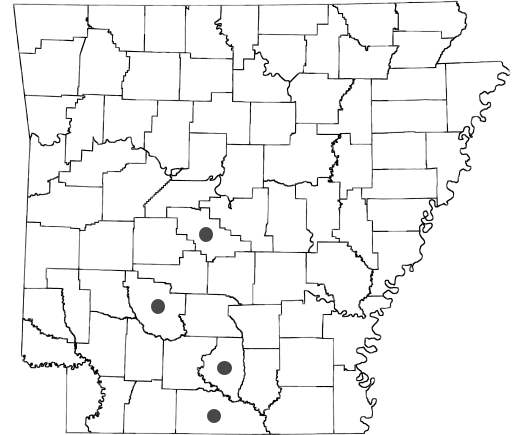
Bruce's bog club-moss



LYCOPODIACEAE

***Lycopodiella* × *copelandii* (Eiger) Cranfill**

Copeland's bog club-moss

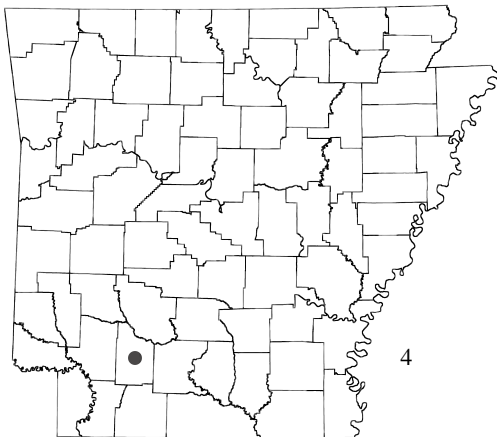


LYCOPODIACEAE

***Lycopodiella alopecuroides* (L.) Cranfill**

× ***L. prostrata* (R.M.Harper) Cranfill**

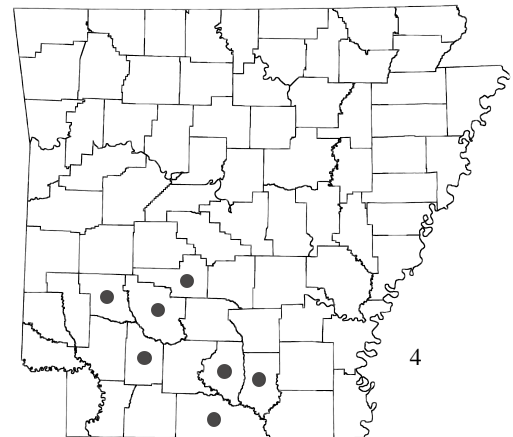
hybrid bog club-moss



LYCOPODIACEAE

***Palhinhaea cernua* (L.) Vasc. & Franco**

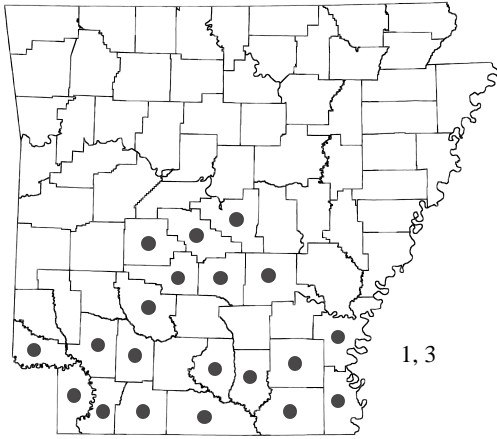
nodding club-moss



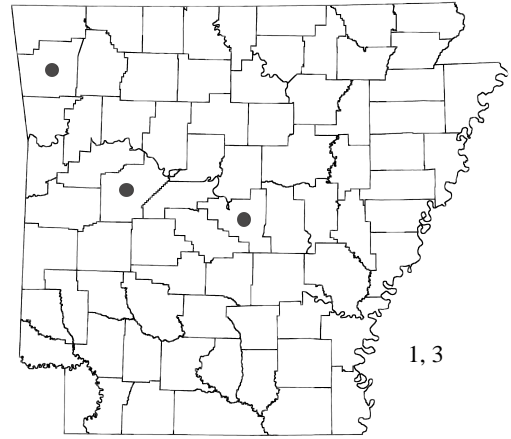
LYCOPODIACEAE

***Pseudolycopodiella caroliniana* (L.) Holub**

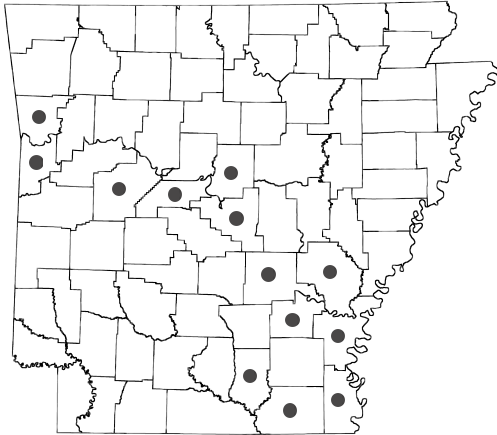
slender bog club-moss



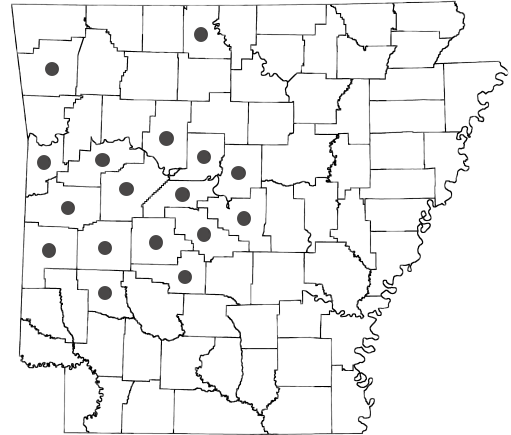
LYGODIACEAE
Lygodium japonicum (Thunb. ex Murray) Sw.
 Japanese climbing fern



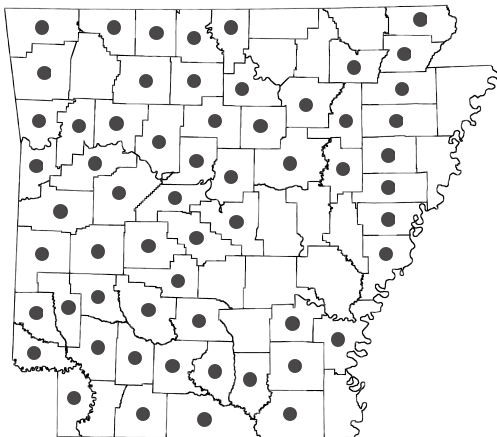
MARSILEACEAE
Marsilea quadrifolia L.
 European water-clover



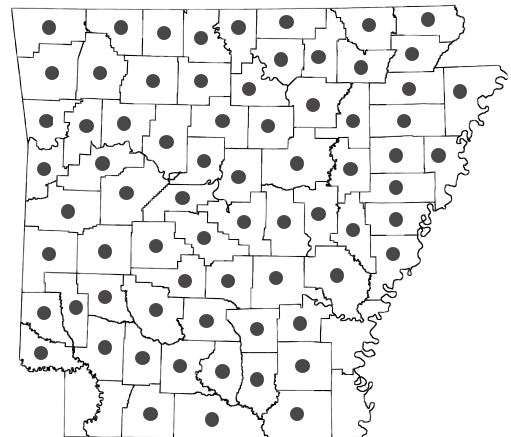
MARSILEACEAE
Marsilea vestita Hook. & Grev.
 hairy water-clover



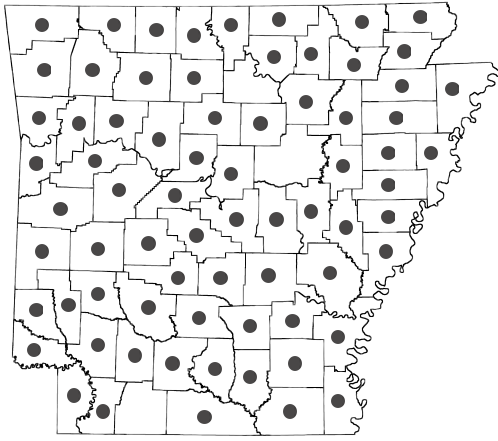
MARSILEACEAE
Pilularia americana A.Braun
 American pillwort



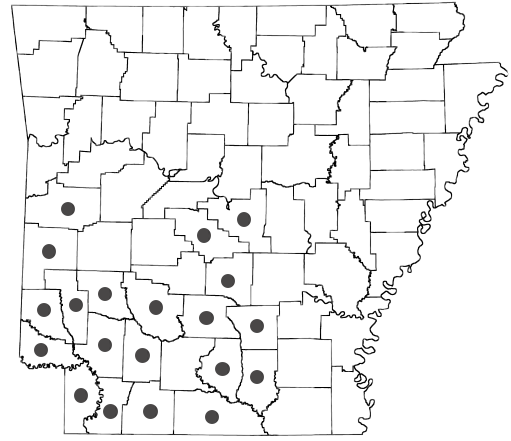
ONOCLEACEAE
Onoclea sensibilis L.
 sensitive fern



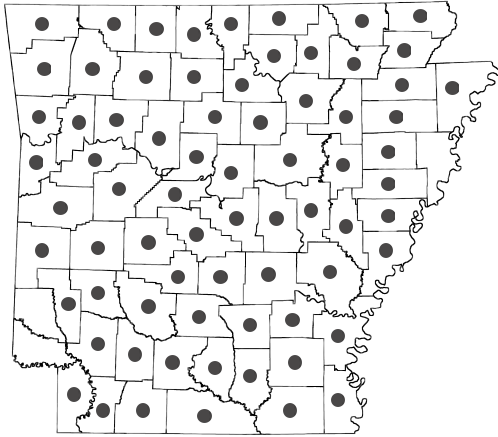
OPHIOGLOSSACEAE
Botrychium biternatum (Savigny) Underw.
 southern grape fern, sparse-lobe grape fern



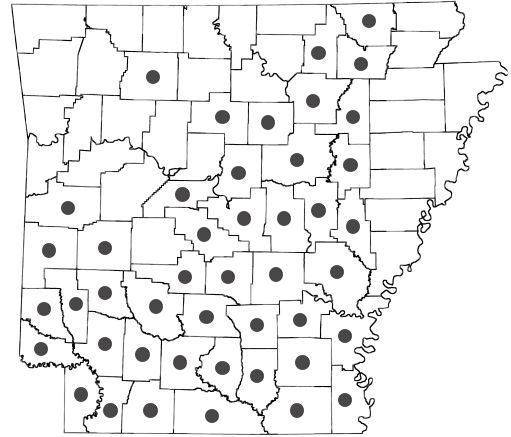
OPHIOGLOSSACEAE
Botrychium dissectum Spreng.
cut-leaf grape fern, dissected grape fern



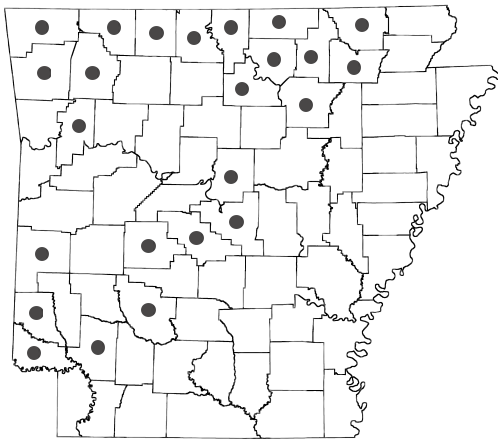
OPHIOGLOSSACEAE
Botrychium lunarioides (Michx.) Sw.
winter grape fern



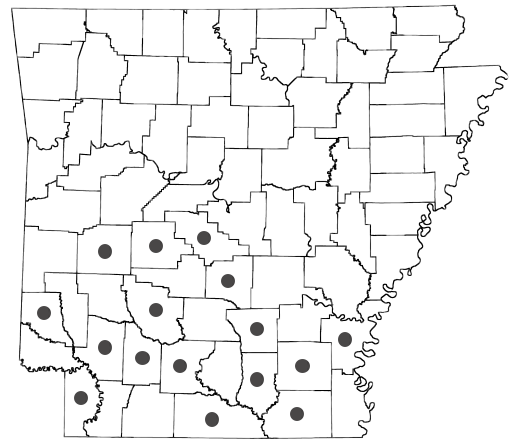
OPHIOGLOSSACEAE
Botrychium virginianum (L.) Sw.
rattlesnake fern



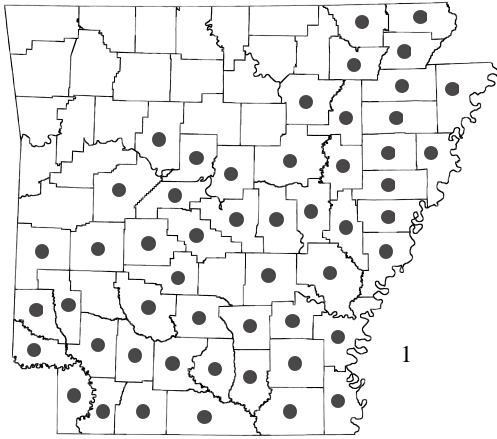
OPHIOGLOSSACEAE
Ophioglossum crotalophoroides Walter
bulbous adder's-tongue fern



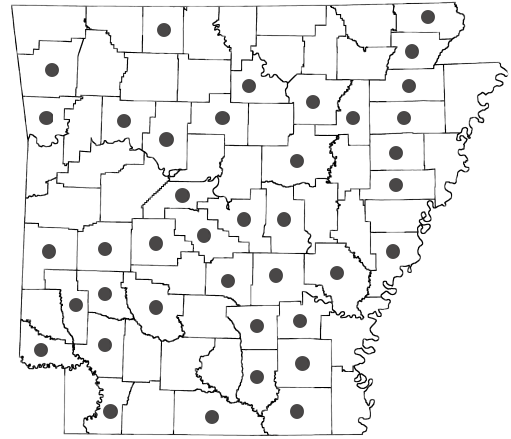
OPHIOGLOSSACEAE
Ophioglossum engelmannii Prantl
limestone adder's-tongue fern



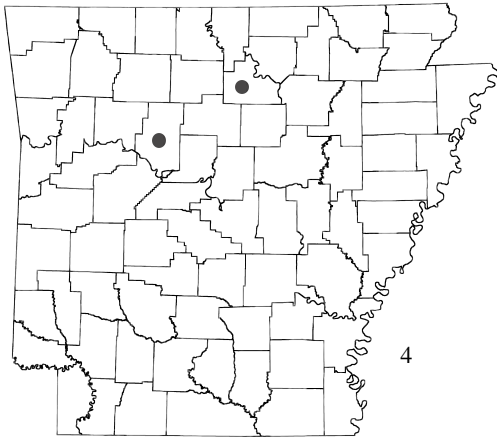
OPHIOGLOSSACEAE
Ophioglossum nudicaule L.f.
least adder's-tongue fern



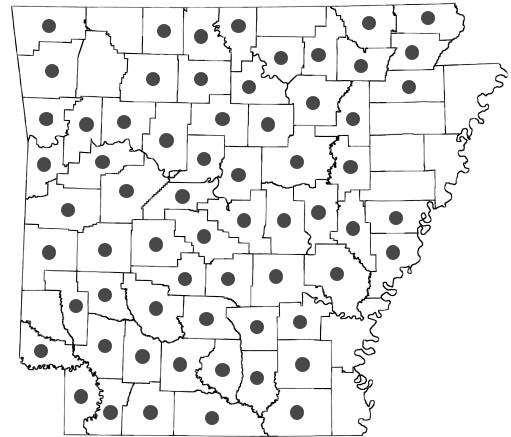
OPHIOGLOSSACEAE
Ophioglossum petiolatum Hook.
 stalked adder's-tongue fern



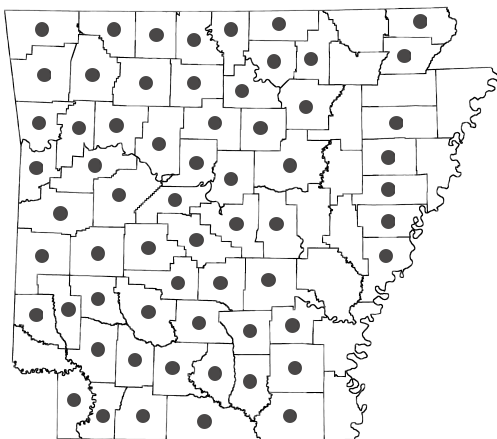
OPHIOGLOSSACEAE
Ophioglossum pycnostichum (Fernald) Á.Löve & D.Löve
 southern adder's-tongue fern



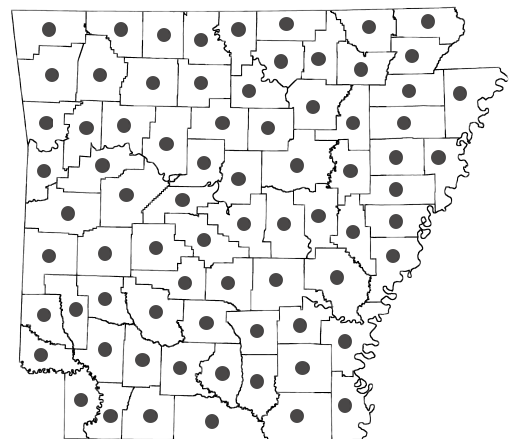
OSMUNDACEAE
Osmunda claytoniana L.
 interrupted fern



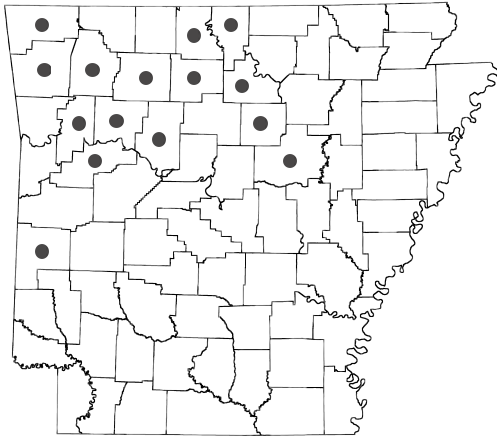
OSMUNDACEAE
Osmunda regalis L.
var. spectabilis (Willd.) A.Gray
 royal fern



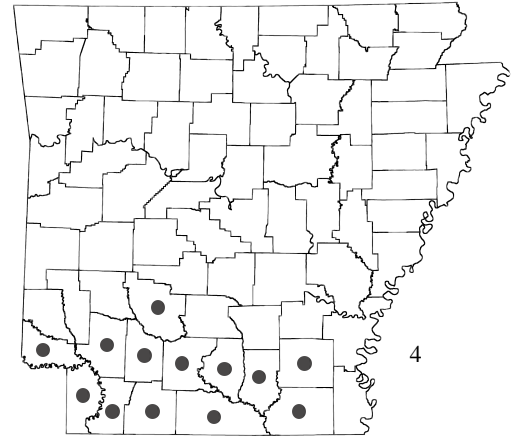
OSMUNDACEAE
Osmundastrum cinnamomeum (L.) C.Presl
 cinnamon fern



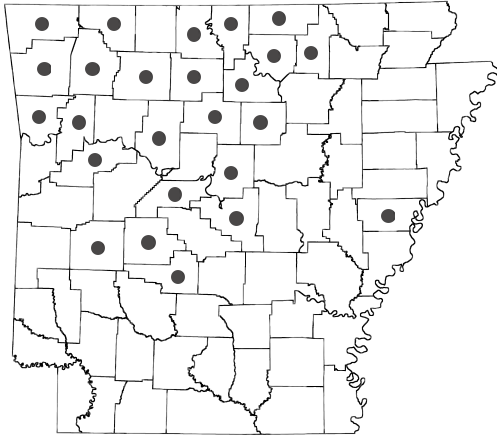
POLYPODIACEAE
Pleopeltis polypodioides (L.) E.G.Andrews & Windham in Windham
var. michauxiana (Weath.) E.G.Andrews & Windham in Windham
 resurrection fern



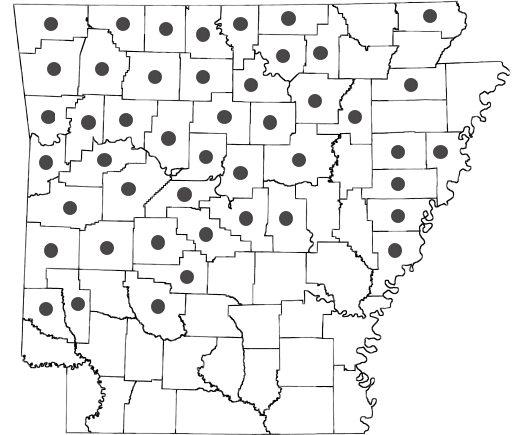
POLYPODIACEAE
Polypodium virginianum L.
 rock polypody



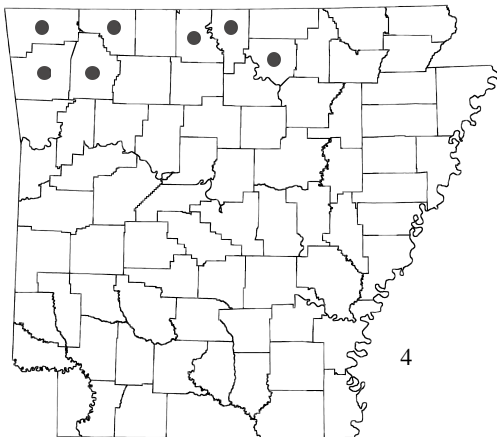
PSILOACEAE
Psilotum nudum (L.) P.Beauv.
 whisk fern



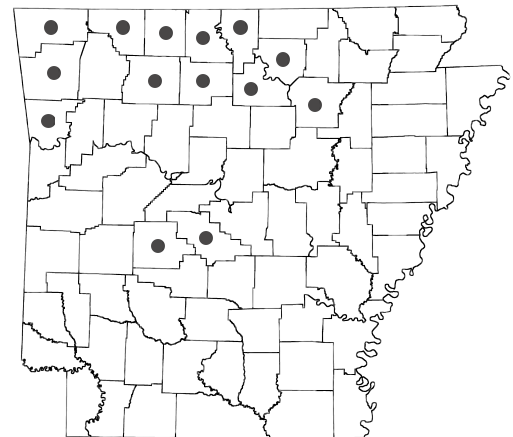
PTERIDACEAE
Adiantum capillus-veneris L.
 southern maidenhair fern, Venus'-hair fern



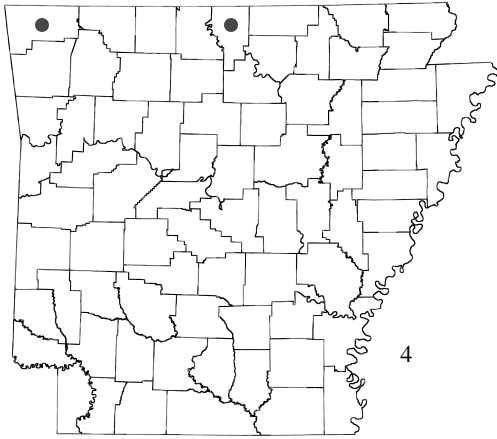
PTERIDACEAE
Adiantum pedatum L.
 northern maidenhair fern



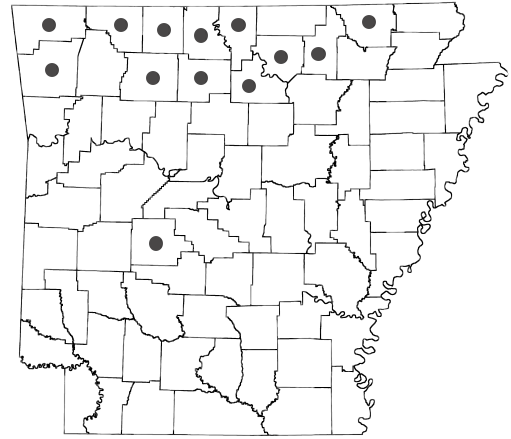
PTERIDACEAE
Argyrochosma dealbata (Pursh) Windham
 powdery cloak fern



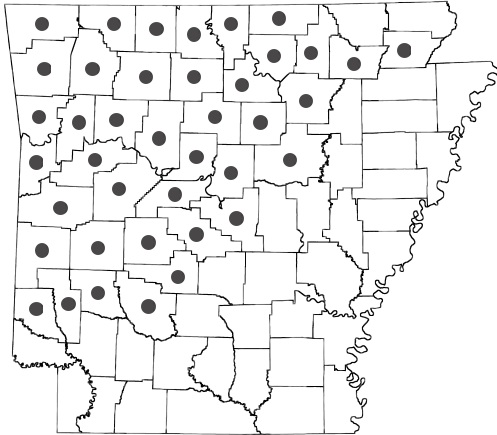
PTERIDACEAE
Cheilanthes alabamensis (Buckley) Kunze
 Alabama lip fern



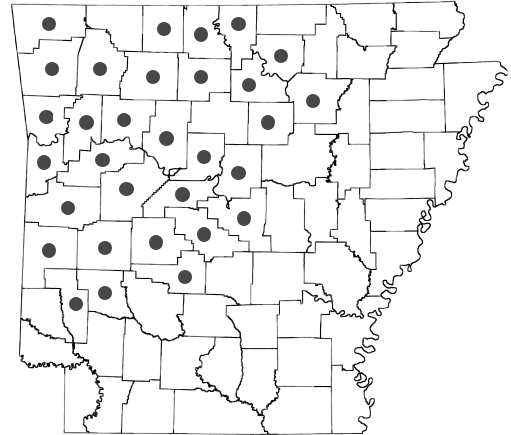
PTERIDACEAE
Cheilanthes eatonii Baker in Hook. & Baker
 Eaton's lip fern



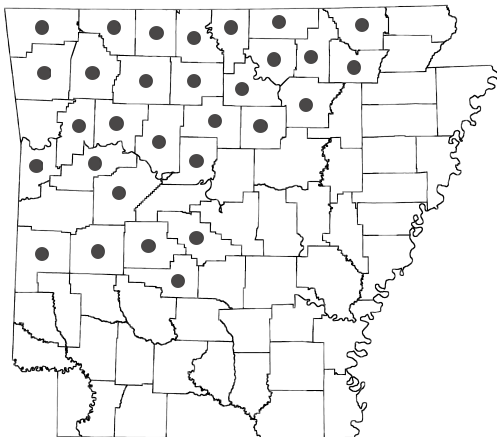
PTERIDACEAE
Cheilanthes feei T.Moore
 slender lip fern, Fee's lip fern



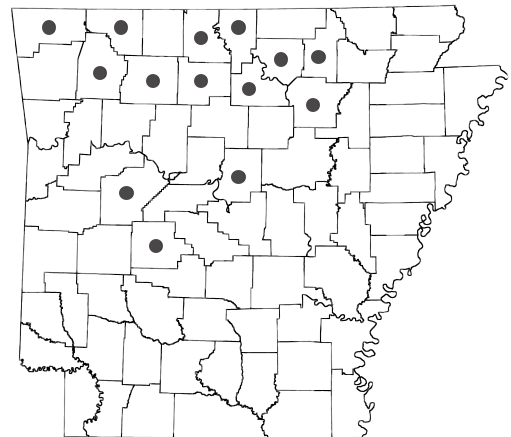
PTERIDACEAE
Cheilanthes lanosa (Michx.) D.C.Eaton in Emory
 hairy lip fern



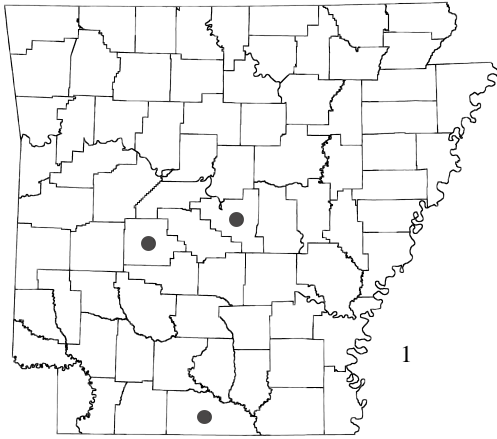
PTERIDACEAE
Cheilanthes tomentosa Link
 woolly lip fern



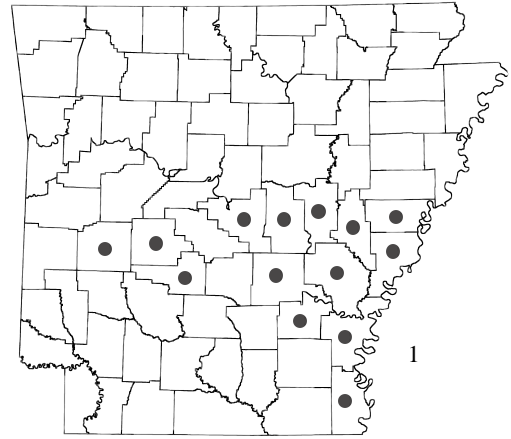
PTERIDACEAE
Pellaea atropurpurea (L.) Link
 purple-stem cliff-brake



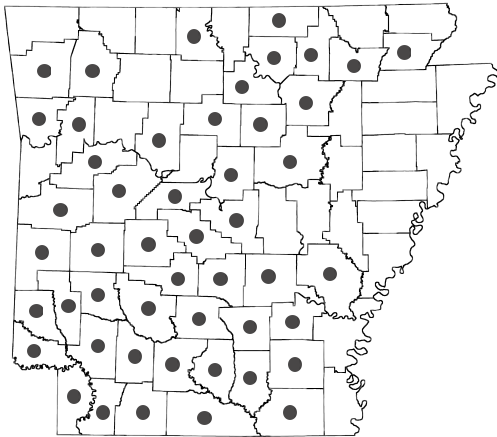
PTERIDACEAE
Pellaea glabella Mett. ex Kuhn
 subsp. **glabella**
 smooth cliff-brake



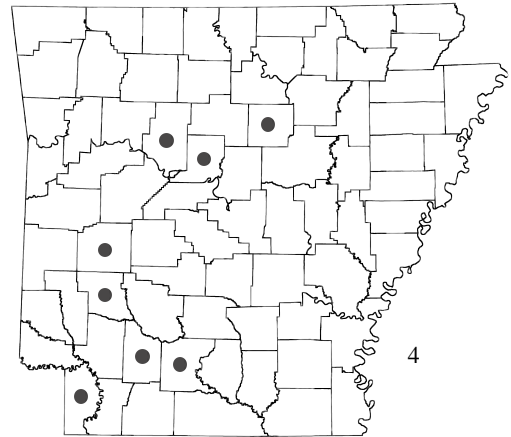
PTERIDACEAE
***Pteris multifida* Poir. in Lam. et al.**
 spider brake



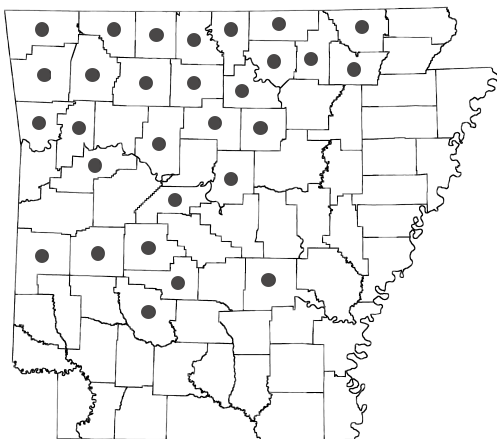
SALVINIACEAE
***Salvinia minima* Baker**
 water-spangles, floating fern



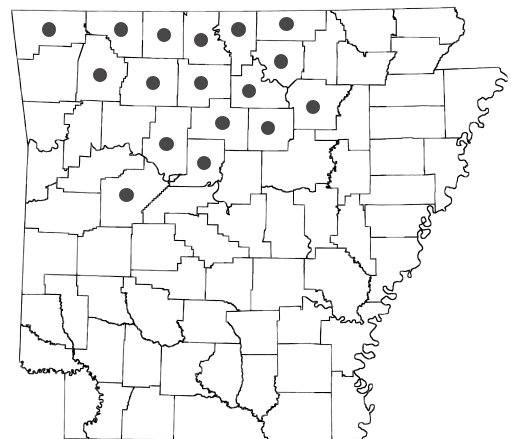
SELAGINELLACEAE
***Selaginella apoda* (L.) Spring in Mart. et al.**
 meadow spike-moss



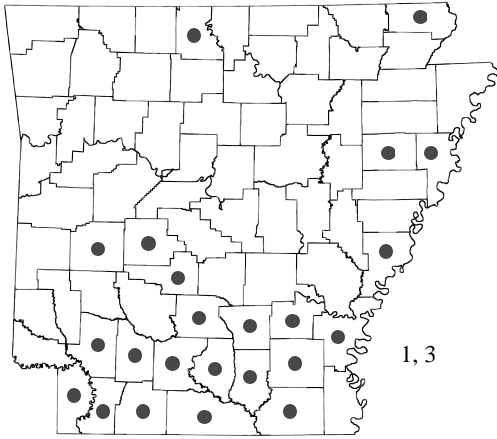
SELAGINELLACEAE
***Selaginella arenicola* Underw.**
subsp. *riddellii* (Van Eselt.) R.M.Tryon
 Riddell's spike-moss



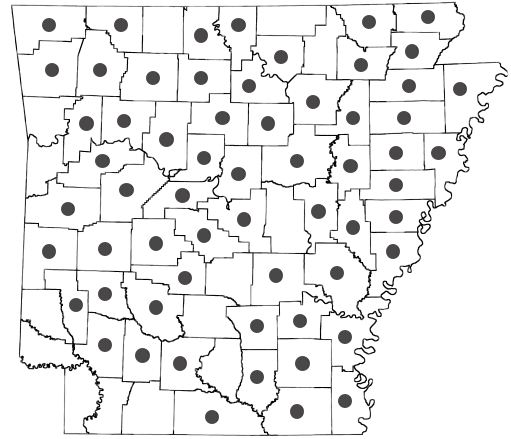
SELAGINELLACEAE
***Selaginella ecliptes* W.R.Buck**
 hidden spike-moss



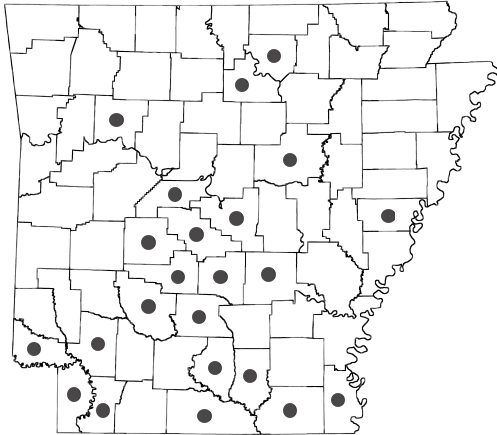
SELAGINELLACEAE
***Selaginella rupestris* (L.) Spring**
 rock spike-moss



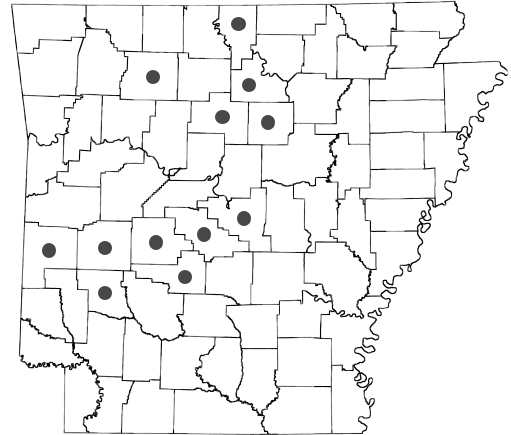
THELYPTERIDACEAE
Macrothelypteris torresiana (Gaudich.) Ching
 Mariana maiden fern



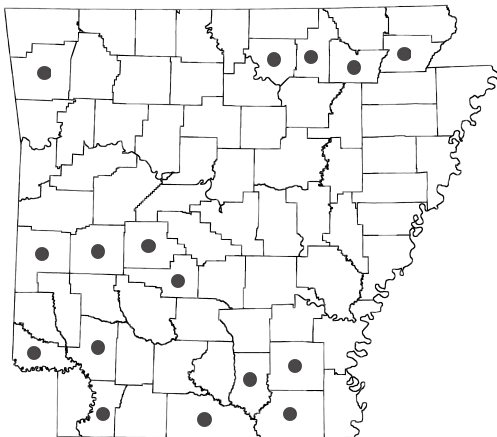
THELYPTERIDACEAE
Phegopteris hexagonoptera (Michx.) Fée
 broad beech fern, southern beech fern



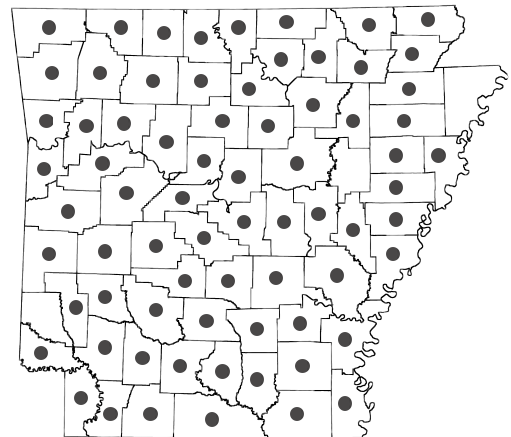
THELYPTERIDACEAE
Thelypteris kunthii (Desv.) C.V.Morton
 southern shield fern



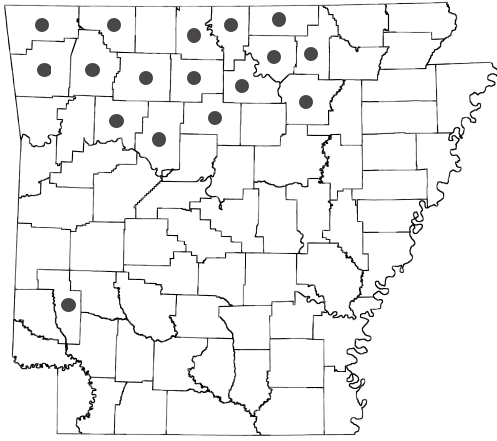
THELYPTERIDACEAE
Thelypteris noveboracensis (L.) Nieuwl.
 New York fern



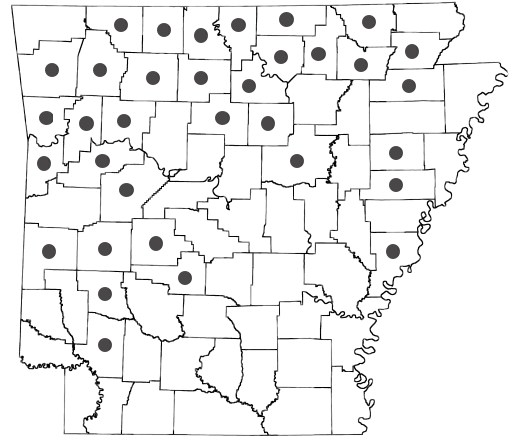
THELYPTERIDACEAE
Thelypteris palustris Schott
var. pubescens (Lawson) Fernald
 marsh fern



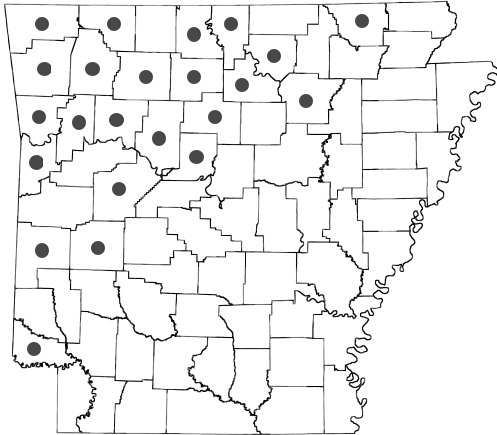
WOODSIACEAE
Athyrium filix-femina (L.) Roth ex Mertens
subsp. asplenioides (Michx.) Hultén
 southern lady fern



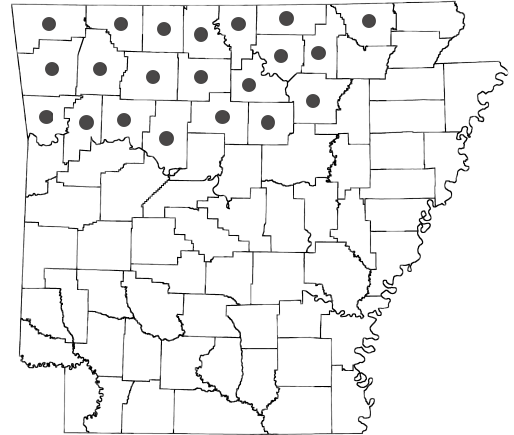
WOODSIACEAE
***Cystopteris bulbifera* (L.) Bernh.**
bulblet bladder fern



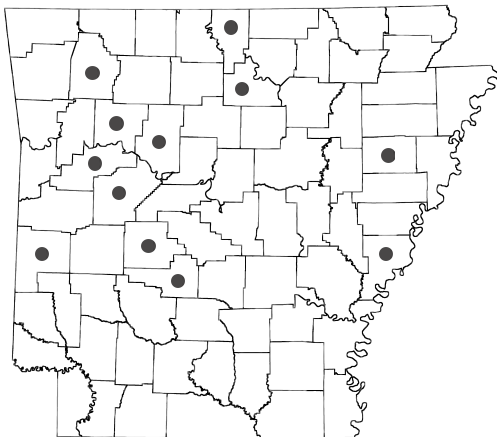
WOODSIACEAE
***Cystopteris protrusa* (Weath.) Blasdel**
southern bladder fern, southern fragile fern



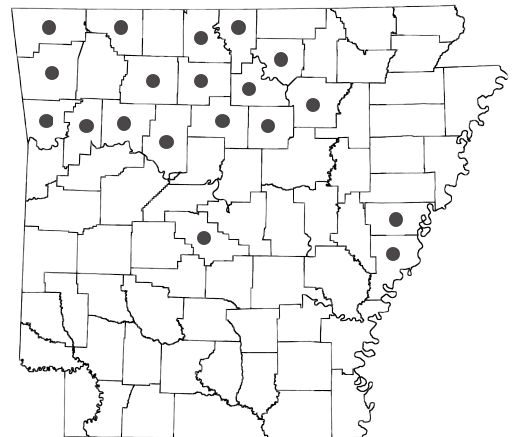
WOODSIACEAE
***Cystopteris tennesseensis* Shaver**
Tennessee bladder fern



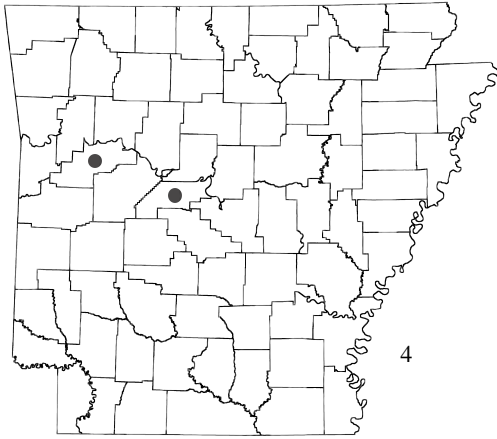
WOODSIACEAE
***Cystopteris tenuis* (Michx.) Desv.**
Mackay's bladder fern, Mackay's fragile fern



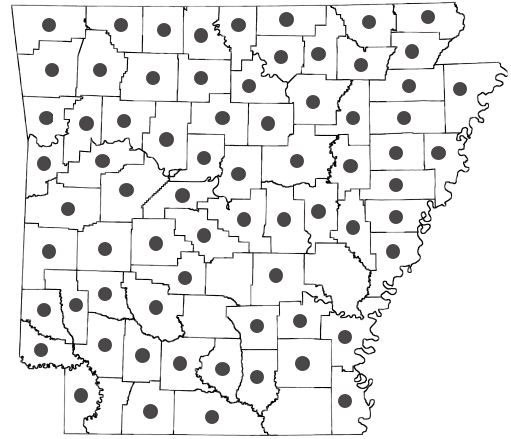
WOODSIACEAE
***Deparia acrostichoides* (Sw.) M.Kato**
silvery glade fern



WOODSIACEAE
***Diplazium pycnocarpon* (Spreng.) M.Broun**
glade fern



WOODSIACEAE
Woodsia appalachiana T.M.C.Taylor
Appalachian cliff fern

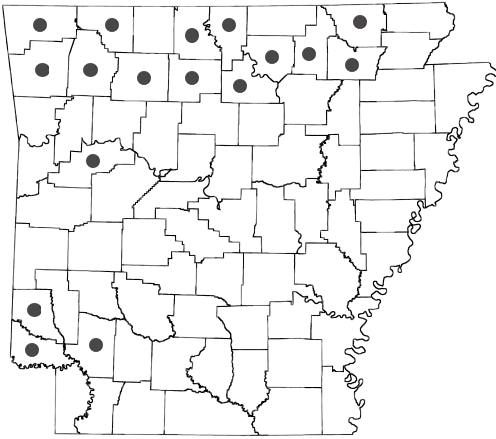


WOODSIACEAE
Woodsia obtusa (Spreng.) Torr.
blunt-lobe cliff fern
See *Appendix I* for infraspecific taxa and species status.



Gymnosperms

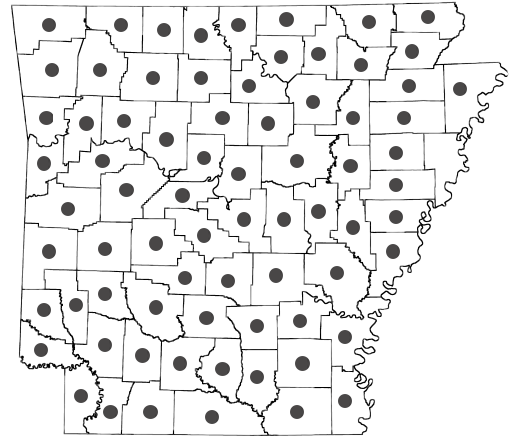




CUPRESSACEAE

Juniperus ashei J.Buchholz

Ashe's juniper, rock-cedar, Ozark white-cedar

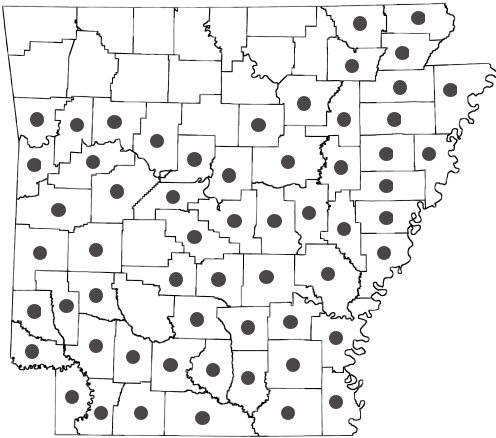


CUPRESSACEAE

Juniperus virginiana L.

var. virginiana

eastern red-cedar, cedar

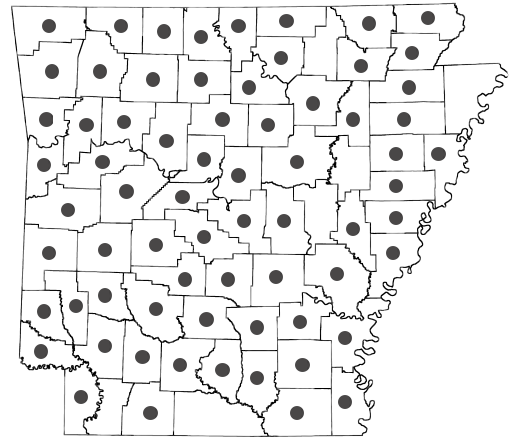


CUPRESSACEAE

Taxodium distichum (L.) Rich.

var. distichum

bald-cypress, cypress



PINACEAE

Pinus echinata Mill.

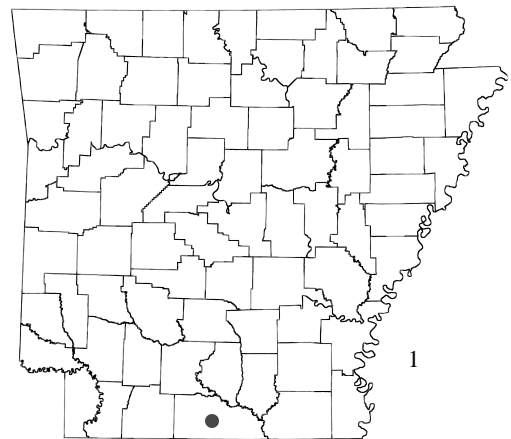
short-leaf pine, yellow pine



PINACEAE

Pinus glabra Walter

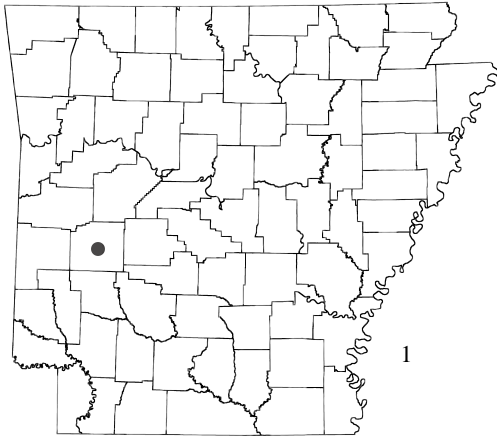
spruce pine



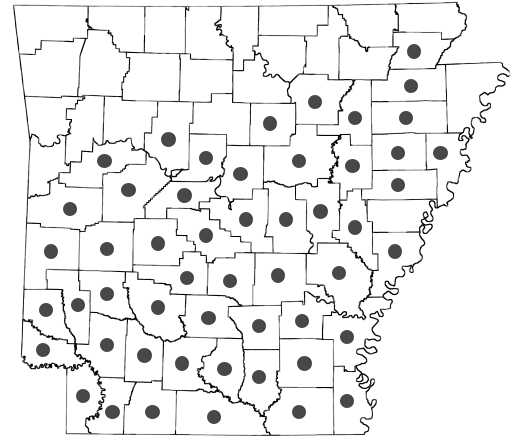
PINACEAE

Pinus palustris Mill.

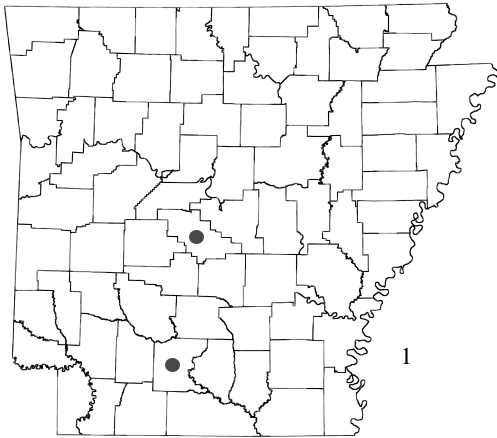
long-leaf pine



PINACEAE
Pinus strobus L.
eastern white pine



PINACEAE
Pinus taeda L.
loblolly pine

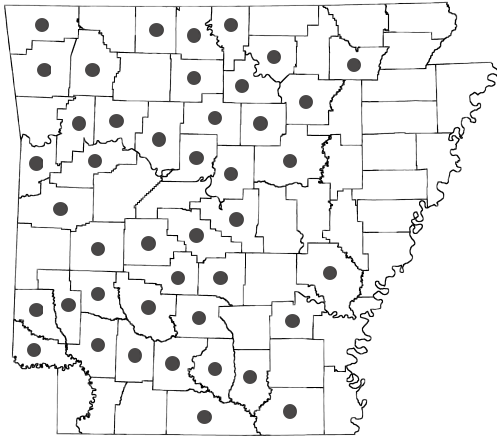


PINACEAE
Pinus virginiana Mill.
Virginia pine

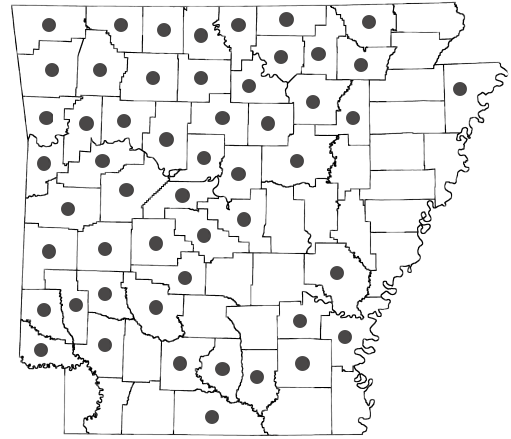


Angiosperm
Dicots

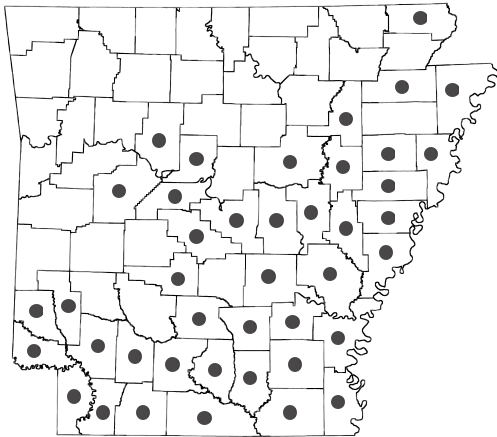




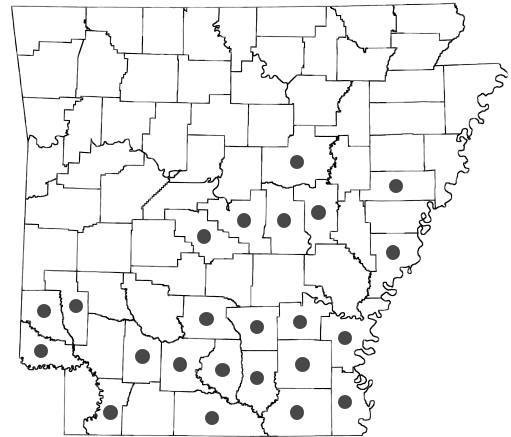
ACANTHACEAE
Dicliptera brachiata (Pursh) Spreng.
 dicliptera, branched foldingwing



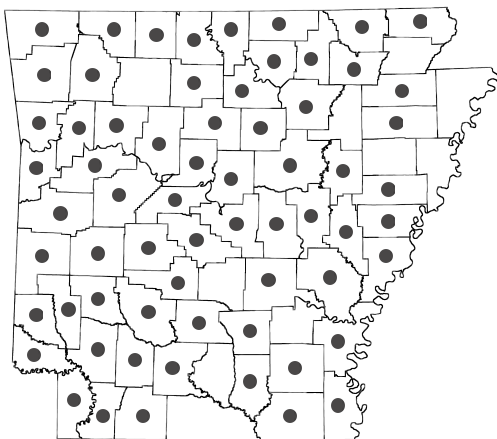
ACANTHACEAE
Justicia americana (L.) Vahl
 water-willow



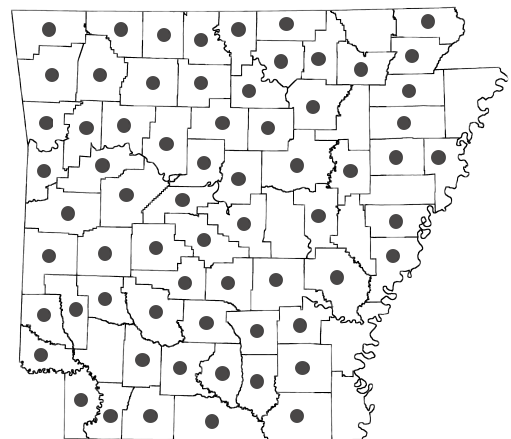
ACANTHACEAE
Justicia ovata (Walter) Lindau
var. lanceolata (Chapm.) R.W.Long
 lance-leaf water-willow



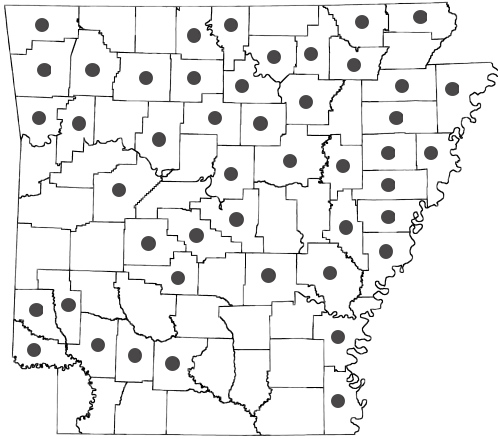
ACANTHACEAE
Ruellia caroliniensis (J.F.Gmel.) Steud.
 Carolina wild petunia



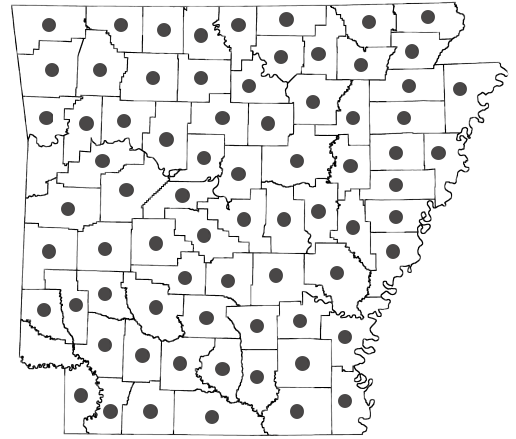
ACANTHACEAE
Ruellia humilis Nutt.
 hairy wild petunia



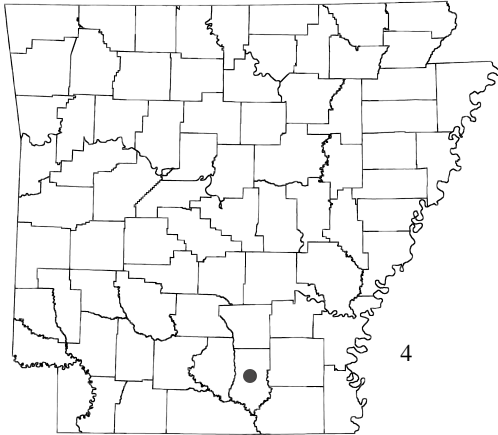
ACANTHACEAE
Ruellia pedunculata Torr. ex A.Gray
subsp. pedunculata
 stalked wild petunia



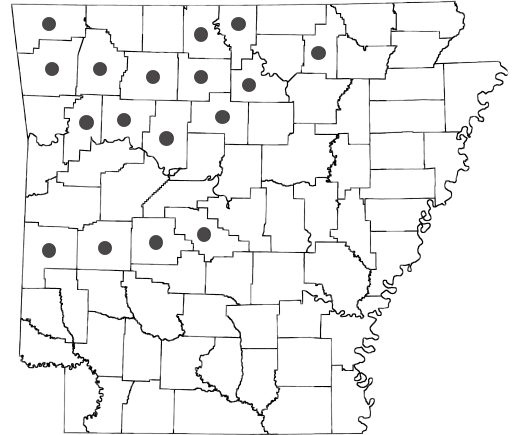
ACANTHACEAE
***Ruellia strepens* L.**
 smooth wild petunia



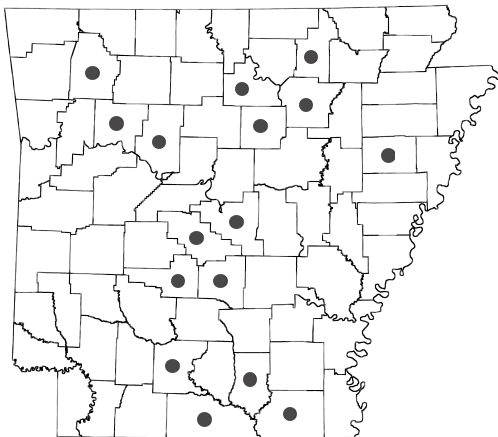
ADOXACEAE
***Sambucus canadensis* L.**
 elderberry



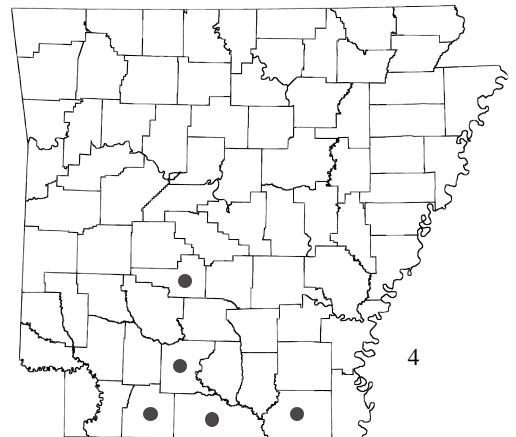
ADOXACEAE
***Viburnum acerifolium* L.**
 maple-leaf viburnum, maple-leaf arrow-wood



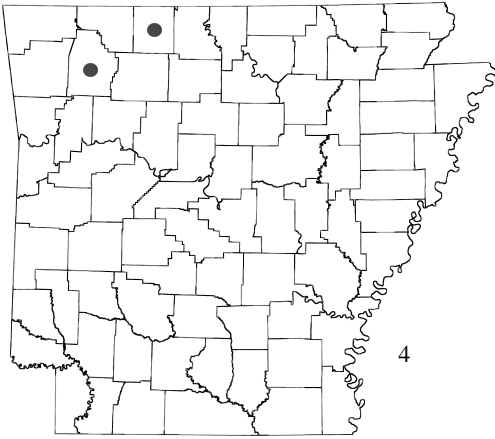
ADOXACEAE
***Viburnum bracteatum* Rehder**
 Ozark arrow-wood



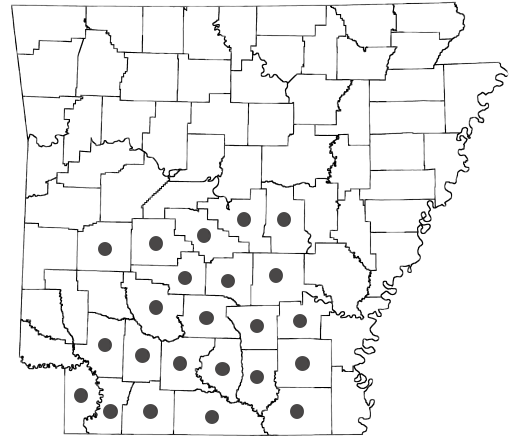
ADOXACEAE
***Viburnum dentatum* L.**
var. *dentatum*
 arrow-wood



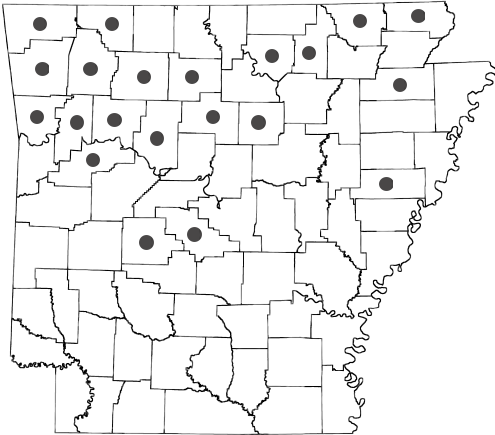
ADOXACEAE
***Viburnum dentatum* L.**
var. *scabrellum* Torr. & A.Gray
 southern arrow-wood



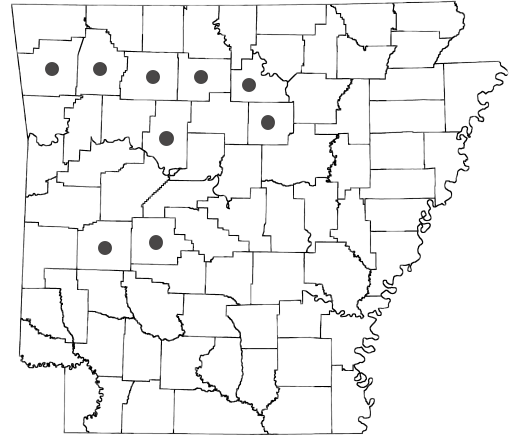
ADOXACEAE
Viburnum molle Michx.
 soft-leaf arrow-wood



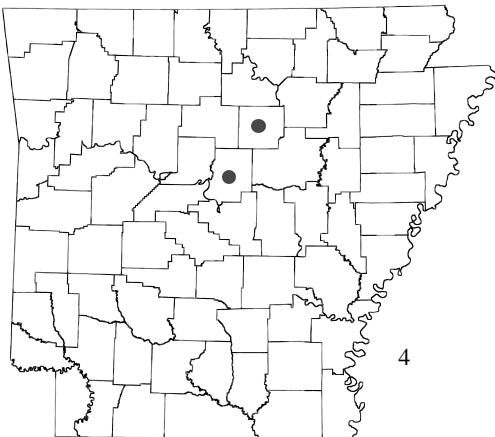
ADOXACEAE
Viburnum nudum L.
 possumhaw



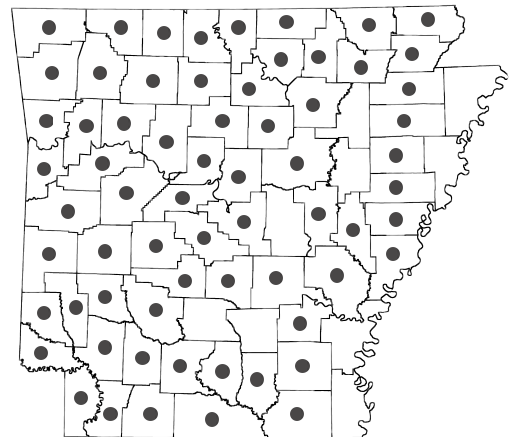
ADOXACEAE
Viburnum prunifolium L.
 blackhaw



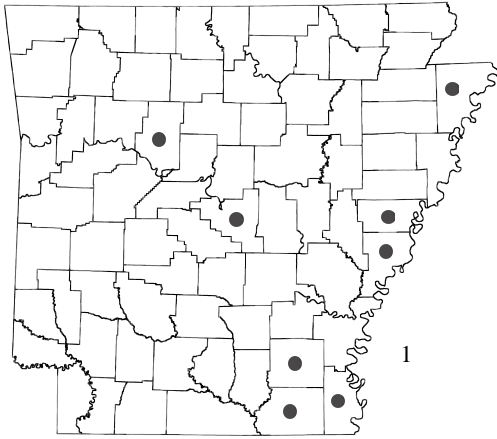
ADOXACEAE
Viburnum rafinesquianum Schult.
 downy arrow-wood



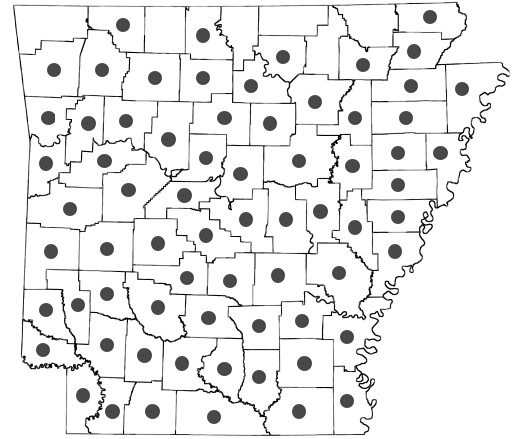
ADOXACEAE
Viburnum recognitum Fernald
 northern arrow-wood



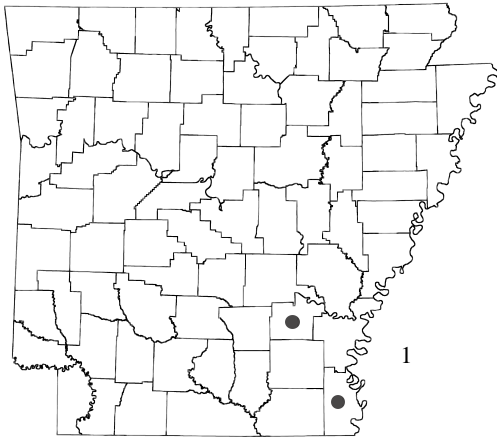
ADOXACEAE
Viburnum rufidulum Raf.
 rusty blackhaw, southern blackhaw



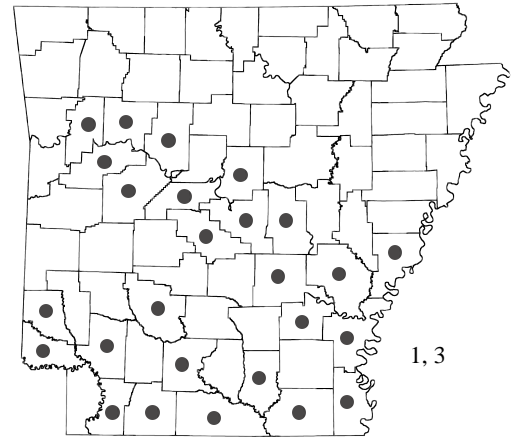
AIZOACEAE
***Trianthema portulacastrum* L.**
 sea-purslane, horse-purslane



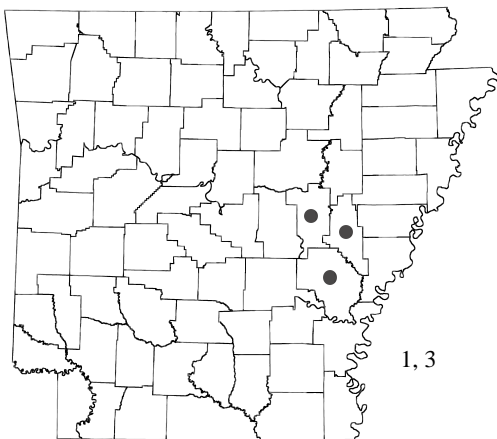
ALTINGIACEAE
***Liquidambar styraciflua* L.**
 sweet-gum



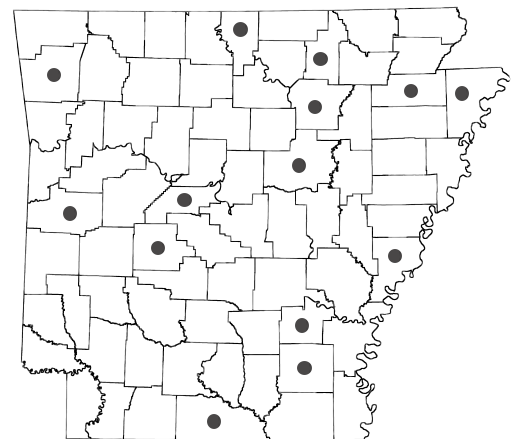
AMARANTHACEAE
***Alternanthera paronychioides* A.St.-Hil.**
 smooth joyweed



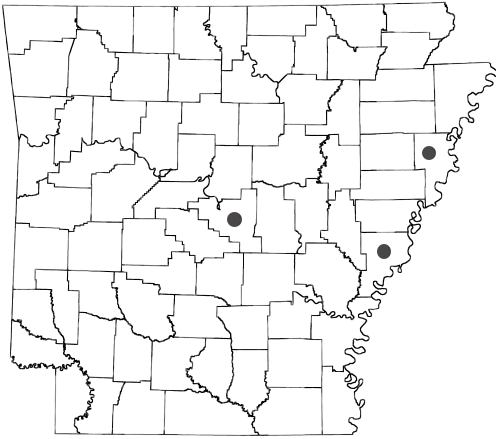
AMARANTHACEAE
***Alternanthera philoxeroides* (Mart.) Griseb.**
 alligator-weed



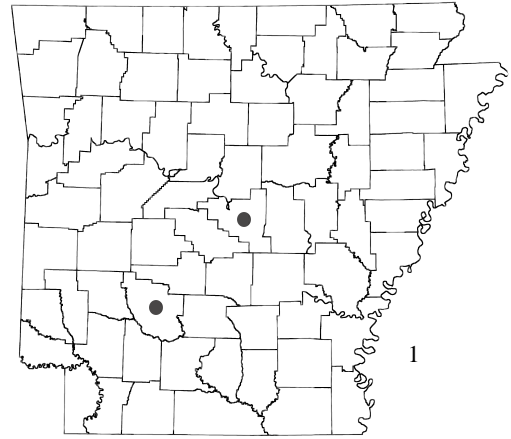
AMARANTHACEAE
***Alternanthera sessilis* (L.) R.Br. ex DC.**
 sessile joyweed



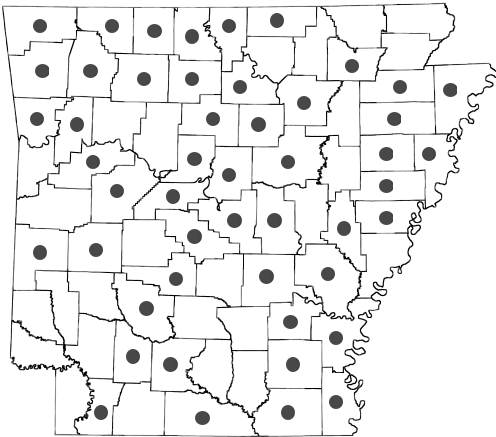
AMARANTHACEAE
***Amaranthus albus* L.**
 tumbleweed, tumble pigweed



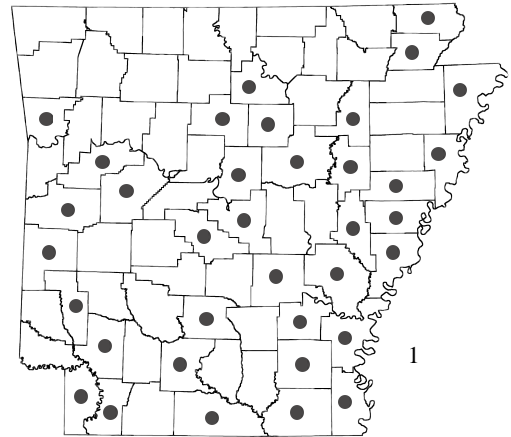
AMARANTHACEAE
Amaranthus blitoides S.Watson
 tumbleweed, prostrate amaranth, prostrate pigweed



AMARANTHACEAE
Amaranthus blitum L.
 purple amaranth



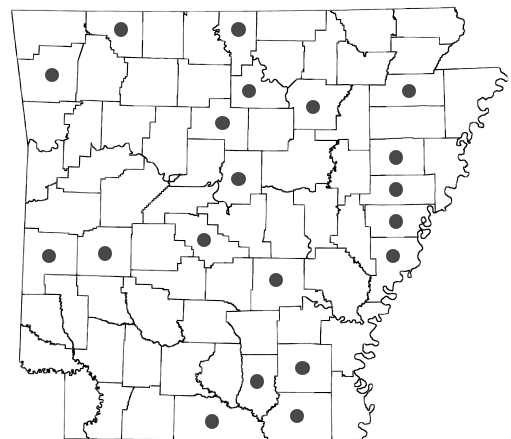
AMARANTHACEAE
Amaranthus hybridus L.
 green amaranth, smooth pigweed



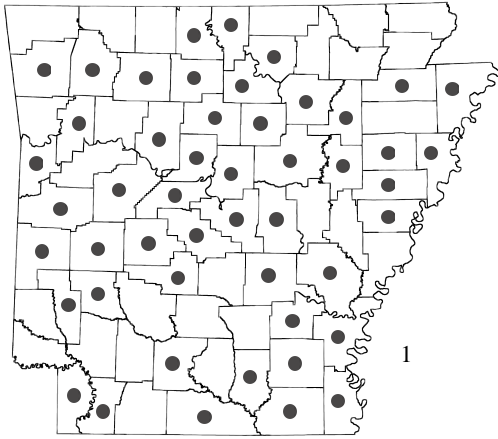
AMARANTHACEAE
Amaranthus palmeri S.Watson
 Palmer's amaranth, careless-weed



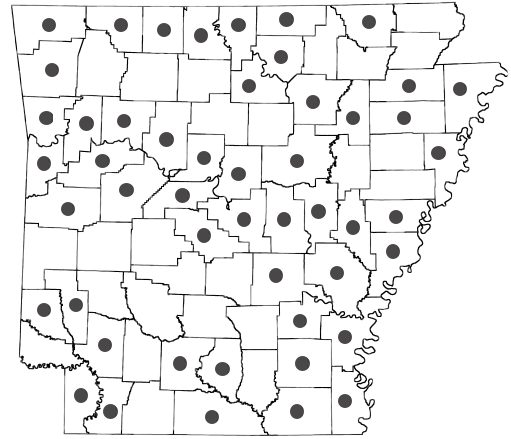
AMARANTHACEAE
Amaranthus powellii S.Watson
 Powell's amaranth



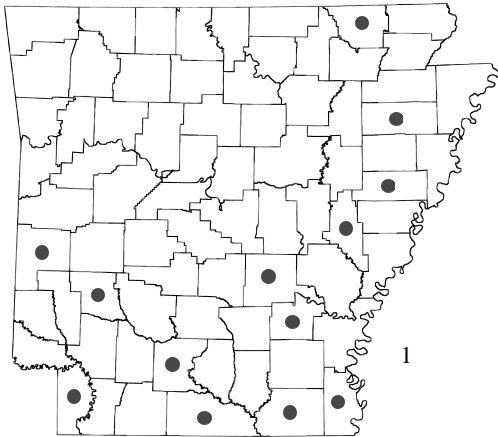
AMARANTHACEAE
Amaranthus retroflexus L.
 red-root pigweed, rough green amaranth



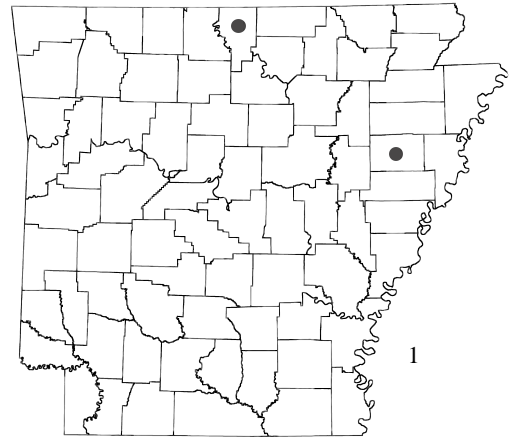
AMARANTHACEAE
Amaranthus spinosus L.
 spiny amaranth



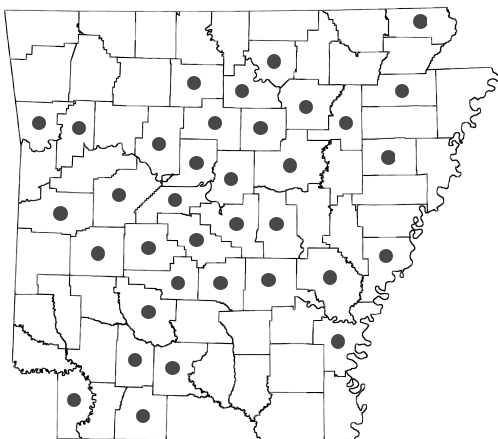
AMARANTHACEAE
Amaranthus tuberculatus (Moq.) J.D.Sauer
 water-hemp, tall water-hemp



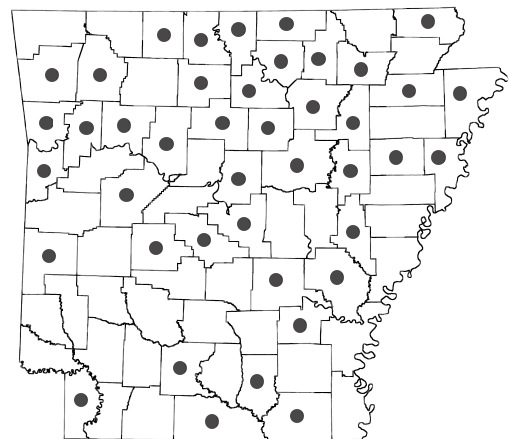
AMARANTHACEAE
Amaranthus viridis L.
 slender amaranth



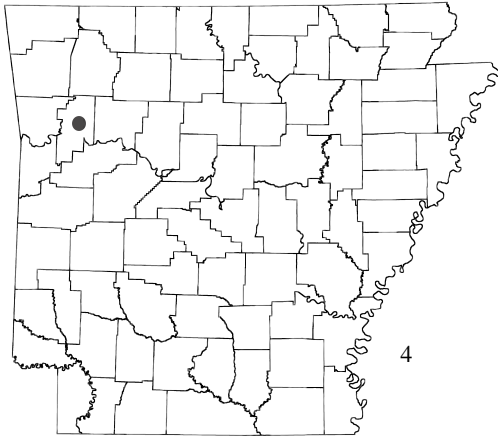
AMARANTHACEAE
Celosia argentea L.
 silver cock's-comb



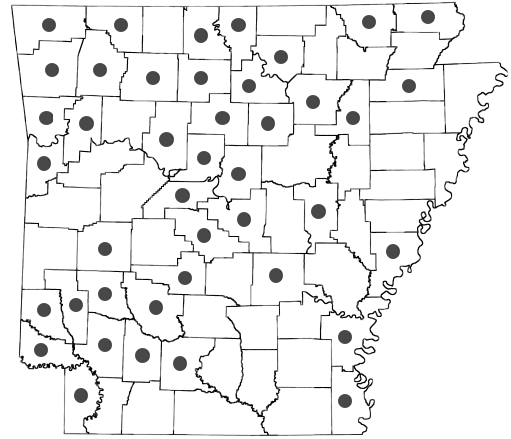
AMARANTHACEAE
Froelichia floridana (Nutt.) Moq. in DC. & A.DC.
 cotton-weed, plains snake-cotton



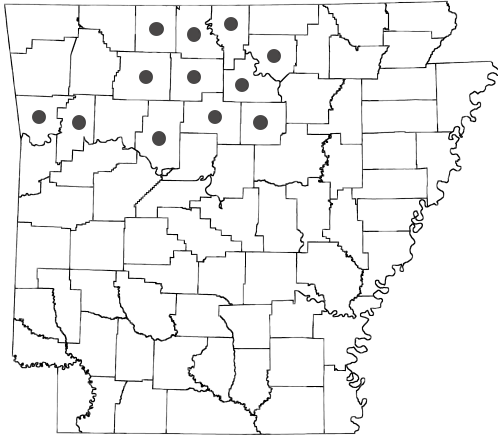
AMARANTHACEAE
Froelichia gracilis (Hook.) Moq. in DC. & A.DC.
 slender cotton-weed, slender snake-cotton



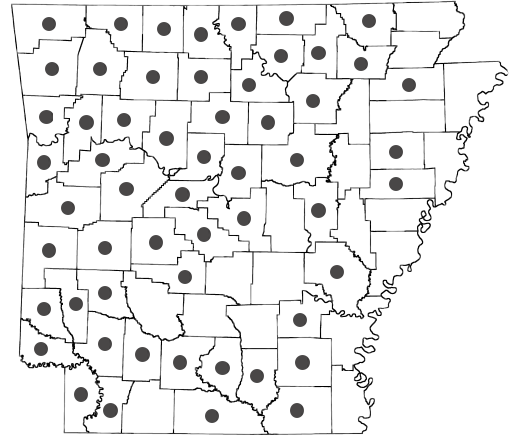
AMARANTHACEAE
Gossypianthus lanuginosus (Poir.) Moq. in DC. & A.DC.
var. tenuiflorus (Hook.) Henr.
 woolly cotton-flower



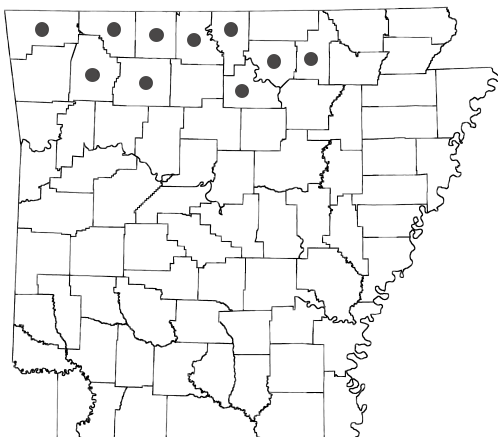
AMARANTHACEAE
Iresine rhizomatosa Standl.
 blood-leaf, Juda's-bush



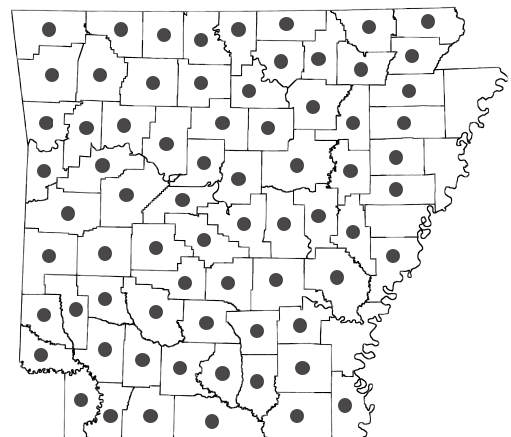
ANACARDIACEAE
Cotinus obovatus Raf.
 American smoke-tree



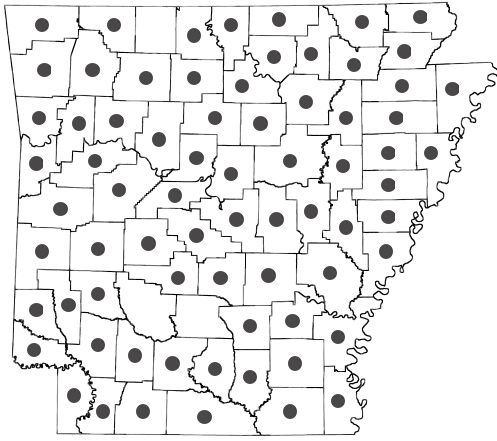
ANACARDIACEAE
Rhus aromatica Aiton
var. aromatica
 fragrant sumac



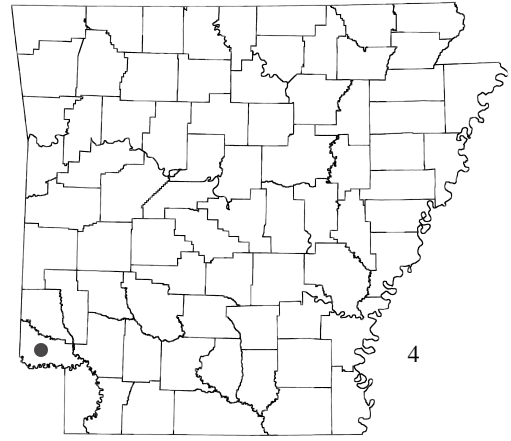
ANACARDIACEAE
Rhus aromatica Aiton
var. serotina (Greene) Rehder
 fragrant sumac



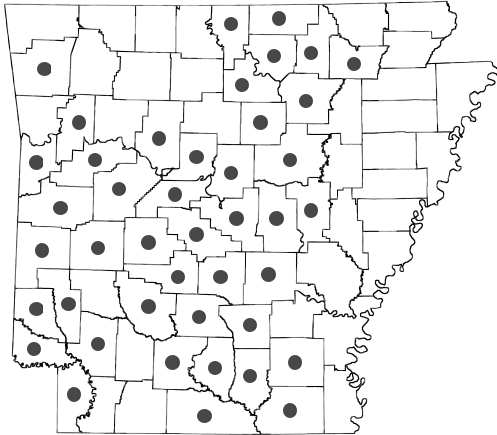
ANACARDIACEAE
Rhus copallinum L.
 winged sumac, dwarf sumac, shining sumac



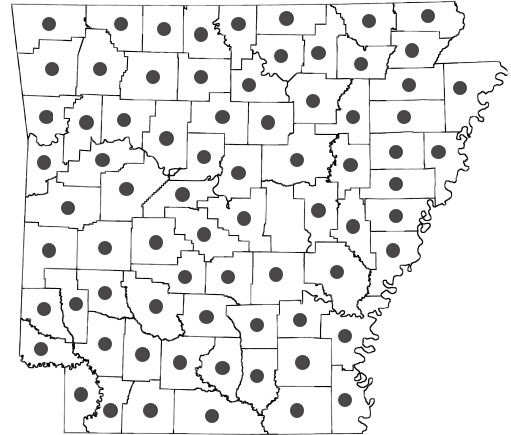
ANACARDIACEAE
Rhus glabra L.
smooth sumac



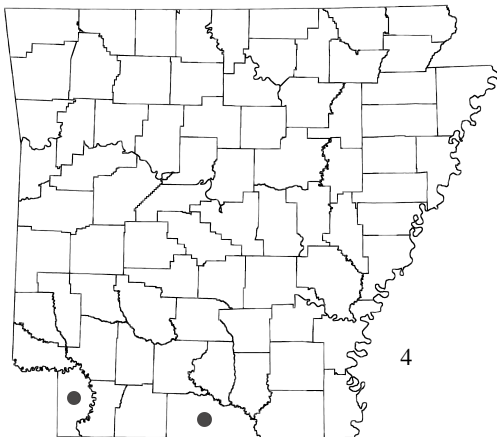
ANACARDIACEAE
Rhus trilobata Nutt. ex Torr. & A.Gray
var. trilobata
skunk-bush sumac



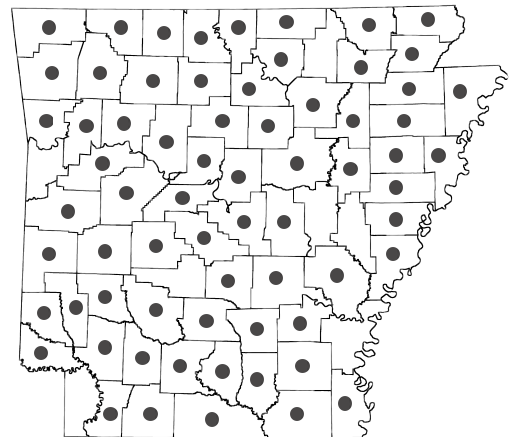
ANACARDIACEAE
Toxicodendron pubescens Mill.
poison-oak



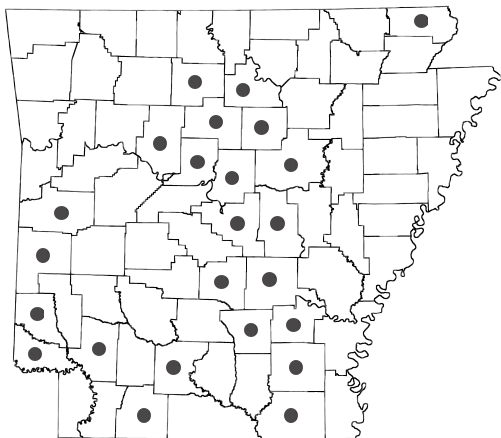
ANACARDIACEAE
Toxicodendron radicans (L.) Kuntze
poison-ivy



ANNONACEAE
Asimina parviflora (Michx.) Dunal
dwarf pawpaw



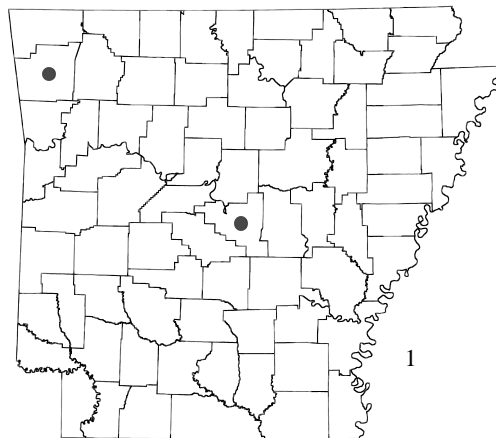
ANNONACEAE
Asimina triloba (L.) Dunal
pawpaw



APIACEAE

Ammoselinum butleri (Engelm. ex S.Watson) J.M.Coult. & Rose

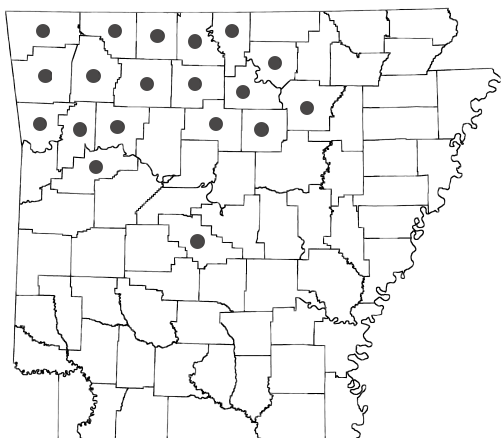
Butler's sand-parsley



APIACEAE

Anethum graveolens L.

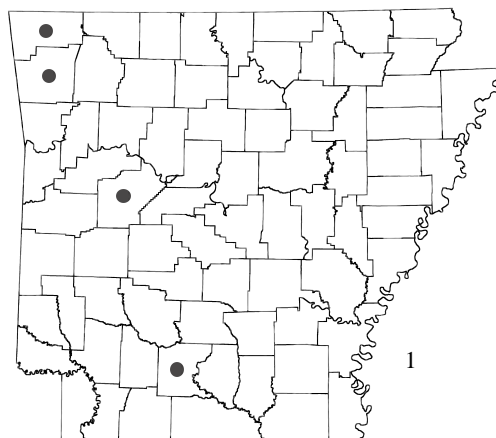
dill



APIACEAE

Angelica venenosa (Greenway) Fernald

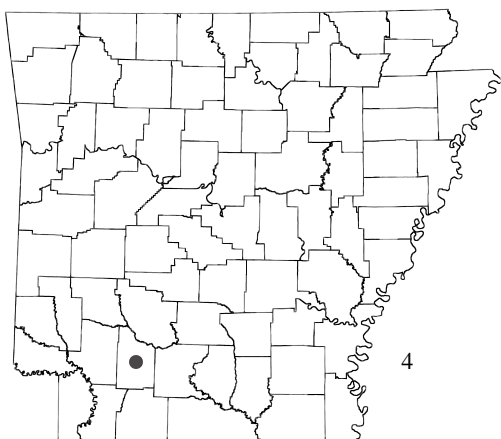
hairy angelica



APIACEAE

Anthriscus caucalis M.Bieb.

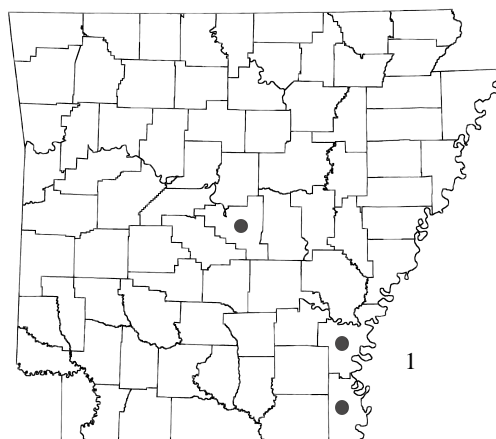
bur chervil



APIACEAE

Bifora americana Benth. & Hook.f. ex S.Watson

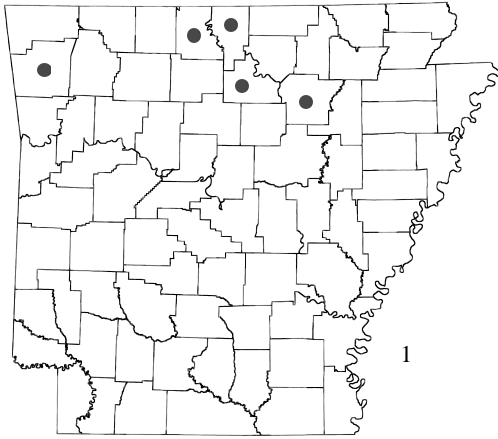
prairie bishop



APIACEAE

Bowlesia incana Ruiz & Pav.

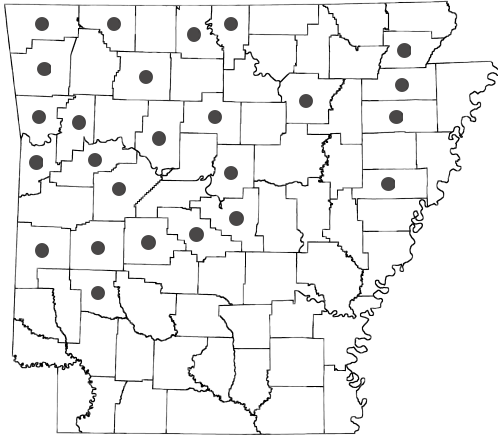
hoary bowlesia



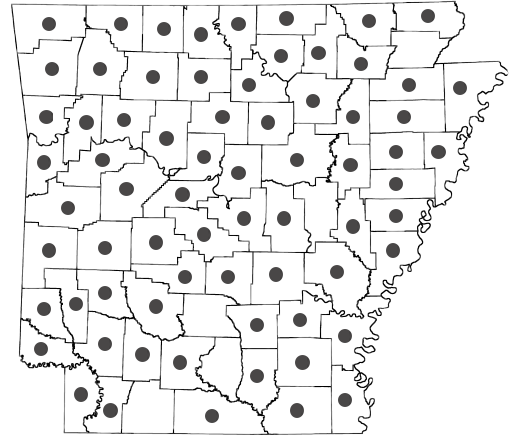
APIACEAE
Bupleurum rotundifolium L.
thoroughwax, hare's-ear



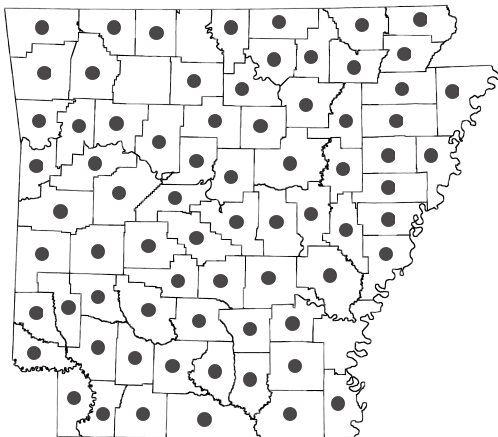
APIACEAE
Centella erecta (L.f.) Fernald
stiff spadeleaf



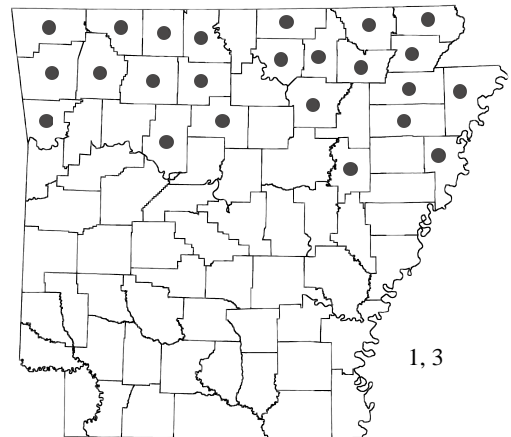
APIACEAE
Chaerophyllum procumbens (L.) Crantz
spreading chervil



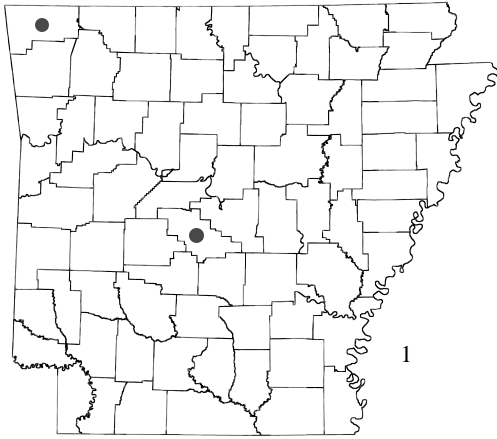
APIACEAE
Chaerophyllum tainturieri Hook.
wild chervil



APIACEAE
Cicuta maculata L.
water-hemlock, spotted cowbane



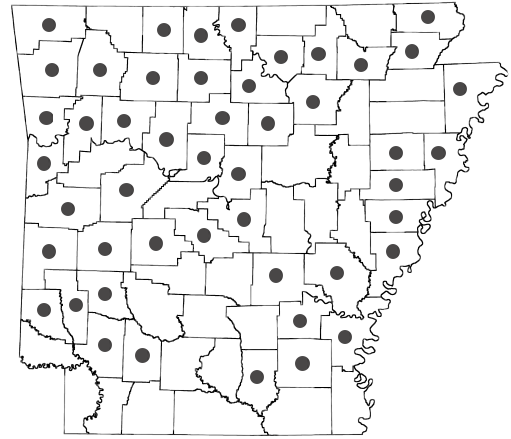
APIACEAE
Conium maculatum L.
poison-hemlock



APIACEAE

Coriandrum sativum L.

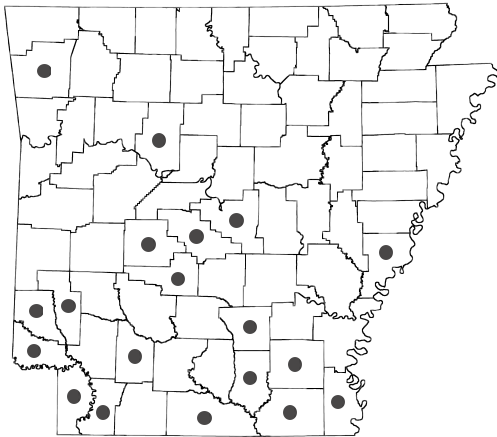
coriander, Chinese-parsley, cilantro



APIACEAE

Cryptotaenia canadensis (L.) DC.

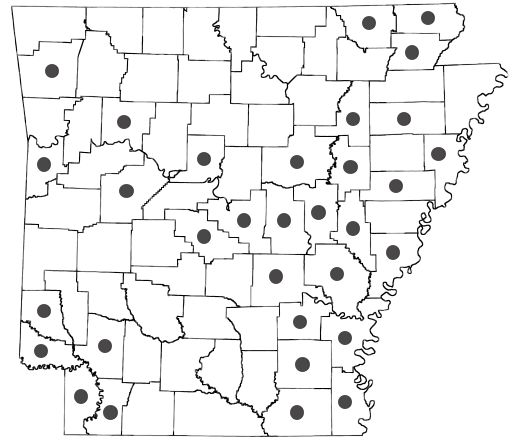
honewort



APIACEAE

Cyclosporum leptophyllum (Pers.) Sprague ex Britton & P. Wilson

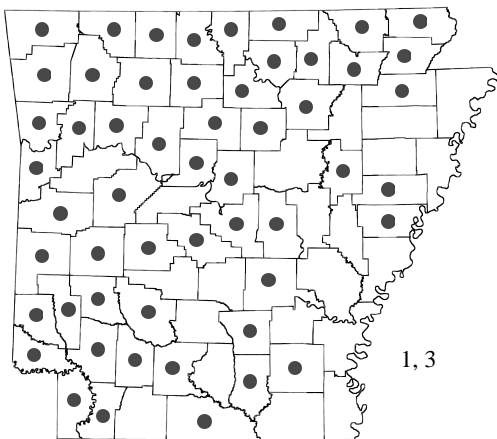
marsh-parsley, wild celery



APIACEAE

Cynosciadium digitatum DC.

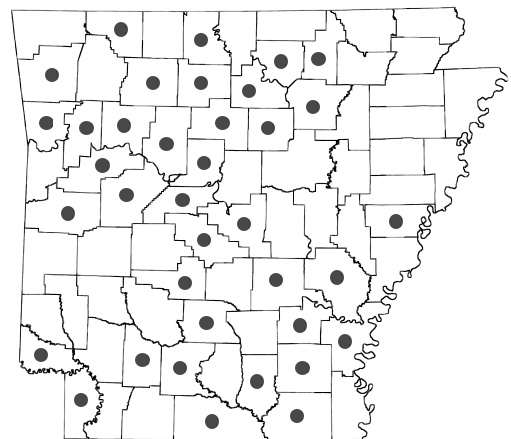
dogshade



APIACEAE

Daucus carota L.

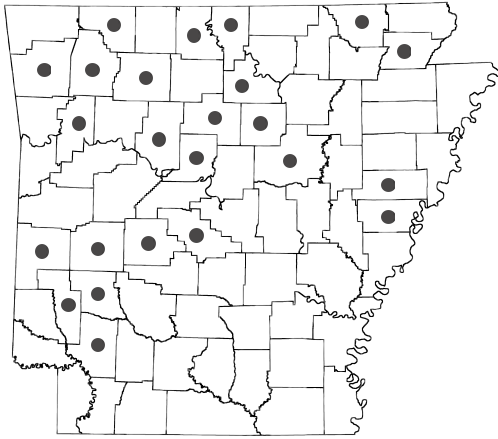
Queen Anne's-lace, wild carrot



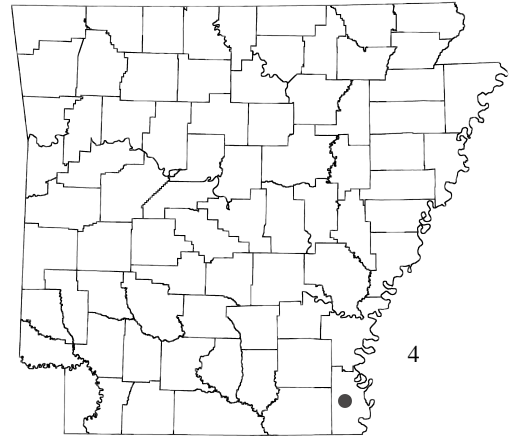
APIACEAE

Daucus pusillus Michx.

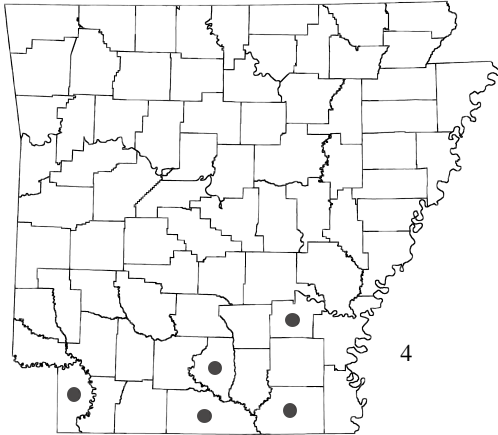
rattlesnake-weed, wild carrot



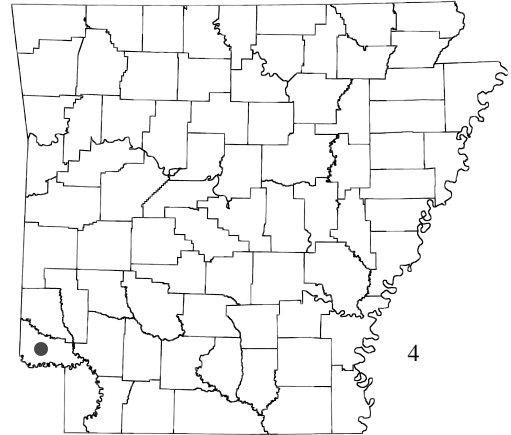
APIACEAE
***Eriogon bulbosa* (Michx.) Nutt.**
harbinger-of-spring, pepper-and-salt



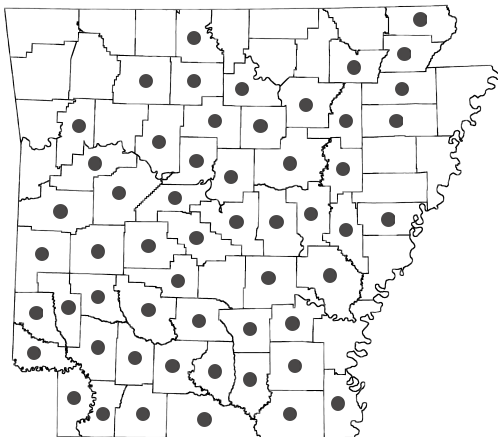
APIACEAE
***Eriogon hookeri* Walp.**
Hooker's eryngo



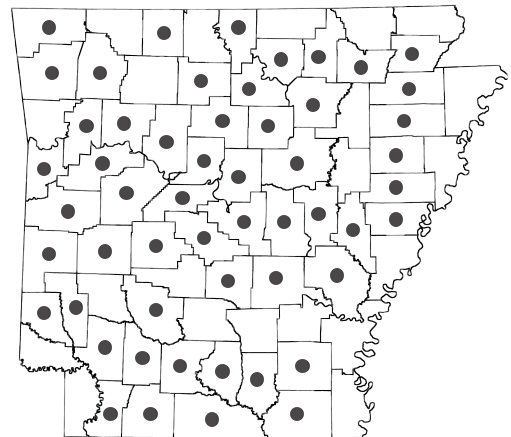
APIACEAE
***Eriogon integrifolium* Walter**
blue-flower eryngo, eryngo



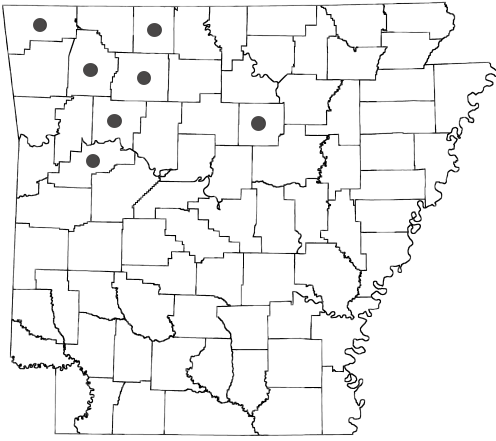
APIACEAE
***Eriogon leavenworthii* Torr. & A.Gray**
Leavenworth's eryngo



APIACEAE
***Eriogon prostratum* Nutt. ex DC.**
creeping eryngo



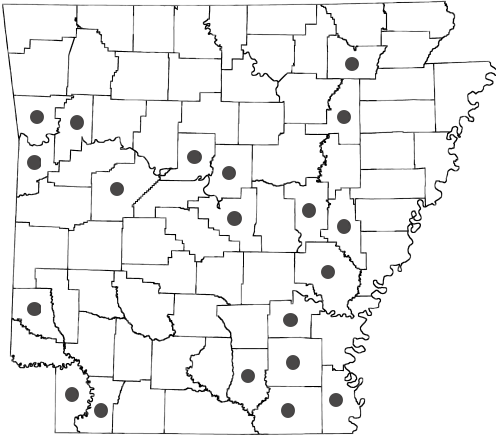
APIACEAE
***Eriogon yuccifolium* Michx.**
rattlesnake-master, button snakeroot



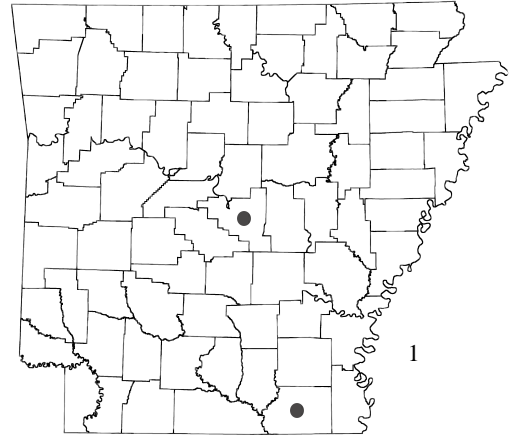
APIACEAE
Ligusticum canadense (L.) Britton
 angelico



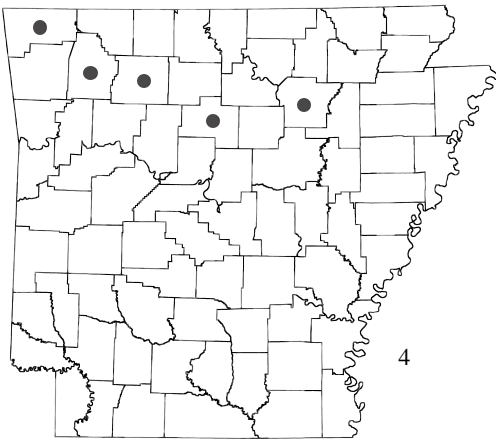
APIACEAE
Lilaeopsis carolinensis J.M.Coult. & Rose
 Carolina grasswort



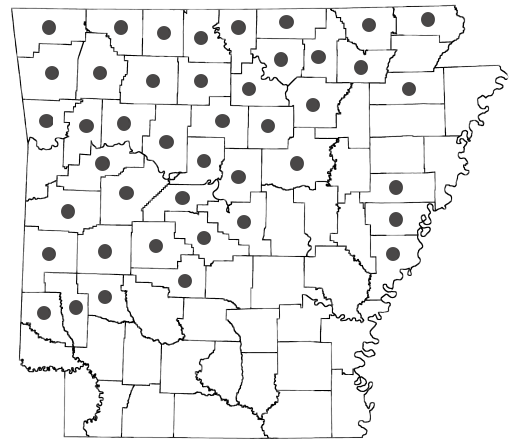
APIACEAE
Limnoscadium pinnatum (DC.) Mathias & Constance
 Arkansas dogshade



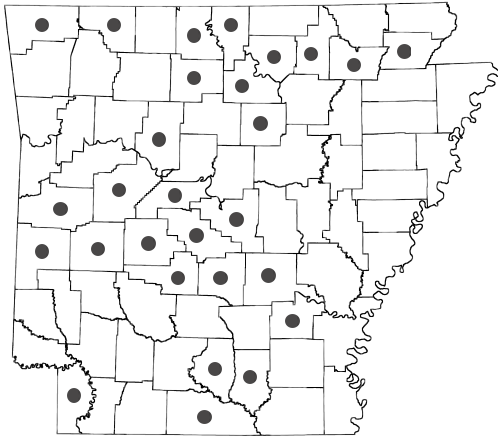
APIACEAE
Limnoscadium pumilum (Engelm. & A.Gray) Mathias & Constance
 ricefield dogshade, prairie dogshade



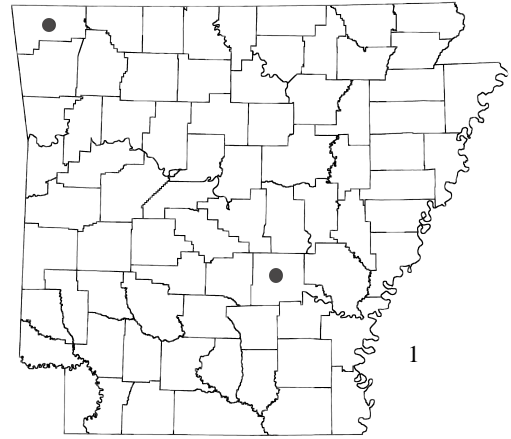
APIACEAE
Osmorhiza claytonii (Michx.) C.B.Clarke
 hairy sweet-cicely



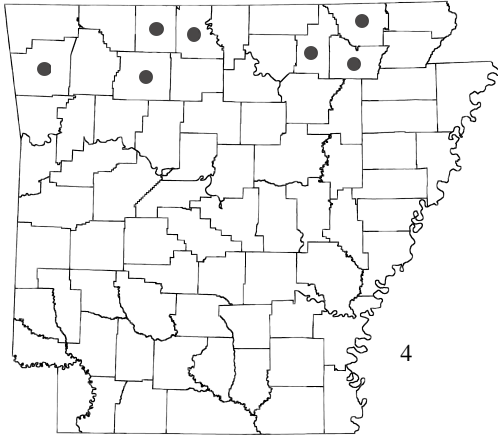
APIACEAE
Osmorhiza longistylis (Torr.) DC.
 aniseroot, sweet anise



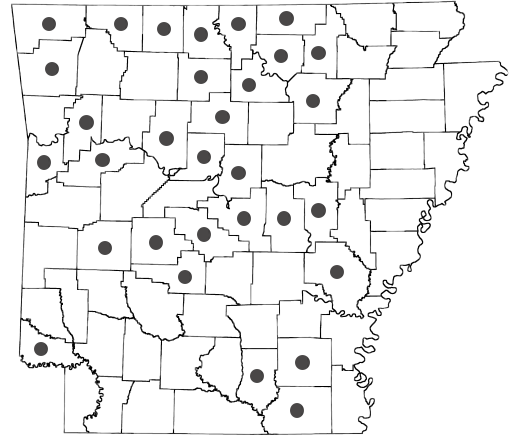
APIACEAE
Oxypolis rigidior (L.) Raf.
cowbane



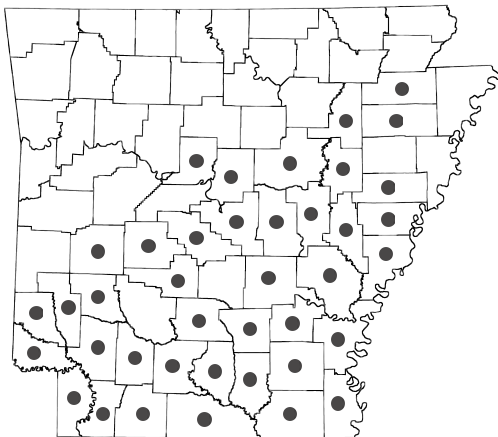
APIACEAE
Pastinaca sativa L.
parsnip



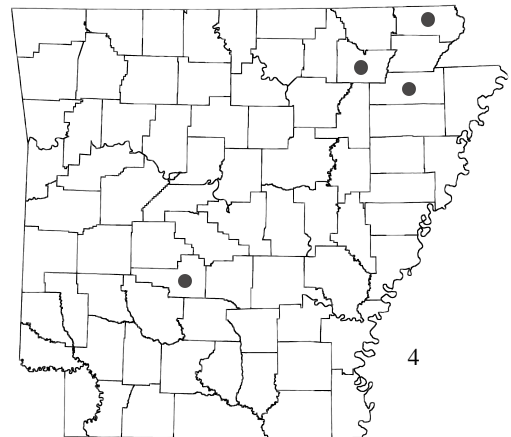
APIACEAE
Perideridia americana (Nutt. ex DC.) Rchb.
American squaw-root, eastern yampah



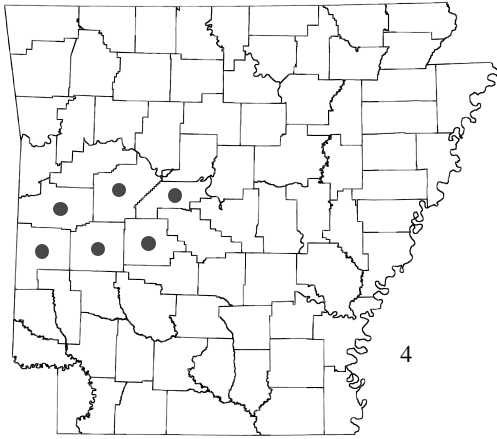
APIACEAE
Polytaenia nuttallii DC.
prairie-parsley



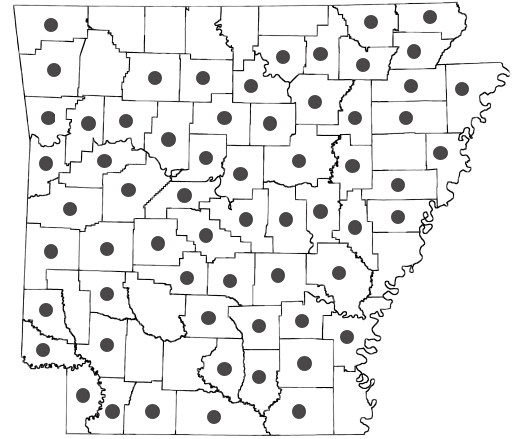
APIACEAE
Ptilimnium capillaceum (Michx.) Raf.
Atlantic mock bishop's-weed



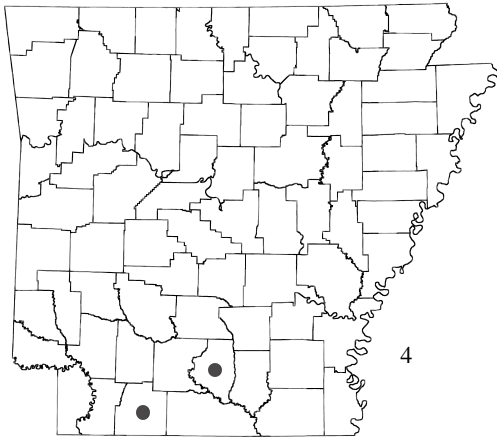
APIACEAE
Ptilimnium costatum (Elliott) Raf.
big mock bishop's-weed



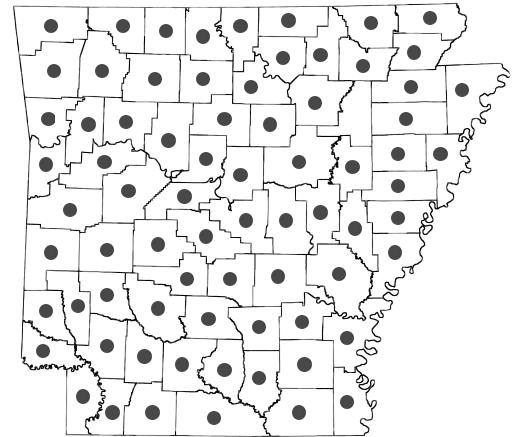
APIACEAE
Ptilimnium nodosum (Rose) Mathias
 harperella



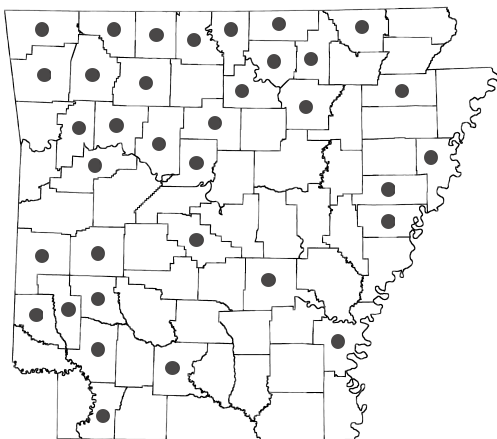
APIACEAE
Ptilimnium nuttallii (DC.) Britton
 Nuttall's mock bishop's-weed



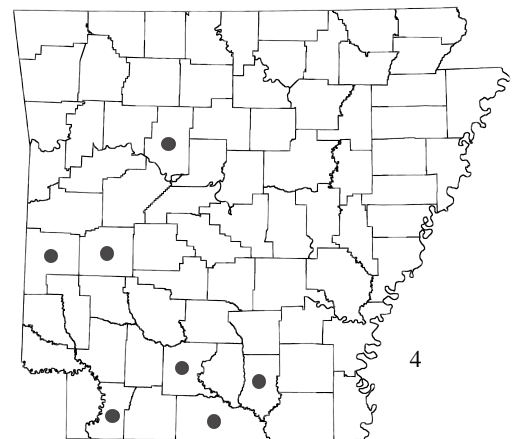
APIACEAE
Ptilimnium texense J.M.Coult. & Rose
 Texas mock bishop's-weed



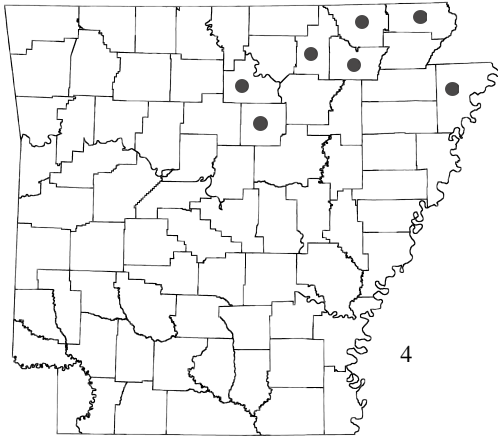
APIACEAE
Sanicula canadensis L.
 Canadian black-snakeroot



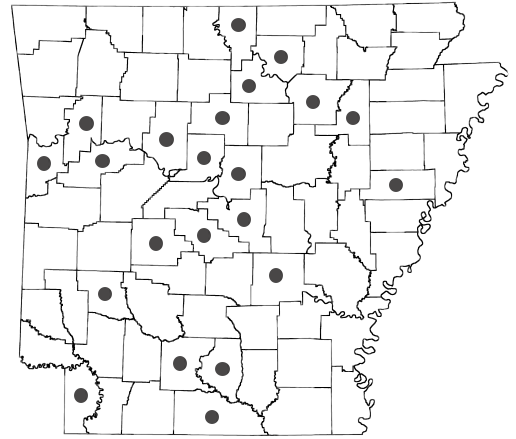
APIACEAE
Sanicula odorata (Raf.) Pryer & Phillippe
 clustered black-snakeroot



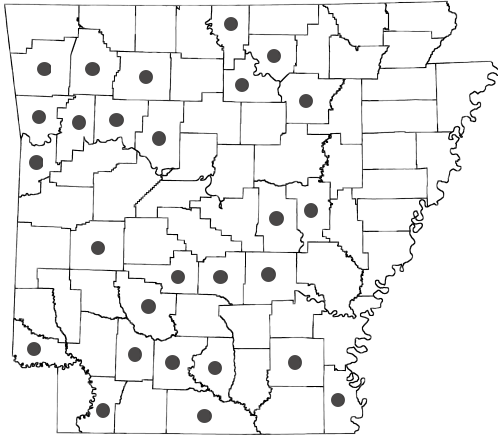
APIACEAE
Sanicula smallii E.P.Bicknell
 Small's black-snakeroot



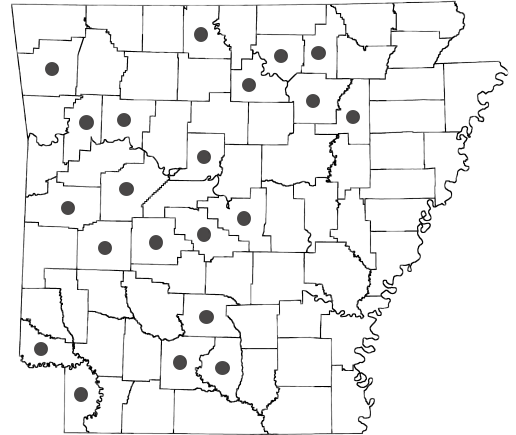
APIACEAE
Sium suave Walter
 water-parsnip



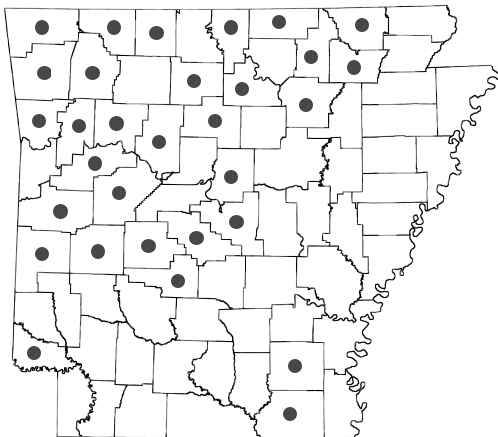
APIACEAE
Spermolepis divaricata (Walter) Raf. ex Ser.
 rough-fruit scaledseed



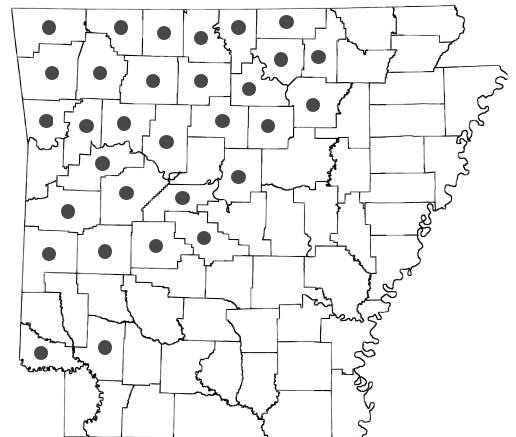
APIACEAE
Spermolepis echinata (Nutt. ex DC.) A.Heller
 bristle-fruit scaledseed



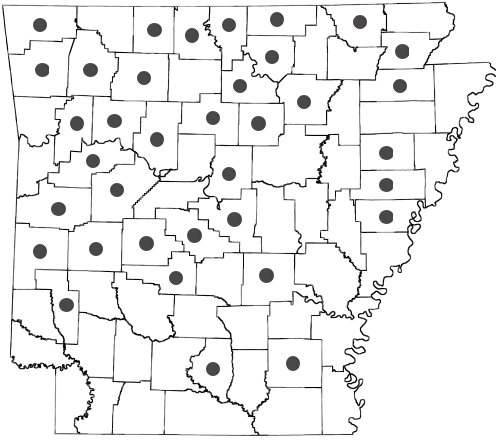
APIACEAE
Spermolepis inermis (Nutt. ex DC.) Mathias & Constance
 western scaledseed



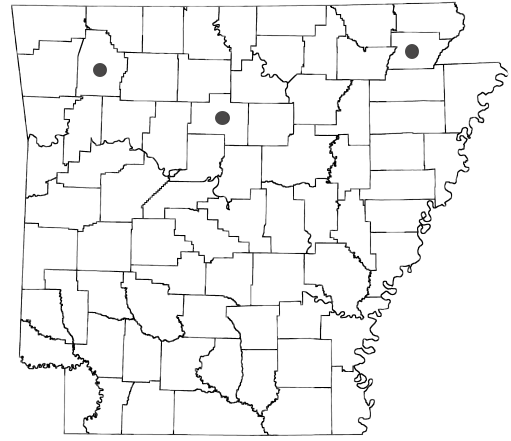
APIACEAE
Taenidia integerrima (L.) Drude
 yellow pimpinell



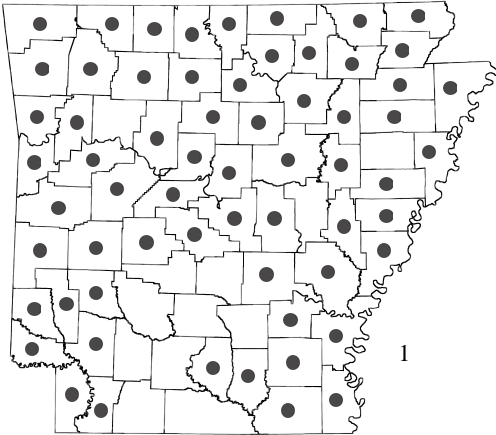
APIACEAE
Thaspium barbinode (Michx.) Nutt.
 meadow-parsnip



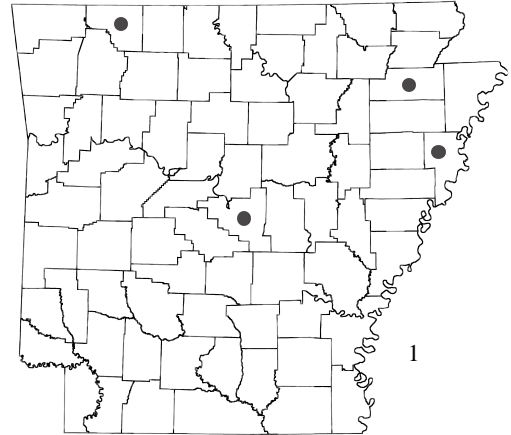
APIACEAE
Thaspium trifoliatum (L.) A.Gray
var. aureum (L.) Britton
 meadow-parsnip



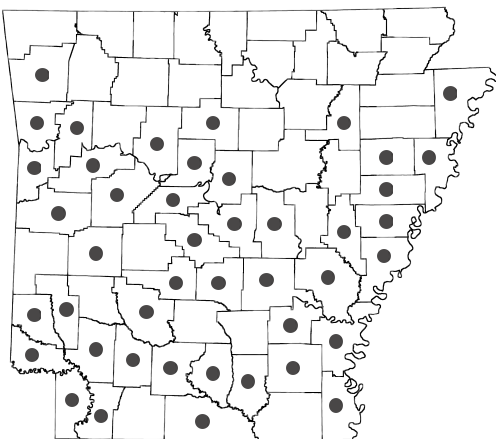
APIACEAE
Thaspium trifoliatum (L.) A.Gray
var. trifoliatum
 purple meadow-parsnip



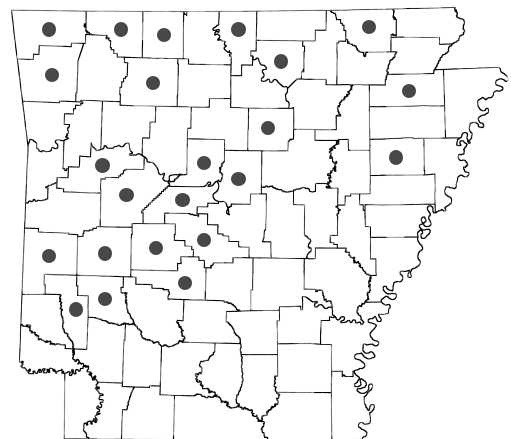
APIACEAE
Torilis arvensis (Huds.) Link
 field hedge-parsley



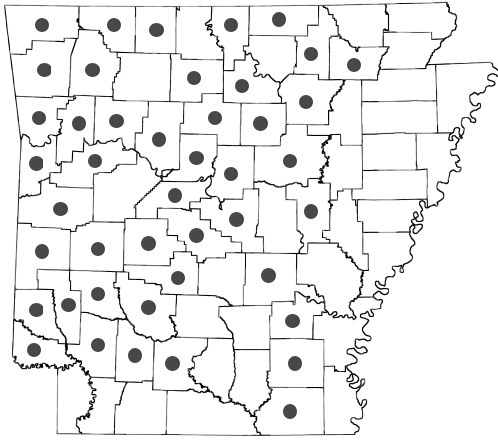
APIACEAE
Torilis nodosa (L.) Gaertn.
 knotted hedge-parsley



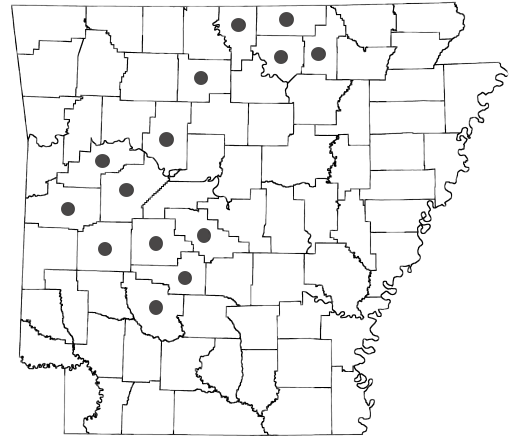
APIACEAE
Trepocarpus aethusae Nutt. ex DC.
 whitenymph



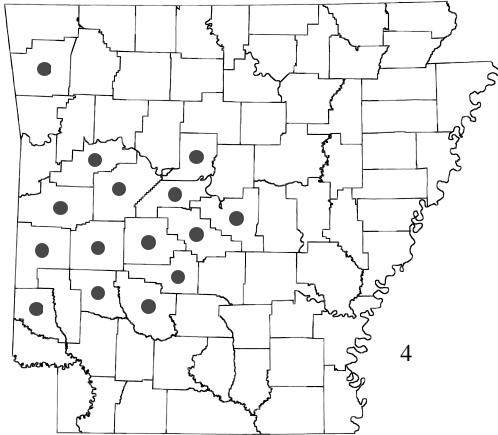
APIACEAE
Zizia aptera (A.Gray) Fernald
 heart-leaf golden Alexanders



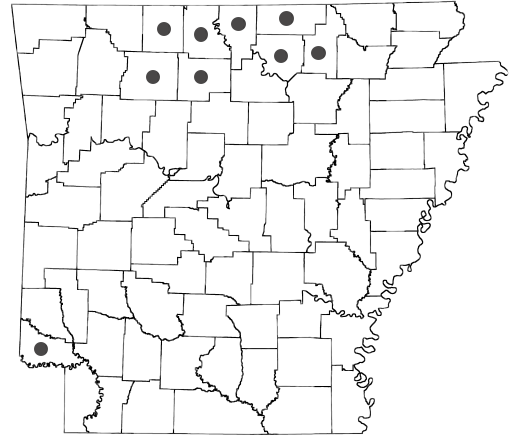
APIACEAE
Zizia aurea (L.) W.D.J.Koch
 golden Alexanders



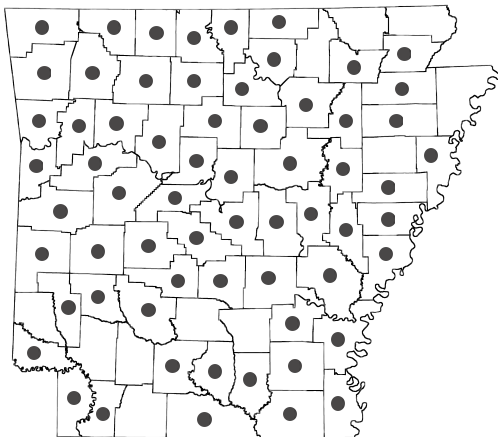
APOCYNACEAE
Amsonia ciliata Walter
var. tenuifolia (Raf.) Woodson
 bluestar



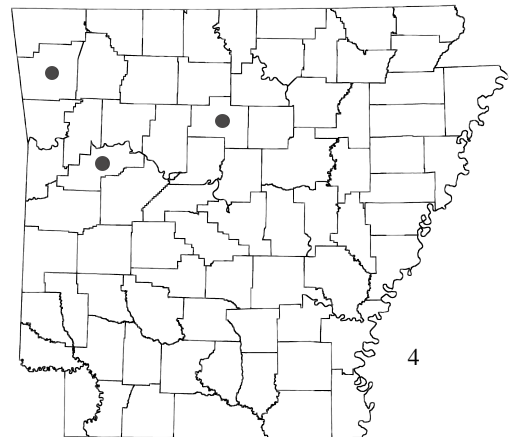
APOCYNACEAE
Amsonia hubrichtii Woodson
 Ouachita bluestar, Arkansas bluestar



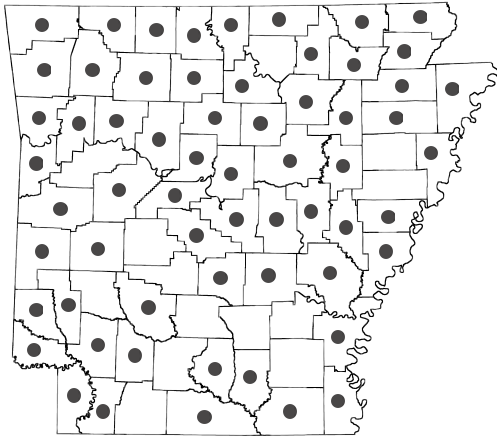
APOCYNACEAE
Amsonia illustris Woodson
 shining bluestar



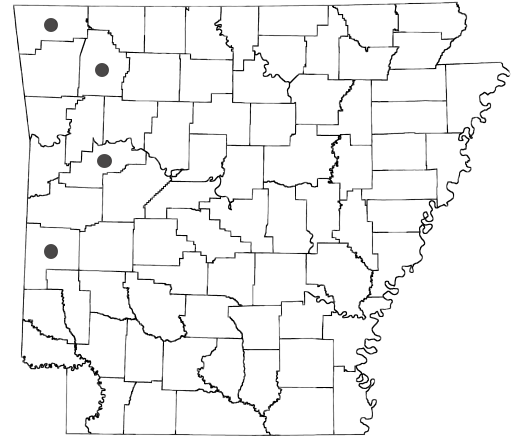
APOCYNACEAE
Amsonia tabernaemontana Walter
 eastern bluestar



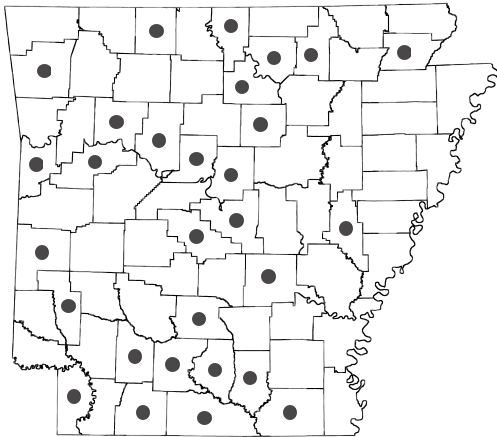
APOCYNACEAE
Apocynum androsaemifolium L.
 spreading dogbane



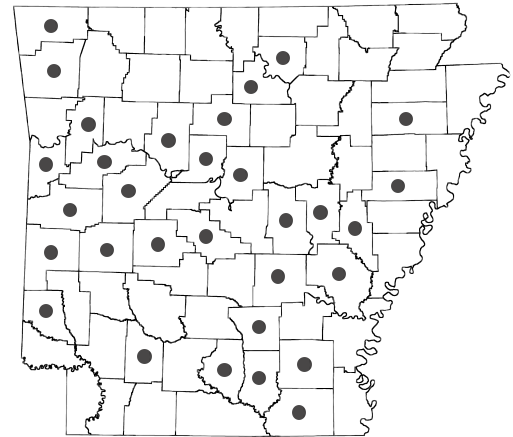
APOCYNACEAE
Apocynum cannabinum L.
 dogbane, Indian-hemp



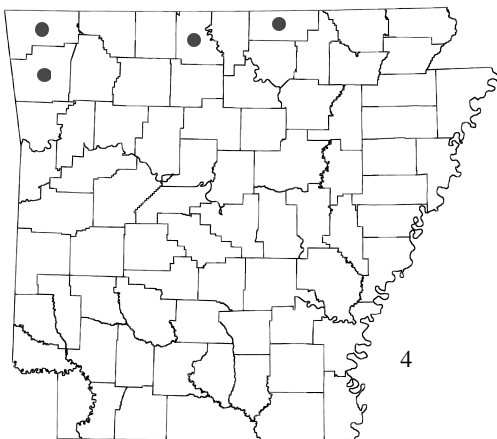
APOCYNACEAE
Apocynum × floribundum Greene
 hybrid dogbane



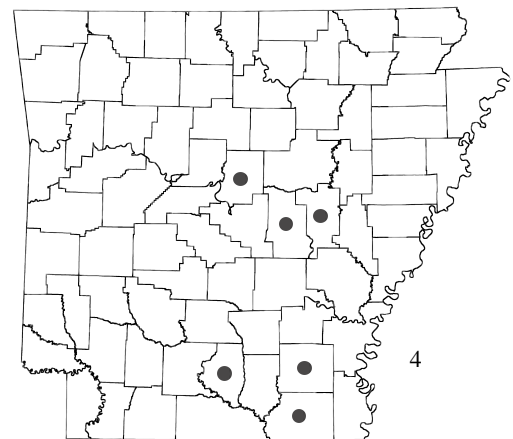
APOCYNACEAE
Asclepias amplexicaulis Sm.
 curly milkweed, blunt-leaf milkweed



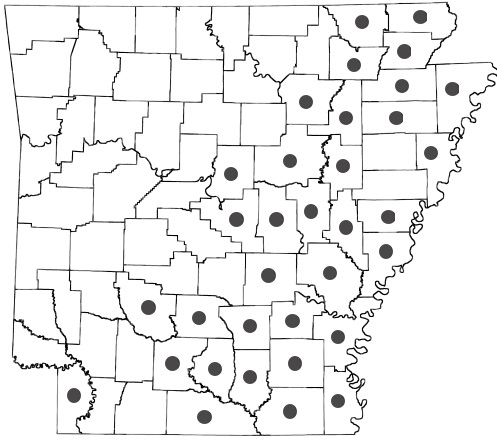
APOCYNACEAE
Asclepias hirtella (Pennell) Woodson
 tall green milkweed



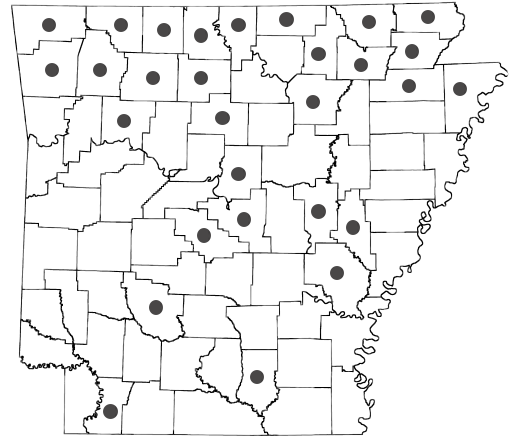
APOCYNACEAE
Asclepias incarnata L.
subsp. incarnata
 swamp milkweed



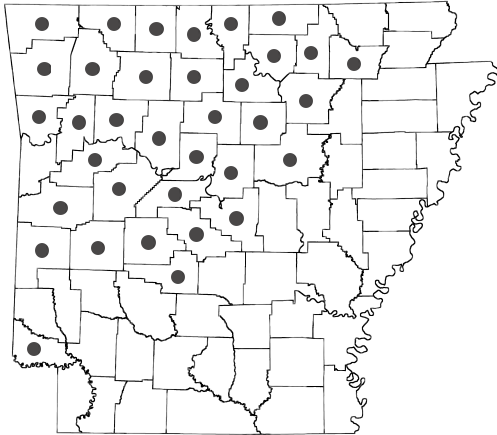
APOCYNACEAE
Asclepias obovata Elliott
 savannah milkweed, pineland milkweed



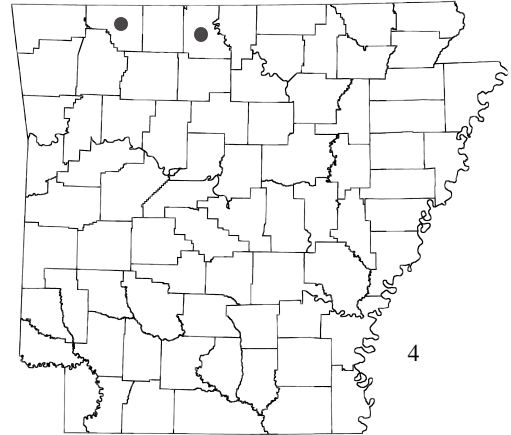
APOCYNACEAE
***Asclepias perennis* Walter**
swamp milkweed



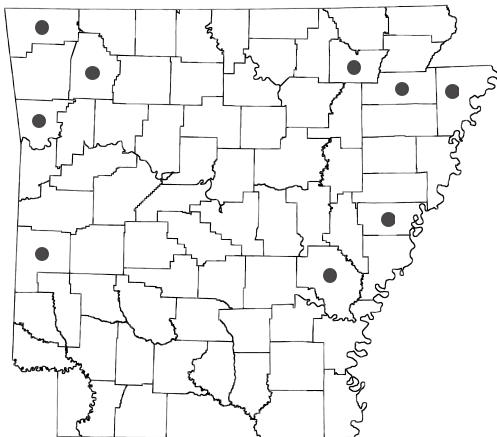
APOCYNACEAE
***Asclepias purpurascens* L.**
purple milkweed



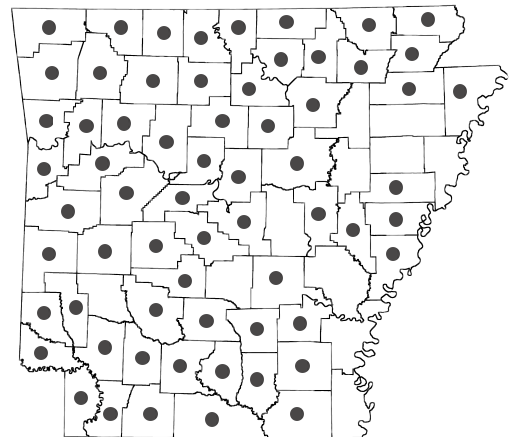
APOCYNACEAE
***Asclepias quadrifolia* Jacq.**
four-leaf milkweed



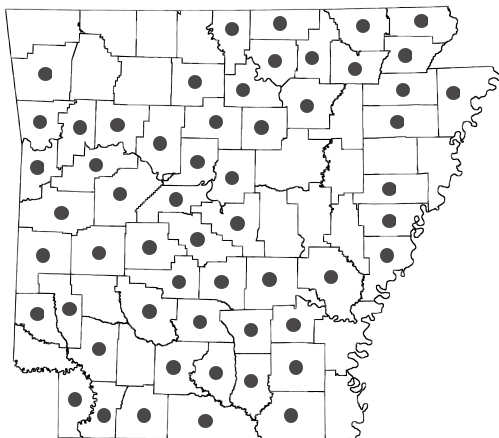
APOCYNACEAE
***Asclepias stenophylla* A.Gray**
narrow-leaf milkweed



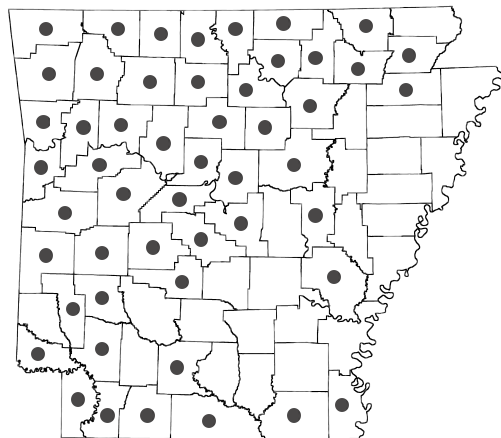
APOCYNACEAE
***Asclepias syriaca* L.**
common milkweed



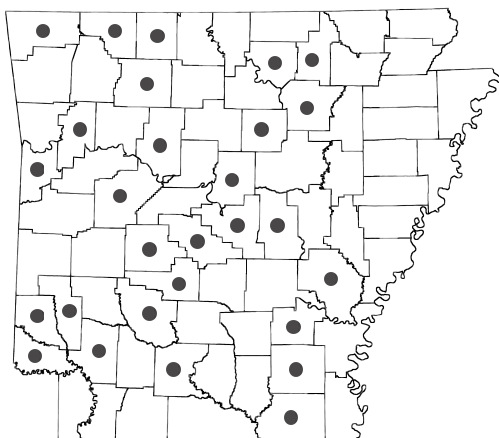
APOCYNACEAE
***Asclepias tuberosa* L.
subsp. interior Woodson**
butterfly milkweed



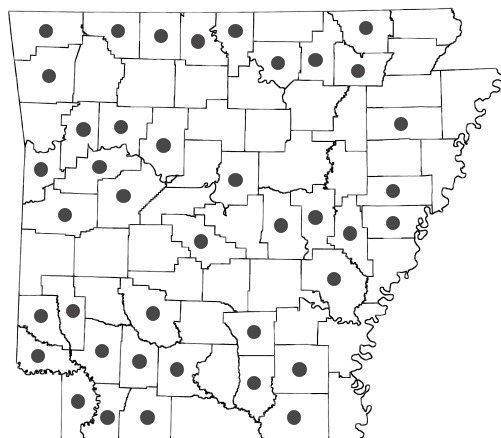
APOCYNACEAE
Asclepias variegata L.
 white milkweed



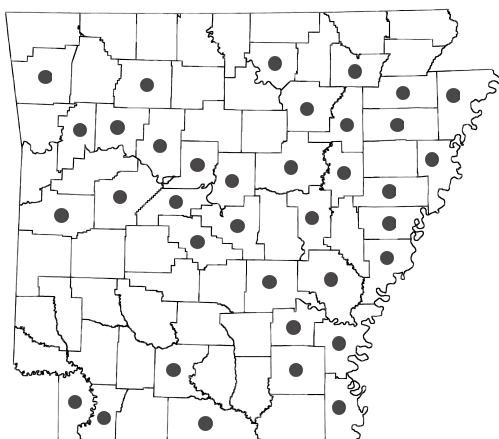
APOCYNACEAE
Asclepias verticillata L.
 whorled milkweed



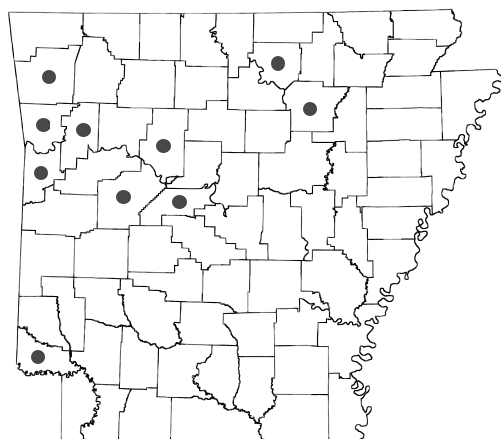
APOCYNACEAE
Asclepias viridiflora Raf.
 green-flower milkweed



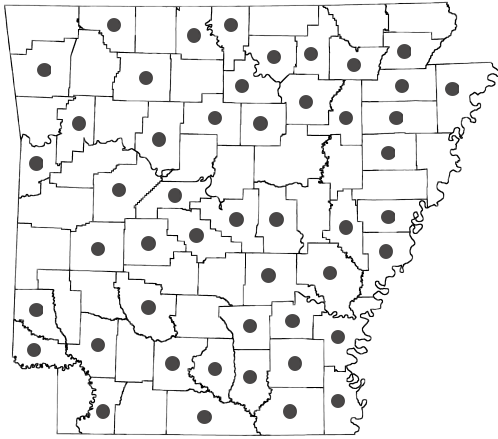
APOCYNACEAE
Asclepias viridis Walter
 green milkweed, spider milkweed



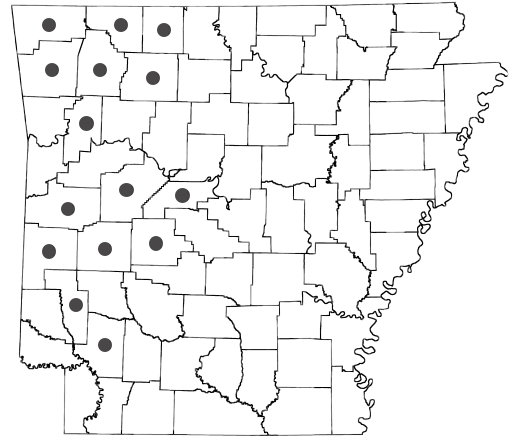
APOCYNACEAE
Cynanchum laeve (Michx.) Pers.
 sandvine, honeyvine



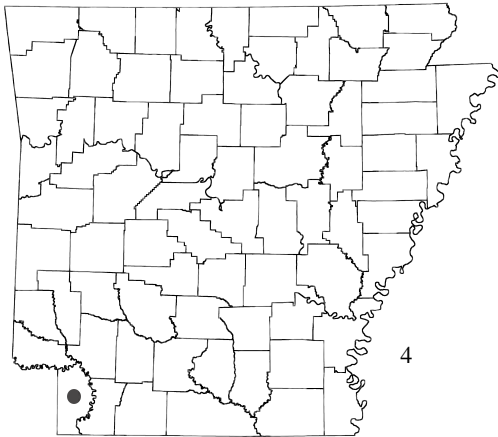
APOCYNACEAE
Funastrum cynanchoides (Decne.) Schltr.
 subsp. **cynanchoides**
 climbing-milkweed, twinevine



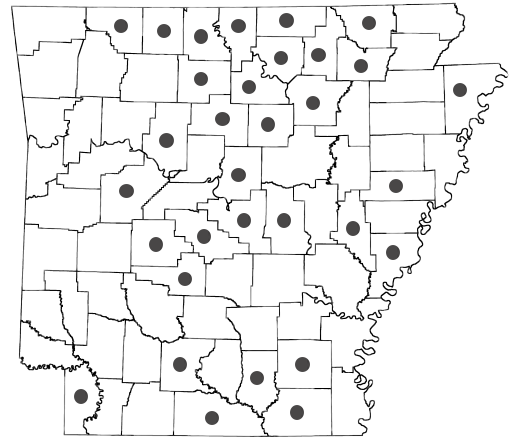
APOCYNACEAE
Gonolobus suberosus (L.) R.Br. ex Schult.
 anglepod



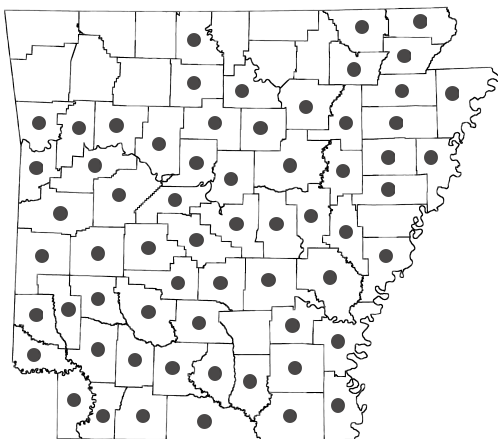
APOCYNACEAE
Matelea baldwyniana (Sweet) Woodson
 climbing-milkweed



APOCYNACEAE
Matelea cynanchoides (Engelm.) Woodson
 milkvine



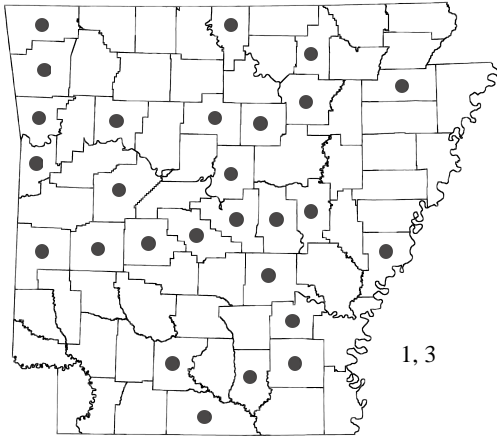
APOCYNACEAE
Matelea decipiens (Alexander) Woodson
 climbing-milkweed



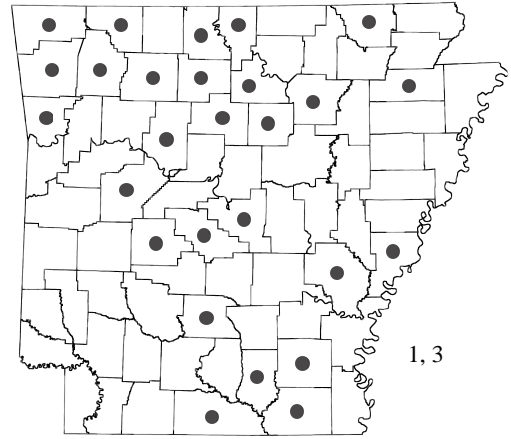
APOCYNACEAE
Trachelospermum diffforme (Walter) A.Gray
 climbing-dogbane



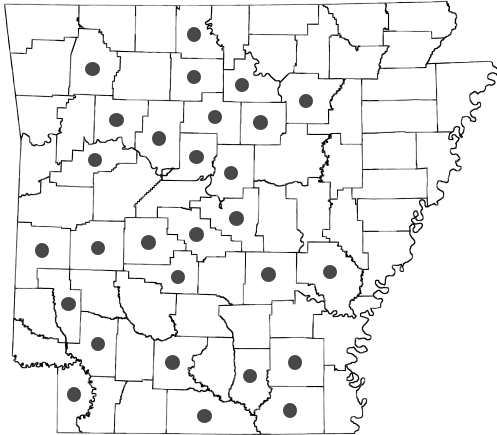
APOCYNACEAE
Trachelospermum jasminoides (Lindl.) Lem.
 Confederate-jasmine, star-jasmine



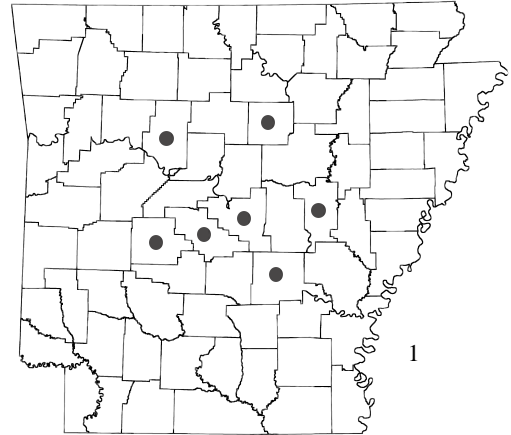
APOCYNACEAE
Vinca major L.
 big-leaf periwinkle



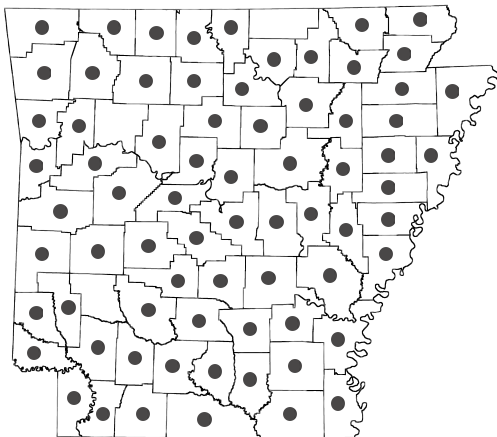
APOCYNACEAE
Vinca minor L.
 common periwinkle



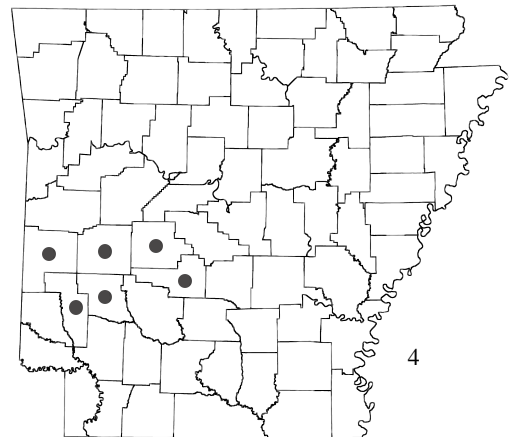
AQUIFOLIACEAE
Ilex ambigua (Michx.) Torr.
 Carolina holly



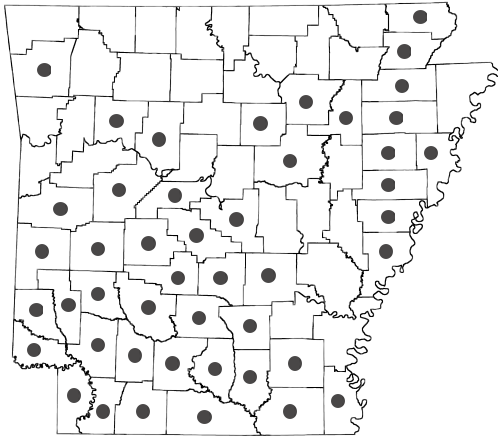
AQUIFOLIACEAE
Ilex cornuta Lindl. & Paxton
 Chinese holly



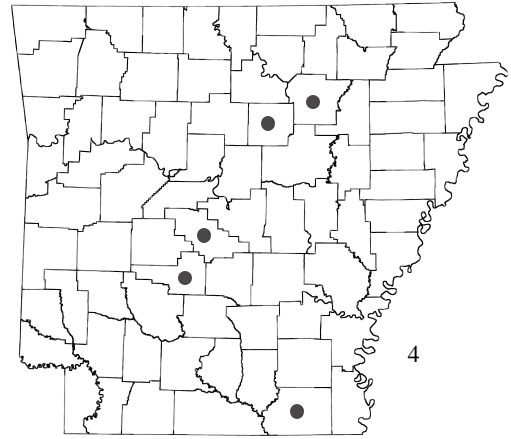
AQUIFOLIACEAE
Ilex decidua Walter
 deciduous holly, possumhaw



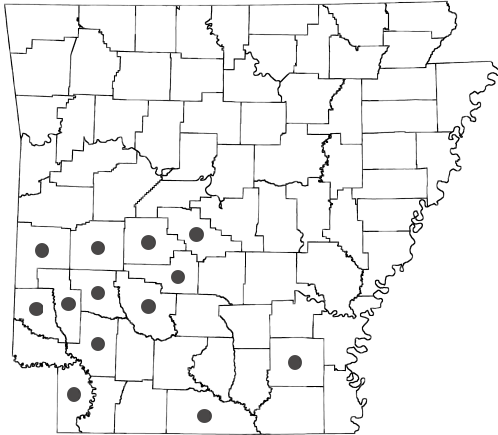
AQUIFOLIACEAE
Ilex longipes Chapm. ex Trel.
 Georgia holly



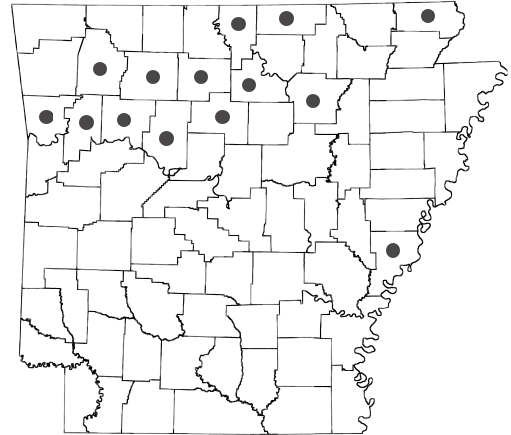
AQUIFOLIACEAE
***Ilex opaca* Aiton**
var. *opaca*
American holly



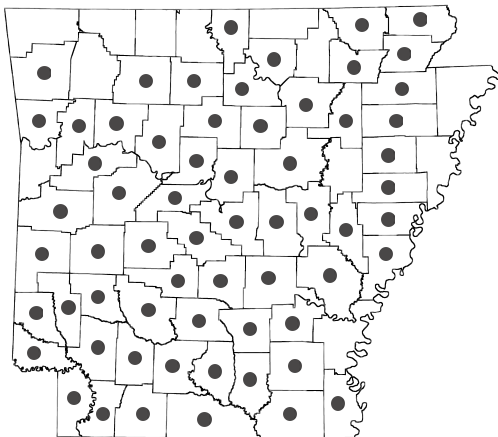
AQUIFOLIACEAE
***Ilex verticillata* (L.) A.Gray**
winterberry



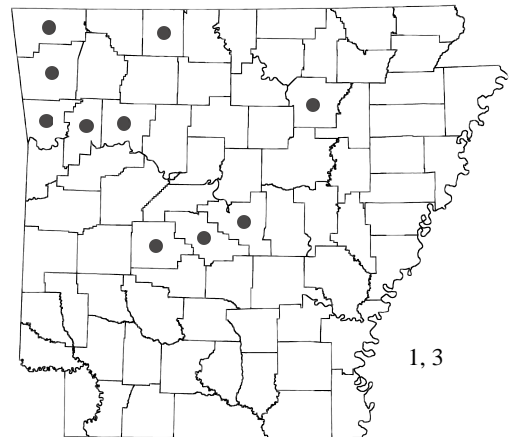
AQUIFOLIACEAE
***Ilex vomitoria* Aiton**
yaupon



ARALIACEAE
***Aralia racemosa* L.**
American spikenard



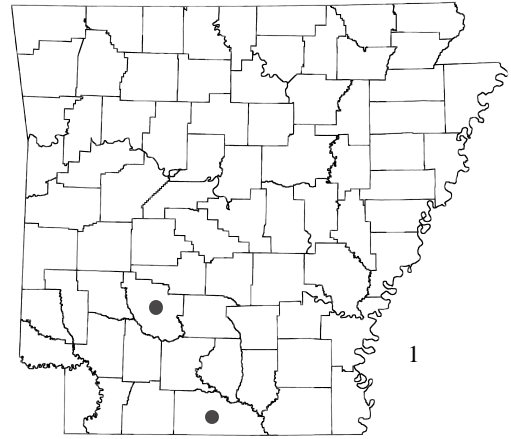
ARALIACEAE
***Aralia spinosa* L.**
devil's-walkingstick, Hercules'-club



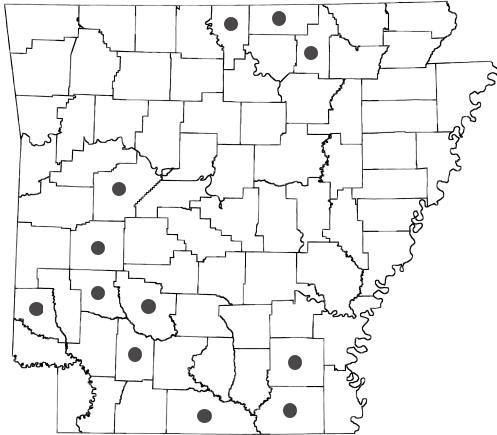
ARALIACEAE
***Hedera helix* L.**
English ivy



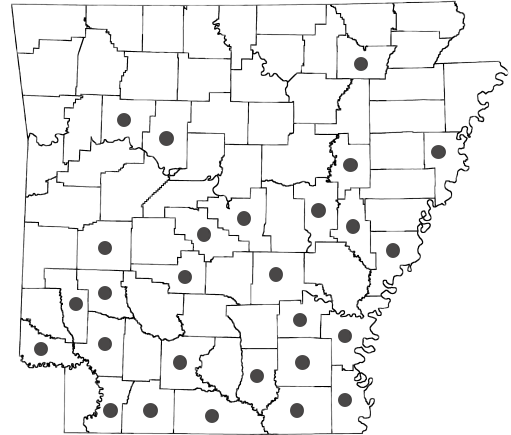
ARALIACEAE
Hydrocotyle americana L.
 marsh pennywort



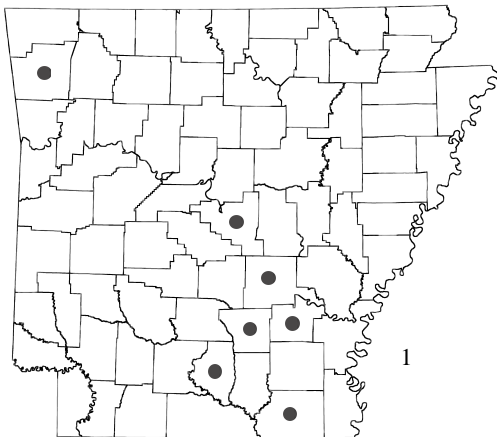
ARALIACEAE
Hydrocotyle bonariensis Lam.
 coastal pennywort



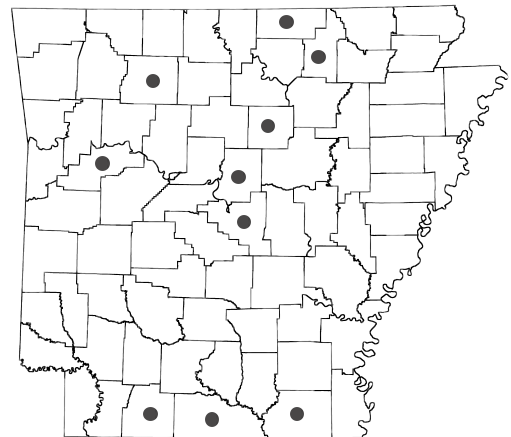
ARALIACEAE
Hydrocotyle prolifera Kellogg
 water pennywort



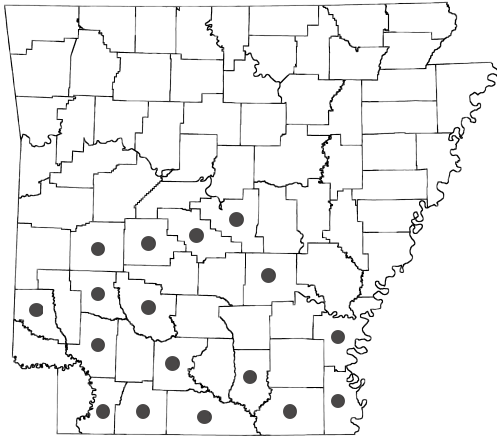
ARALIACEAE
Hydrocotyle ranunculoides L.f.
 floating pennywort



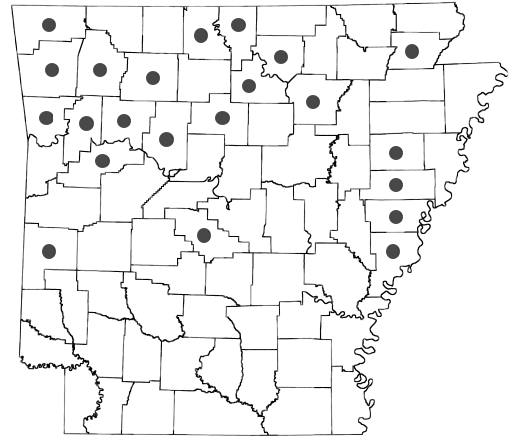
ARALIACEAE
Hydrocotyle sibthorpioides Lam.
 lawn pennywort



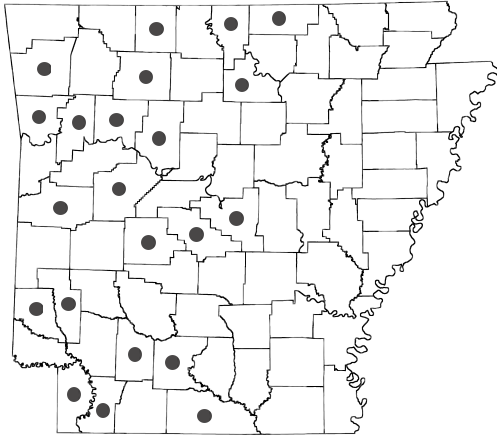
ARALIACEAE
Hydrocotyle umbellata L.
 water pennywort



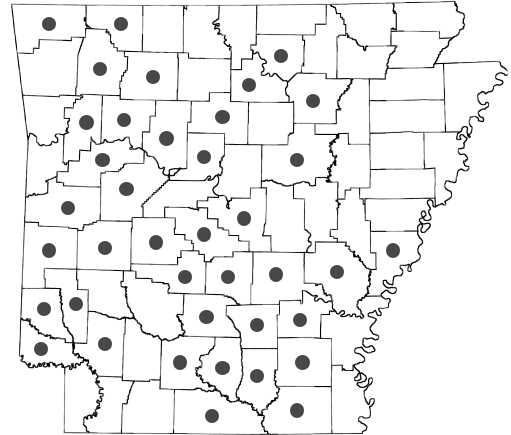
ARALIACEAE
Hydrocotyle verticillata Thunb.
whorled pennywort



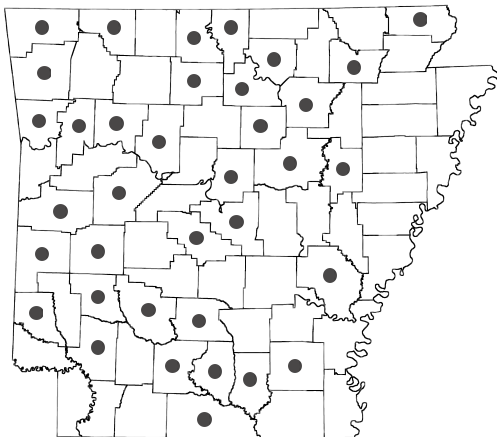
ARALIACEAE
Panax quinquefolius L.
ginseng, sang



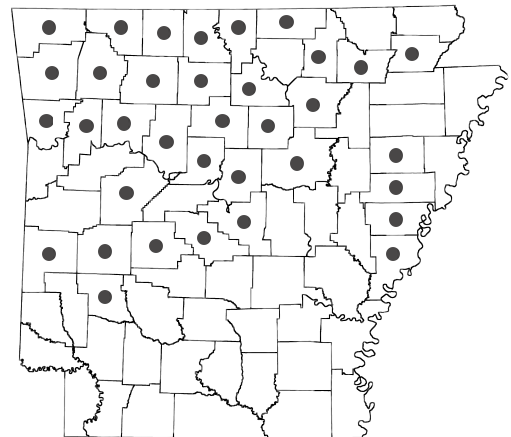
ARISTOLOCHIACEAE
Aristolochia reticulata Nutt.
Texas Dutchman's-pipe



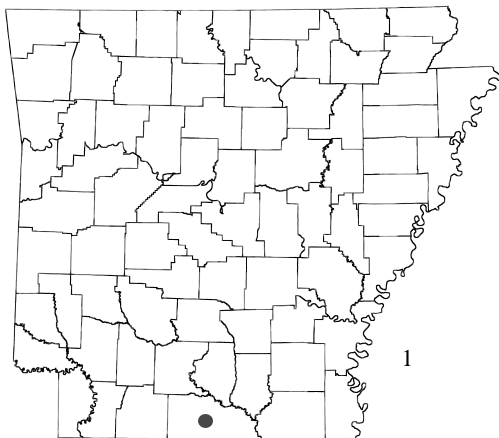
ARISTOLOCHIACEAE
Aristolochia serpentaria L.
Virginia snakeroot



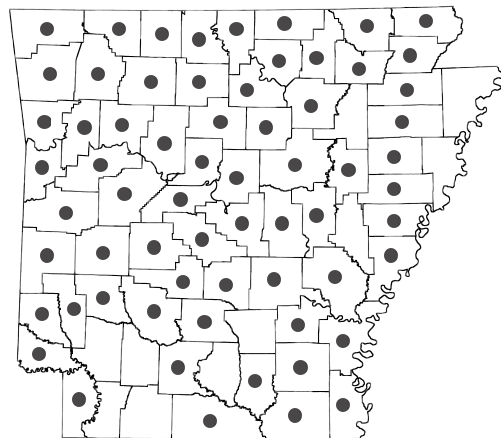
ARISTOLOCHIACEAE
Aristolochia tomentosa Sims
pipe-vine, Dutchman's-pipe



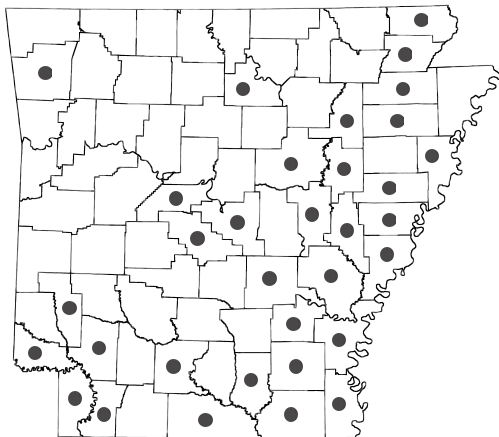
ARISTOLOCHIACEAE
Asarum canadense L.
wild ginger



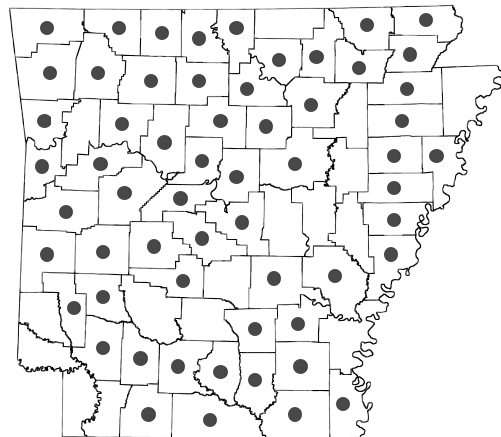
ASTERACEAE
Acanthospermum australe (Loefl.) Kuntze
 Paraguay starbur



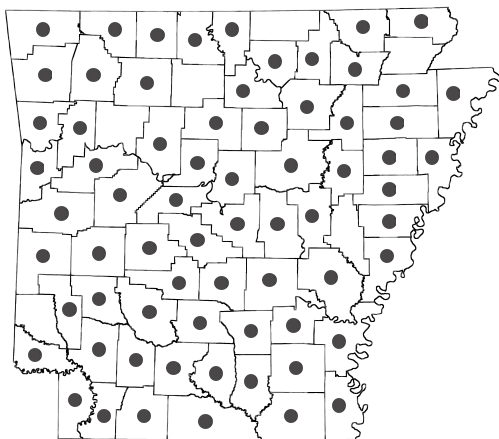
ASTERACEAE
Achillea millefolium L.
 yarrow, common milfoil



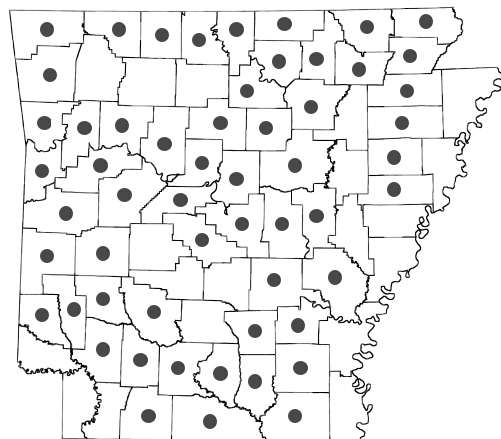
ASTERACEAE
Acnella repens (Walter) Rich. in Pers.
 creeping spotflower



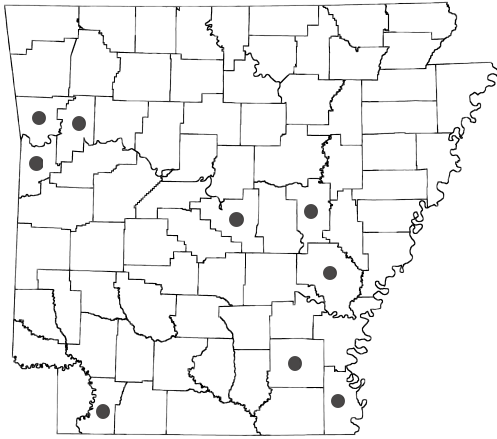
ASTERACEAE
Ageratina altissima (L.) R.M.King & H.Rob.
var. altissima
 white snakeroot



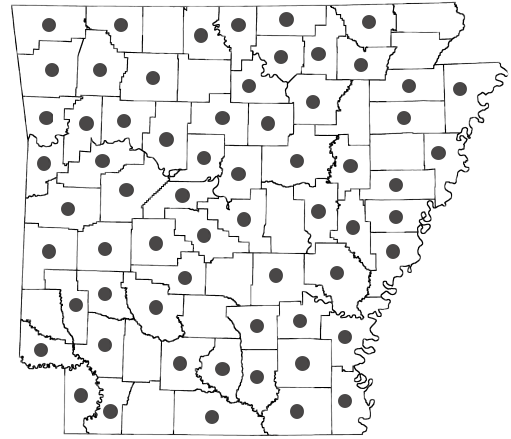
ASTERACEAE
Ambrosia artemisiifolia L.
 common ragweed



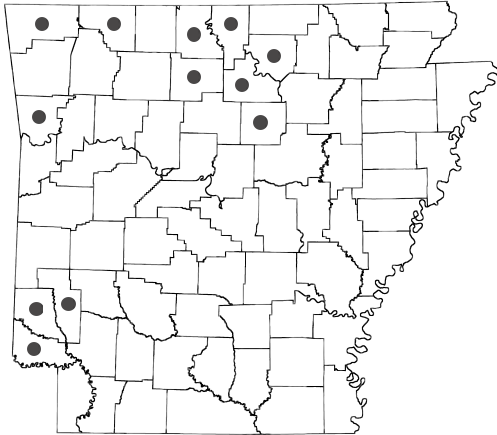
ASTERACEAE
Ambrosia bidentata Michx.
 lance-leaf ragweed



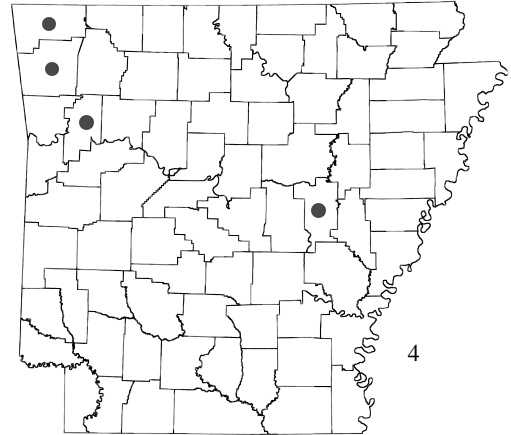
ASTERACEAE
***Ambrosia psilostachya* DC. in DC. & A.DC.**
 western ragweed



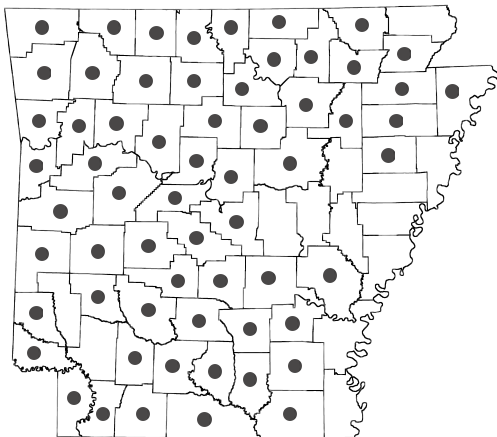
ASTERACEAE
***Ambrosia trifida* L.**
 giant ragweed



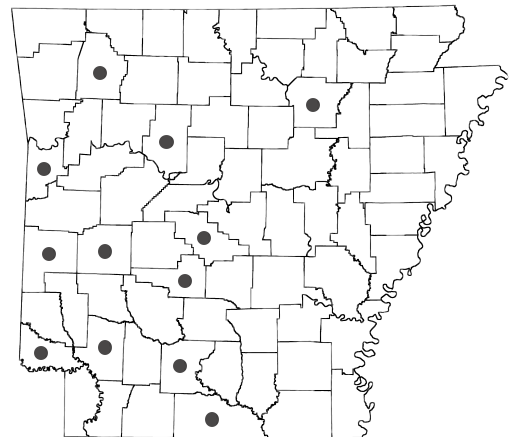
ASTERACEAE
***Amphiachyris dracunculoides* (DC.) Nutt.**
 broomweed



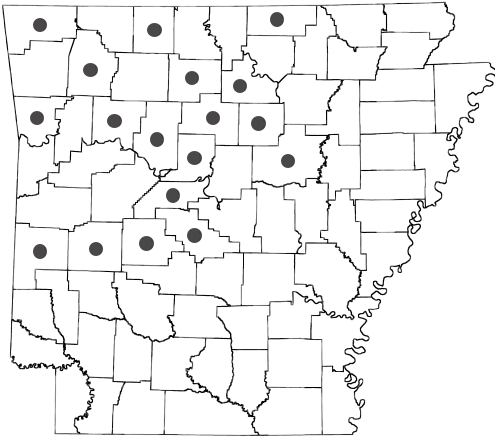
ASTERACEAE
***Antennaria neglecta* Greene**
 field pussytoes



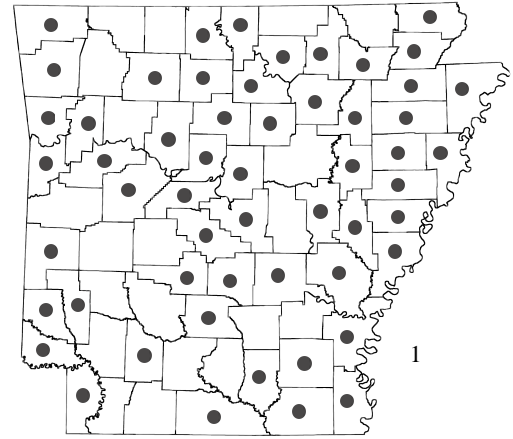
ASTERACEAE
***Antennaria parlinii* Fernald**
subsp. *fallax* (Greene) R.J.Bayer & Stebbins
 pussytoes, ladies'-tobacco



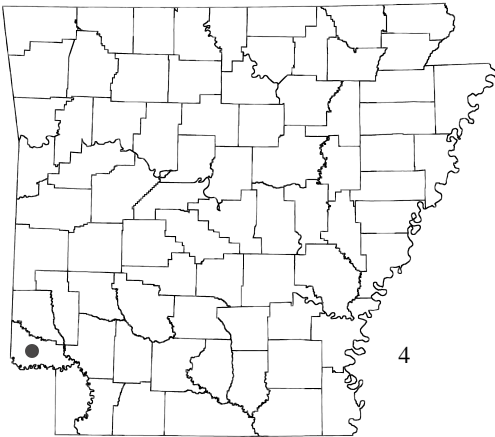
ASTERACEAE
***Antennaria parlinii* Fernald**
subsp. *parlinii*
 pussytoes, ladies'-tobacco



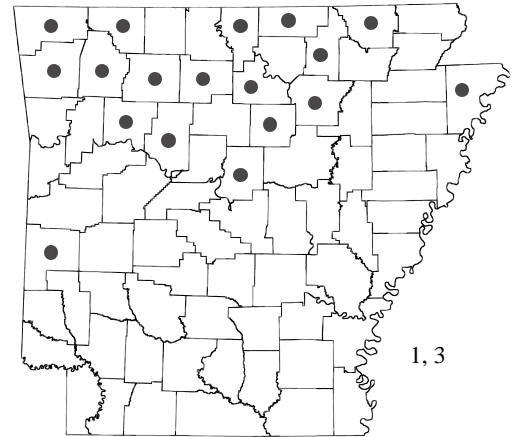
ASTERACEAE
Antennaria plantaginifolia (L.) Hook.
 pussytoes, ladies'-tobacco



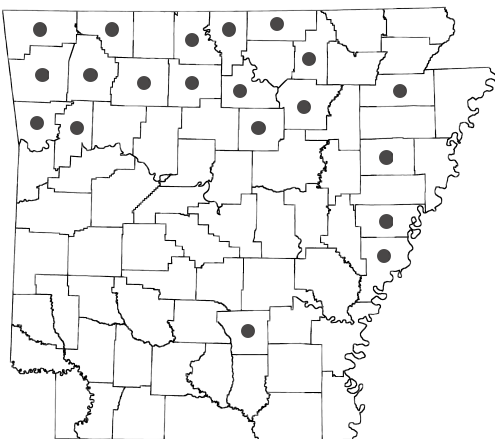
ASTERACEAE
Anthemis cotula L.
 Mayweed, dog-fennel



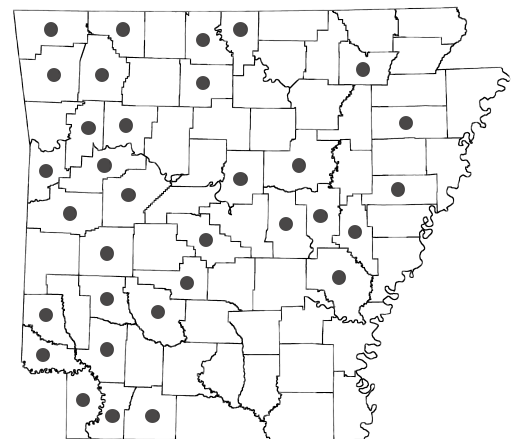
ASTERACEAE
Aphanostephus skirrhobasis (DC.) Trel.
var. skirrhobasis
 Arkansas lazy daisy



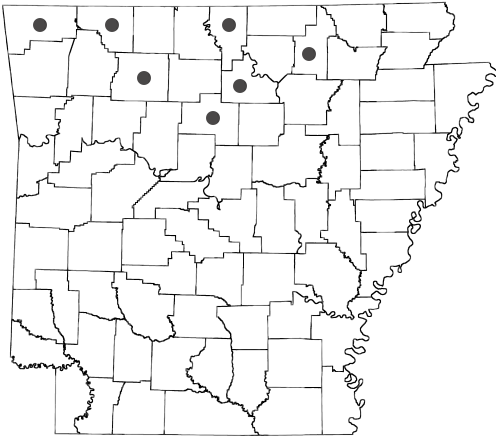
ASTERACEAE
Arctium minus (Hill) Bernh.
 common burdock, lesser burdock



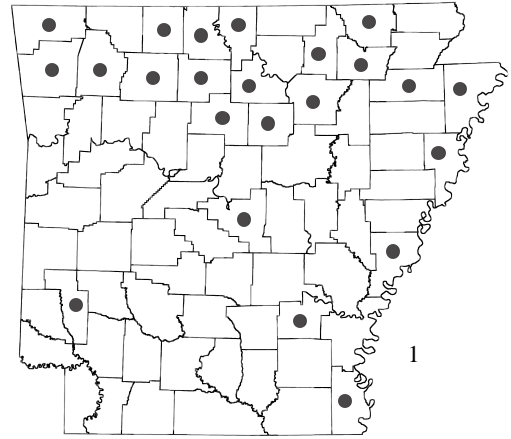
ASTERACEAE
Arnoglossum atriplicifolium (L.) H. Rob.
 pale Indian-plantain



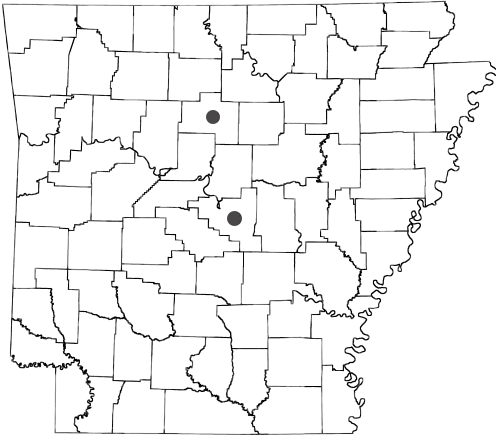
ASTERACEAE
Arnoglossum plantagineum Raf.
 Indian-plantain



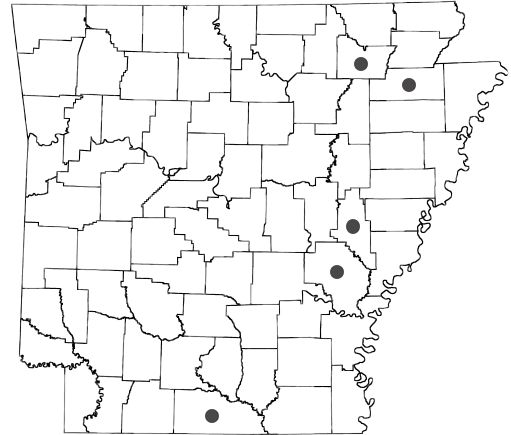
ASTERACEAE
Arnoglossum reniforme (Hook.) H. Rob.
 great Indian-plantain



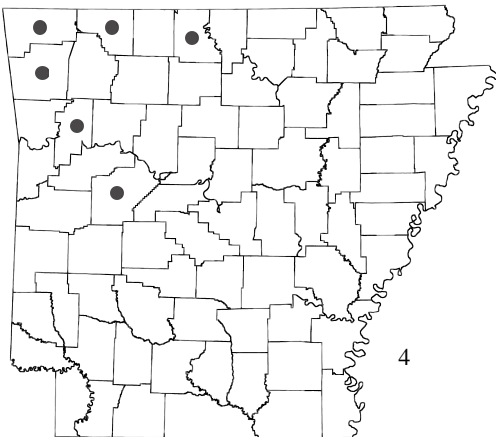
ASTERACEAE
Artemisia annua L.
 sweet wormwood



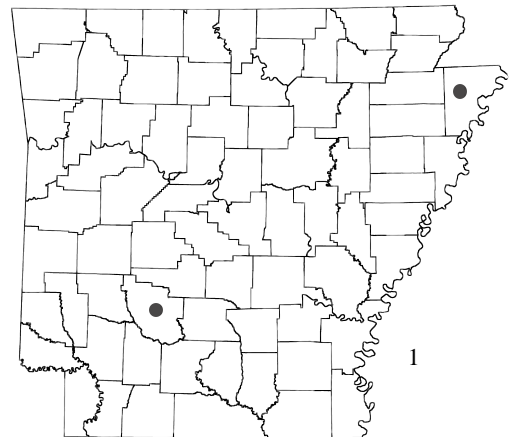
ASTERACEAE
Artemisia campestris L.
subsp. caudata (Michx.) H.M. Hall & Clem.
 wild wormwood



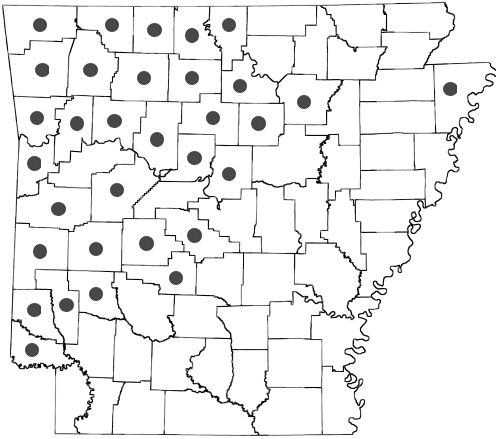
ASTERACEAE
Artemisia ludoviciana Nutt.
subsp. ludoviciana
 white sagebrush, silver wormwood



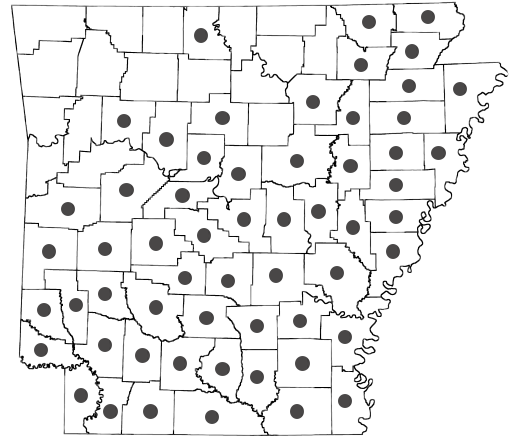
ASTERACEAE
Artemisia ludoviciana Nutt.
subsp. mexicana (Willd. ex Spreng.) D.D. Keck
 white sagebrush, silver wormwood



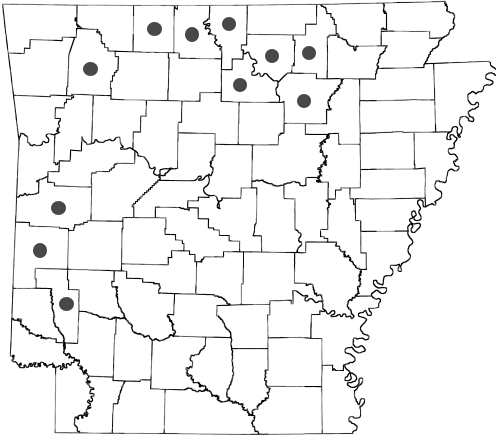
ASTERACEAE
Artemisia vulgaris L.
 mugwort, wormwood



ASTERACEAE
Astranthium ciliatum (Raf.) G.L.Nesom
 western daisy



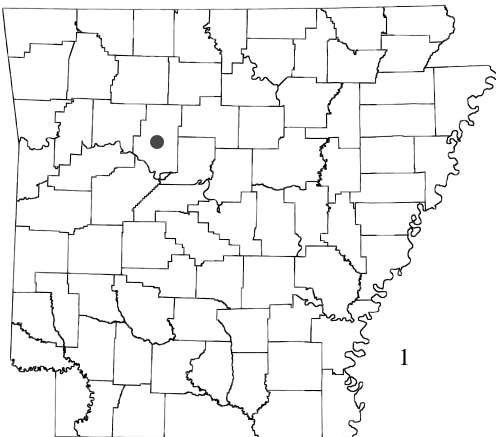
ASTERACEAE
Baccharis halimifolia L.
 saltbush, groundsel-tree, sea-myrtle



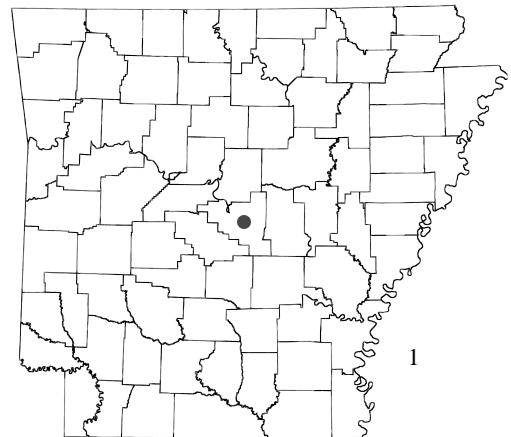
ASTERACEAE
Berlandiera betonicifolia (Hook.) Small
 green-eyes, berlandiera



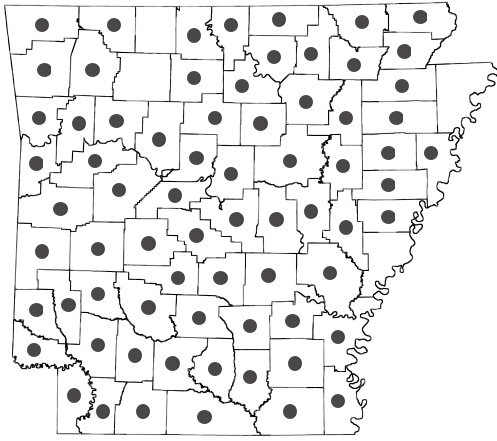
ASTERACEAE
Berlandiera pumila (Michx.) Nutt.
var. pumila
 sandhill green-eyes, berlandiera



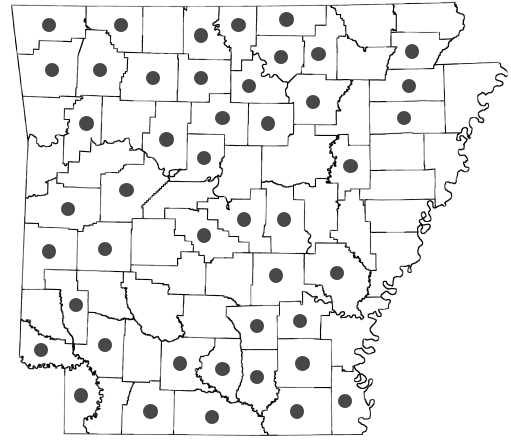
ASTERACEAE
Berlandiera subacaulis (Nutt.) Nutt.
 Florida green-eyes



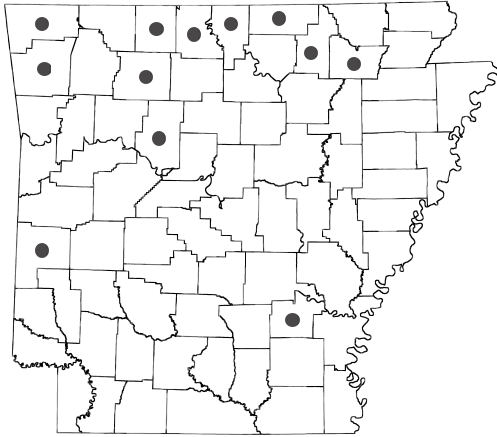
ASTERACEAE
Bidens alba (L.) DC.
 beggar-ticks



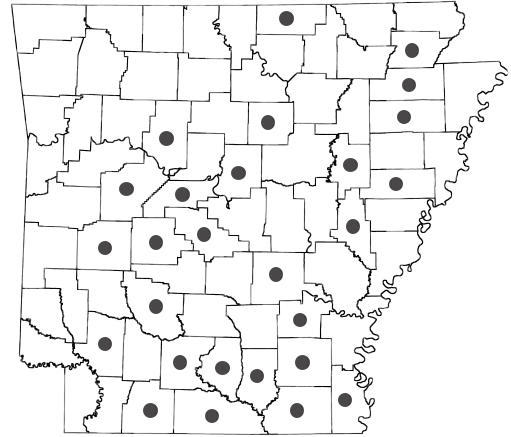
ASTERACEAE
Bidens aristosa (Michx.) Britton
tickseed-sunflower



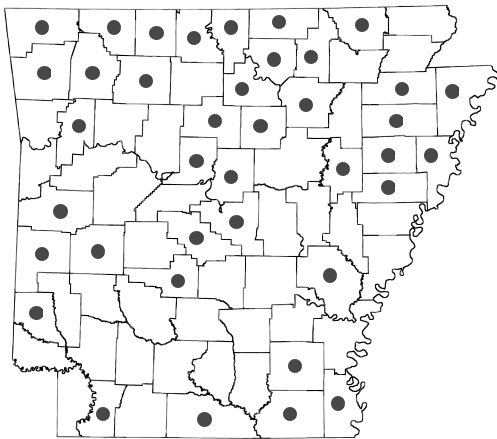
ASTERACEAE
Bidens bipinnata L.
Spanish-needles



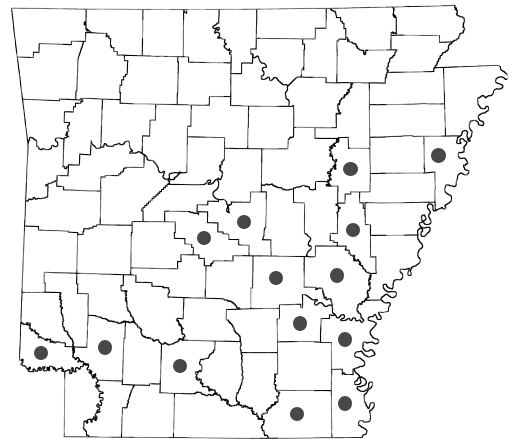
ASTERACEAE
Bidens cernua L.
nodding bur-marigold



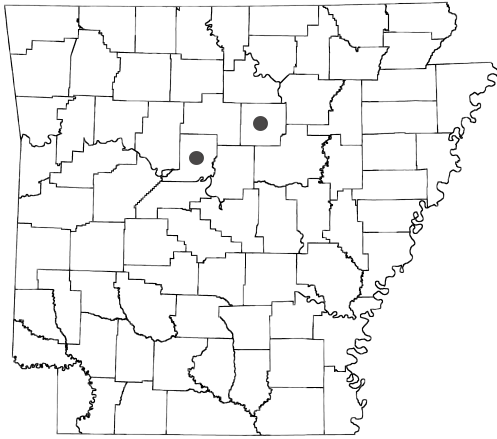
ASTERACEAE
Bidens discoidea (Torr. & A.Gray) Britton
beggar-ticks, stick-tight



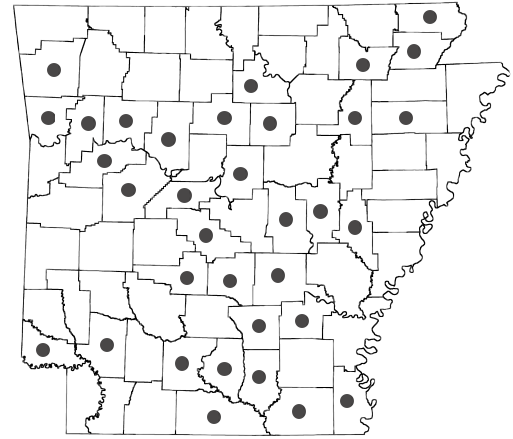
ASTERACEAE
Bidens frondosa L.
beggar-ticks, stick-tight



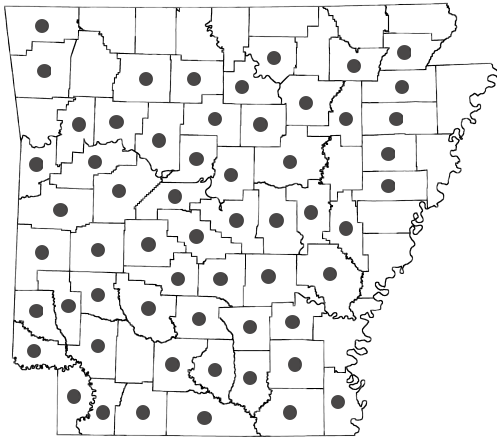
ASTERACEAE
Bidens laevis (L.) Britton, Sterns & Poggenb.
smooth bur-marigold, showy bur-marigold



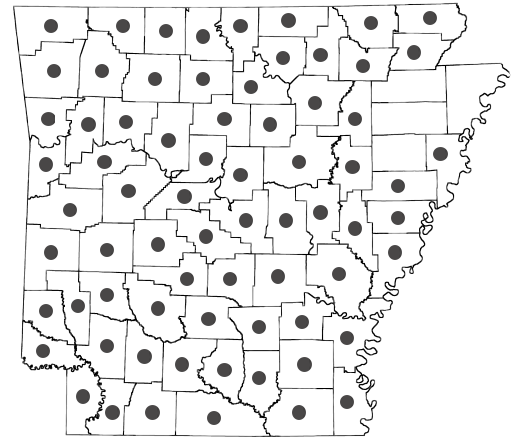
ASTERACEAE
Bidens vulgata Greene
 beggar-ticks, stick-tight



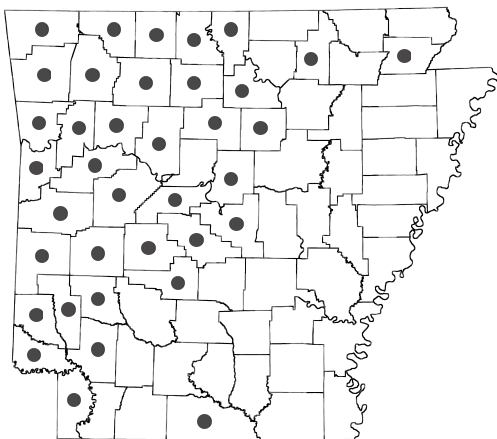
ASTERACEAE
Boltonia asteroides (L.) L'Hér.
 white doll's daisy
 See *Appendix I* for infraspecific taxa and species status.



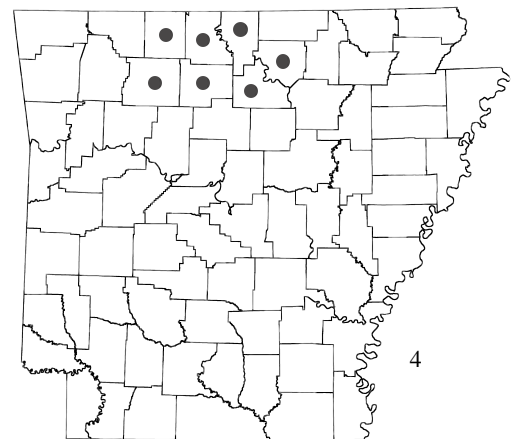
ASTERACEAE
Boltonia diffusa Elliott
 small-head doll's daisy
 See *Appendix I* for infraspecific taxa and species status.



ASTERACEAE
Bradburia pilosa (Nutt.) Semple
 golden-aster



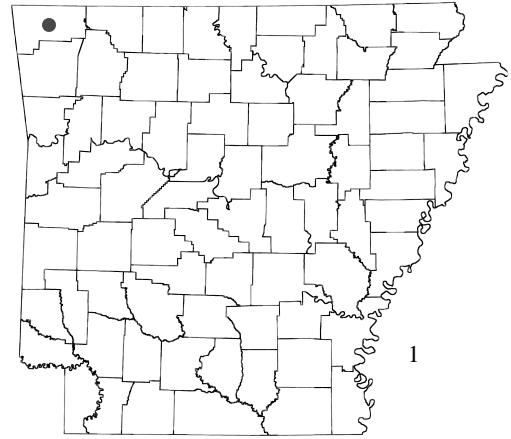
ASTERACEAE
Brickellia eupatorioides (L.) Shiners
 false boneset
 See *Appendix I* for infraspecific taxa and species status.



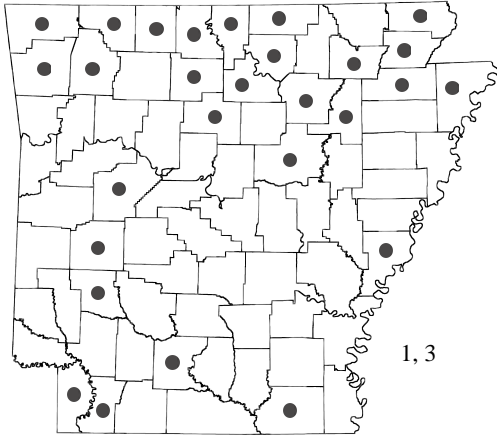
ASTERACEAE
Brickellia grandiflora (Hook.) Nutt.
 tassel-flower



ASTERACEAE
Calyptocarpus vialis Less.
straggler daisy



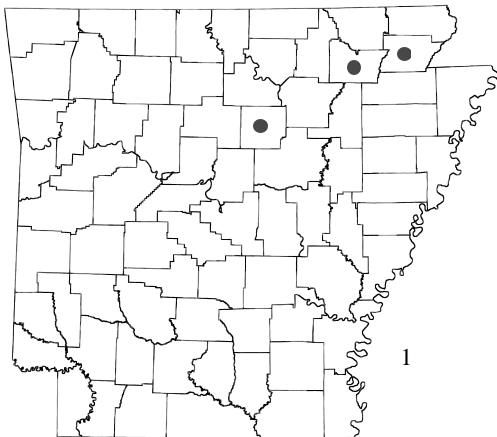
ASTERACEAE
Carduus crispus L.
curly thistle, welted thistle



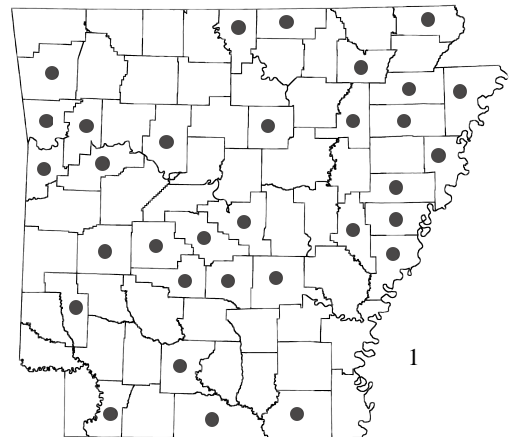
ASTERACEAE
Carduus nutans L.
musk thistle, nodding thistle



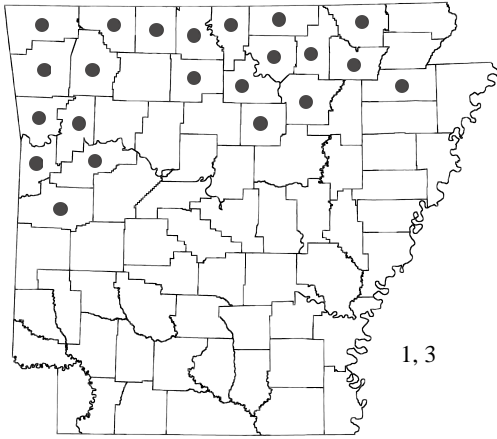
ASTERACEAE
Carduus pycnocephalus L.
subsp. pycnocephalus
Italian thistle



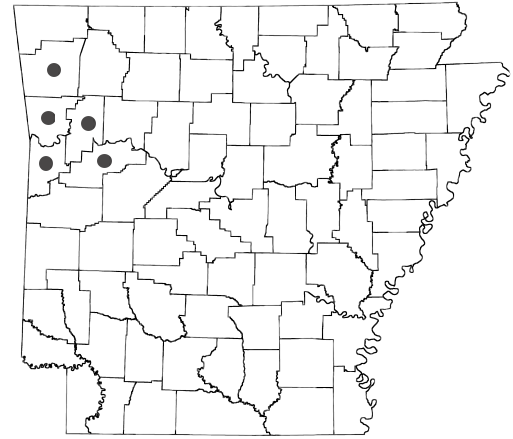
ASTERACEAE
Centaurea benedicta (L.) L.
blessed thistle



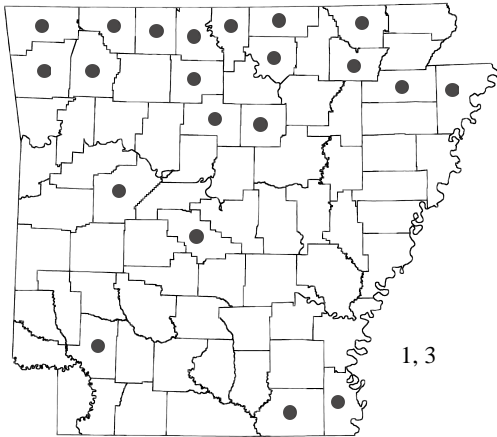
ASTERACEAE
Centaurea cyanus L.
bachelor's-button, cornflower



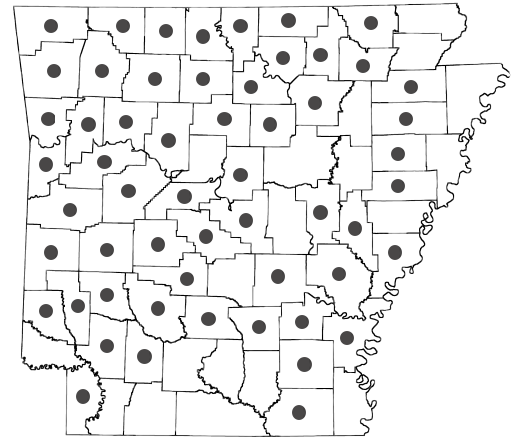
ASTERACEAE
Centaurea stoebe L.
 subsp. **micranthos (S.G.Gmel. ex Gugler) Hayek**
 spotted knapweed



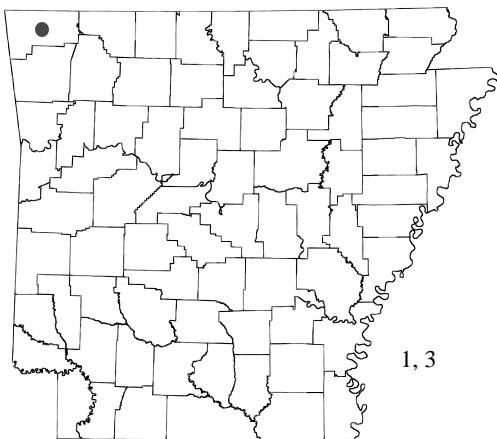
ASTERACEAE
Chaetopappa asteroides (Nutt.) DC. in DC. & A.DC.
 var. **asterioides**
 Arkansas least-daisy



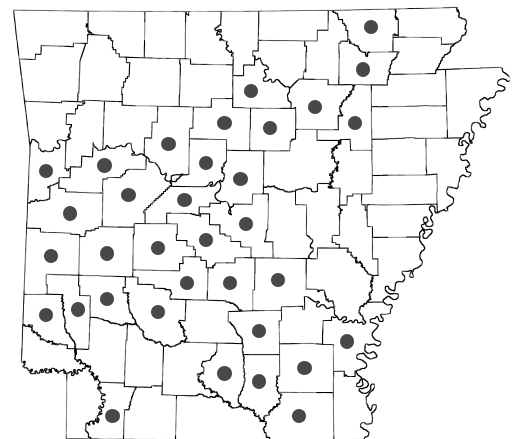
ASTERACEAE
Cichorium intybus L.
 chicory, blue sailors



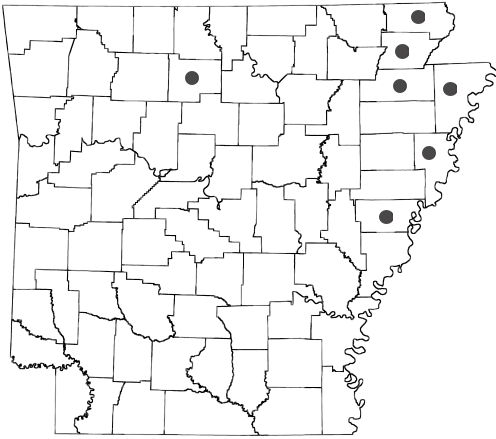
ASTERACEAE
Cirsium altissimum (L.) Spreng.
 tall thistle



ASTERACEAE
Cirsium arvense (L.) Scop.
 Canadian thistle



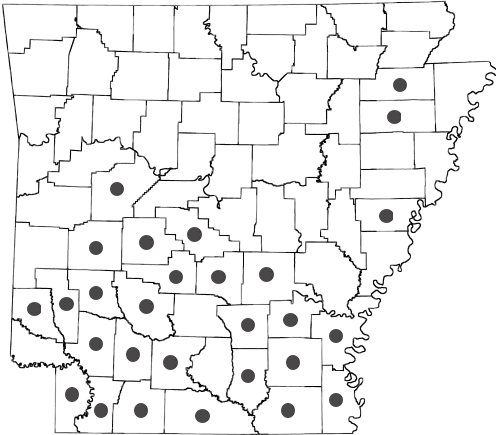
ASTERACEAE
Cirsium carolinianum (Walter) Fernald & B.G.Schub.
 Carolina thistle, soft thistle



ASTERACEAE
***Cirsium discolor* (Muhl. ex Willd.) Spreng.**
 field thistle



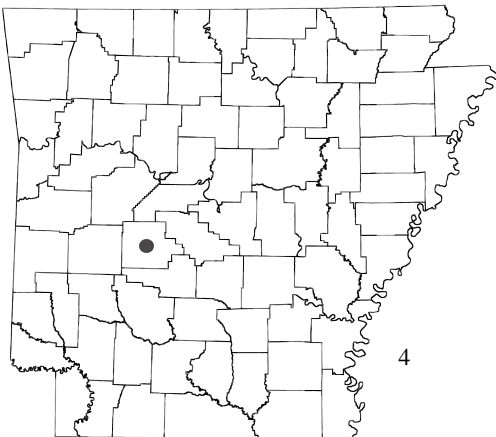
ASTERACEAE
***Cirsium engelmannii* Rydb.**
 Engelmann's thistle



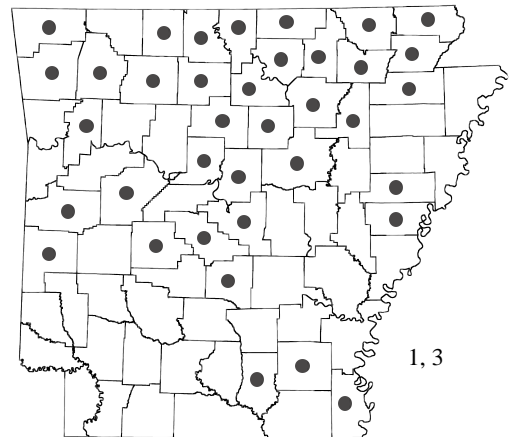
ASTERACEAE
***Cirsium horridulum* Michx.**
var. *megacanthum* (Nutt.) D.J.Kell
 yellow thistle, big-spine thistle



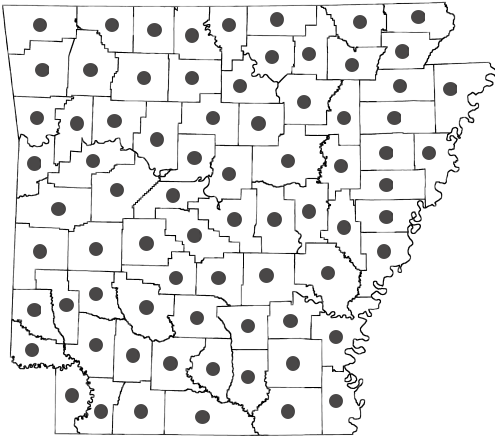
ASTERACEAE
***Cirsium horridulum* Michx.**
var. *vittatum* (Small) R.W.Long
 yellow thistle, Florida thistle



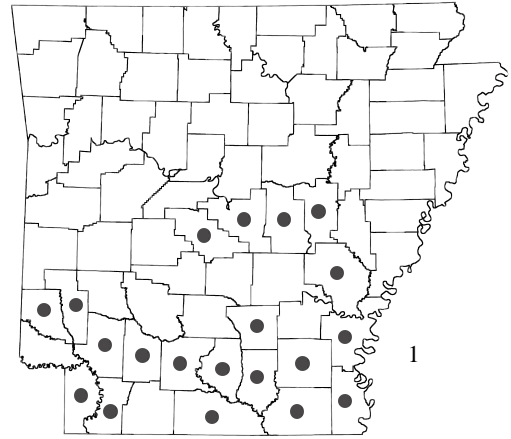
ASTERACEAE
***Cirsium muticum* Michx.**
 swamp thistle



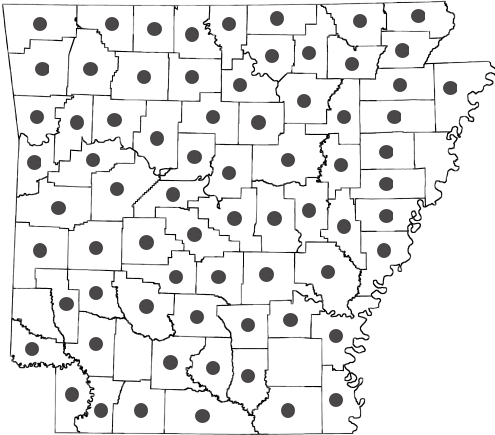
ASTERACEAE
***Cirsium vulgare* (Savi) Ten.**
 bull thistle



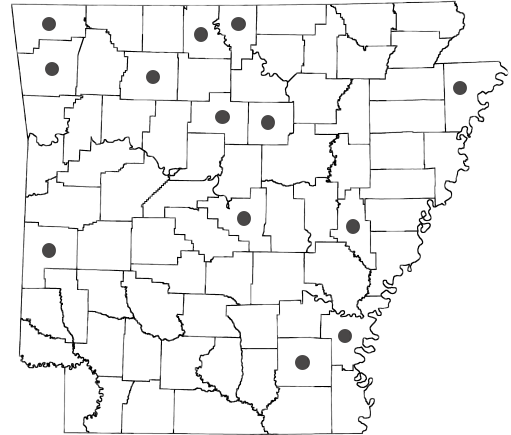
ASTERACEAE
Conoclinium coelestinum (L.) DC. in DC. & A.DC.
 mist-flower



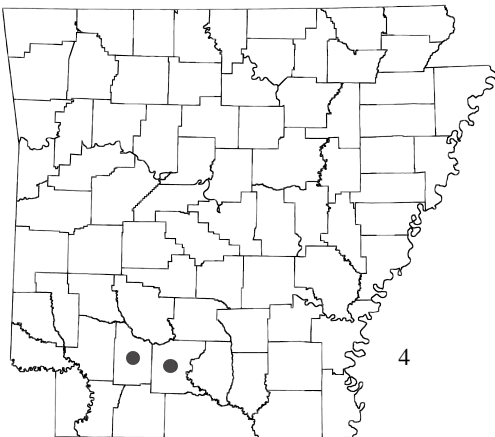
ASTERACEAE
Conyza bonariensis (L.) Cronquist
 asthma-weed



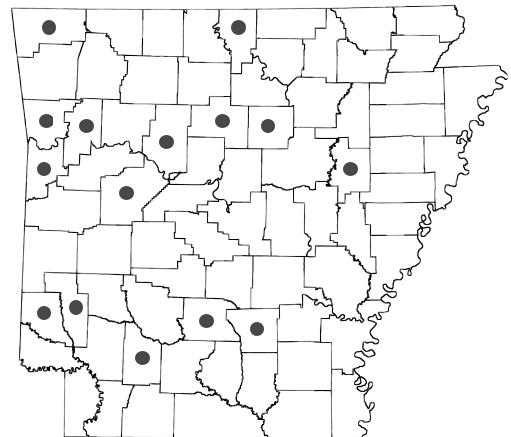
ASTERACEAE
Conyza canadensis (L.) Cronquist
 horseweed



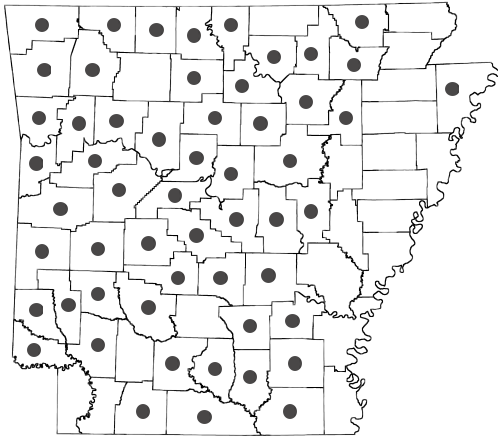
ASTERACEAE
Conyza ramosissima Cronquist
 dwarf fleabane, dwarf horseweed



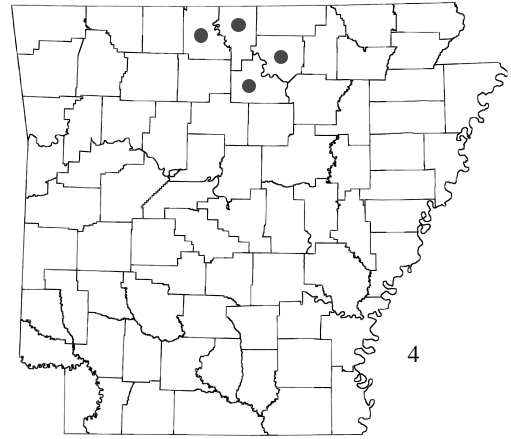
ASTERACEAE
Coreopsis basalis (A.Dietr.) Blake
 golden-mane tickseed



ASTERACEAE
Coreopsis grandiflora Hogg ex Sweet
var. grandiflora
 large-flower tickseed



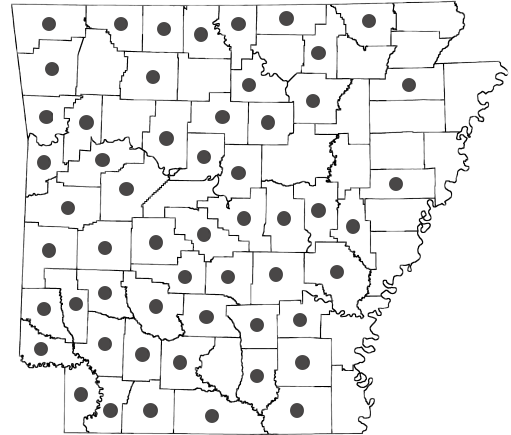
ASTERACEAE
Coreopsis grandiflora Hogg ex Sweet
var. harveyana (A.Gray) Sherff
large-flower tickseed



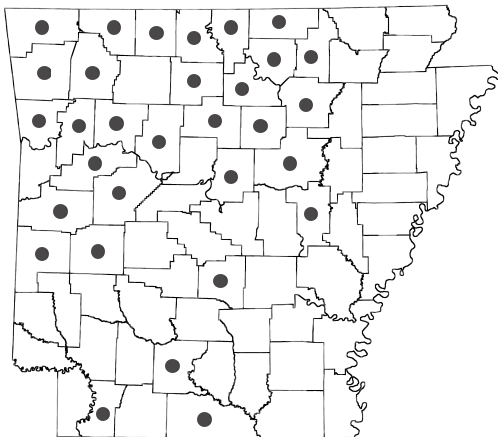
ASTERACEAE
Coreopsis grandiflora Hogg ex Sweet
var. saxicola (Alexander) E.B.Sm.
large-flower tickseed



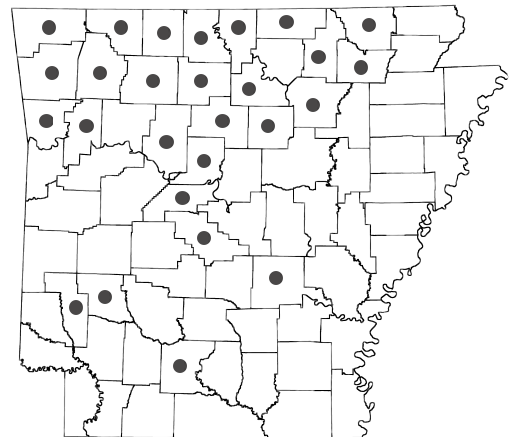
ASTERACEAE
Coreopsis intermedia Sherff
golden-wave tickseed



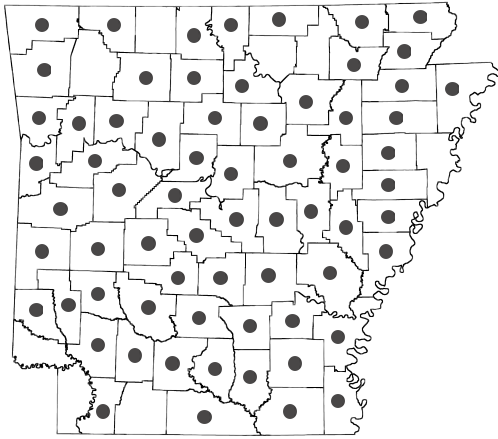
ASTERACEAE
Coreopsis lanceolata L.
lance-leaf tickseed



ASTERACEAE
Coreopsis palmata Nutt.
tickseed

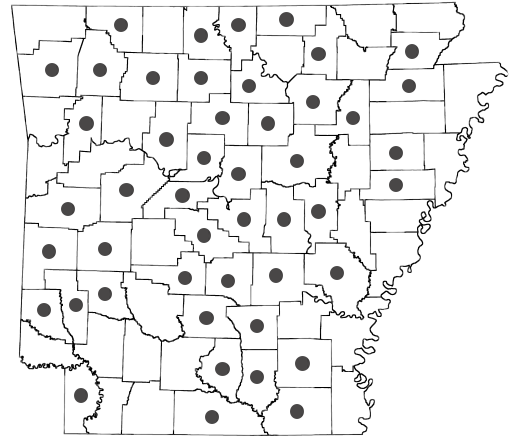


ASTERACEAE
Coreopsis pubescens Elliott
star tickseed



ASTERACEAE
Coreopsis tinctoria Nutt.

Plains coreopsis, tickseed, calliopsis



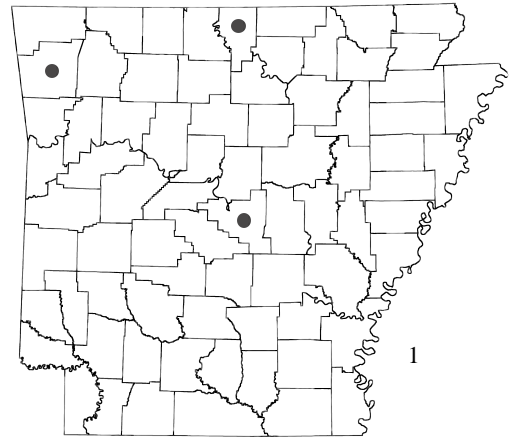
ASTERACEAE
Coreopsis tripteris L.

tall tickseed



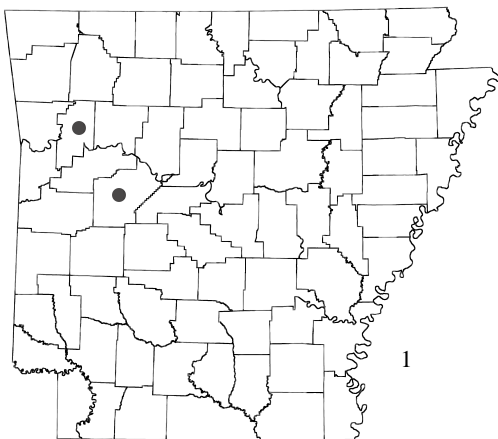
ASTERACEAE
Cosmos bipinnatus Cav.

cosmos



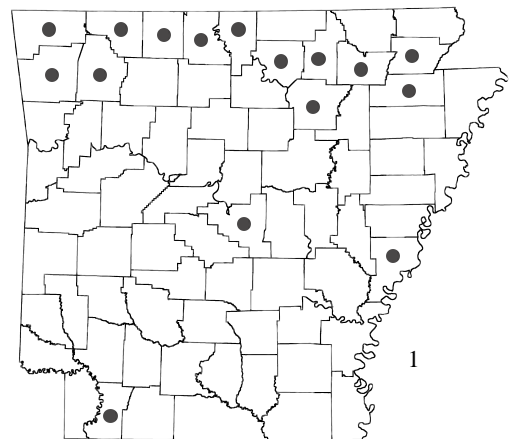
ASTERACEAE
Cosmos sulphureus Cav.

cosmos



ASTERACEAE
Cota tinctoria (L.) J.Gay ex Guss.

yellow chamomile

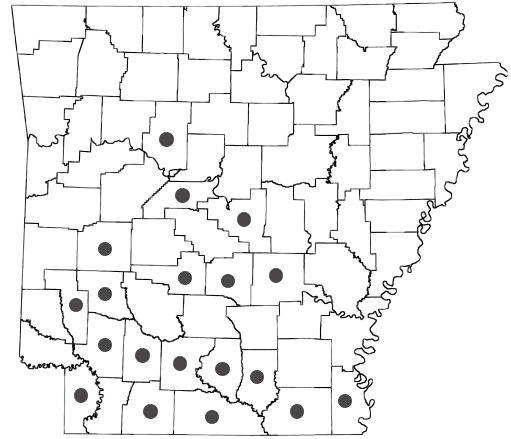


ASTERACEAE
Crepis pulchra L.

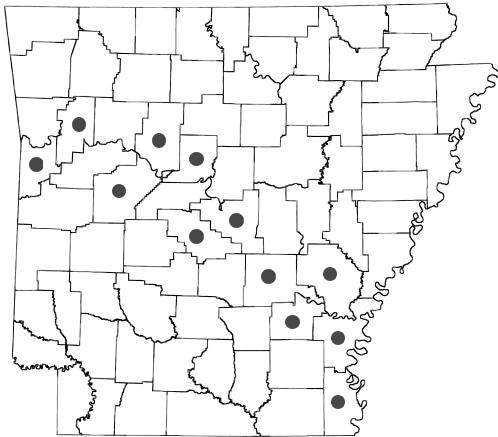
small-flower hawk's-beard



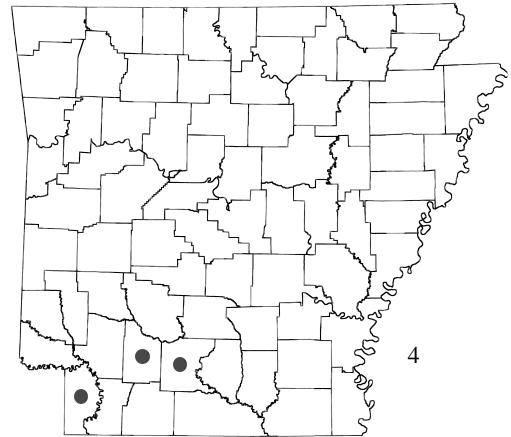
ASTERACEAE
Crepis setosa Haller f.
 bristly hawk's-beard



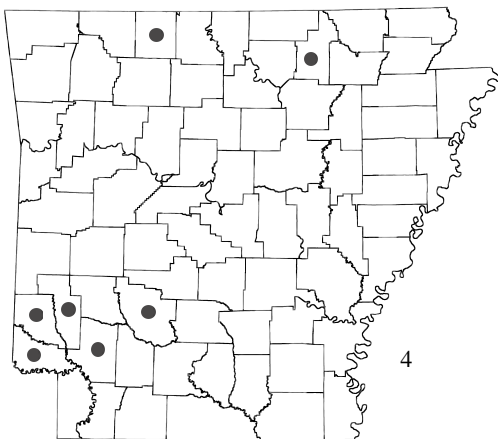
ASTERACEAE
Croptilon divaricatum (Nutt.) Raf.
 scratch-daisy



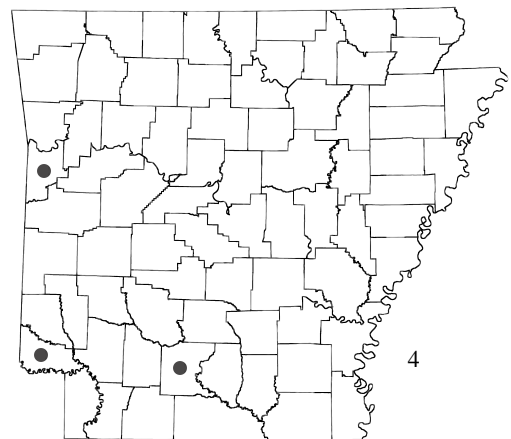
ASTERACEAE
Croptilon hookerianum (Torr. & A.Gray) House
 var. **validum** (Rydb.) E.B.Sm.
 Hooker's scratch-daisy



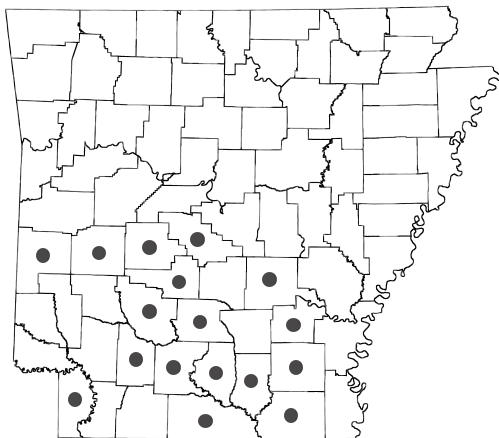
ASTERACEAE
Diaperia candida (Torr. & A.Gray) Bentham & Hook.f.
 silver rabbit-tobacco



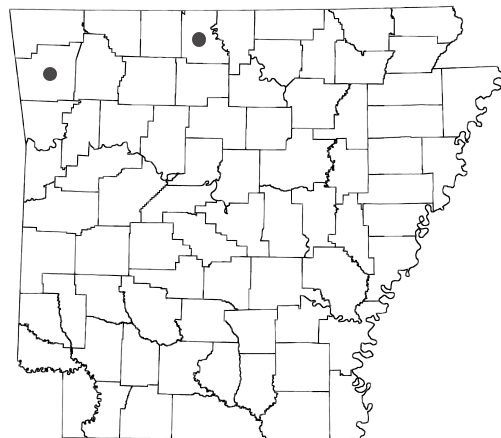
ASTERACEAE
Diaperia prolifera (Nutt. ex DC.) Nutt.
 var. **prolifera**
 big-head rabbit-tobacco



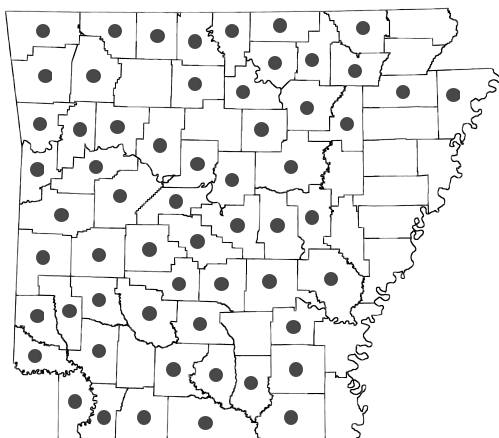
ASTERACEAE
Diaperia verna (Raf.) Morefield
 var. **verna**
 many-stem rabbit-tobacco, cotton-rose



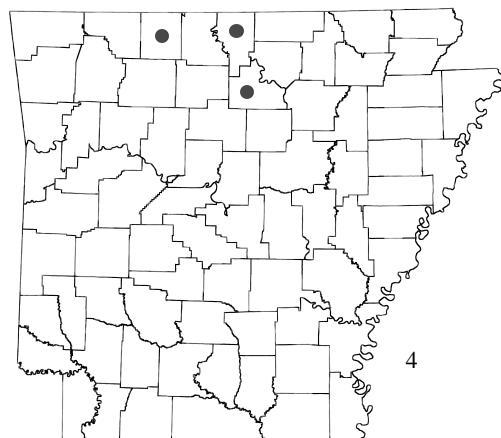
ASTERACEAE
Doellingeria sericocarpoides Small
 southern white-top aster



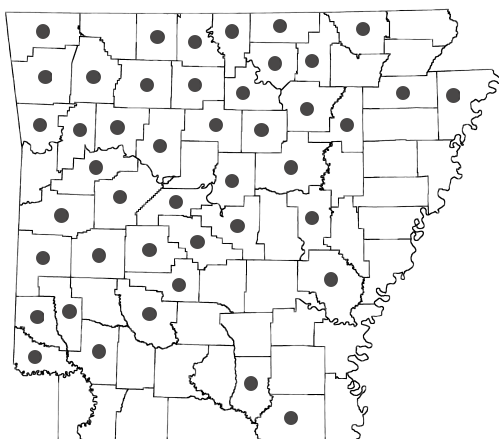
ASTERACEAE
Dyssodia papposa (Vent.) Hitchc.
 fetid-marigold



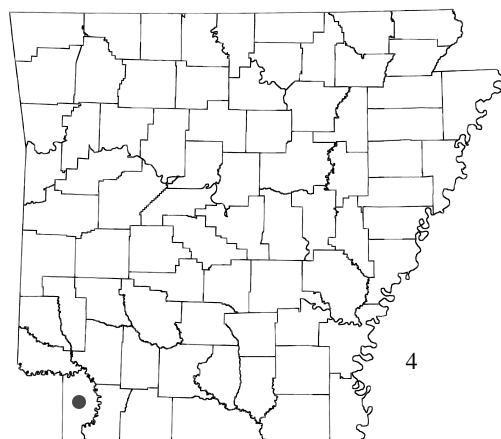
ASTERACEAE
Echinacea pallida (Nutt.) Nutt.
 pale purple coneflower



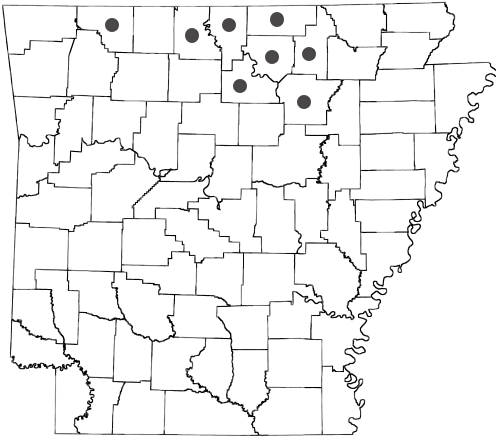
ASTERACEAE
Echinacea paradoxa (Norton) Britton in Britton & Brown
 var. **paradoxa**
 yellow coneflower



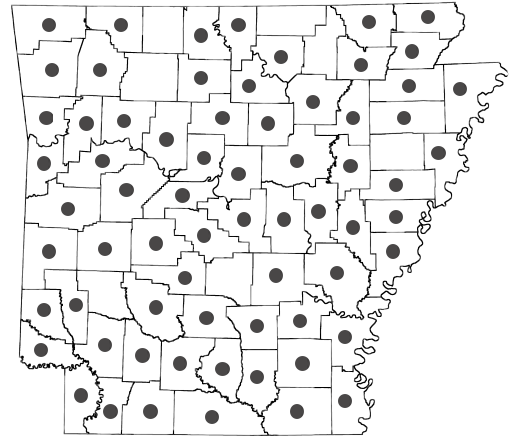
ASTERACEAE
Echinacea purpurea (L.) Moench
 purple coneflower



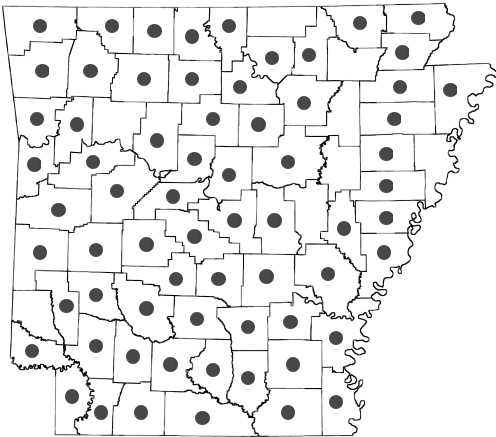
ASTERACEAE
Echinacea sanguinea Nutt.
 sanguine purple coneflower



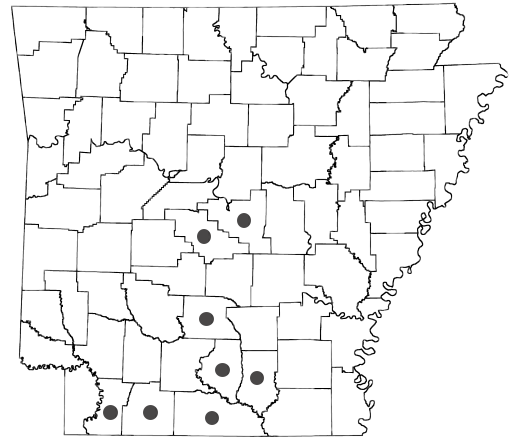
ASTERACEAE
***Echinacea simulata* McGregor**
glade coneflower



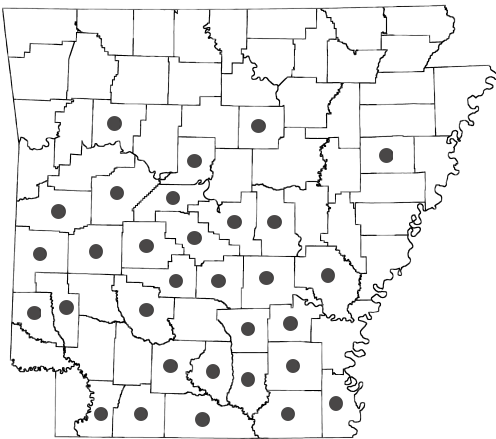
ASTERACEAE
***Eclipta prostrata* (L.) L.**
false daisy



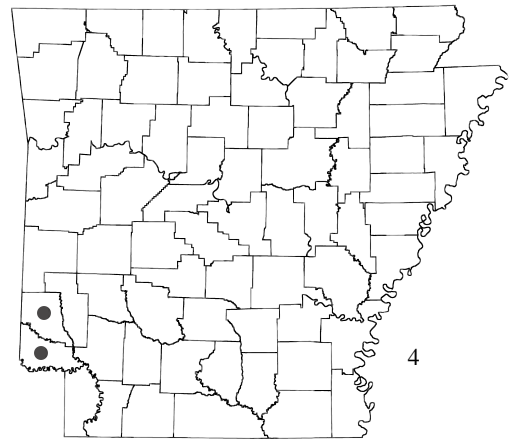
ASTERACEAE
***Elephantopus carolinianus* Raesch.**
Carolina elephant's-foot



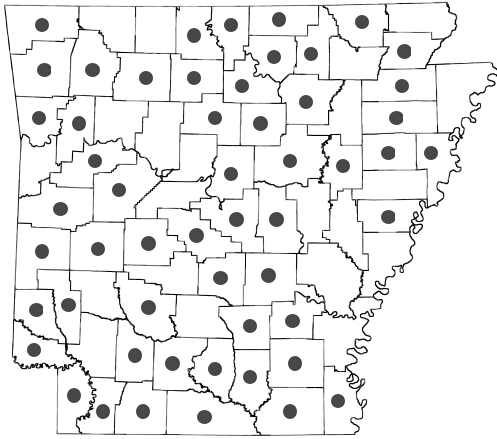
ASTERACEAE
***Elephantopus nudatus* A.Gray**
smooth elephant's-foot



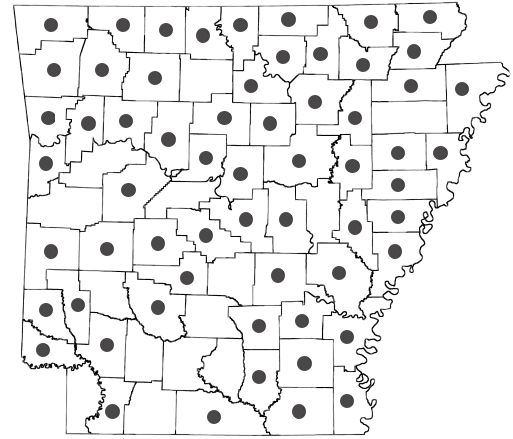
ASTERACEAE
***Elephantopus tomentosus* L.**
hairy elephant's-foot



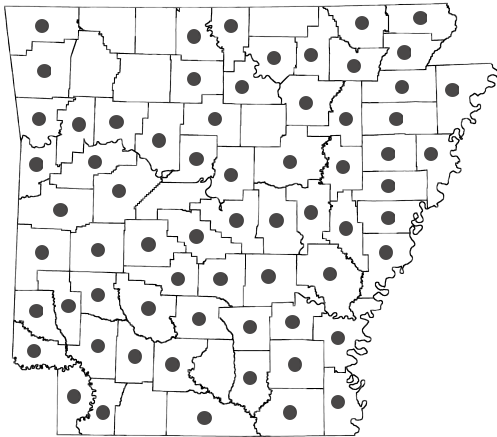
ASTERACEAE
***Engelmannia peristenia* (Raf.) Goodman & C.A.Lawson**
Engelmann's daisy



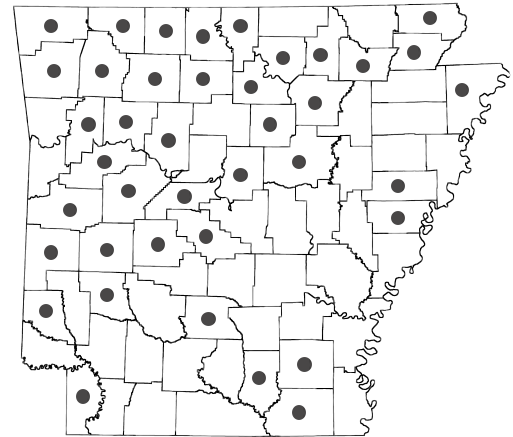
ASTERACEAE
Erechtites hieraciifolius (L.) Raf. ex DC. in DC. & A.DC.
var. hieraciifolius
 fireweed, burnweed



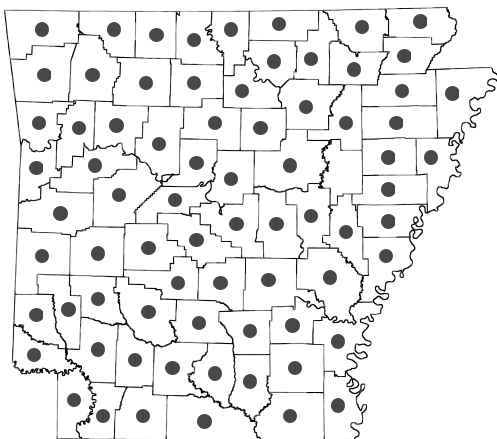
ASTERACEAE
Erigeron annuus (L.) Pers.
 daisy fleabane



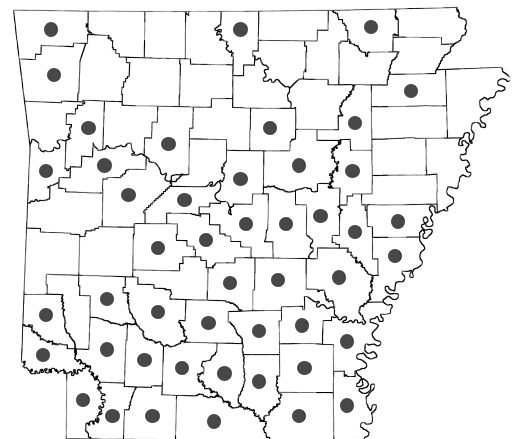
ASTERACEAE
Erigeron philadelphicus L.
var. philadelphicus
 Philadelphia fleabane



ASTERACEAE
Erigeron pulchellus Michx.
var. pulchellus
 Robin's-plantain

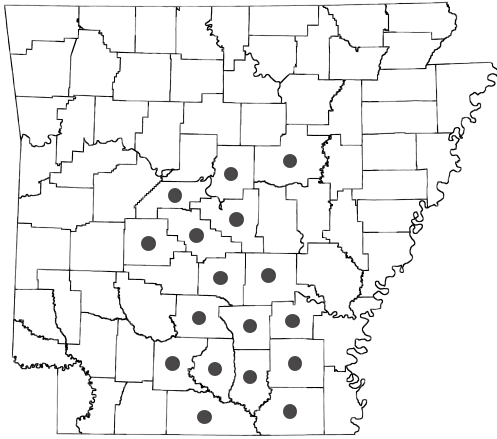


ASTERACEAE
Erigeron strigosus Muhl. ex Willd.
 daisy fleabane

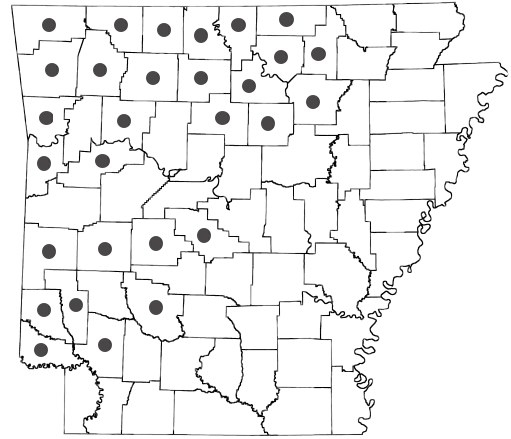


ASTERACEAE
Erigeron tenuis Torr. & A.Gray
 fleabane

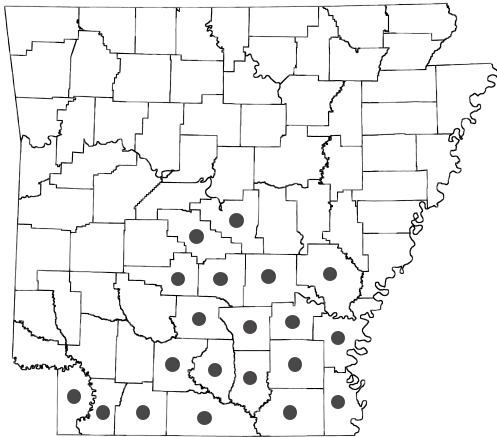
See *Appendix I* for infraspecific taxa and species status.



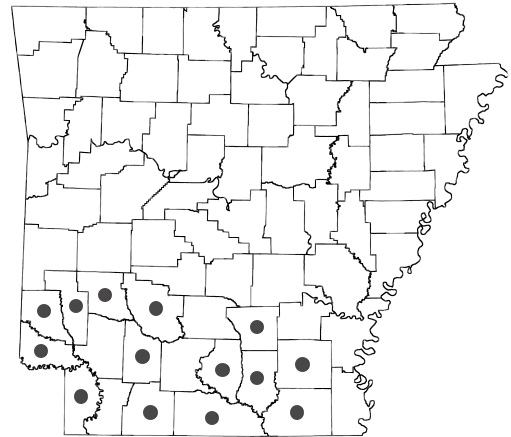
ASTERACEAE
Eupatorium album L.
var. album
boneset, white thoroughwort



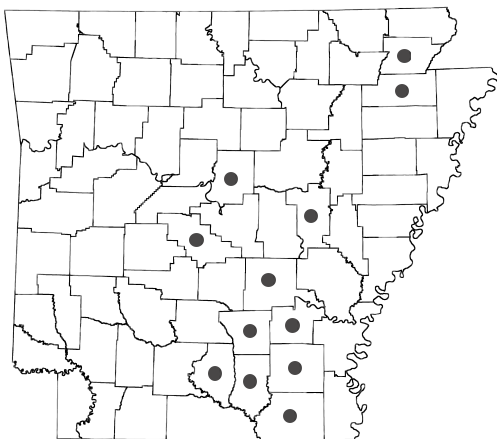
ASTERACEAE
Eupatorium altissimum L.
tall thoroughwort



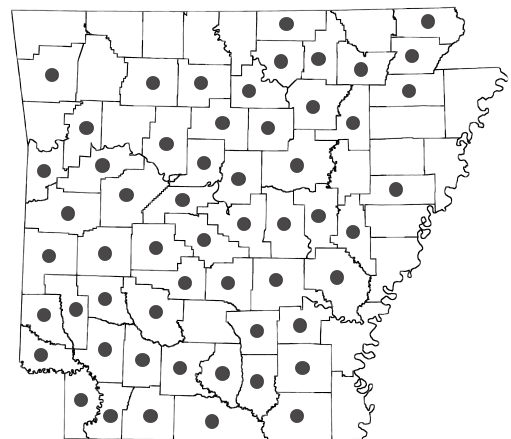
ASTERACEAE
Eupatorium capillifolium (Lam.) Small
dog-fennel



ASTERACEAE
Eupatorium compositifolium Walter
yankee-weed

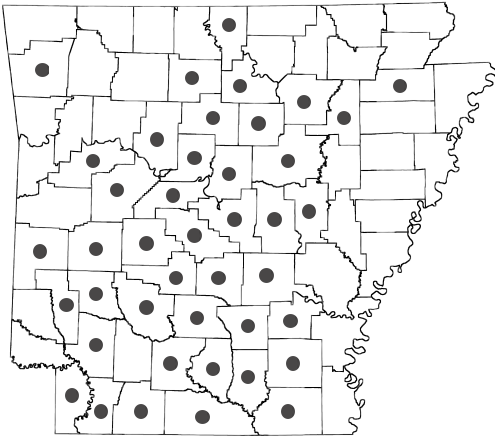


ASTERACEAE
Eupatorium hyssopifolium L.
hyssop-leaf boneset



ASTERACEAE
Eupatorium perfoliatum L.
boneset, thoroughwort

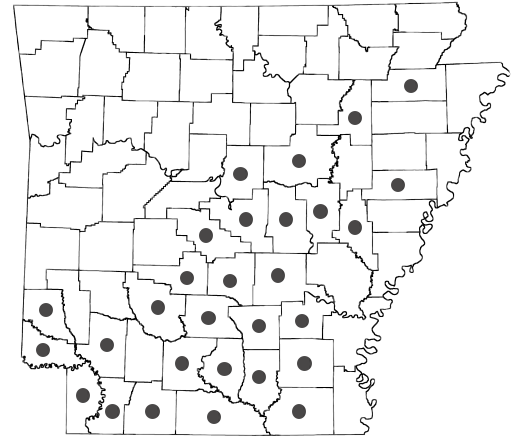
See *Appendix I* for infraspecific taxa and species status.



ASTERACEAE
Eupatorium rotundifolium L.

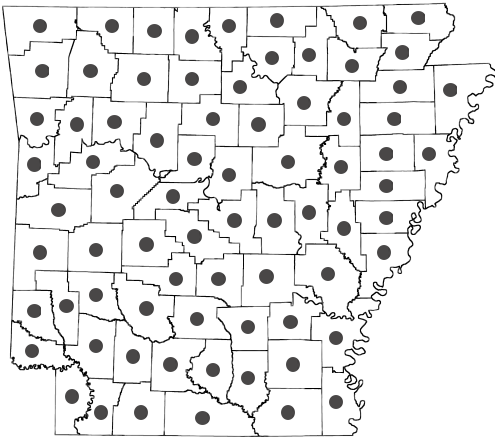
round-leaf boneset

See *Appendix I* for infraspecific taxa and species status.



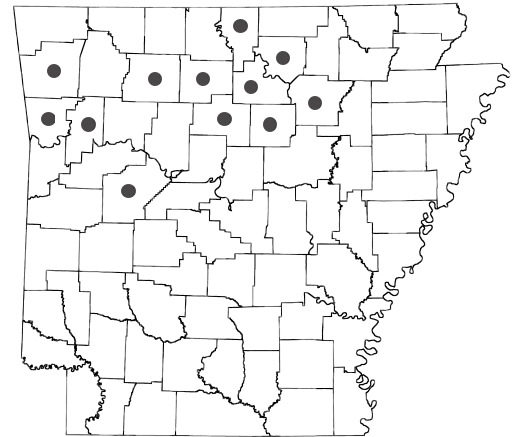
ASTERACEAE
Eupatorium semiserratum DC. in DC. & A.D.C.

small-flower boneset



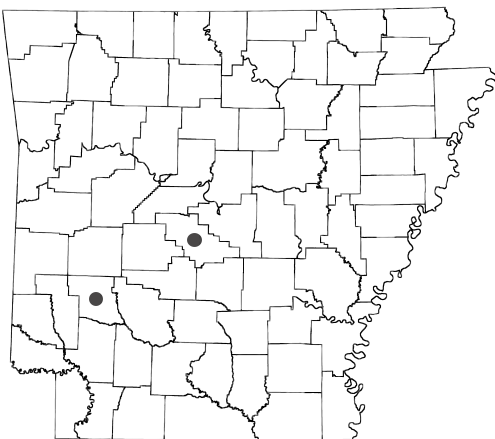
ASTERACEAE
Eupatorium serotinum Michx.

late boneset



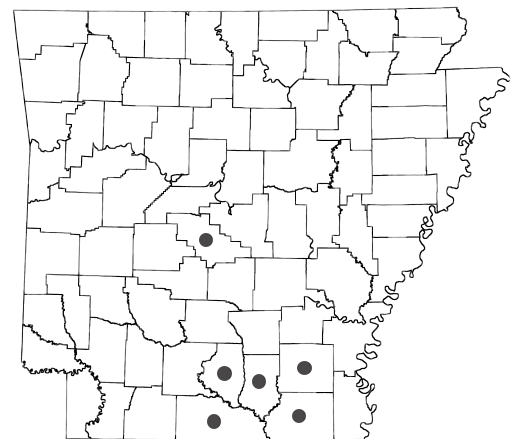
ASTERACEAE
Eupatorium sessilifolium L.

upland boneset



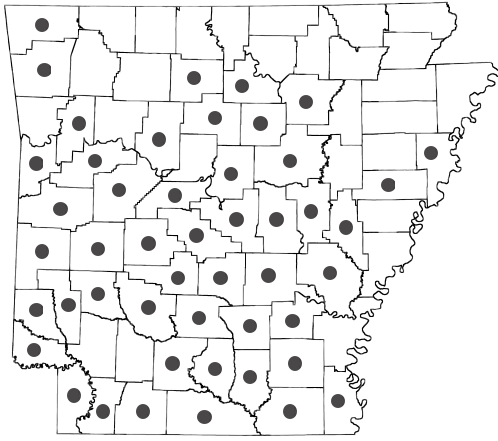
ASTERACEAE
Eupatorium \times cordigerum (Fernald) Fernald

hybrid boneset

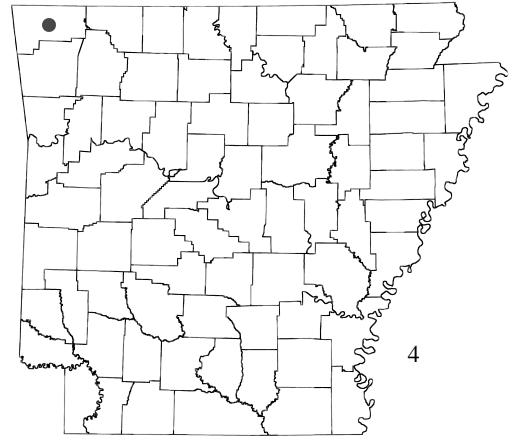


ASTERACEAE
Eupatorium \times pinnatifidum Elliott

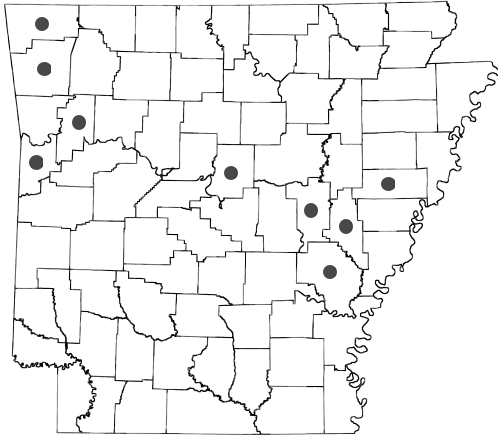
hybrid boneset



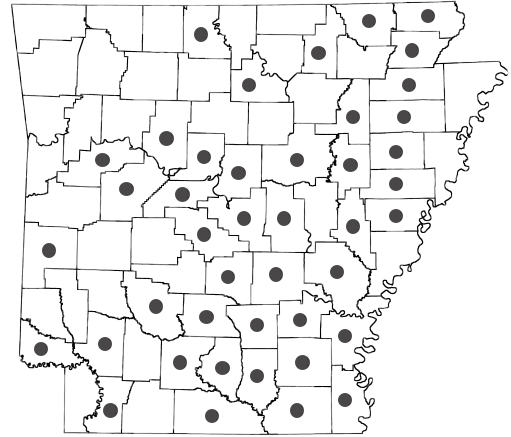
ASTERACEAE
Eurybia hemispherica (Alexander) G.L.Nesom
southern prairie aster



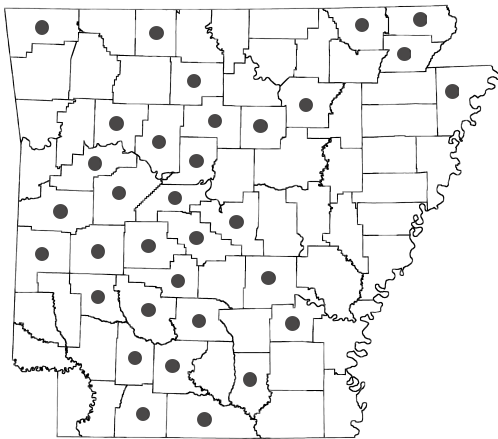
ASTERACEAE
Eurybia macrophylla (L.) Cass in F.Cuvier
big-leaf aster



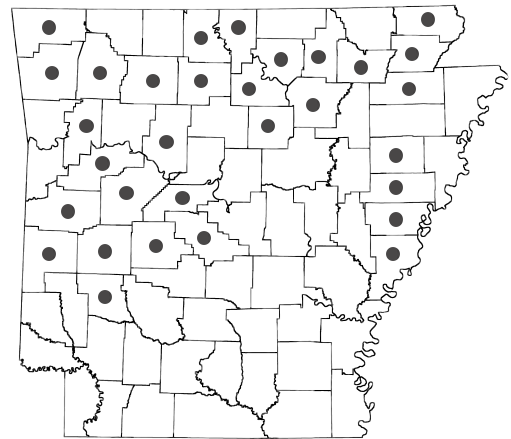
ASTERACEAE
Euthamia gymnospermoides Greene
flat-top goldenrod



ASTERACEAE
Euthamia leptocepala (Torr. & A.Gray) Greene ex Porter & Britton
flat-top goldenrod

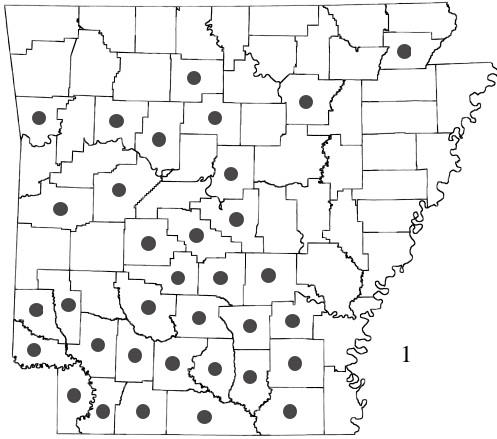


ASTERACEAE
Eutrochium fistulosum (Barratt) E.E.Lamont
Joe-pye-weed

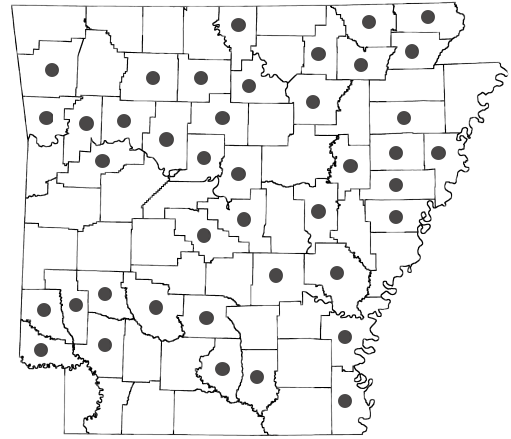


ASTERACEAE
Eutrochium purpureum (L.) E.E.Lamont
Joe-pye-weed

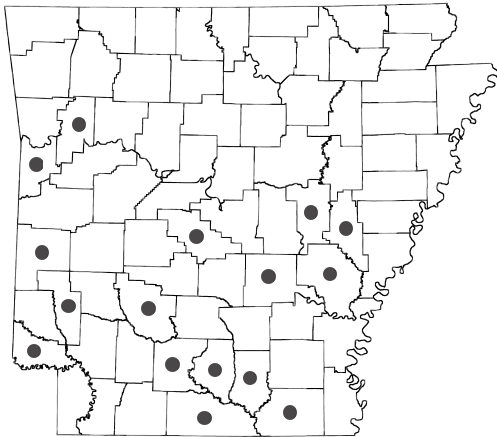
See Appendix I for infraspecific taxa and species status.



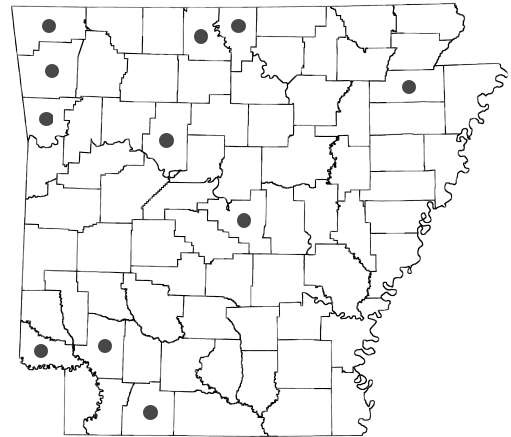
ASTERACEAE
Facelis retusa (Lam.) Sch.Bip.
 annual trampweed



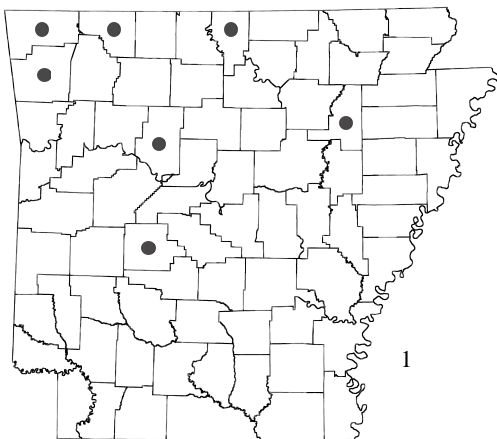
ASTERACEAE
Fleischmannia incarnata (Walter) R.M.King & H.Rob.
 pink thoroughwort



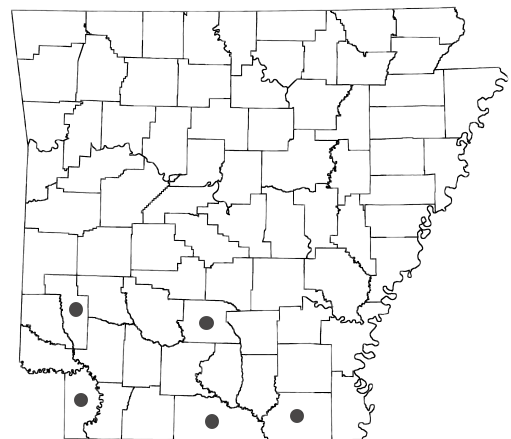
ASTERACEAE
Gaillardia aestivalis (Walter) H.Rock
 blanket-flower



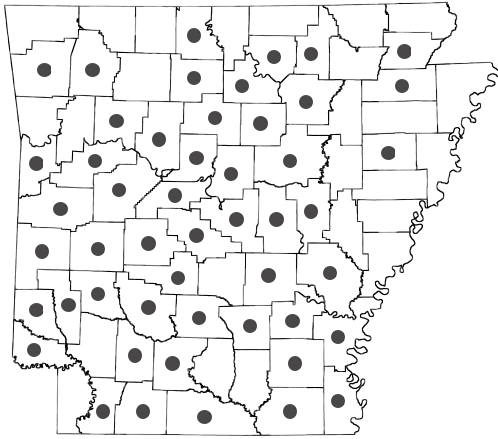
ASTERACEAE
Gaillardia pulchella Foug.
 Indian-blanket, fire-wheels



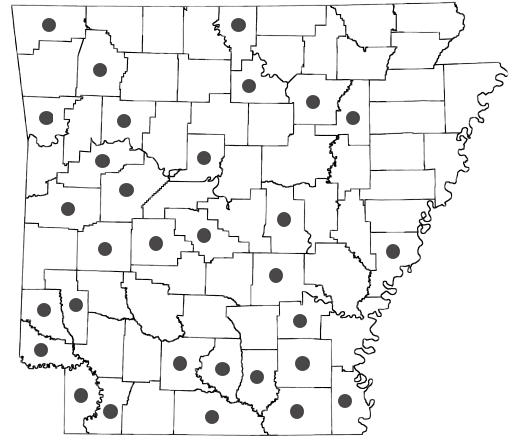
ASTERACEAE
Galinsoga quadriradiata Ruiz & Pav.
 quick-weed



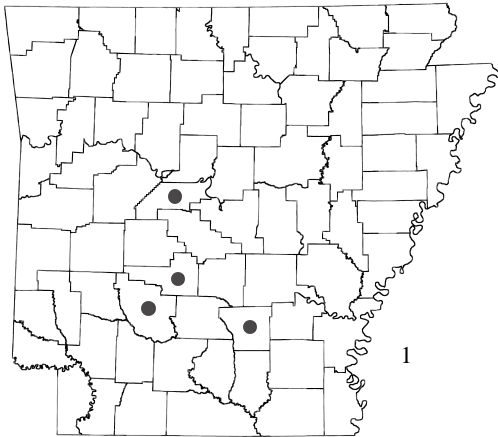
ASTERACEAE
Gamochaeta antillana (Urban) Anderb.
 cudweed, delicate everlasting



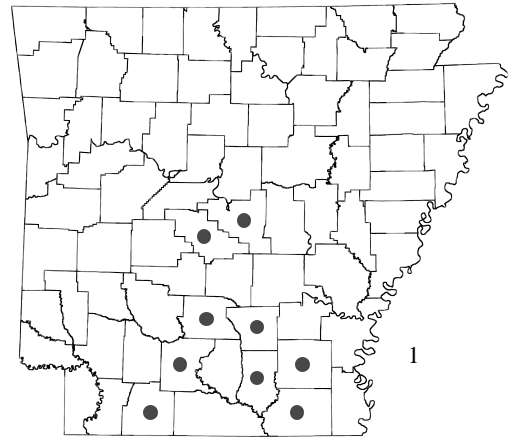
ASTERACEAE
Gamochaeta argyrinea G.L.Nesom
cudweed



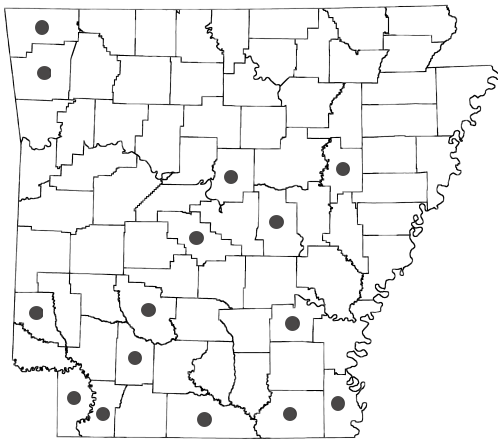
ASTERACEAE
Gamochaeta calviceps (Fernald) Cabrera
cudweed



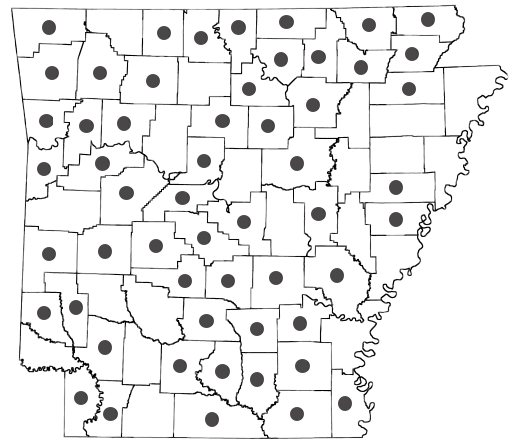
ASTERACEAE
Gamochaeta chionesthes G.L.Nesom
cudweed



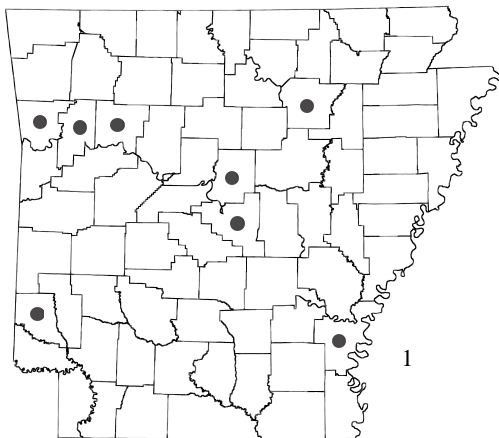
ASTERACEAE
Gamochaeta coerctata (Willd.) Kerg.
cudweed



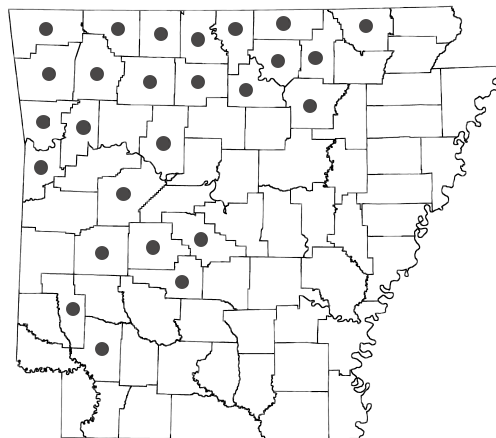
ASTERACEAE
Gamochaeta pensylvanica (Willd.) Cabrera
Pennsylvania cudweed



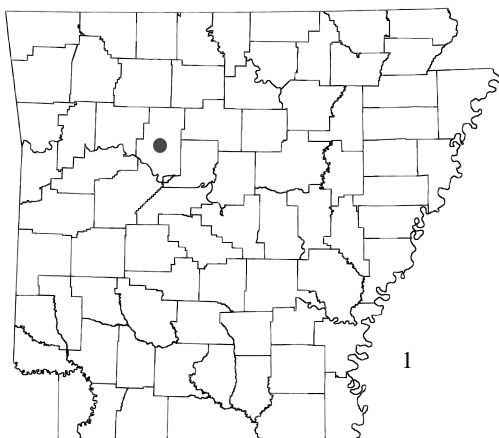
ASTERACEAE
Gamochaeta purpurea (L.) Cabrera
purple cudweed



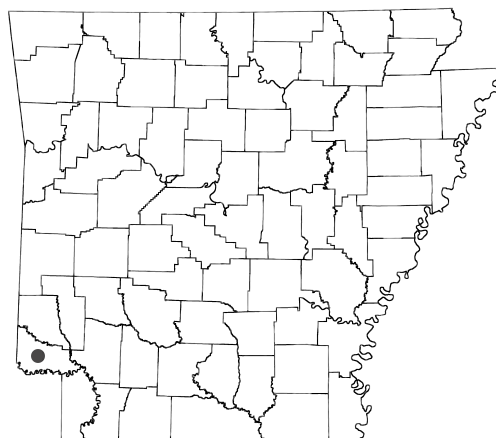
ASTERACEAE
Grindelia ciliata (Nutt.) Spreng.
 gum-plant, Spanish gold



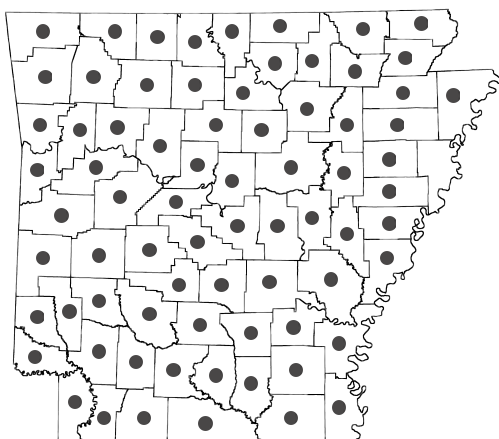
ASTERACEAE
Grindelia lanceolata Nutt.
 gum-plant



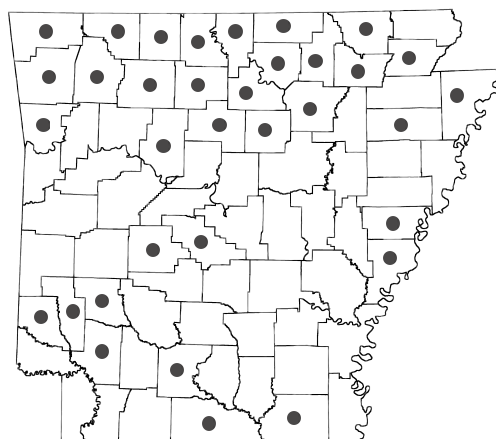
ASTERACEAE
Grindelia squarrosa (Pursh) Dunal
 gum-plant



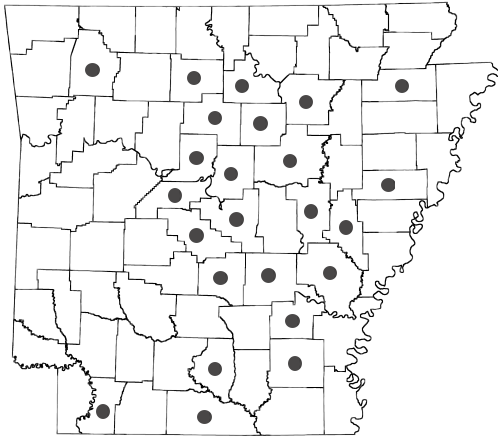
ASTERACEAE
Gutierrezia texana (DC.) Torr. & A.Gray
var. texana
 Texas snakeweed



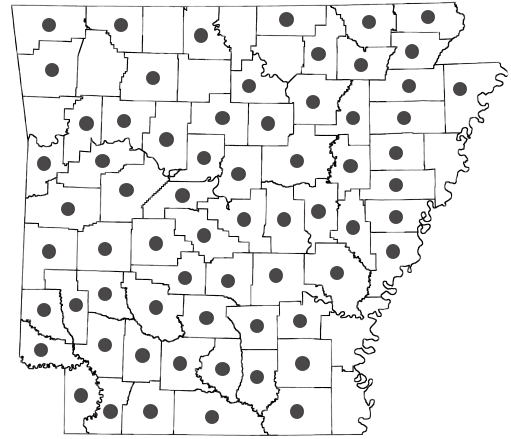
ASTERACEAE
Helenium amarum (Raf.) H.Rock
var. amarum
 bitter sneezeweed, bitterweed



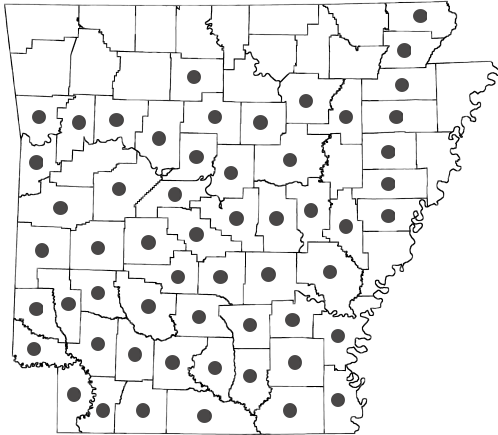
ASTERACEAE
Helenium autumnale L.
 sneezeweed



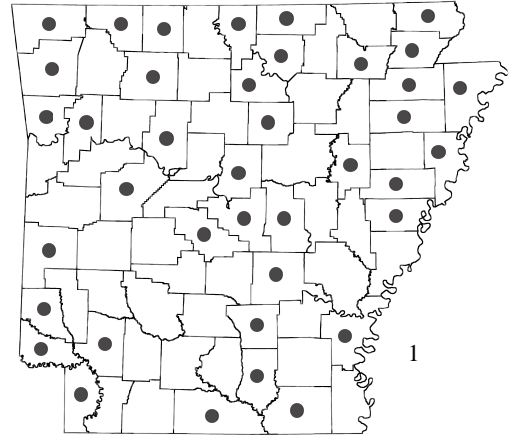
ASTERACEAE
Helonium campestre Small
Arkansas sneezeweed



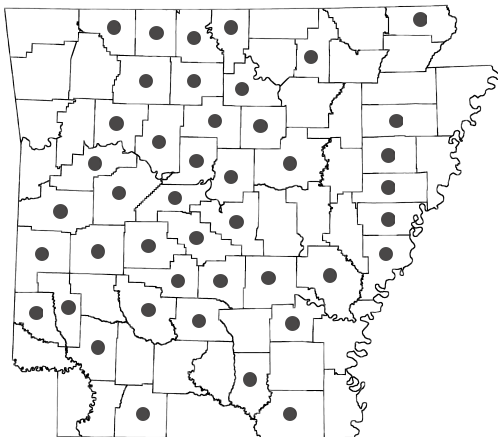
ASTERACEAE
Helonium flexuosum Raf.
purple-head sneezeweed



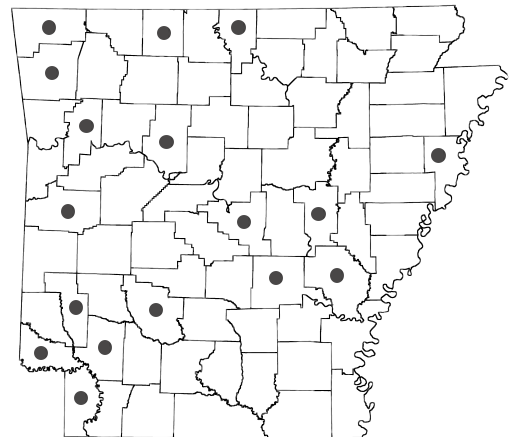
ASTERACEAE
Helianthus angustifolius L.
narrow-leaf sunflower



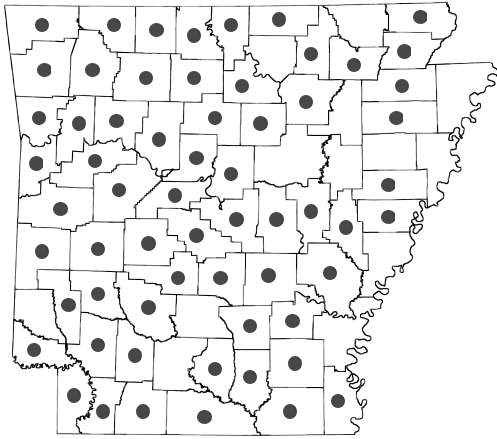
ASTERACEAE
Helianthus annuus L.
common sunflower



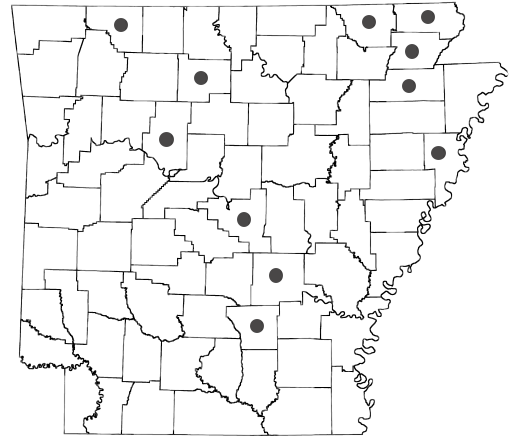
ASTERACEAE
Helianthus divaricatus L.
woodland sunflower



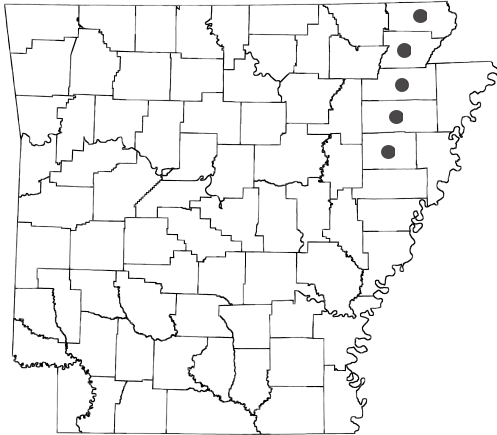
ASTERACEAE
Helianthus grosseserratus M.Martens
saw-tooth sunflower



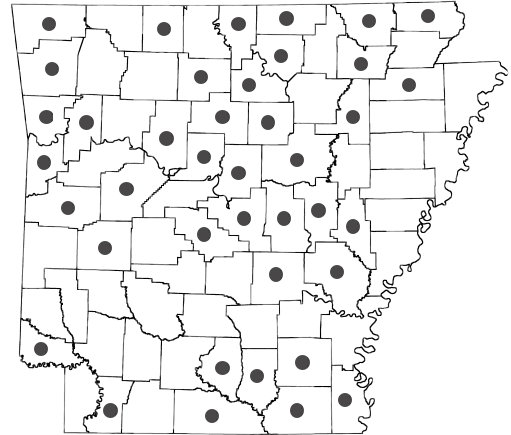
ASTERACEAE
Helianthus hirsutus Raf.
 hairy woodland sunflower



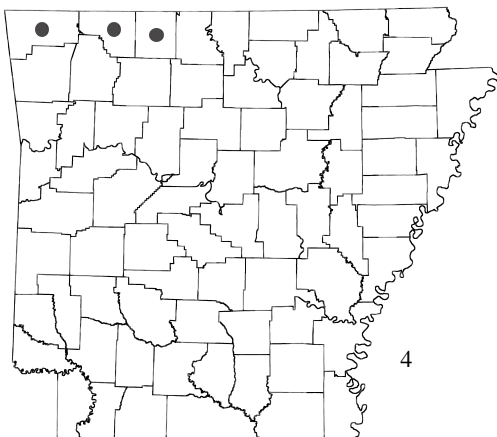
ASTERACEAE
Helianthus maximiliani Schrad.
 Maximilian's sunflower



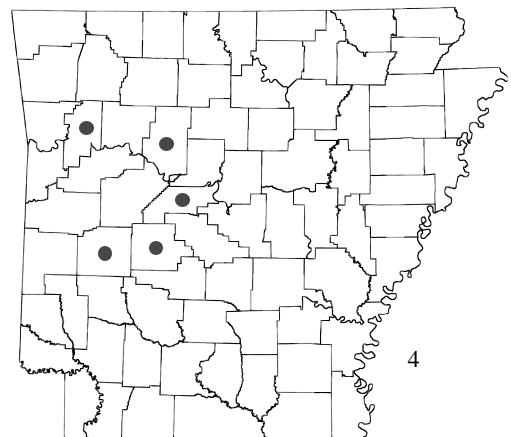
ASTERACEAE
Helianthus microcephalus Torr. & A.Gray
 small woodland sunflower, small-head sunflower



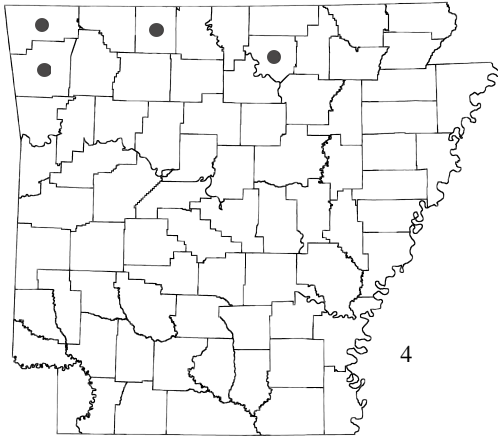
ASTERACEAE
Helianthus mollis Lam. in Lam. et al.
 ashy sunflower, hairy sunflower



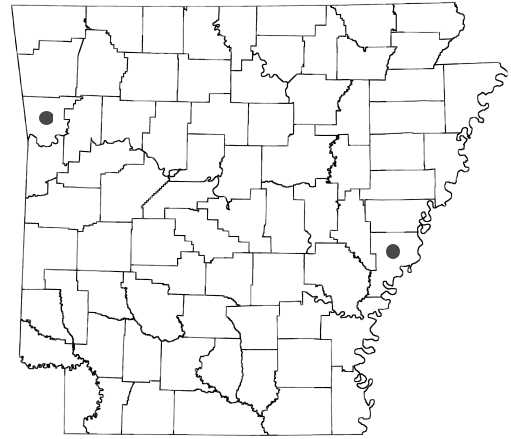
ASTERACEAE
Helianthus occidentalis Riddell
 subsp. **occidentalis**
 naked-stem sunflower



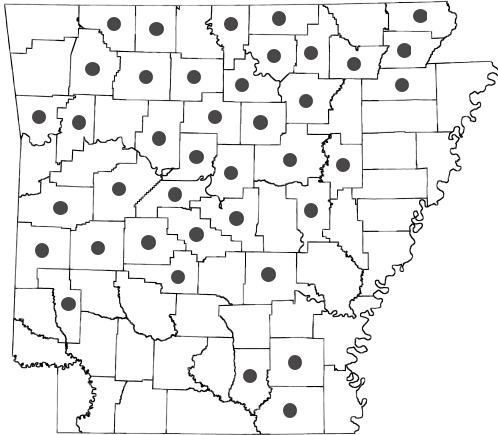
ASTERACEAE
Helianthus occidentalis Riddell
 subsp. **plantagineus (Torr. & A.Gray) Heiser**
 plantain-leaf sunflower



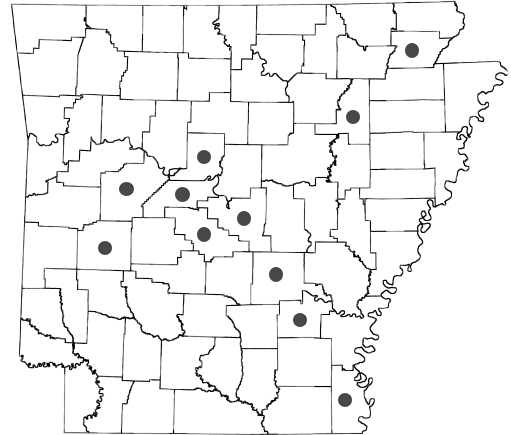
ASTERACEAE
***Helianthus pauciflorus* Nutt.**
subsp. pauciflorus
prairie sunflower, stiff sunflower



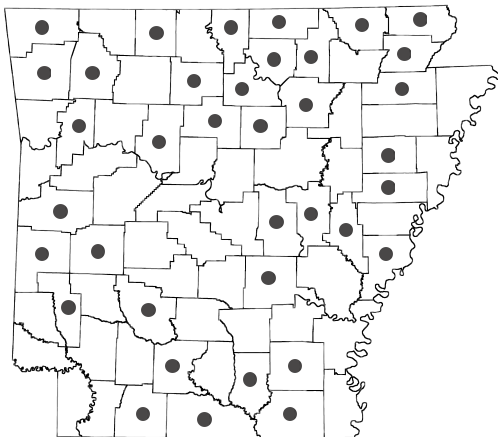
ASTERACEAE
***Helianthus petiolaris* Nutt.**
subsp. petiolaris
prairie sunflower



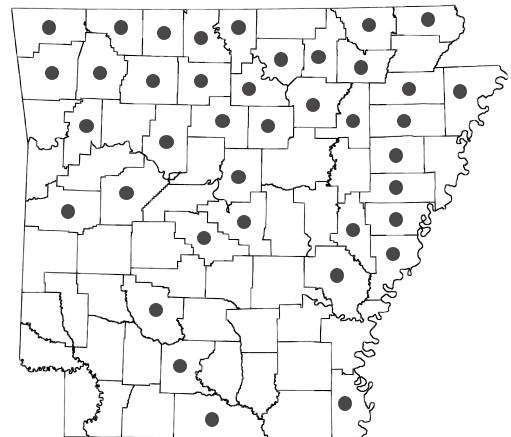
ASTERACEAE
***Helianthus silphoides* Nutt.**
rosinweed sunflower



ASTERACEAE
***Helianthus simulans* E. Watson**
muck sunflower



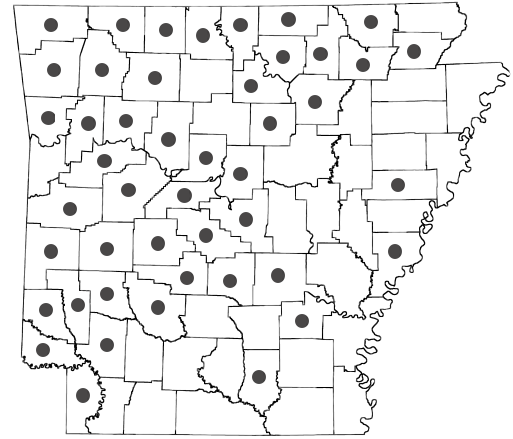
ASTERACEAE
***Helianthus strumosus* L.**
woodland sunflower



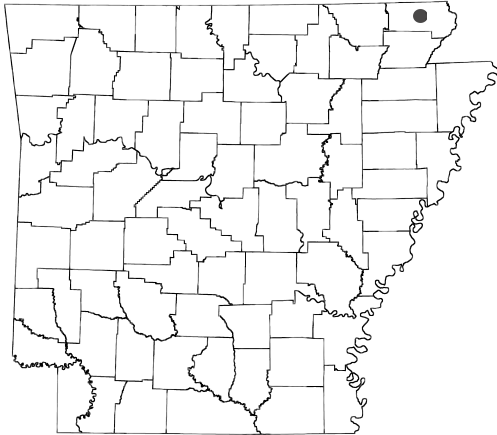
ASTERACEAE
***Helianthus tuberosus* L.**
Jerusalem artichoke



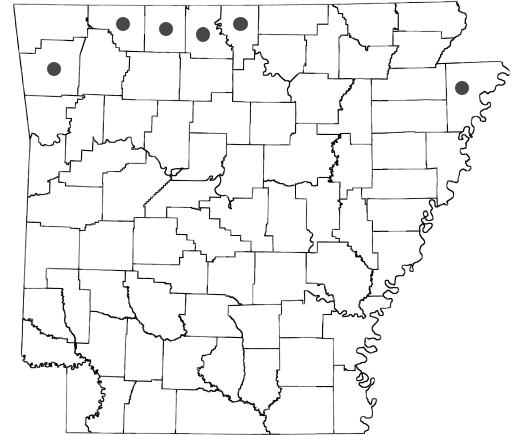
ASTERACEAE
Heliopsis gracilis Nutt.
 pinewoods ox-eye



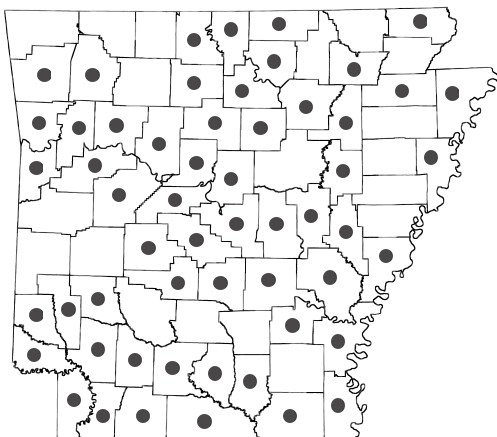
ASTERACEAE
Heliopsis helianthoides (L.) Sweet
var. scabra (Dunal) Fernald
 ox-eye, false sunflower



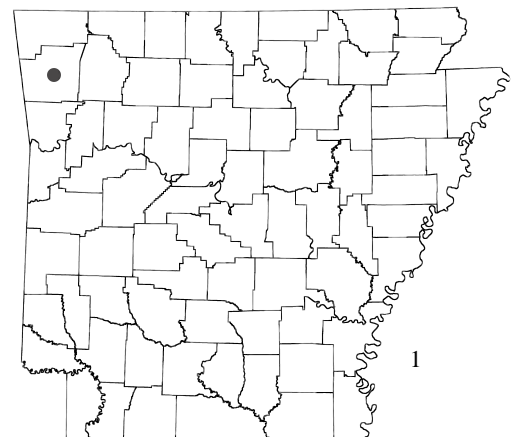
ASTERACEAE
Heterotheca camporum (Greene) Shinnery
var. camporum
 golden-aster



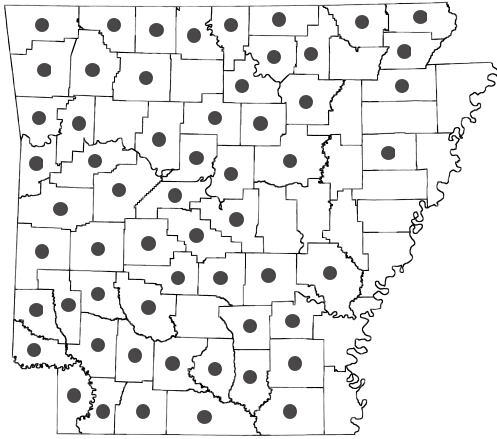
ASTERACEAE
Heterotheca camporum (Greene) Shinnery
var. glandulissimum Semple
 golden-aster



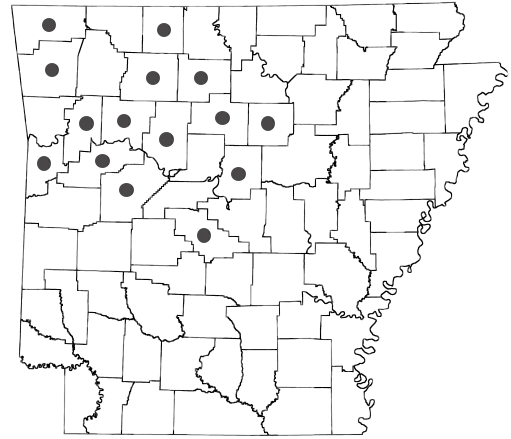
ASTERACEAE
Heterotheca subaxillaris (Lam.) Britton & Rusby
subsp. latifolia (Buckley) Semple
 golden-aster, camphorweed



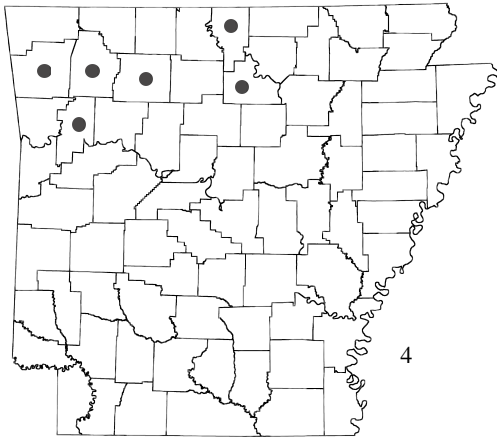
ASTERACEAE
Hieracium aurantiacum L.
 orange hawkweed, devil's-paintbrush



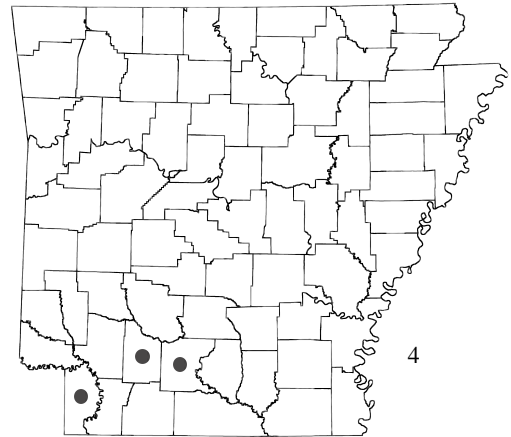
ASTERACEAE
Hieracium gronovii L.
 hawkweed



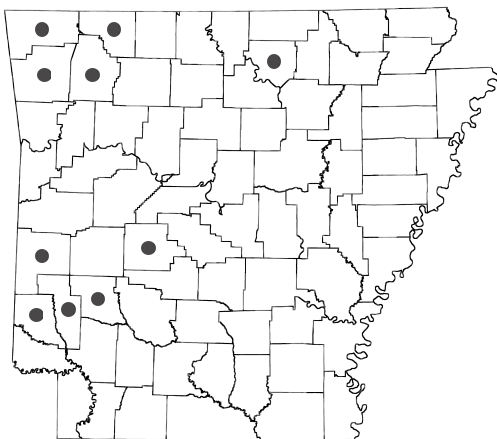
ASTERACEAE
Hieracium longiplum Torr. ex Hook.
 long-hair hawkweed



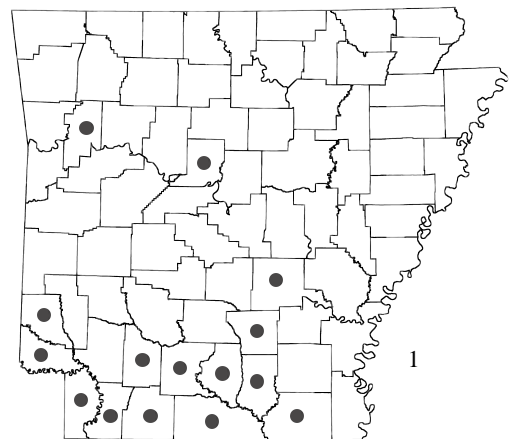
ASTERACEAE
Hieracium scabrum Michx.
 rough hawkweed



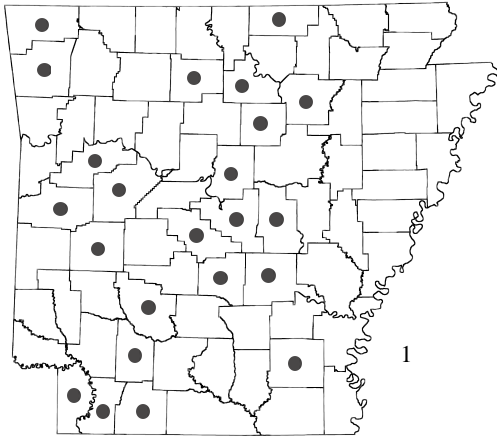
ASTERACEAE
Hymenopappus artemisiifolius DC. in DC. & A.DC.
var. artemisiifolius
 woolly-white



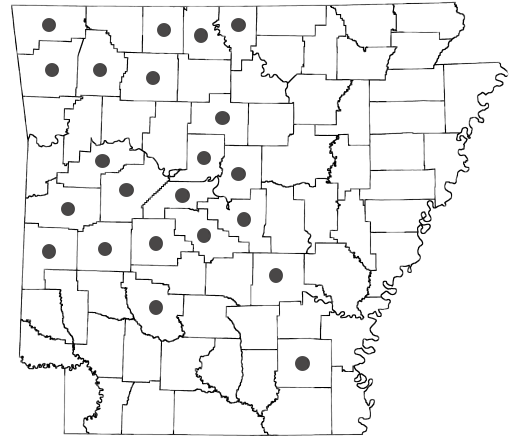
ASTERACEAE
Hymenopappus scabiosaeus L'Hér.
var. scabiosaeus
 old-plainsman



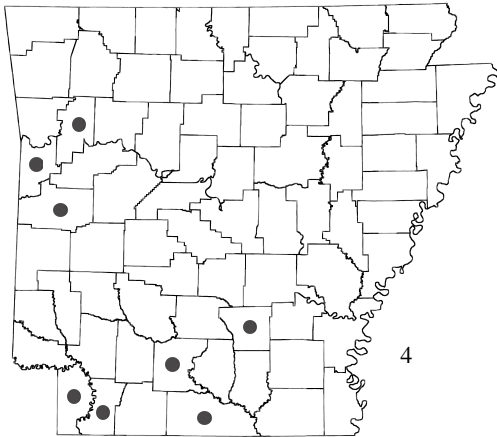
ASTERACEAE
Hypochaeris glabra L.
 smooth cat's-ear



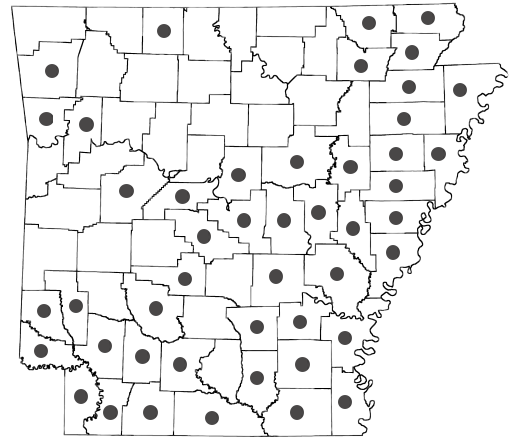
ASTERACEAE
Hypochaeris radicata L.
 cat's-ear, spotted cat's-ear



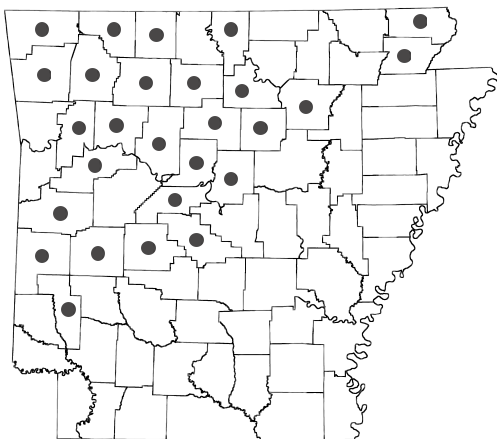
ASTERACEAE
Ionactis linariifolia (L.) Greene
 stiff-leaf aster



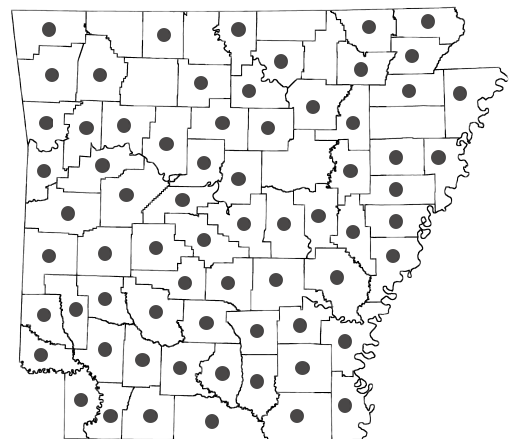
ASTERACEAE
Iva angustifolia Nutt. ex DC. in DC. & A.D.C.
 slender marsh-elder



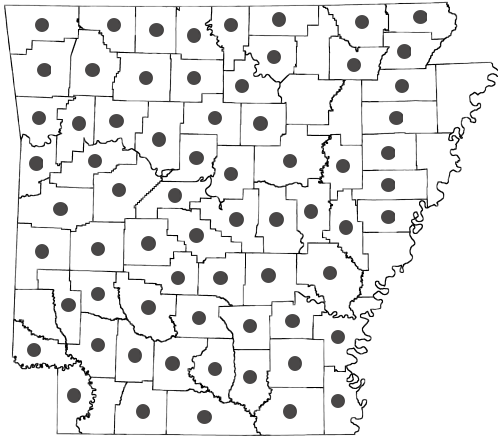
ASTERACEAE
Iva annua L.
 marsh-elder, sumpweed



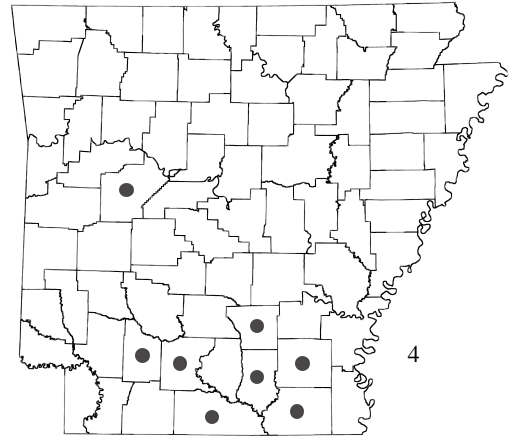
ASTERACEAE
Krigia biflora (Walter) S.F.Blake
 two-flower dwarf-dandelion



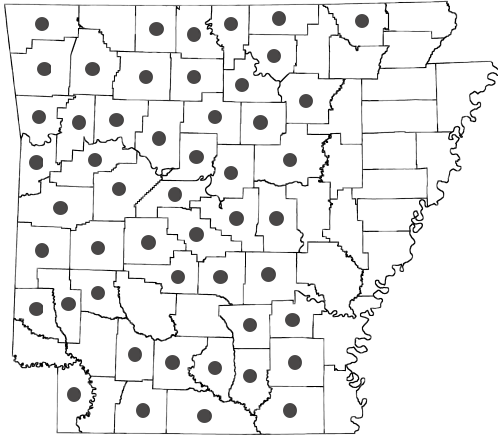
ASTERACEAE
Krigia cespitosa (Raf.) K.L.Chambers
var. cespitosa
 dwarf-dandelion



ASTERACEAE
***Krigia dandelion* (L.) Nutt.**
potato dwarf-dandelion



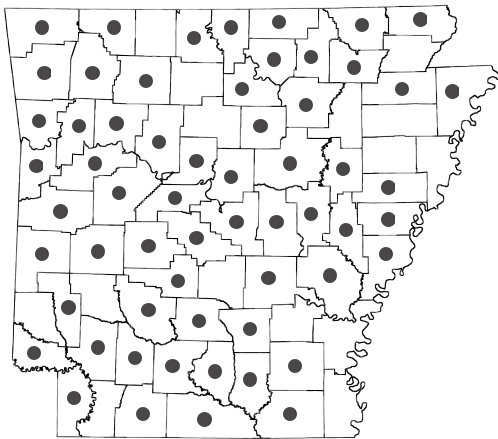
ASTERACEAE
***Krigia occidentalis* Nutt.**
western dwarf-dandelion



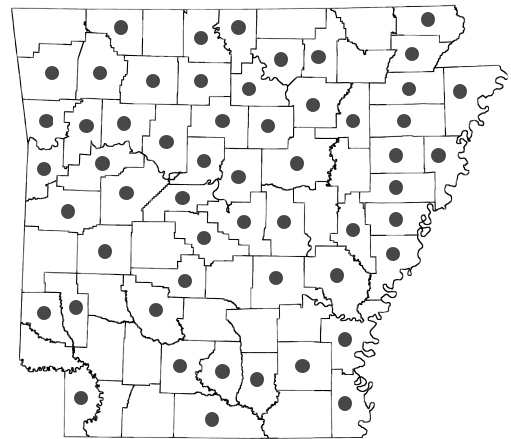
ASTERACEAE
***Krigia virginica* (L.) Willd.**
Virginia dwarf-dandelion



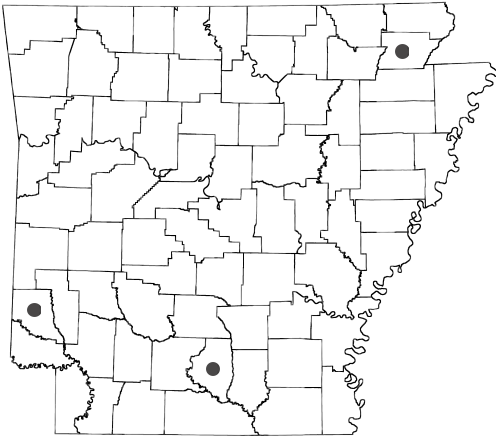
ASTERACEAE
***Krigia wrightii* (A.Gray) K.L.Chambers ex K.J.Kim**
Wright's dwarf-dandelion



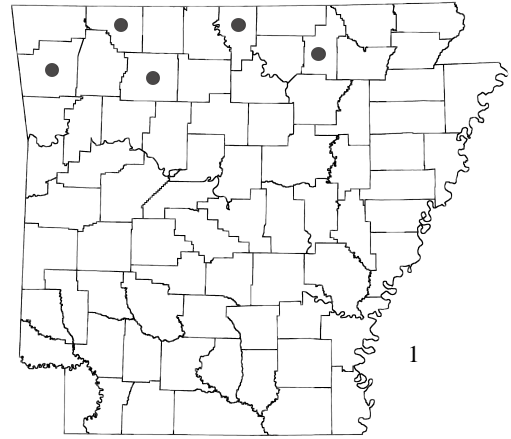
ASTERACEAE
***Lactuca canadensis* L.**
wild lettuce



ASTERACEAE
***Lactuca floridana* (L.) Gaertn.**
Florida wild lettuce



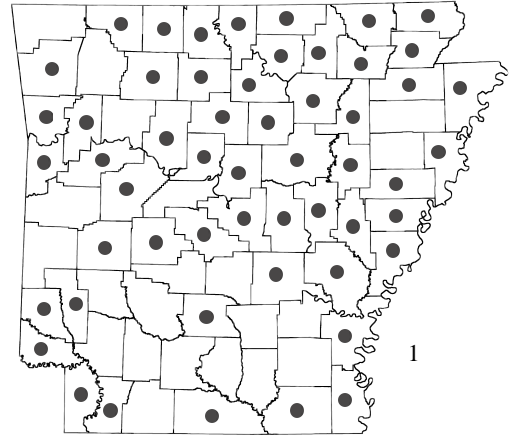
ASTERACEAE
Lactuca hirsuta Muhl. ex Nutt.
 hairy wild lettuce



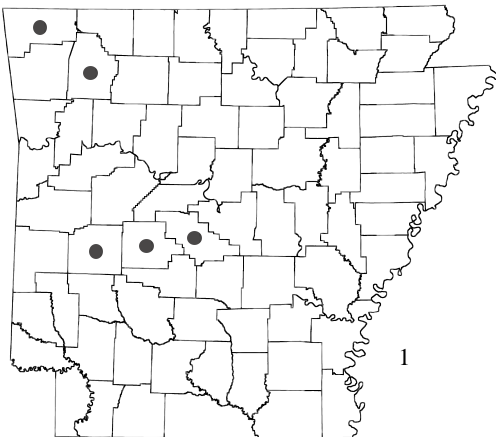
ASTERACEAE
Lactuca saligna L.
 willow-leaf wild lettuce



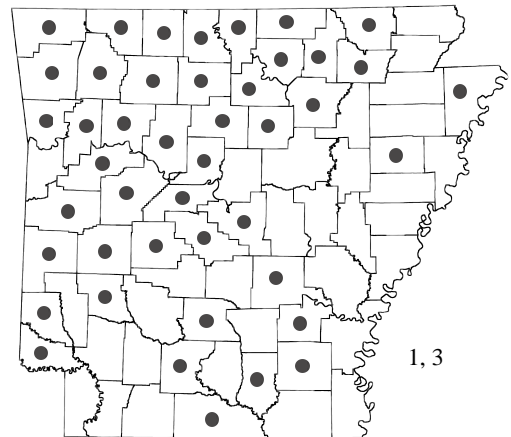
ASTERACEAE
Lactuca sativa L.
 garden lettuce



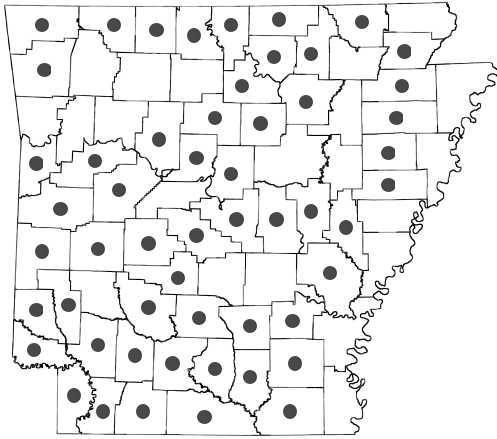
ASTERACEAE
Lactuca serriola L.
 prickly wild lettuce



ASTERACEAE
Lapsana communis L.
 nipplewort



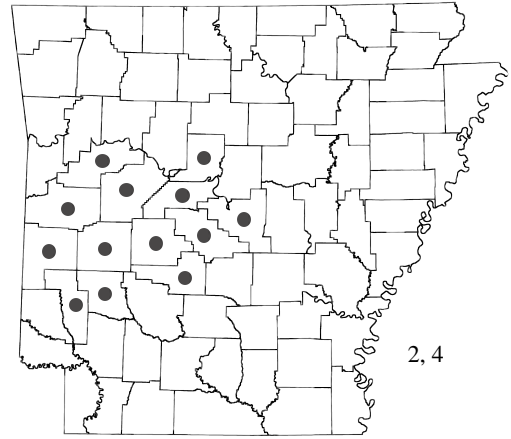
ASTERACEAE
Leucanthemum vulgare Lam.
 ox-eye daisy



ASTERACEAE

***Liatris aspera* Michx.**

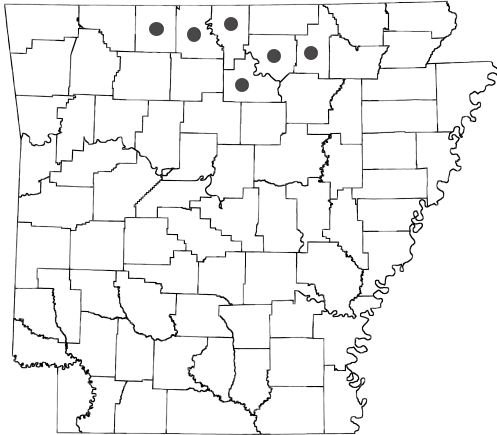
rough blazing-star, rough gayfeather



ASTERACEAE

***Liatris compacta* (Torr. & A.Gray) Rydb.**

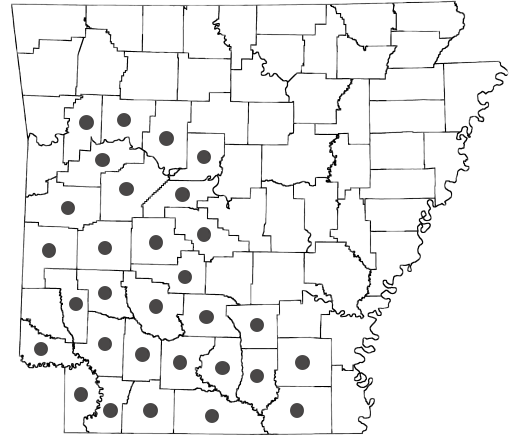
Ouachita blazing-star



ASTERACEAE

***Liatris cylindracea* Michx.**

barrel-head gayfeather

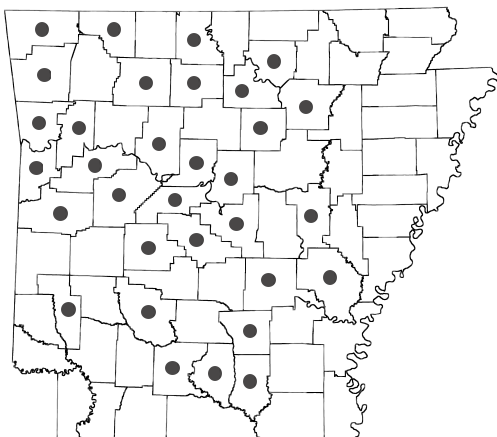


ASTERACEAE

***Liatris elegans* (Walter) Michx.**

var. *elegans*

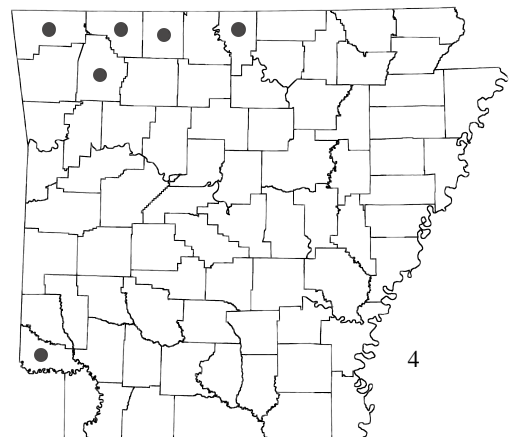
elegant gayfeather, pink-scale gayfeather



ASTERACEAE

***Liatris hirsuta* Rydb.**

hairy blazing-star, Rydberg's blazing-star

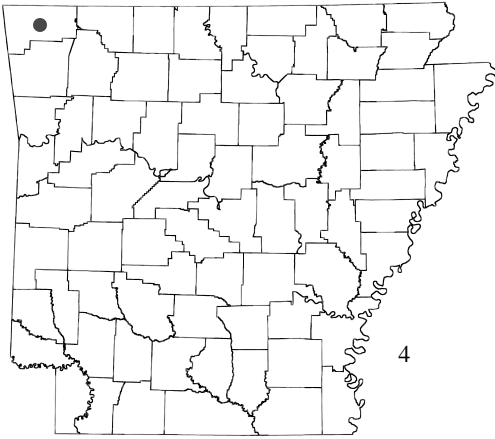


ASTERACEAE

***Liatris punctata* Hook.**

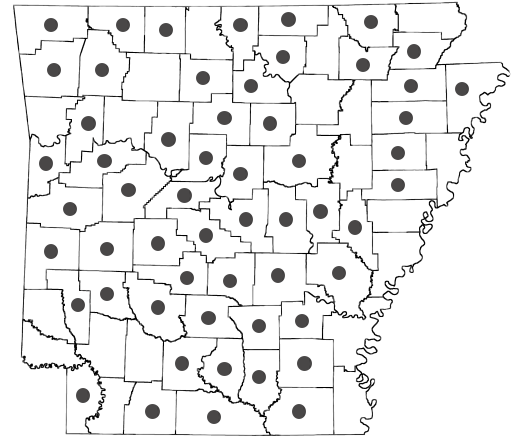
var. *mucronata* (DC.) B.L.Turner in B.L.Turner et al.

dotted gayfeather, dotted blazing-star



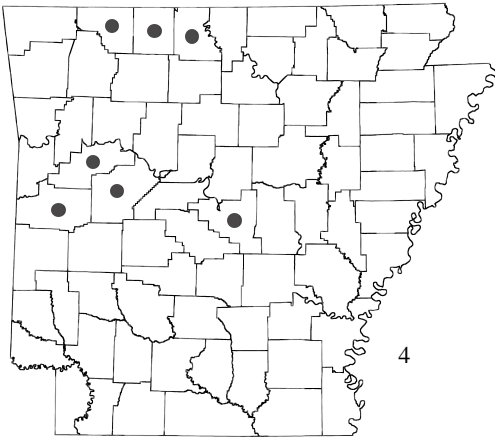
ASTERACEAE
Liatris punctata Hook.
var. punctata

bottle-brush gayfeather, bottle-brush blazing-star



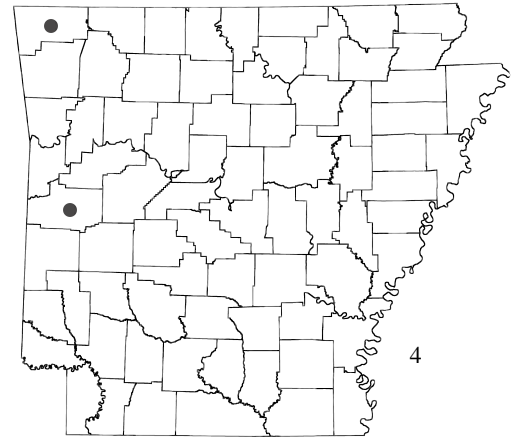
ASTERACEAE
Liatris pycnostachya Michx.
var. pycnostachya

prairie gayfeather, button snakeroot



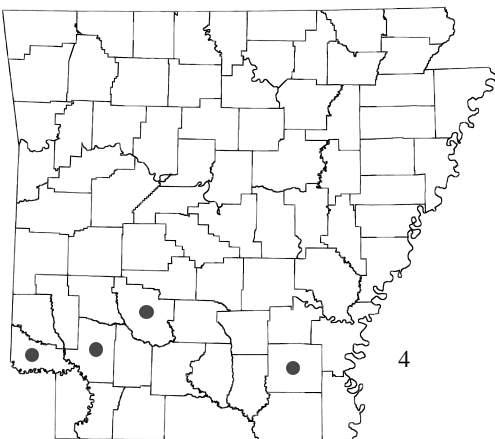
ASTERACEAE
Liatris scariosa (L.) Willd.
var. nieuwandii (Lunell) E.G.Voss

northern blazing-star



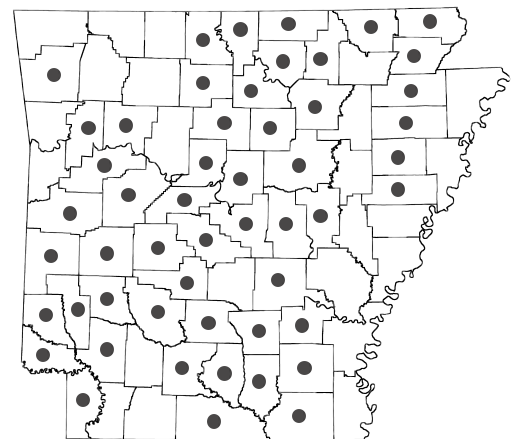
ASTERACEAE
Liatris squarrosa (L.) Michx.
var. glabrata (Rydb.) Gaiser

smooth scaly blazing-star



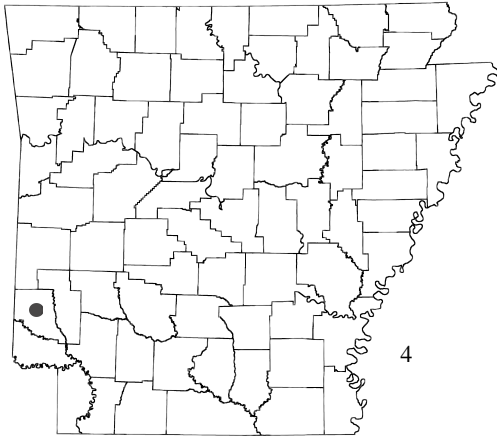
ASTERACEAE
Liatris squarrosa (L.) Michx.
var. squarrosa

hairy scaly blazing-star

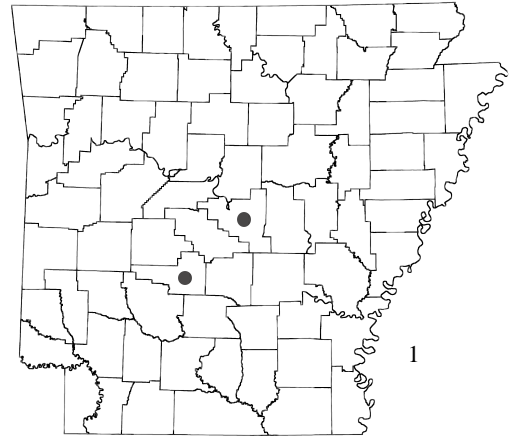


ASTERACEAE
Liatris squarrosa Michx.

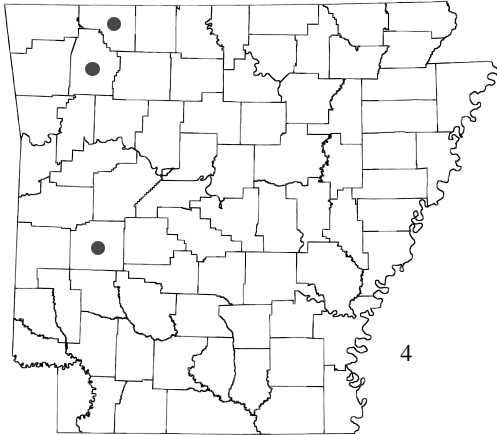
southern blazing-star



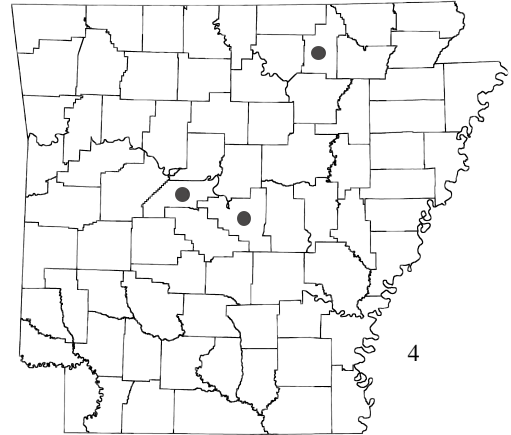
ASTERACEAE
***Lindheimera texana* A.Gray & Engelm.**
 Texas yellowstar, Lindheimer's daisy



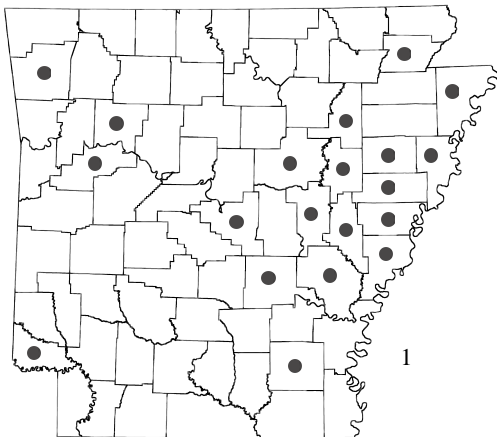
ASTERACEAE
***Lygodesmia juncea* (Pursh) D.Don ex Hook.**
 skeleton-plant



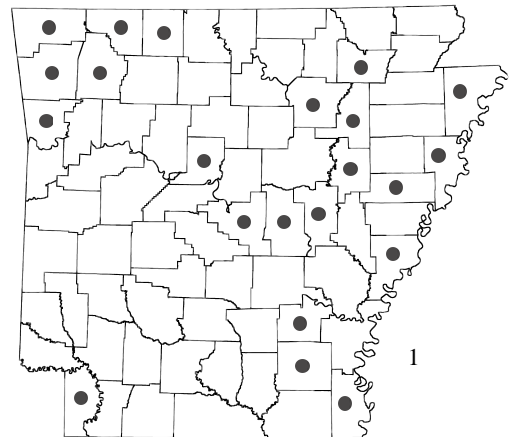
ASTERACEAE
***Marshallia caespitosa* Nutt. ex DC. in DC. & A.DC.**
var. *caespitosa*
 Barbara's-buttons



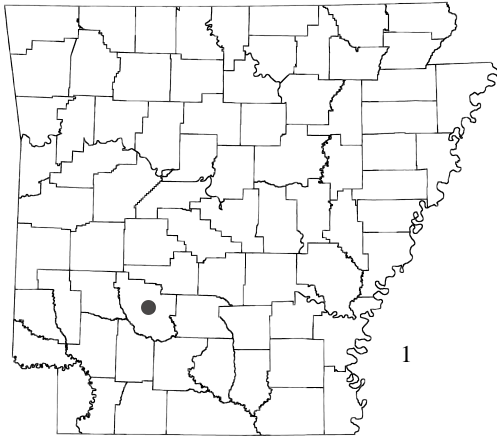
ASTERACEAE
***Marshallia caespitosa* Nutt. ex DC. in DC. & A.DC.**
var. *signata* Beadle & F.E.Boynton
 leafy Barbara's-buttons



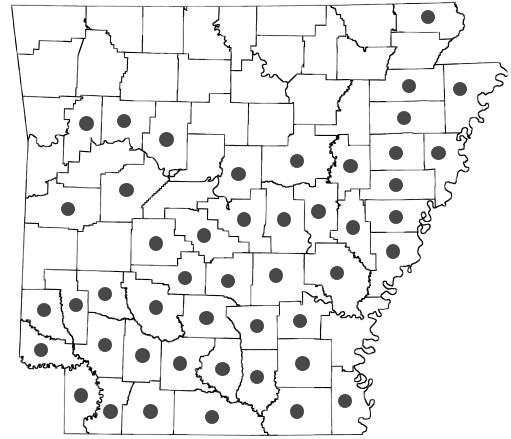
ASTERACEAE
***Matricaria chamomilla* L.**
 wild chamomile, German chamomile



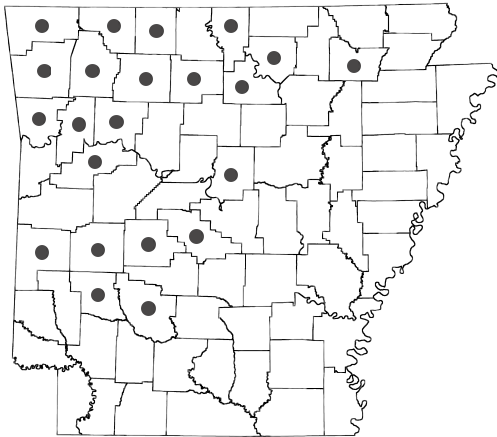
ASTERACEAE
***Matricaria discoidea* DC. in DC. & A.DC.**
 pineapple-weed



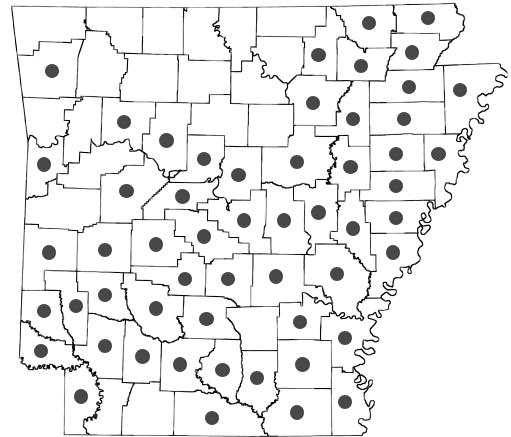
ASTERACEAE
Melampodium divaricatum (Rich.) DC. in DC. & A.DC.
 butter-daisy



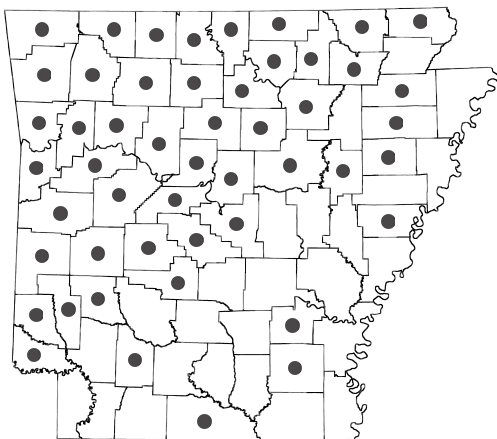
ASTERACEAE
Mikania scandens (L.) Willd.
 climbing hempweed



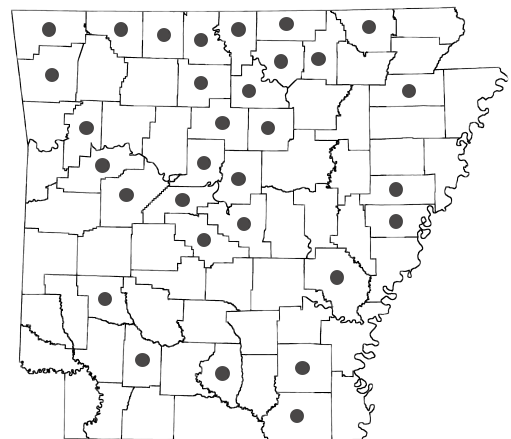
ASTERACEAE
Packera aurea (L.) Á.Löve & D.Löve
 golden ragwort, golden groundsel



ASTERACEAE
Packera glabella (Poir.) C.Jeffrey
 cress-leaf groundsel, butter-weed



ASTERACEAE
Packera obovata (Muhl. ex Willd.) W.A.Weber & Á.Löve
 round-leaf ragwort, round-leaf groundsel



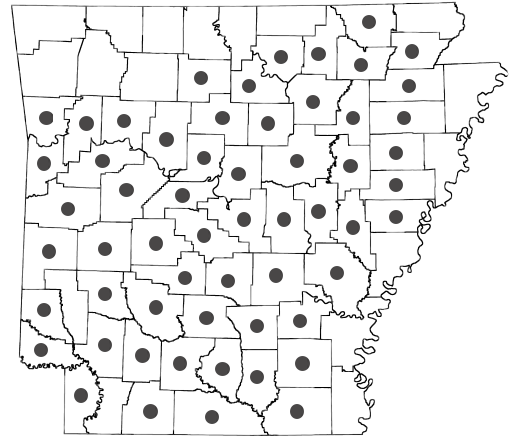
ASTERACEAE
Packera plattensis (Nutt.) W.A.Weber & Á.Löve
 prairie ragwort, prairie groundsel



ASTERACEAE

***Packera tampicana* (DC.) C. Jeffrey**

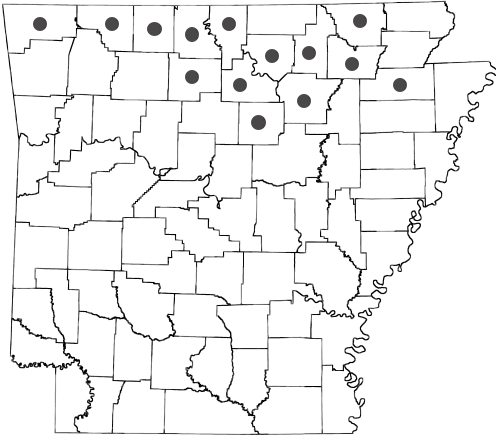
Great Plains ragwort, Great Plains groundsel



ASTERACEAE

***Packera tomentosa* (Michx.) C. Jeffrey**

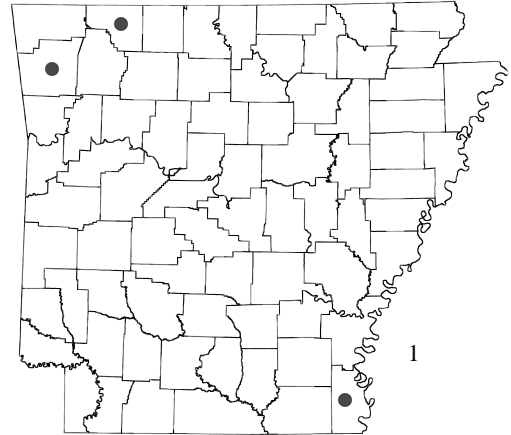
woolly ragwort, woolly groundsel



ASTERACEAE

***Palafoxia callosa* (Nutt.) Torr. & A. Gray**

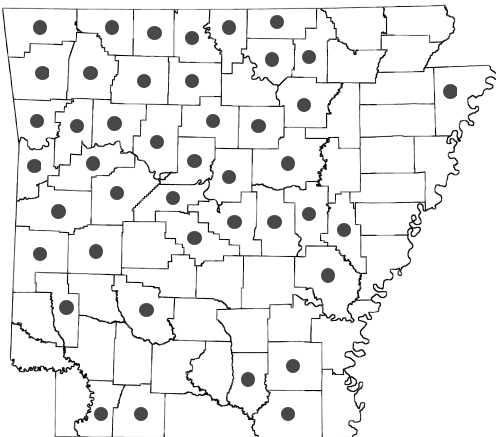
small palafoxia



ASTERACEAE

***Parthenium hysterophorus* L.**

Santa Maria feverfew



ASTERACEAE

***Parthenium integrifolium* L.**

wild quinine, American feverfew

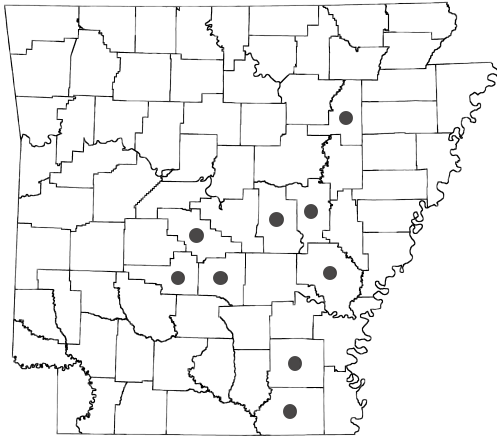


ASTERACEAE

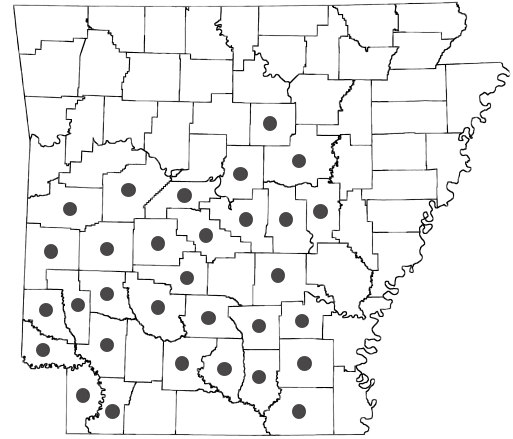
***Pityopsis graminifolia* (Michx.) Nutt.**

var. *graminifolia*

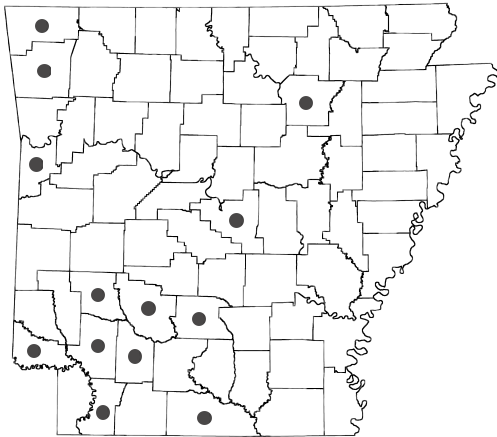
grass-leaf golden-aster



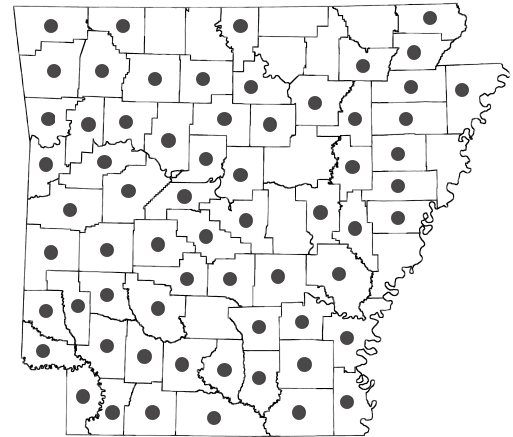
ASTERACEAE
Pityopsis graminifolia (Michx.) Nutt.
var. latifolia (Fernald) Semple & F.D.Bowers
 grass-leaf golden-aster



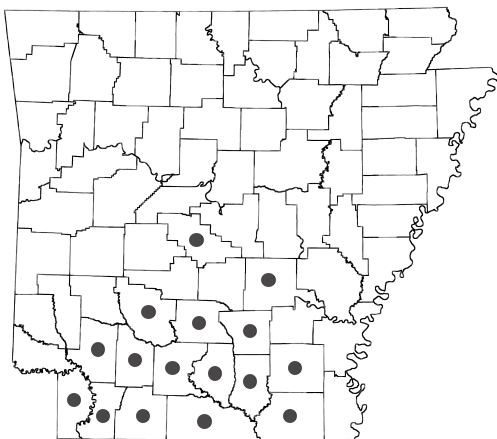
ASTERACEAE
Pityopsis graminifolia (Michx.) Nutt.
var. tenuifolia (Torr.) Semple & F.D.Bowers
 grass-leaf golden-aster



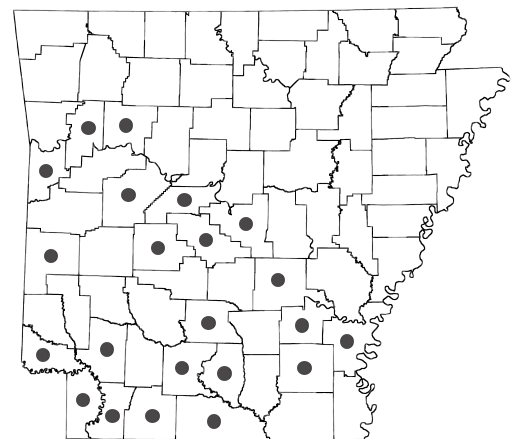
ASTERACEAE
Plectocephalus americanus (Nutt.) D.Don in Sweet
 American basket-flower



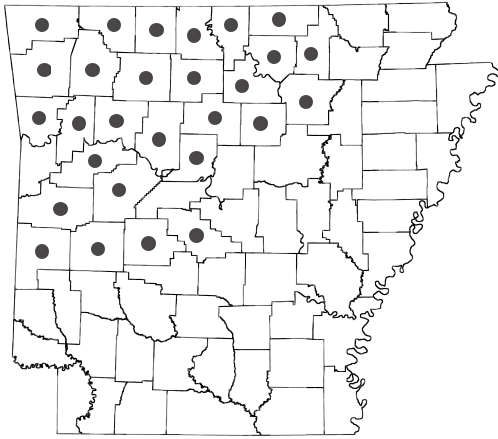
ASTERACEAE
Pluchea camphorata (L.) DC. in DC. & A.DC.
 camphorweed, stinkweed



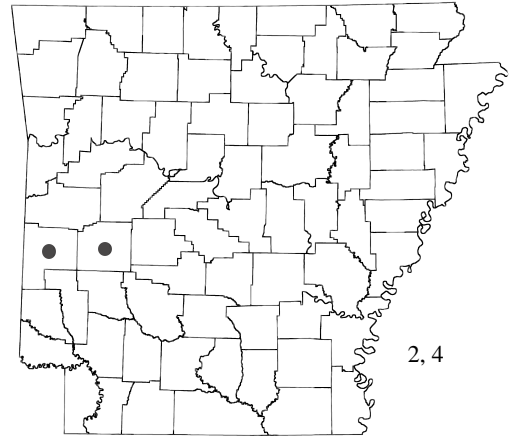
ASTERACEAE
Pluchea foetida (L.) DC. in DC. & A.DC.
 stinking camphorweed



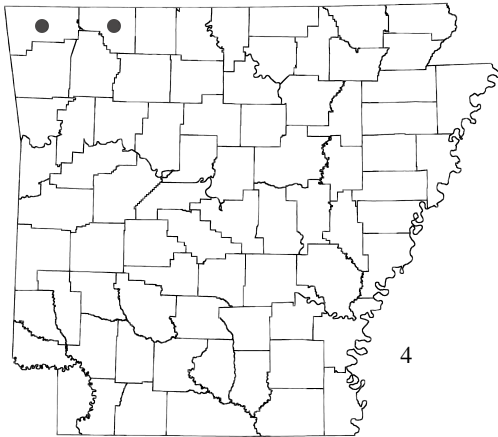
ASTERACEAE
Pluchea odorata (L.) Cass. in F.Cuvier
var. odorata
 sweetscent



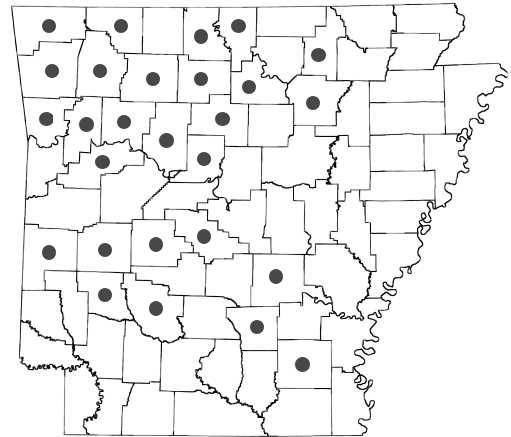
ASTERACEAE
Polymnia canadensis L.
 leafcup, white leafcup



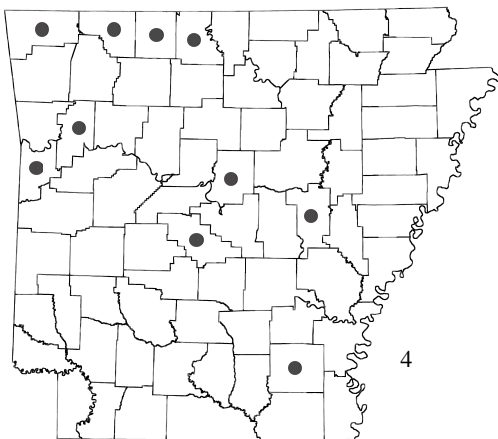
ASTERACEAE
Polymnia cossatotensis Pittman & V.M.Bates
 Cossatot leafcup



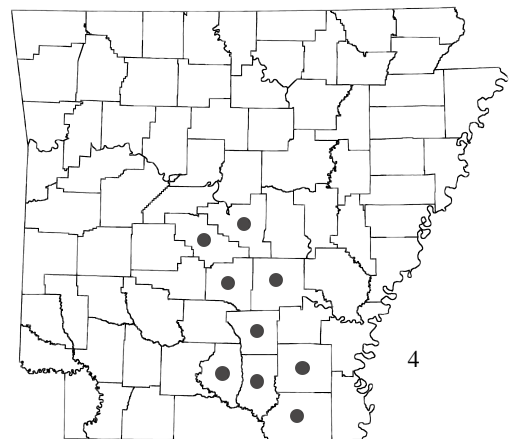
ASTERACEAE
Prenanthes alba L.
 white rattlesnake-root



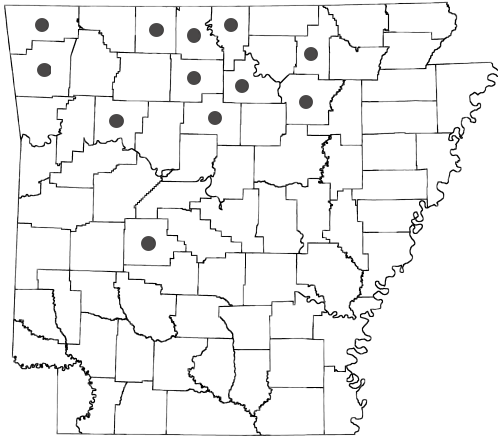
ASTERACEAE
Prenanthes altissima L.
 tall rattlesnake-root



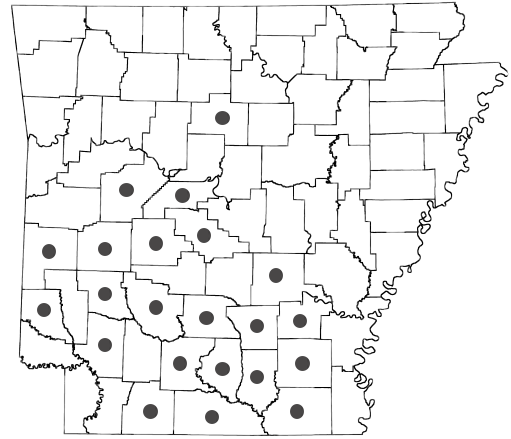
ASTERACEAE
Prenanthes aspera Michx.
 prairie rattlesnake-root, rough rattlesnake-root



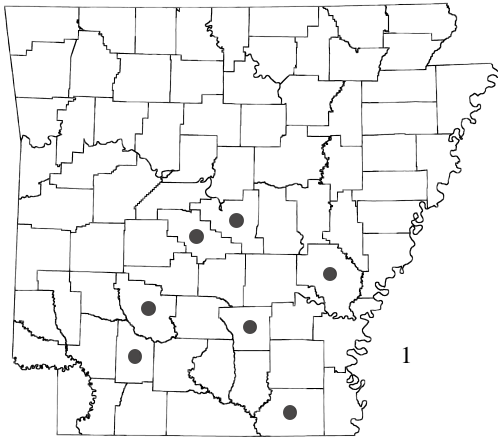
ASTERACEAE
Prenanthes barbata (Torr. & A.Gray) Milstead ex Cronquist
 barbed rattlesnake-root



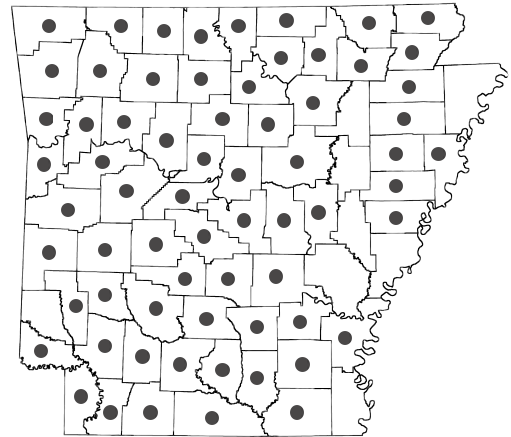
ASTERACEAE
***Prenanthes crepidinea* Michx.**
 nodding rattlesnake-root



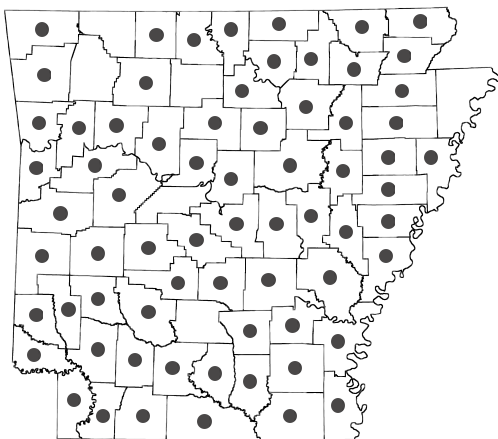
ASTERACEAE
***Pseudognaphalium helleri* (Britton) Anderb.**
 rabbit-tobacco



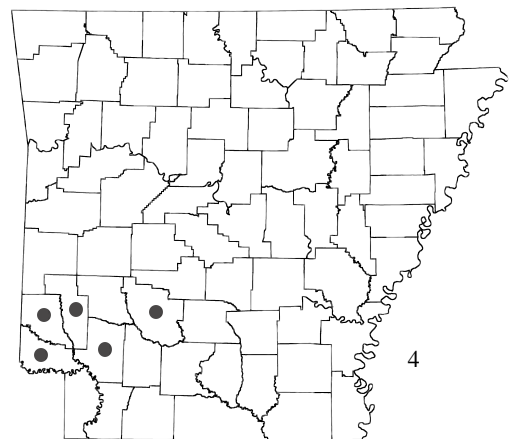
ASTERACEAE
***Pseudognaphalium luteoalbum* (L.) Hilliard & B.L.Burt**
 red-tip rabbit-tobacco



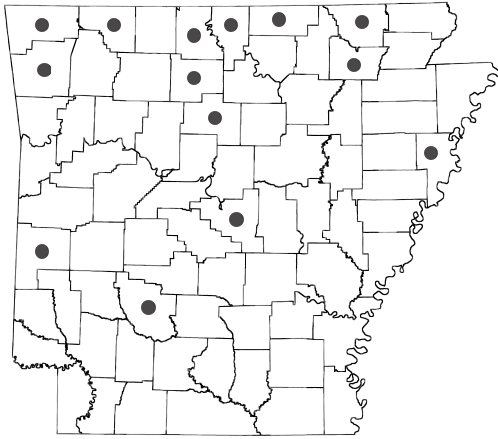
ASTERACEAE
***Pseudognaphalium obtusifolium* (L.) Hilliard & B.L.Burt**
 rabbit-tobacco, sweet everlasting



ASTERACEAE
***Pyrrhappus carolinianus* (Walter) DC. in DC. & A.DC.**
 false dandelion



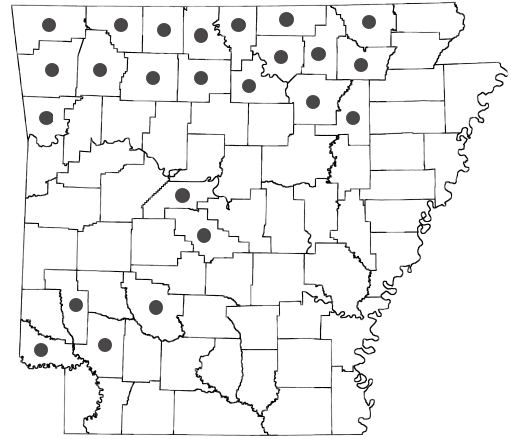
ASTERACEAE
***Pyrrhappus pauciflorus* (D. Don) DC. in DC. & A.DC.**
 few-flower false dandelion



ASTERACEAE

Ratibida columnifera (Nutt.) Wooton & Standl.

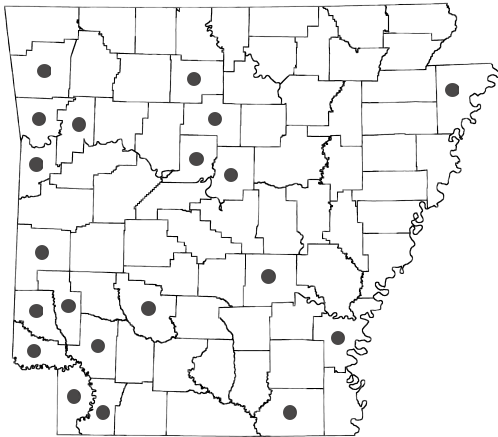
Mexican-hat, long-head coneflower



ASTERACEAE

Ratibida pinnata (Vent.) Barnhart

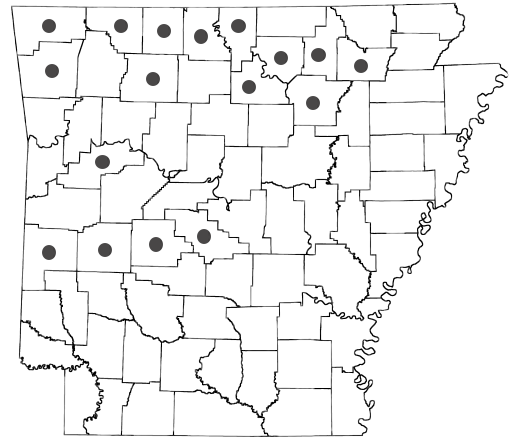
gray-head coneflower, drooping coneflower



ASTERACEAE

Rudbeckia amplexicaulis Vahl

claspng coneflower

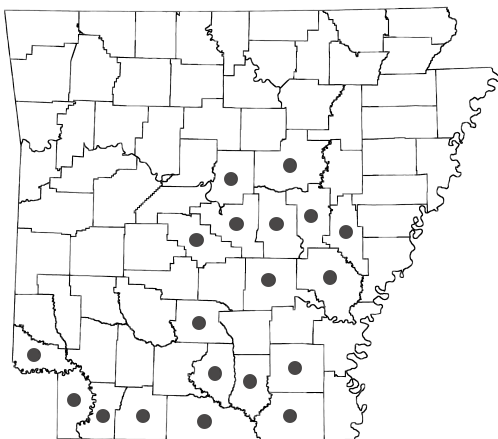


ASTERACEAE

Rudbeckia fulgida Aiton

orange coneflower

See Appendix I for infraspecific taxa and species status.

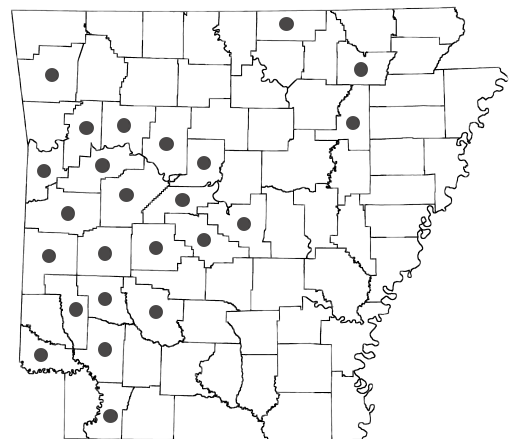


ASTERACEAE

Rudbeckia grandiflora (Sweet) C.C.Gmel. ex DC. in DC. & A.DC.

var. alismifolia (Torr. & A.Gray) Cronquist

large coneflower, rough coneflower

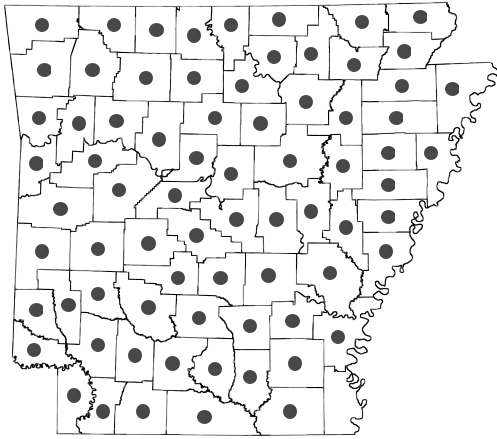


ASTERACEAE

Rudbeckia grandiflora (Sweet) C.C.Gmel. ex DC. in DC. & A.DC.

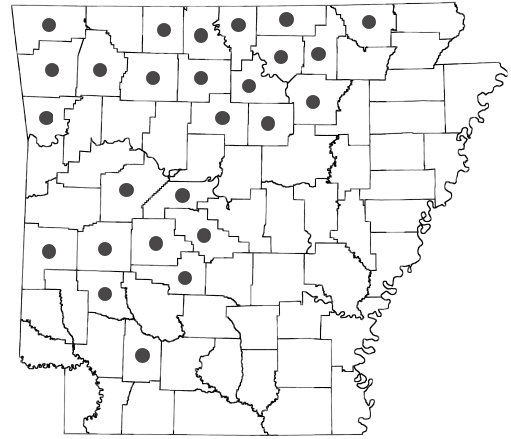
var. grandiflora

large coneflower, rough coneflower

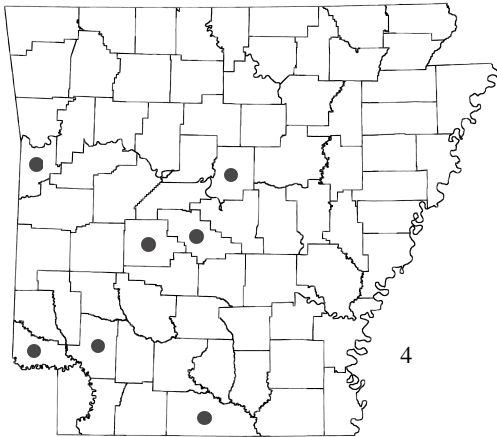


ASTERACEAE
Rudbeckia hirta L.
 black-eyed Susan

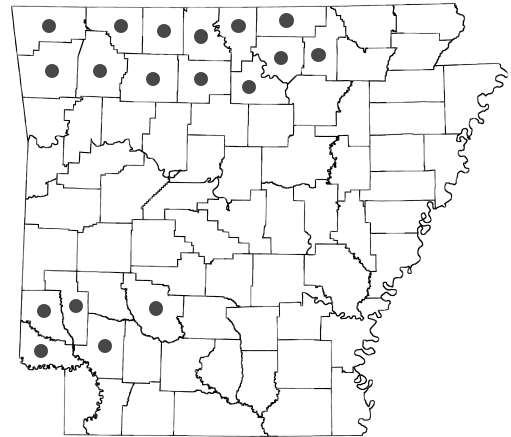
See *Appendix I* for infraspecific taxa and species status.



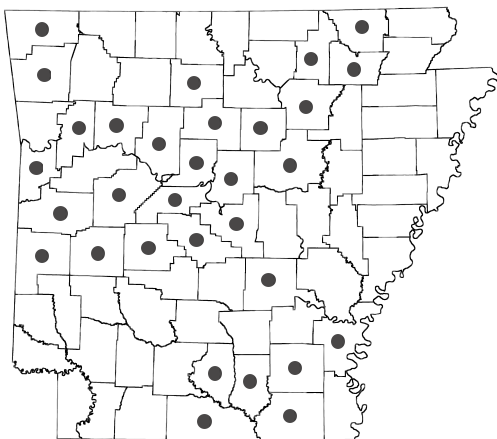
ASTERACEAE
Rudbeckia laciniata L.
var. laciniata
 wild goldenglow



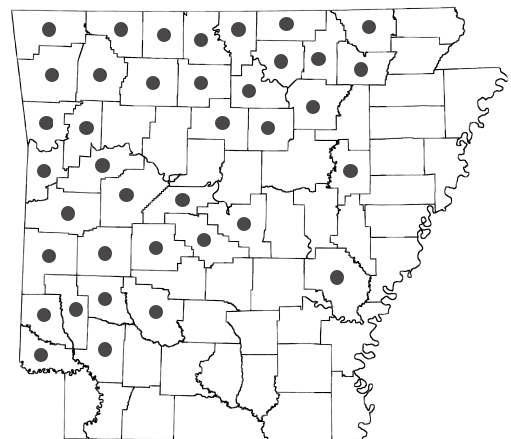
ASTERACEAE
Rudbeckia maxima Nutt.
 great coneflower, giant coneflower



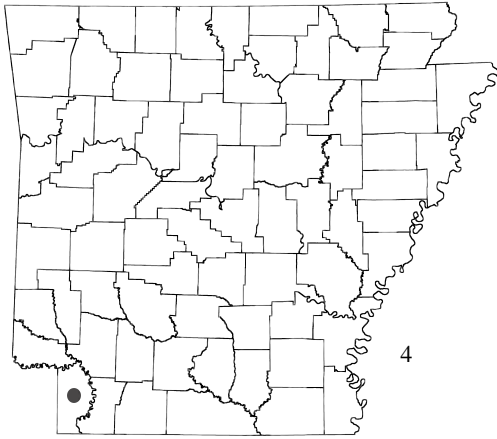
ASTERACEAE
Rudbeckia missouriensis Engelm. ex C.L. Boynton & Beadle
 Missouri coneflower



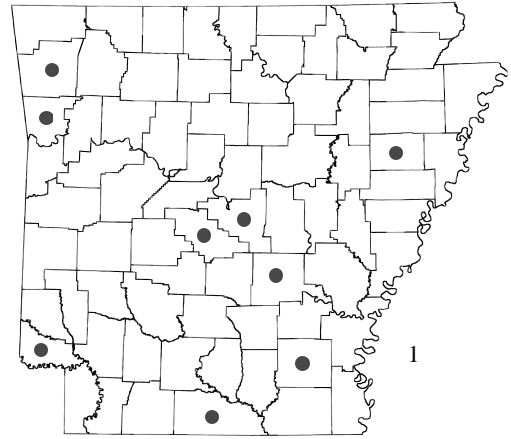
ASTERACEAE
Rudbeckia subtomentosa Pursh
 sweet coneflower



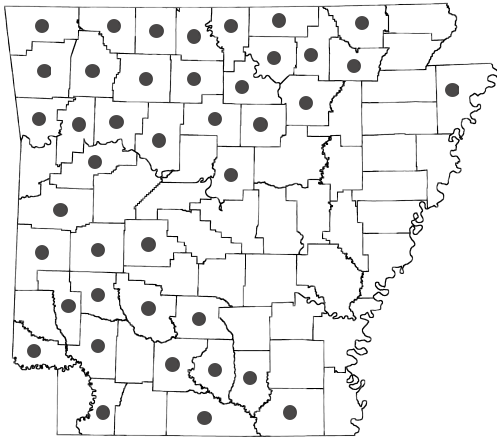
ASTERACEAE
Rudbeckia triloba L.
var. triloba
 brown-eyed Susan



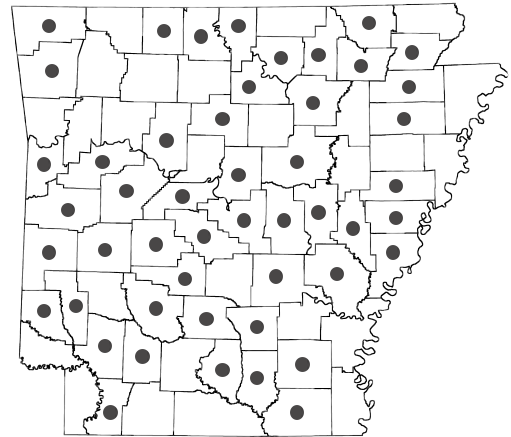
ASTERACEAE
Senecio ampullaceus Hook.
Texas ragwort, Texas groundsel



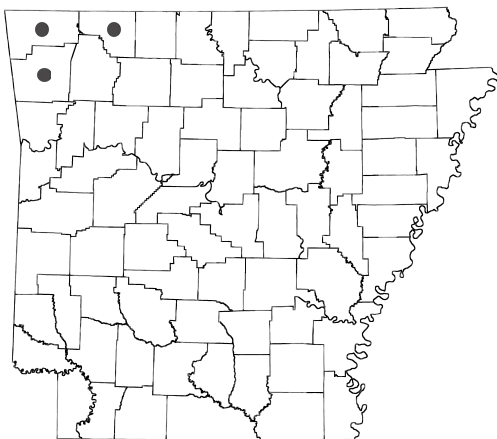
ASTERACEAE
Senecio vulgaris L.
common groundsel



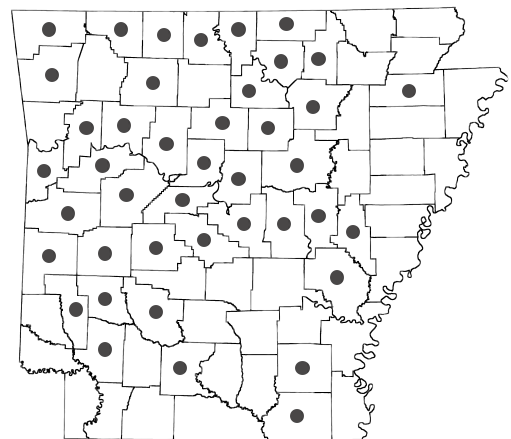
ASTERACEAE
Silphium asteriscus L.
var. asteriscus
starry rosinweed



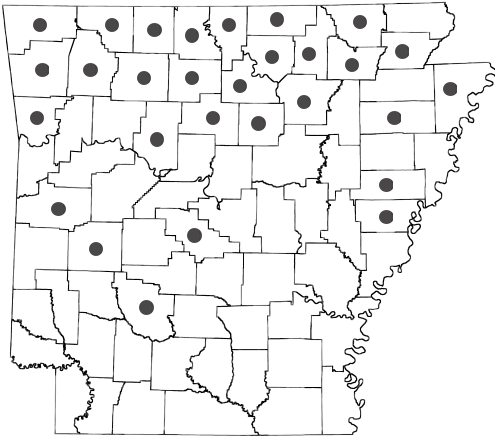
ASTERACEAE
Silphium integrifolium Michx.
var. integrifolium
rosinweed



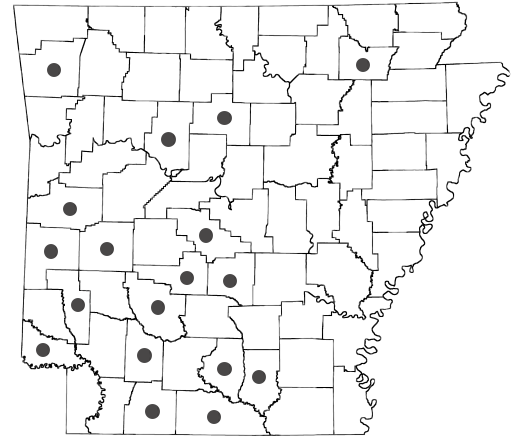
ASTERACEAE
Silphium integrifolium Michx.
var. laeve Torr. & A.Gray
rosinweed



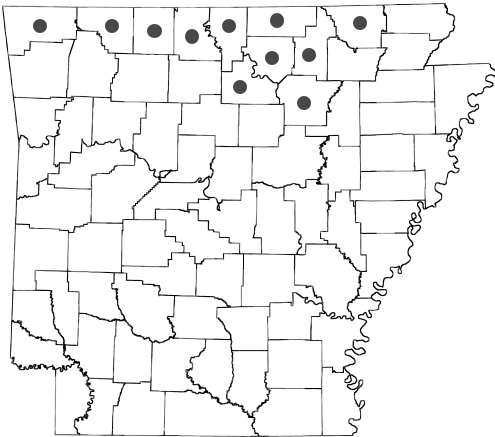
ASTERACEAE
Silphium laciniatum L.
compass-plant



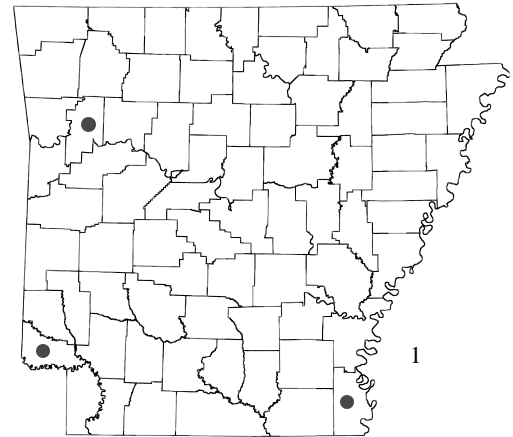
ASTERACEAE
Silphium perfoliatum L.
var. perfoliatum
 cup-plant



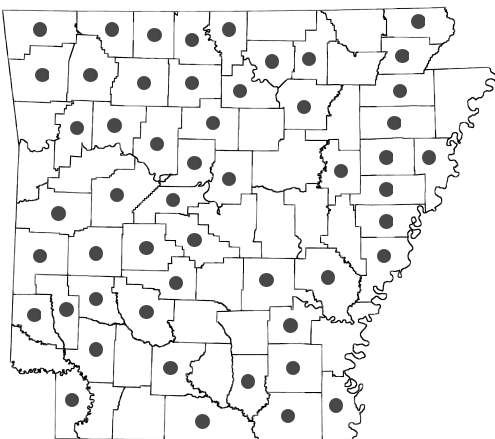
ASTERACEAE
Silphium radula Nutt.
var. radula
 rosinweed



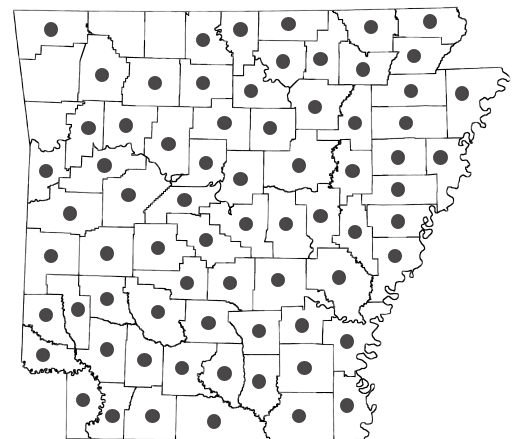
ASTERACEAE
Silphium terebinthinaceum Jacq.
var. terebinthinaceum
 prairie-dock



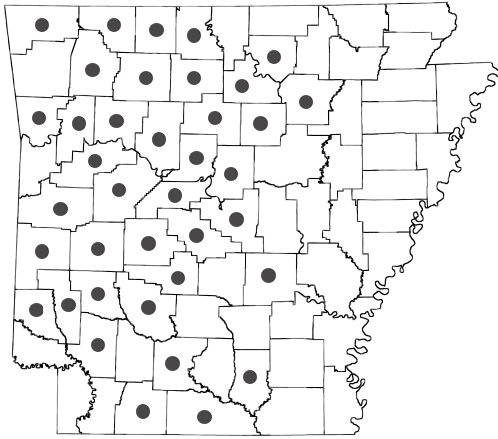
ASTERACEAE
Silybum marianum (L.) Gaertn.
 blessed milk-thistle



ASTERACEAE
Smallanthus uvedalium (L.) Mack. ex Small
 bear's-foot, yellow leafcup



ASTERACEAE
Solidago altissima L.
subsp. altissima
 tall goldenrod



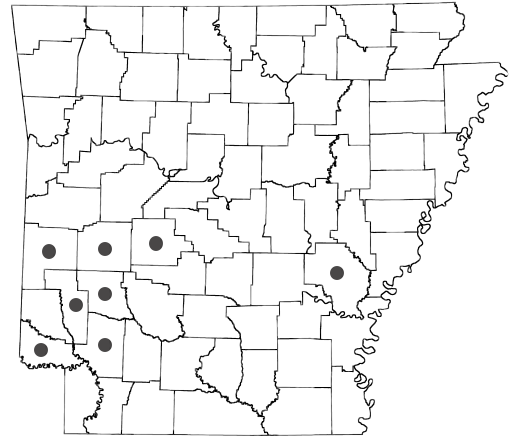
ASTERACEAE

Solidago arguta Aiton

subsp. caroliniana (A.Gray) G.H.Morton var. **boottii** (Hook.) E.J.

Palmer & Steyer.

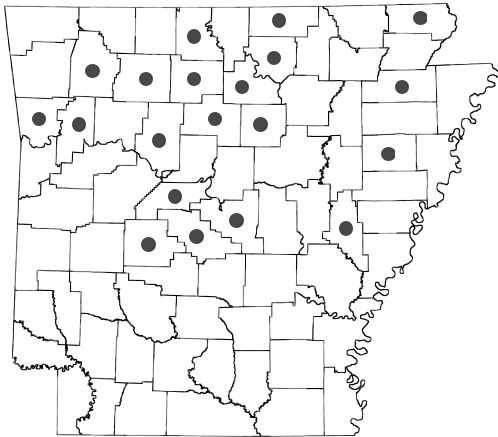
Boott's goldenrod



ASTERACEAE

Solidago auriculata Shuttlew. ex S.F.Blake

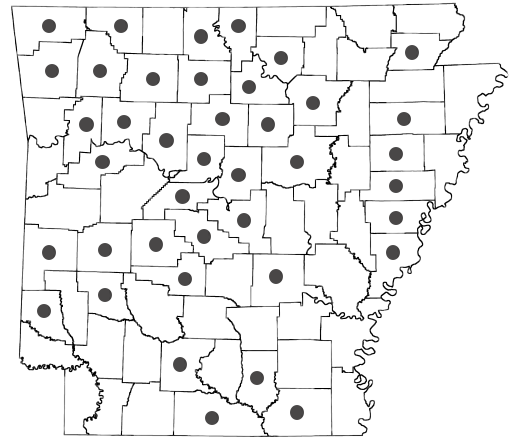
clasping-leaf goldenrod



ASTERACEAE

Solidago buckleyi Torr. & A.Gray

Buckley's goldenrod

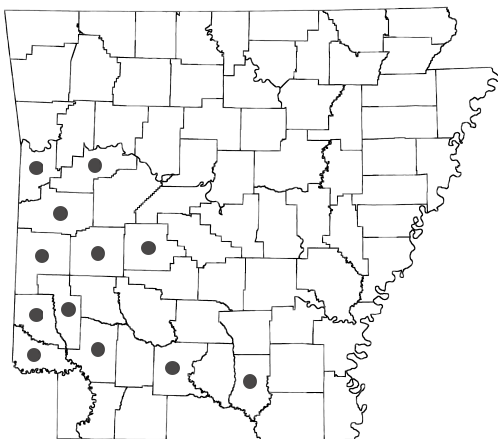


ASTERACEAE

Solidago caesia L.

wreath goldenrod, blue-stem goldenrod

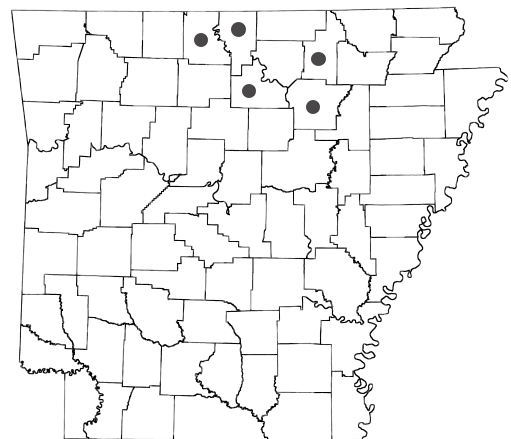
See *Appendix I* for infraspecific taxa and species status.



ASTERACEAE

Solidago delicatula Small

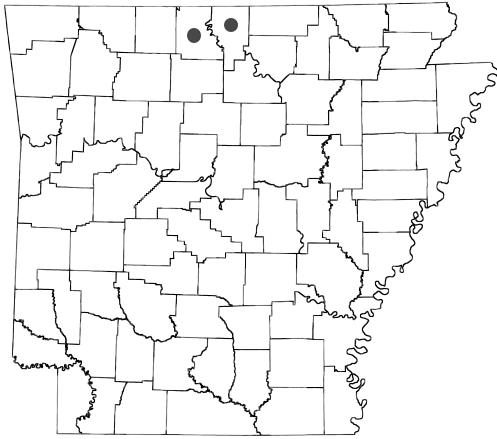
smooth elm-leaf goldenrod



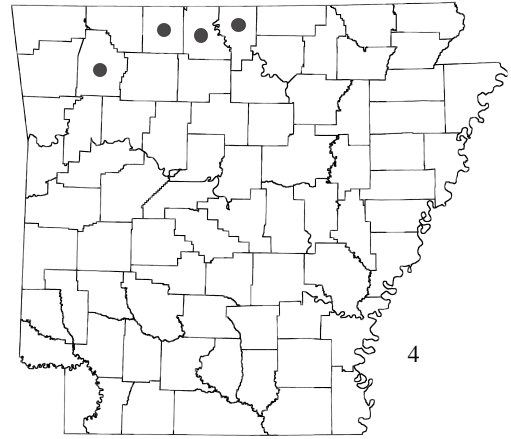
ASTERACEAE

Solidago drummondii Torr. & A.Gray

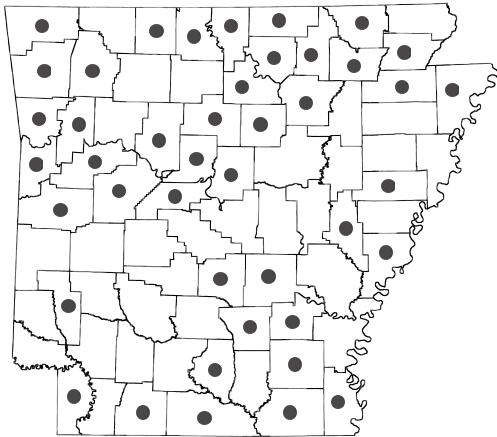
Drummond's goldenrod



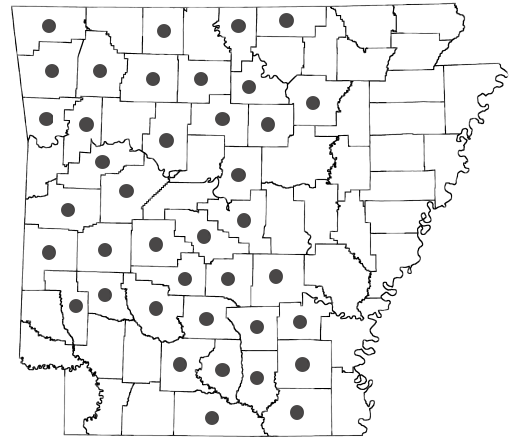
ASTERACEAE
Solidago flexicaulis L.
 zigzag goldenrod, broad-leaf goldenrod



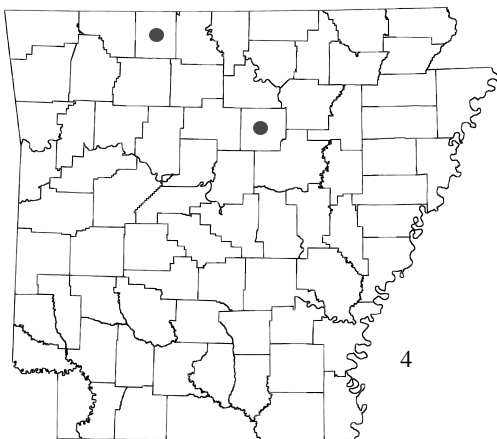
ASTERACEAE
Solidago gattingeri Chapm. ex A.Gray in A.Gray et al.
 Gattinger's goldenrod



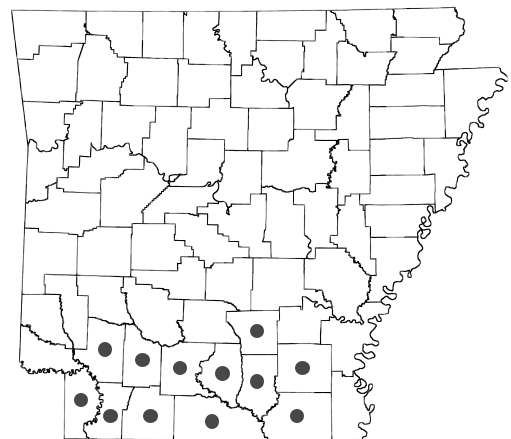
ASTERACEAE
Solidago gigantea Aiton
 late goldenrod, giant goldenrod



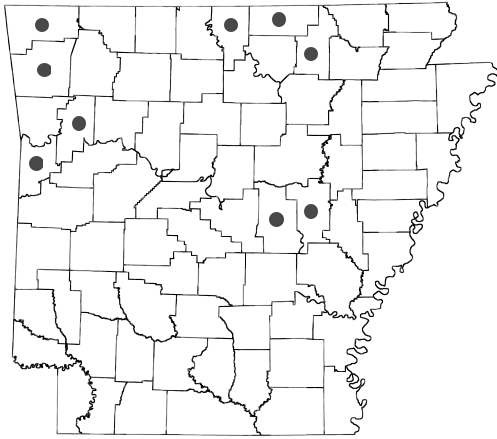
ASTERACEAE
Solidago hispida Muhl. ex Willd.
 hairy goldenrod



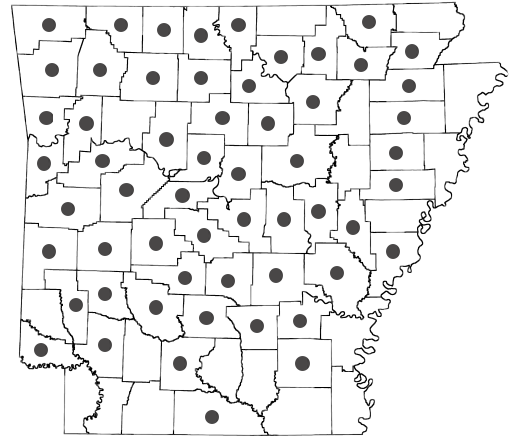
ASTERACEAE
Solidago juncea Aiton
 early goldenrod



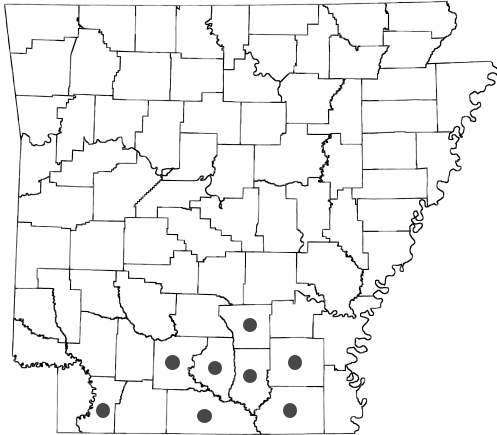
ASTERACEAE
Solidago ludoviciana (A.Gray) Small
 Louisiana goldenrod



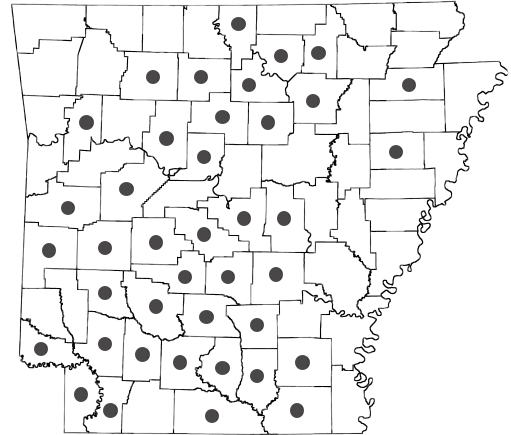
ASTERACEAE
Solidago missouriensis Nutt.
 Missouri goldenrod



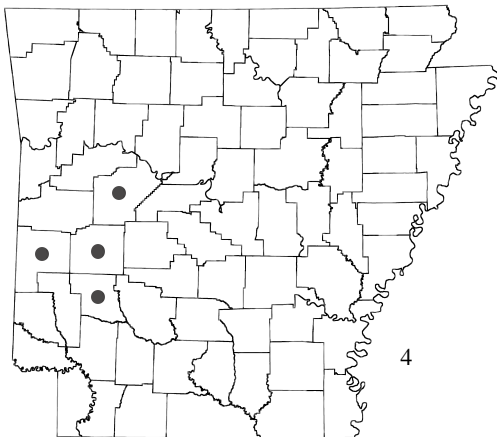
ASTERACEAE
Solidago nemoralis Aiton
 oldfield goldenrod, gray goldenrod
 See *Appendix I* for infraspecific taxa and species status.



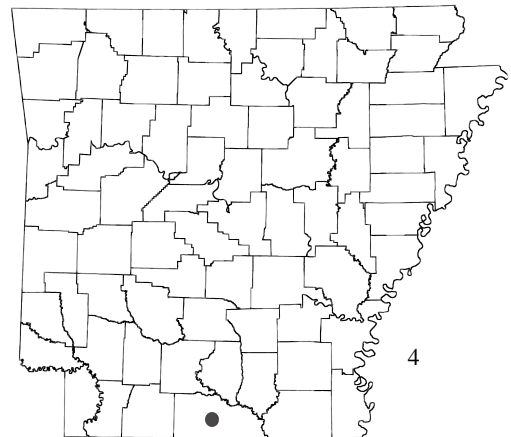
ASTERACEAE
Solidago nitida Torr. & A.Gray
 shiny goldenrod



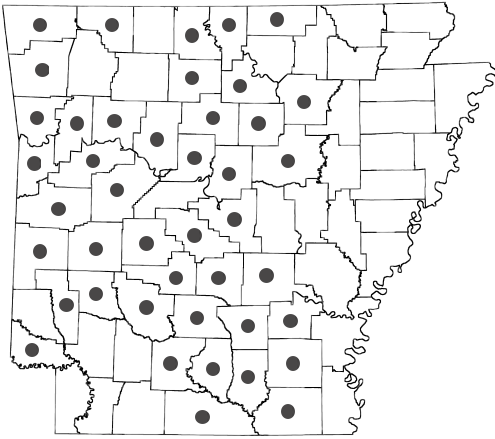
ASTERACEAE
Solidago odora Aiton
subsp. odora
 fragrant goldenrod, sweet goldenrod



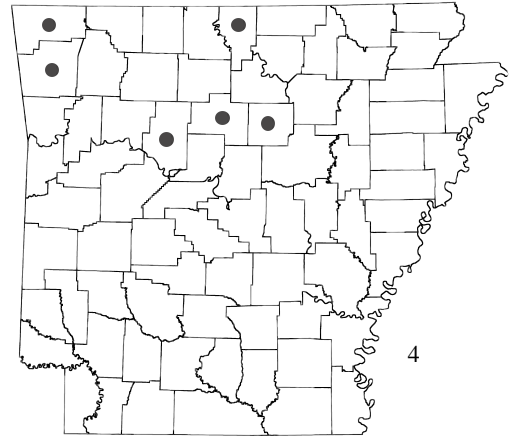
ASTERACEAE
Solidago ouachitensis C.E.S.Taylor & R.J.Taylor
 Ouachita goldenrod



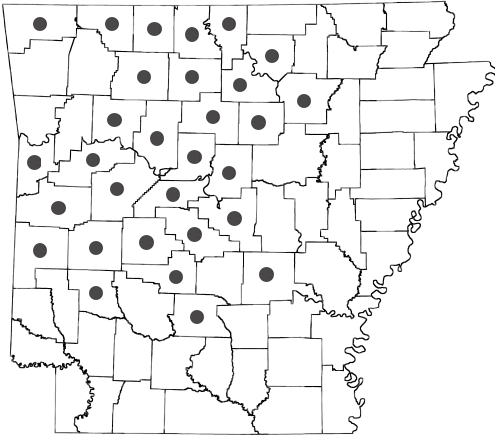
ASTERACEAE
Solidago patula Muhl. ex Willd.
subsp. strictula (Torr. & A.Gray) Semple
 swamp goldenrod, rough-leaf goldenrod



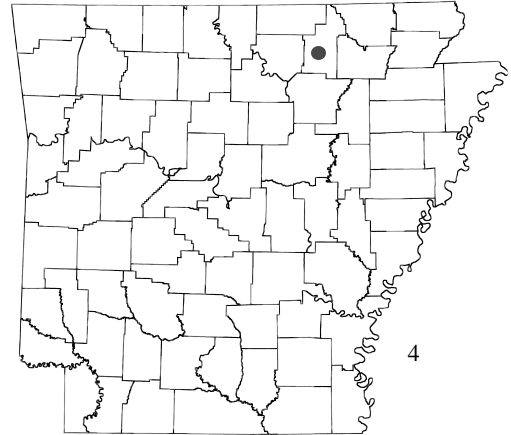
ASTERACEAE
Solidago petiolaris Aiton
 goldenrod



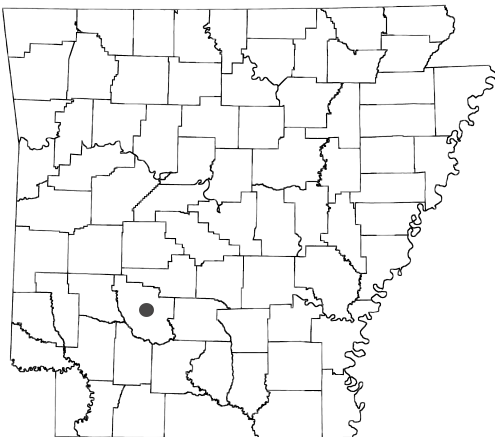
ASTERACEAE
Solidago ptarmicoides (Torr. & A.Gray) B.Boivin
 white flat-top goldenrod, white upland-aster



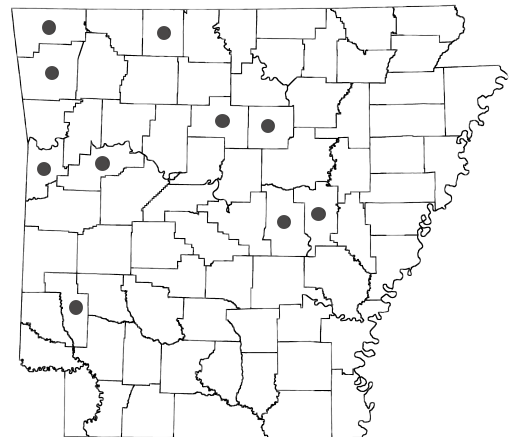
ASTERACEAE
Solidago radula Nutt.
 rough goldenrod



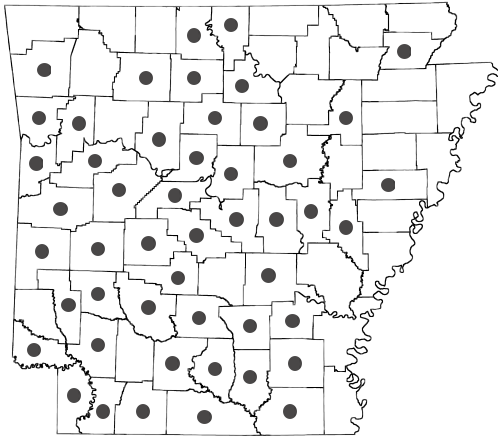
ASTERACEAE
Solidago riddellii Frank
 Riddell's goldenrod



ASTERACEAE
Solidago rigida L.
subsp. glabrata (E.L.Braun) S.B.Heard & Semple
 stiff goldenrod

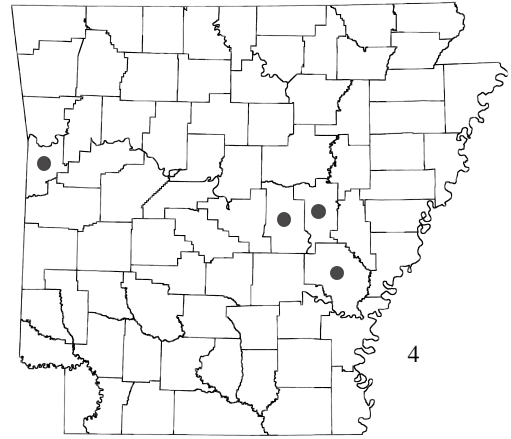


ASTERACEAE
Solidago rigida L.
subsp. rigida
 stiff goldenrod



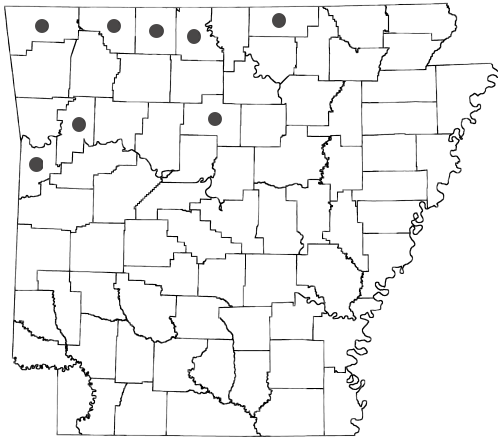
ASTERACEAE
***Solidago rugosa* Mill.**

wrinkle-leaf goldenrod, rough-leaf goldenrod, rough-stem goldenrod
See *Appendix I* for infraspecific taxa and species status.

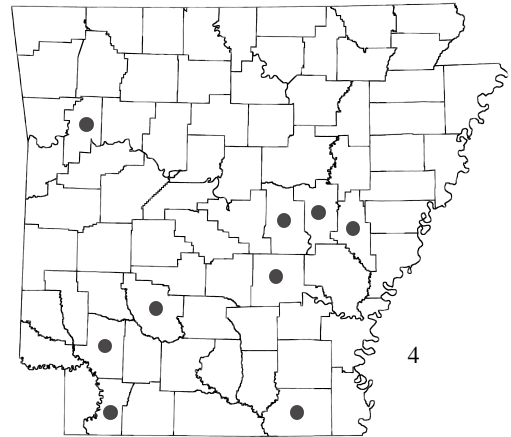


ASTERACEAE
***Solidago speciosa* Nutt.**

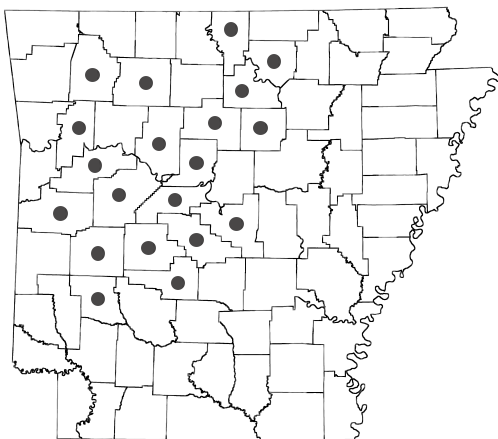
subsp. *speciosa* var. *rigidiuscula* Torr. & A.Gray
narrow-leaf showy goldenrod



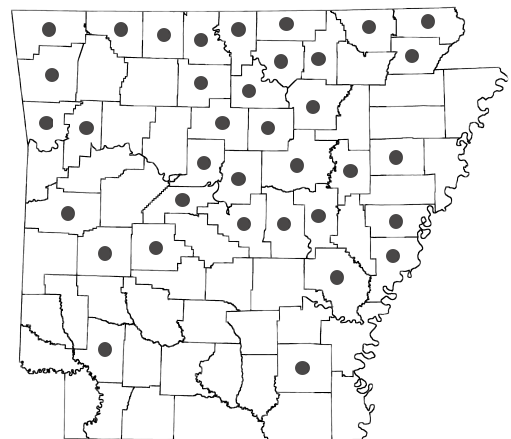
ASTERACEAE
***Solidago speciosa* Nutt.**
subsp. *speciosa* var. *speciosa*
showy goldenrod



ASTERACEAE
***Solidago tortifolia* Elliott**
twist-leaf goldenrod



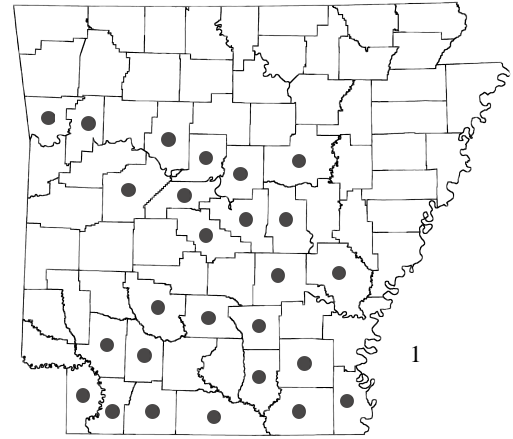
ASTERACEAE
***Solidago ulmifolia* Muhl. ex Willd.**
var. *palmeri* Cronquist
Palmer's elm-leaf goldenrod



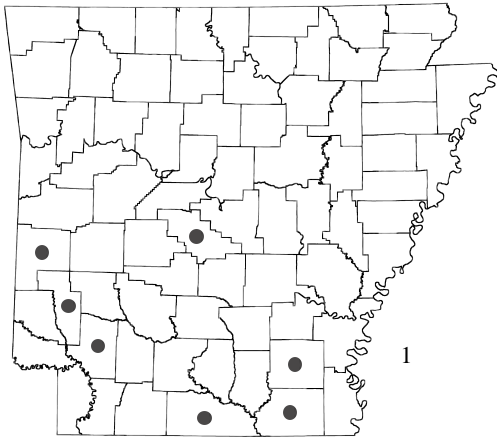
ASTERACEAE
***Solidago ulmifolia* Muhl. ex Willd.**
var. *ulmifolia*
elm-leaf goldenrod



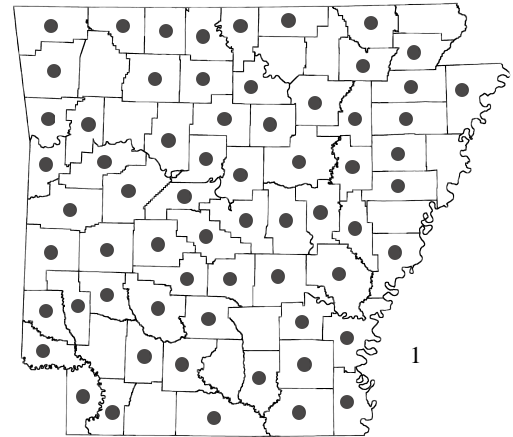
ASTERACEAE
Soliva anthemifolia (Juss.) Sweet
 button burweed



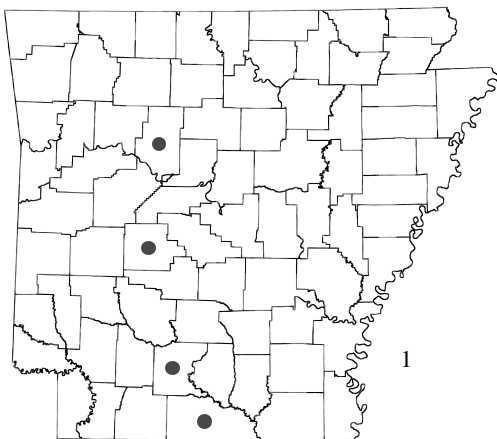
ASTERACEAE
Soliva sessilis Ruiz & Pav.
 lawn burweed, sticker-bur



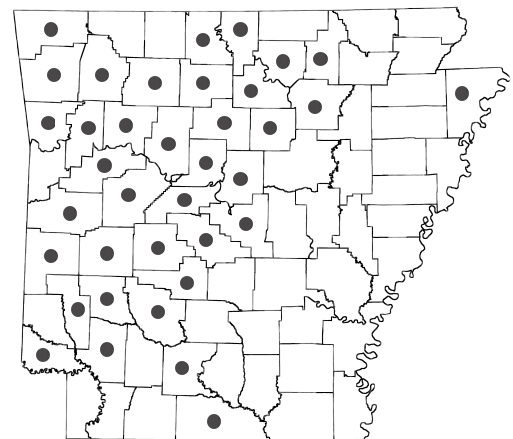
ASTERACEAE
Soliva stolonifera (Brot.) Sweet
 carpet burweed, sticker-bur



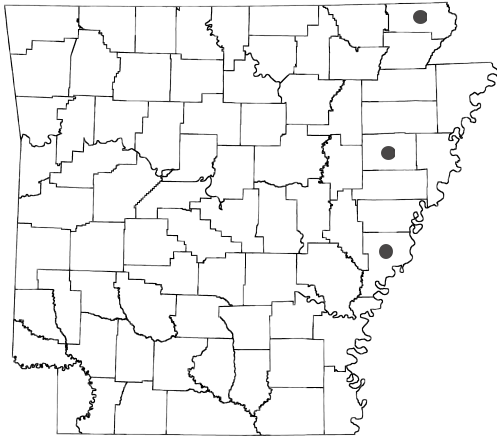
ASTERACEAE
Sonchus asper (L.) Hill
 spiny sow-thistle



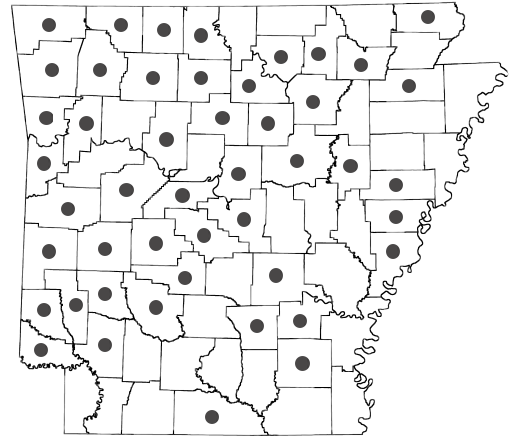
ASTERACEAE
Sonchus oleraceus L.
 sow-thistle



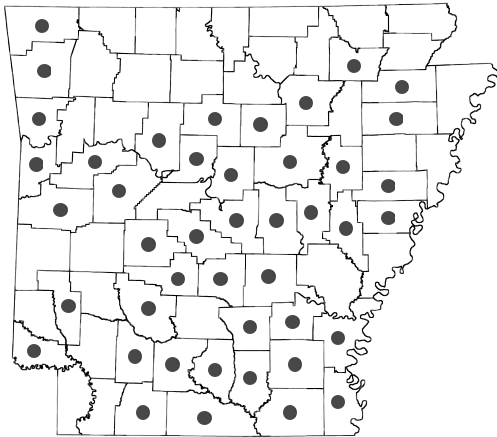
ASTERACEAE
Symphyotrichum anomalum (Engelm. ex Torr. & A.Gray) G.L.
Nesom
 aster



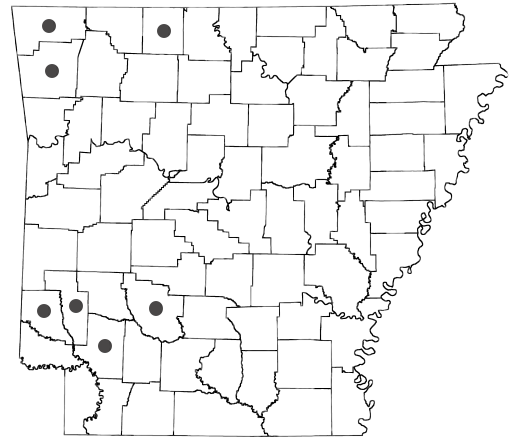
ASTERACEAE
***Symphotrichum cordifolium* (L.) G.L.Nesom**
 blue wood aster



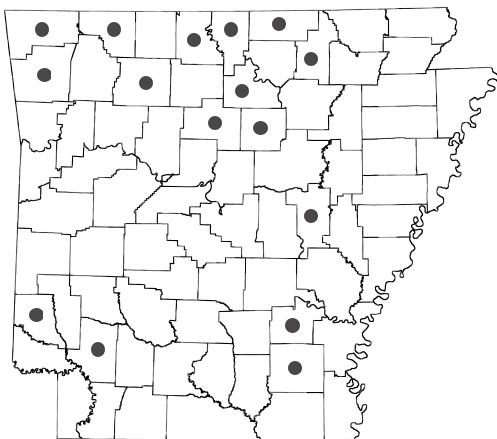
ASTERACEAE
***Symphotrichum drummondii* (Lindl.) G.L.Nesom**
 blue wood aster, Drummond's aster
 See *Appendix I* for infraspecific taxa and species status.



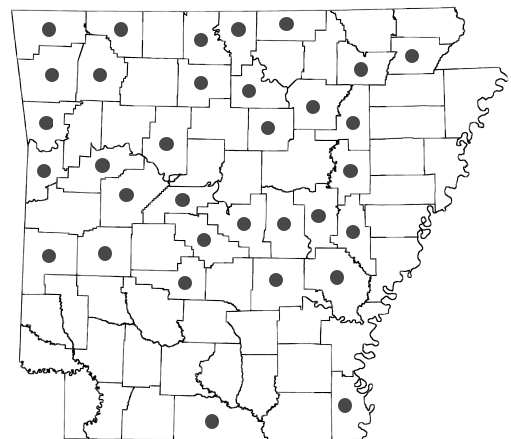
ASTERACEAE
***Symphotrichum dumosum* (L.) G.L.Nesom**
 aster



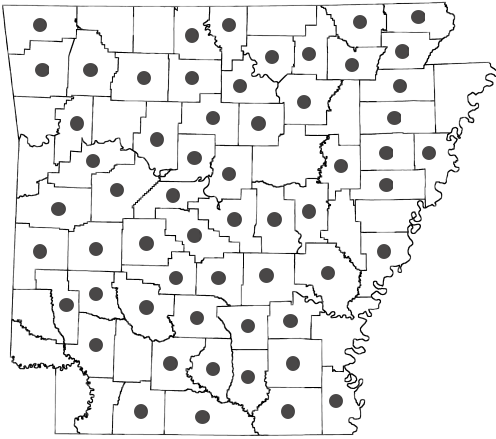
ASTERACEAE
***Symphotrichum ericoides* (L.) G.L.Nesom**
var. ericoides
 white heath aster, wreath aster



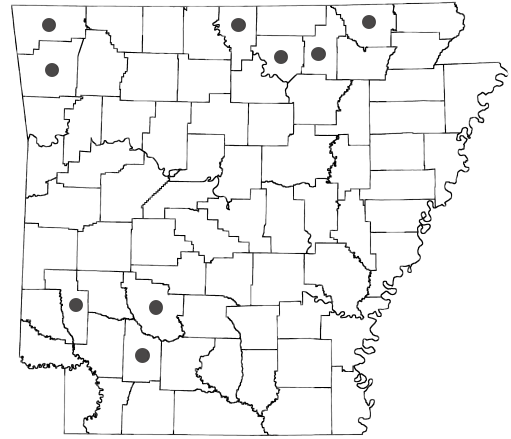
ASTERACEAE
***Symphotrichum laeve* (L.) Á.Löve & D.Löve**
var. laeve
 smooth aster



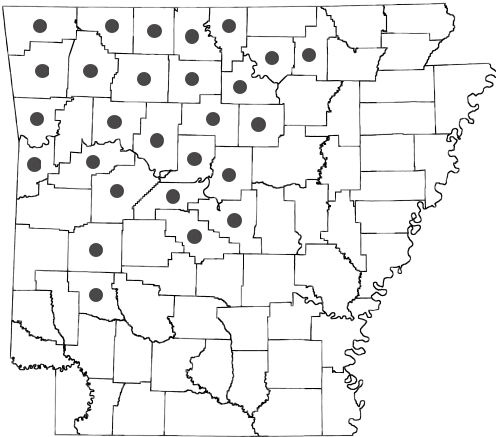
ASTERACEAE
***Symphotrichum lanceolatum* (Willd.) G.L.Nesom**
 tall white aster
 See *Appendix I* for infraspecific taxa and species status.



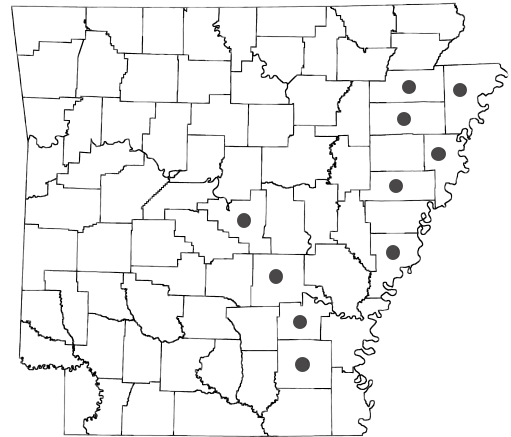
ASTERACEAE
Symphotrichum lateriflorum (L.) Á.Löve & D.Löve
 white woodland aster



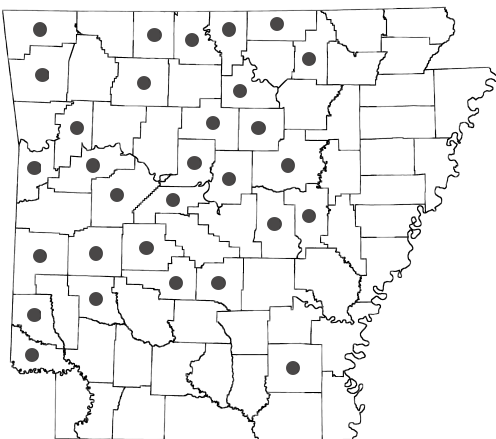
ASTERACEAE
Symphotrichum novae-angliae (L.) G.L.Nesom
 New England aster



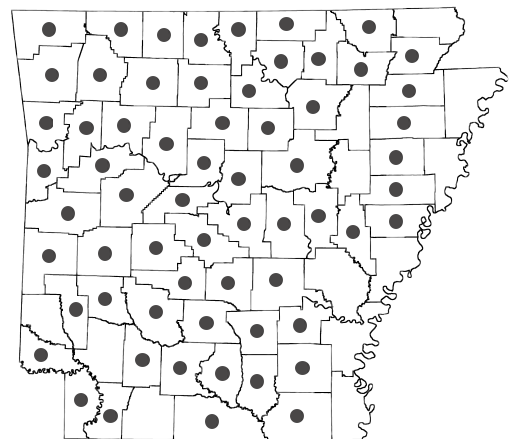
ASTERACEAE
Symphotrichum oblongifolium (Nutt.) G.L.Nesom
 aromatic aster



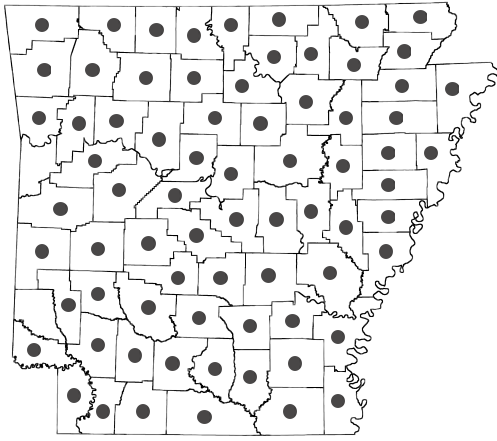
ASTERACEAE
Symphotrichum ontarionis (Wiegand) G.L.Nesom
var. ontarionis
 bottomland aster



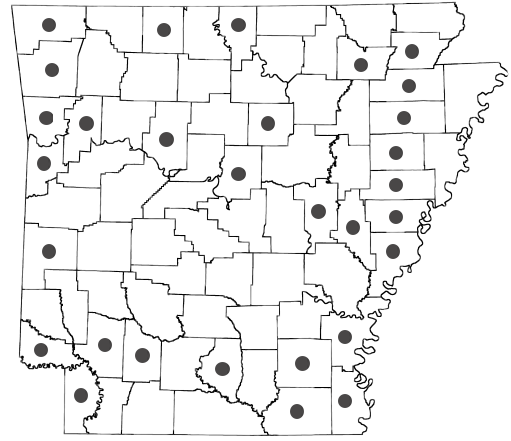
ASTERACEAE
Symphotrichum oolentangiense (Riddell) G.L.Nesom
 azure aster, sky-blue aster



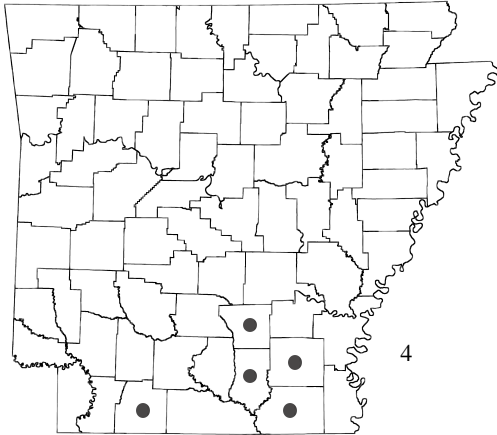
ASTERACEAE
Symphotrichum patens (Aiton) G.L.Nesom
 late purple aster, spreading aster
 See *Appendix I* for infraspecific taxa and species status.



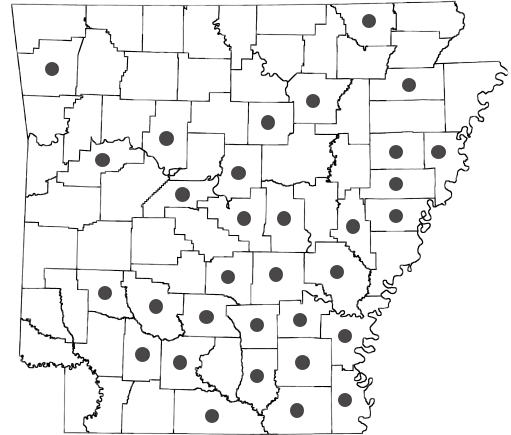
ASTERACEAE
Symphyotrichum pilosum (Willd.) G.L.Nesom
var. pilosum
 white heath aster, white oldfield aster



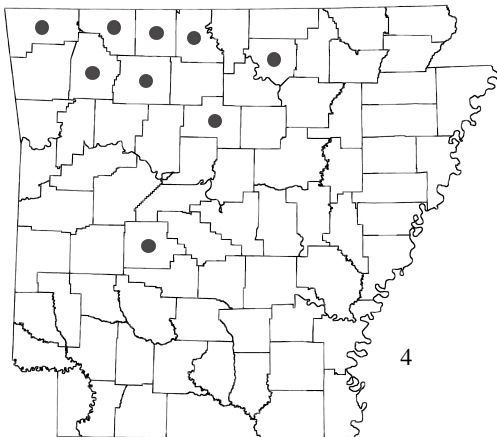
ASTERACEAE
Symphyotrichum praealtum (Poir.) G.L.Nesom
 willow-leaf aster



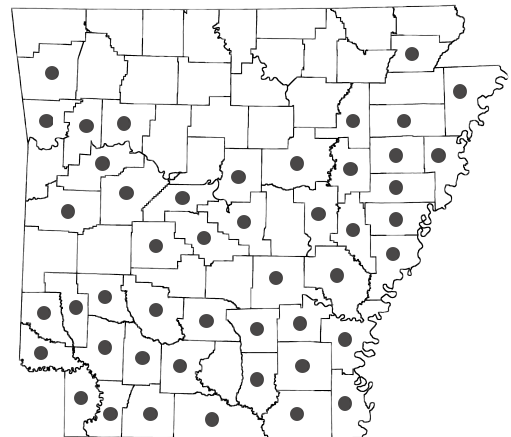
ASTERACEAE
Symphyotrichum pratense (Raf.) G.L.Nesom
 barrens silky aster



ASTERACEAE
Symphyotrichum racemosum (Elliott) G.L.Nesom
 small white aster



ASTERACEAE
Symphyotrichum sericeum (Vent.) G.L.Nesom
 silvery aster, silky aster



ASTERACEAE
Symphyotrichum subulatum (Michx.) G.L.Nesom
var. ligulatum (Shinners) S.D.Sundberg
 inland salt-marsh aster, annual water aster

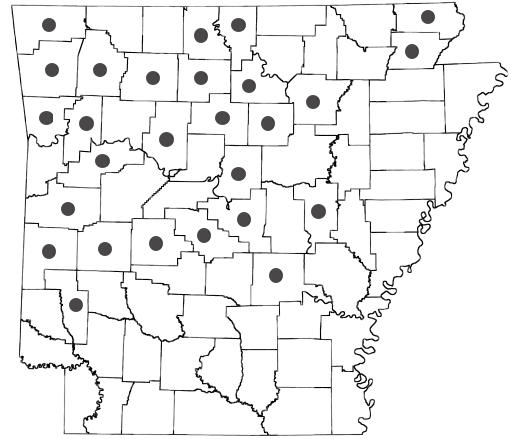


ASTERACEAE

Symphyotrichum subulatum (Michx.) G.L.Nesom

var. subulatum

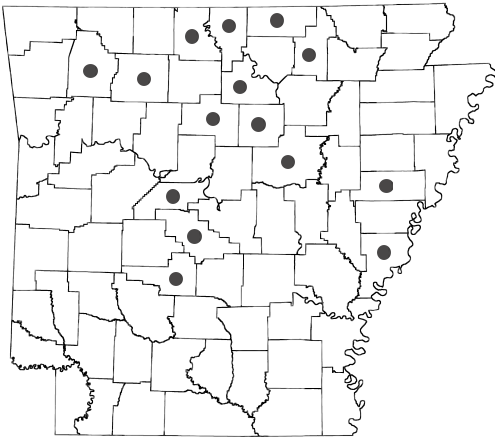
salt-marsh aster



ASTERACEAE

Symphyotrichum turbinellum (Lindl.) G.L.Nesom

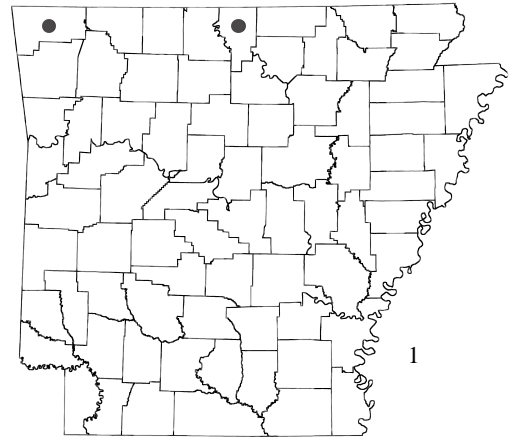
prairie aster



ASTERACEAE

Symphyotrichum urophyllum (Lindl. ex DC.) G.L.Nesom

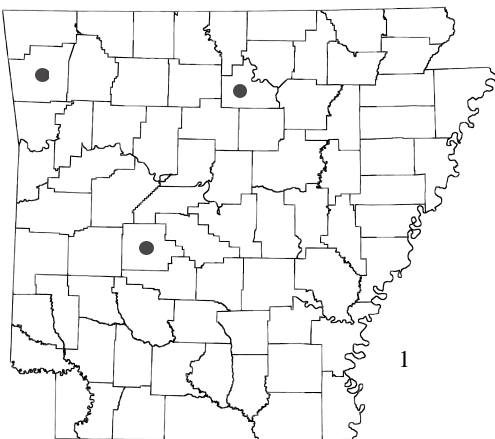
white arrow-leaf aster



ASTERACEAE

Tagetes erecta L.

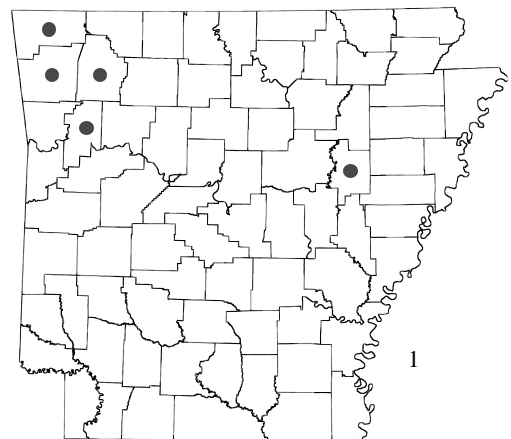
marigold



ASTERACEAE

Tanacetum vulgare L.

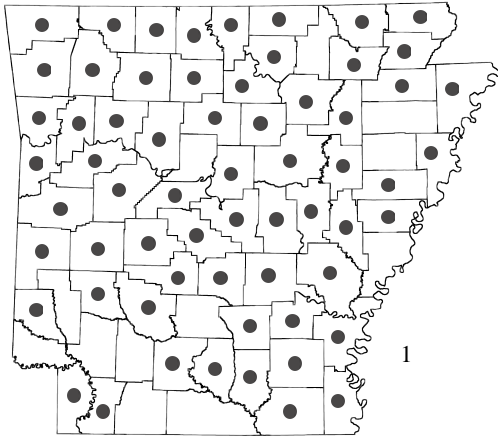
tansy



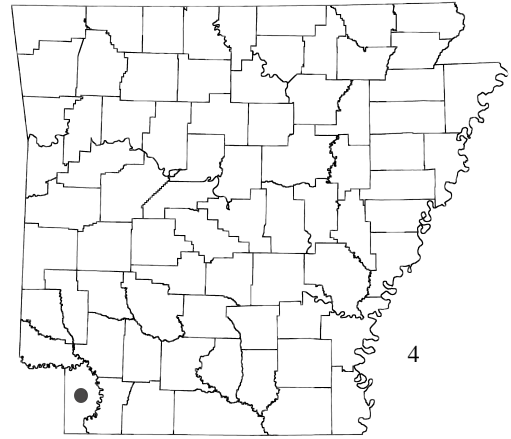
ASTERACEAE

Taraxacum erythrospermum Andrzejowski ex Besser

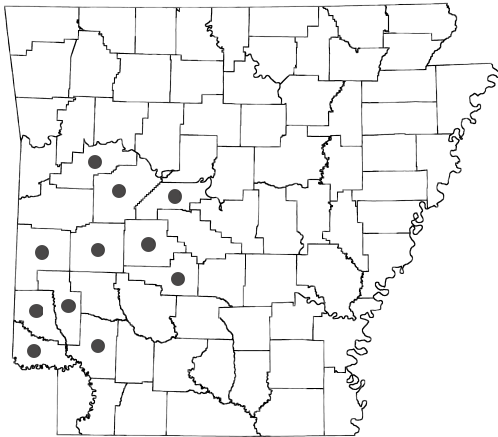
red-seed dandelion



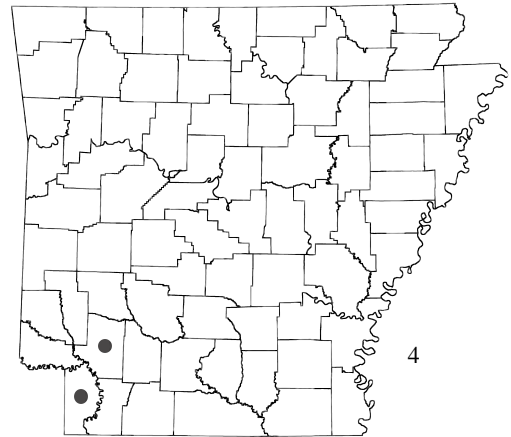
ASTERACEAE
Taraxacum officinale Weber ex F.H.Wigg.
 common dandelion



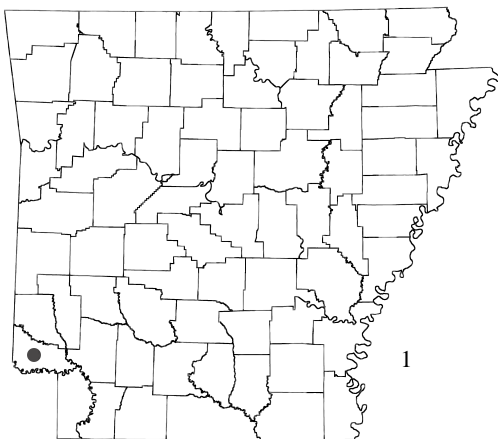
ASTERACEAE
Tetragonotheca ludoviciana (Torr. & A.Gray) A.Gray ex Hall
 Louisiana squarehead, Louisiana nerveray



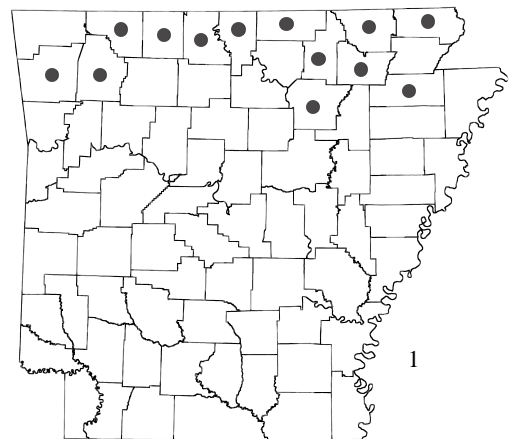
ASTERACEAE
Thelesperma filifolium (Hook.) A.Gray
 greenthread



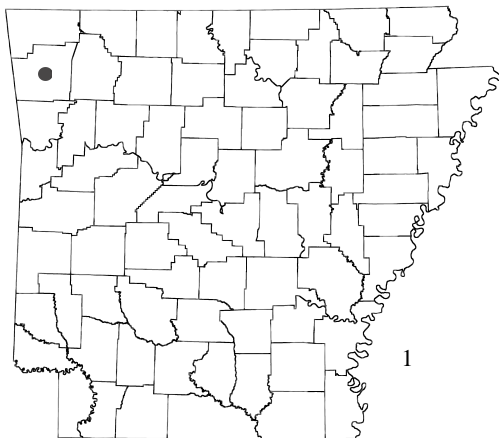
ASTERACEAE
Thelesperma flavodiscum (Shinners) B.L.Turner
 yellow-disk greenthread



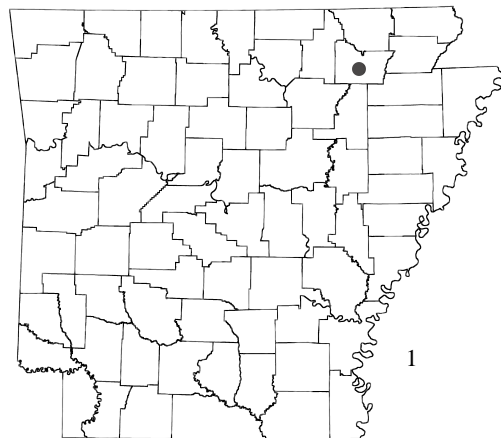
ASTERACEAE
Thelesperma megapotamicum (Spreng.) Kuntze
 greenthread, Hopi-tea



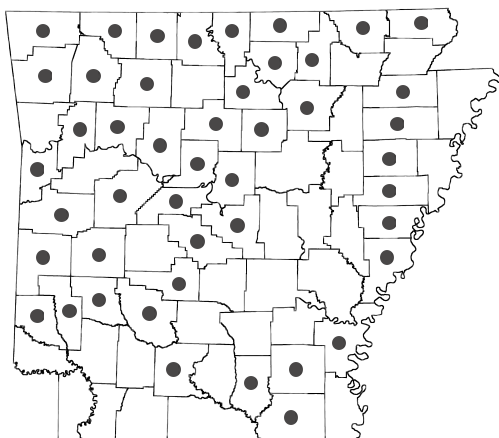
ASTERACEAE
Tragopogon dubius Scop.
 goat's-beard



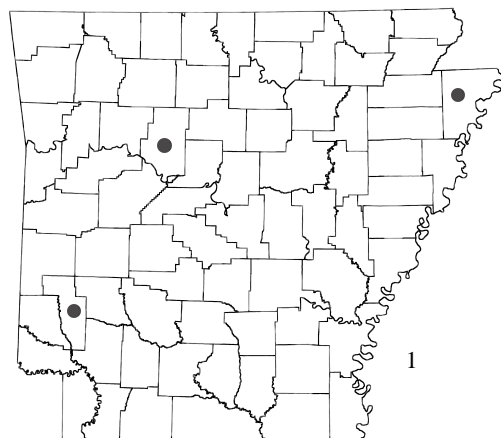
ASTERACEAE
Tragopogon porrifolius L.
 salsify, vegetable-oyster



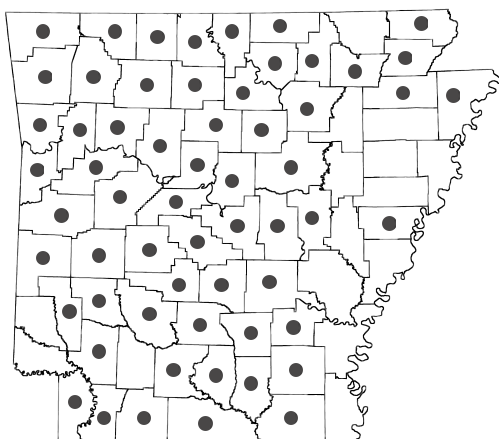
ASTERACEAE
Tragopogon pratensis L.
 Jack-go-to-bed-at-noon



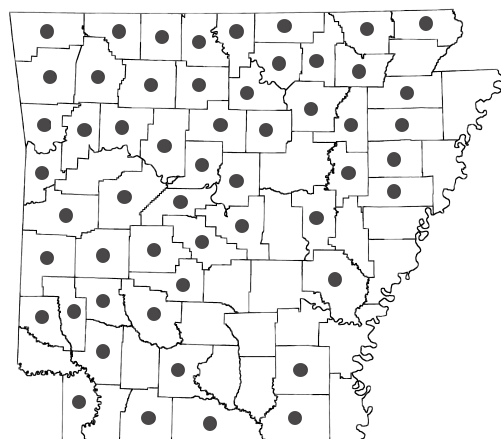
ASTERACEAE
Verbesina alternifolia (L.) Britton ex Kearney
 yellow-ironweed



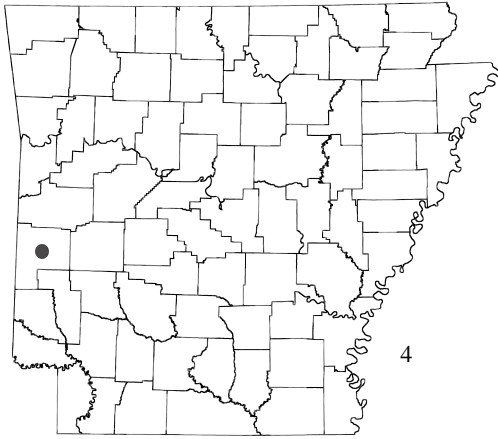
ASTERACEAE
Verbesina encelioides (Cav.) Benth. & Hook.f. ex A.Gray in W.H. Brewer et al.
 cowpen daisy



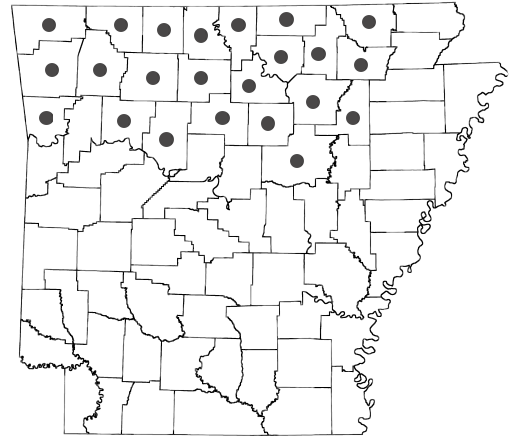
ASTERACEAE
Verbesina helianthoides Michx.
 crownbeard, wingstem



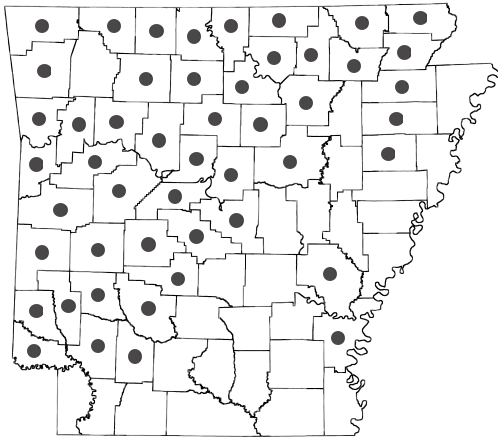
ASTERACEAE
Verbesina virginica L.
 frostweed, white crownbeard



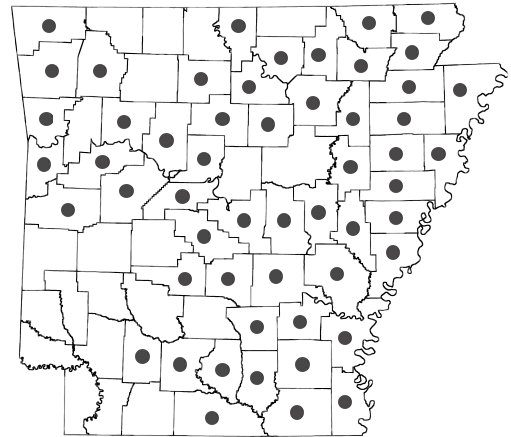
ASTERACEAE
Verbesina walteri Shimmers
 rayless crownbeard, Walter's crownbeard



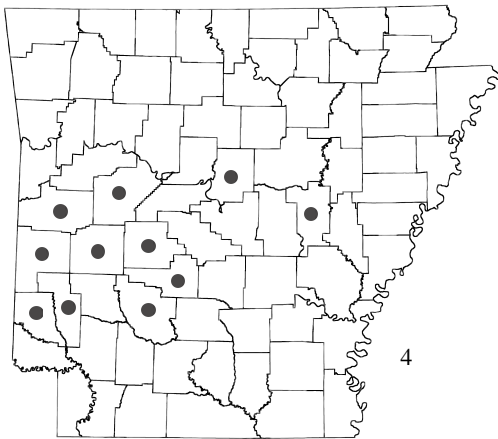
ASTERACEAE
Vernonia arkansana DC. in DC. & A.D.C.
 Arkansas ironweed



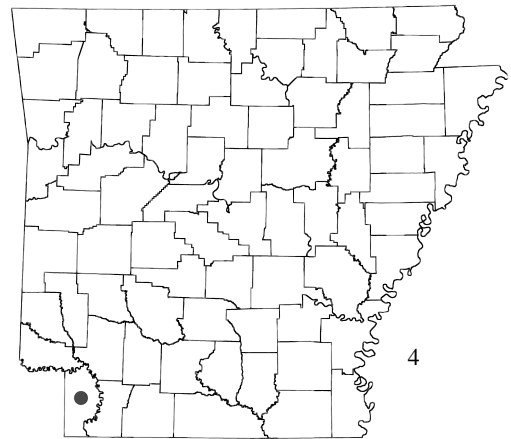
ASTERACEAE
Vernonia baldwinii Torr.
 Baldwin's ironweed, western ironweed



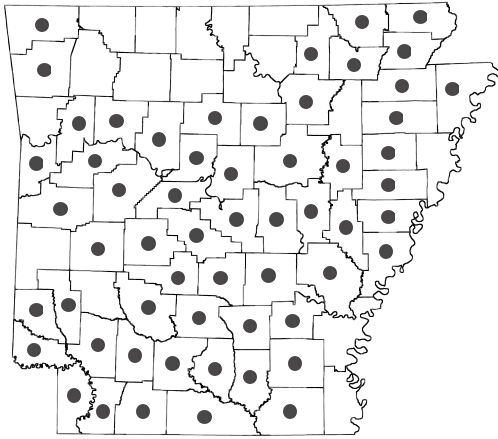
ASTERACEAE
Vernonia gigantea (Walter) Trel. ex Branner & Coville
 tall ironweed



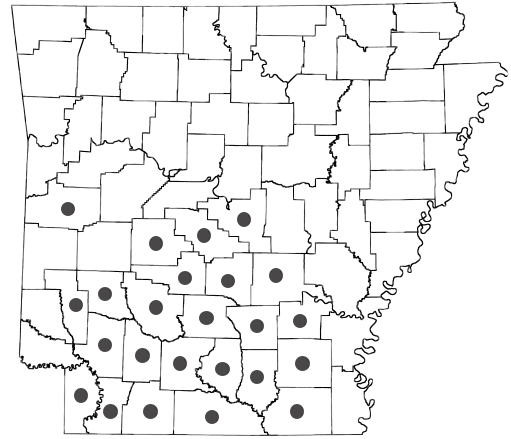
ASTERACEAE
Vernonia lettermannii Engelm. ex A.Gray
 Letterman's ironweed, narrow-leaf ironweed



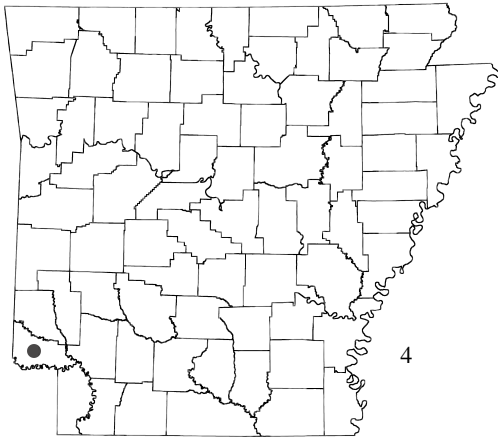
ASTERACEAE
Vernonia lindheimeri A.Gray & Engelm.
 woolly ironweed, Lindheimer's ironweed



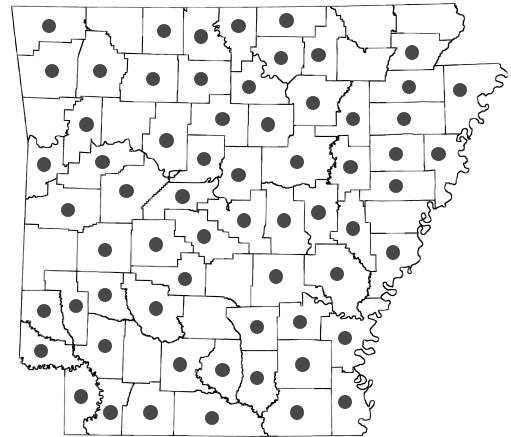
ASTERACEAE
Vernonia missurica Raf.
 Missouri ironweed



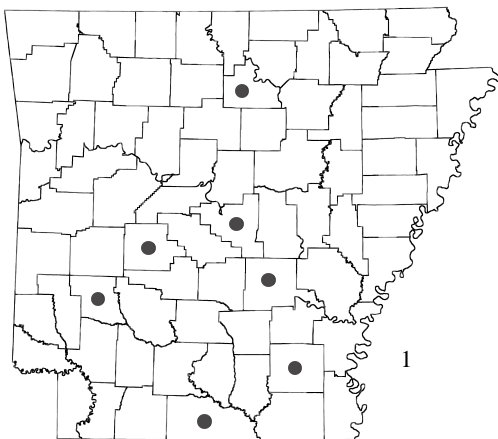
ASTERACEAE
Vernonia texana (A.Gray) Small
 Texas ironweed



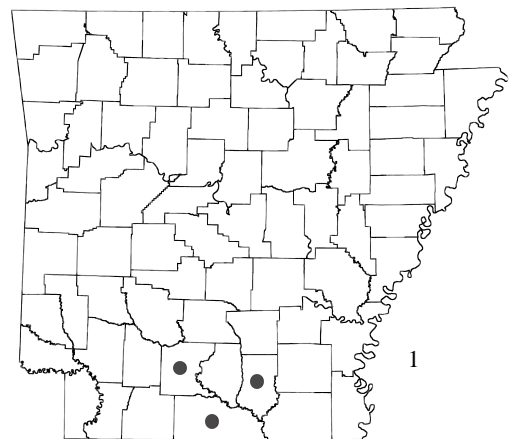
ASTERACEAE
Xanthisma spinulosum (Pursh) D.R.Morgan & R.L.Hartman
var. spinulosum
 lacy tansy-aster



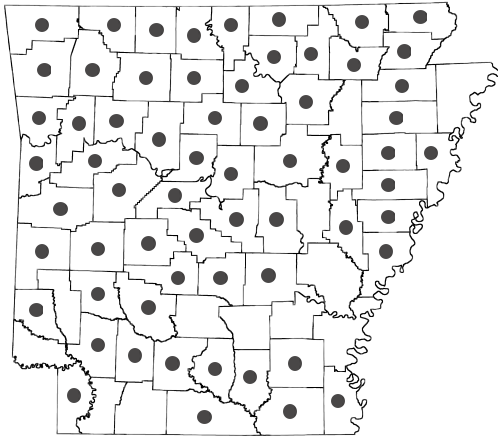
ASTERACEAE
Xanthium strumarium L.
 cocklebur



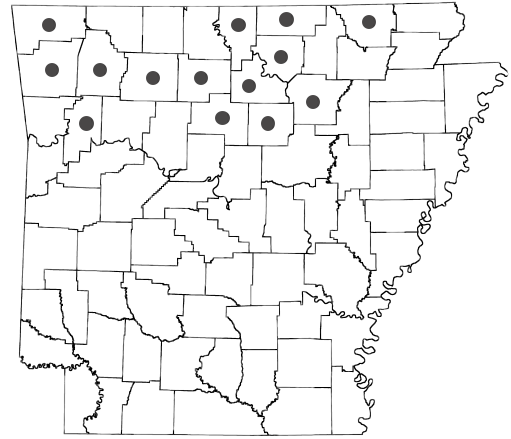
ASTERACEAE
Youngia japonica (L.) DC. in DC. & A.D.C.
 Oriental false hawk's-beard



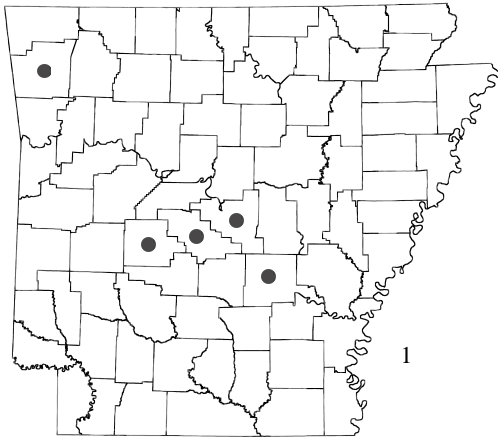
BALSAMINACEAE
Impatiens balsamina L.
 garden balsam



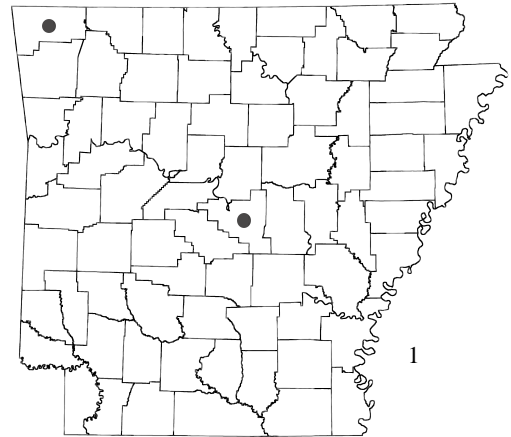
BALSAMINACEAE
Impatiens capensis Meerb.
 spotted jewelweed, spotted touch-me-not



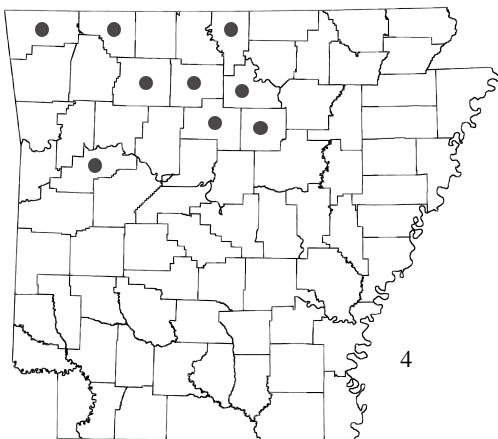
BALSAMINACEAE
Impatiens pallida Nutt.
 yellow jewelweed, pale touch-me-not



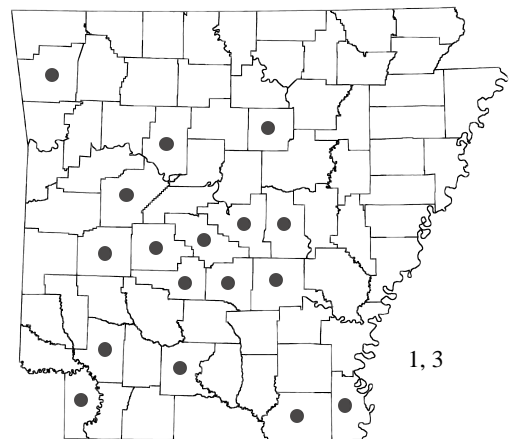
BERBERIDACEAE
Berberis bealei Fortune
 mahonia



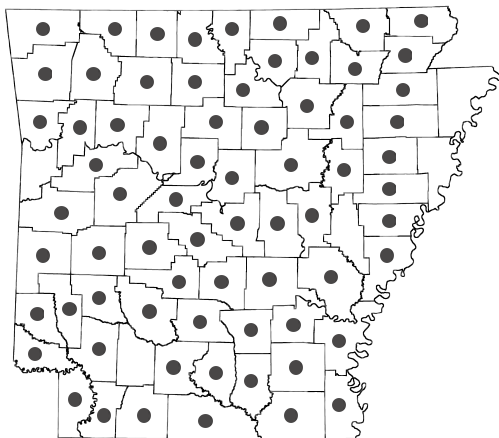
BERBERIDACEAE
Berberis thunbergii DC.
 Japanese barberry



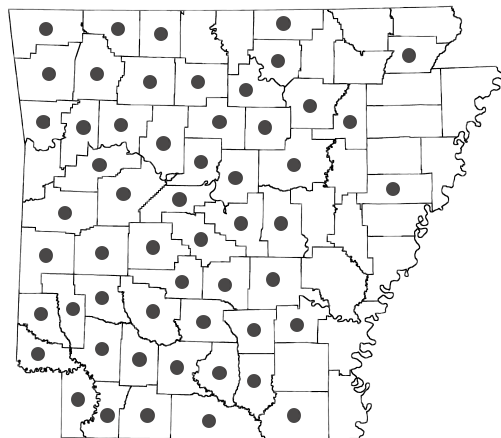
BERBERIDACEAE
Caulophyllum thalictroides (L.) Michx.
 blue cohosh



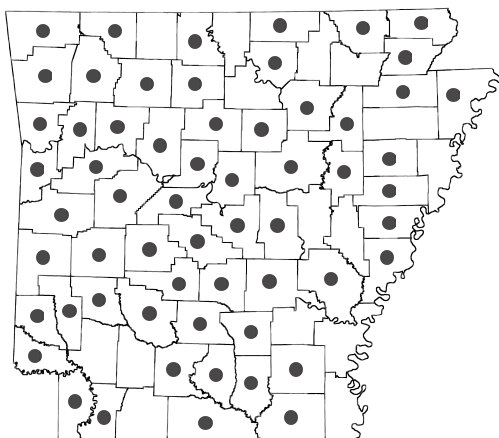
BERBERIDACEAE
Nandina domestica Thunb.
 nandina, heavenly-bamboo



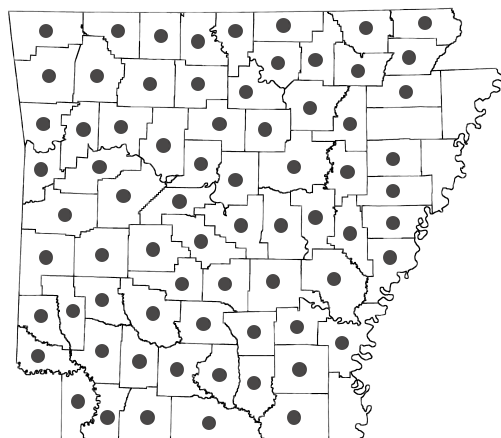
BERBERIDACEAE
Podophyllum peltatum L.
 May-apple, mandrake



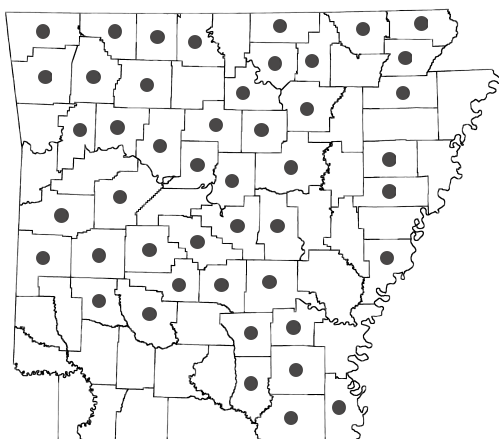
BETULACEAE
Alnus serrulata (Aiton) Willd.
 alder, smooth alder, tag alder



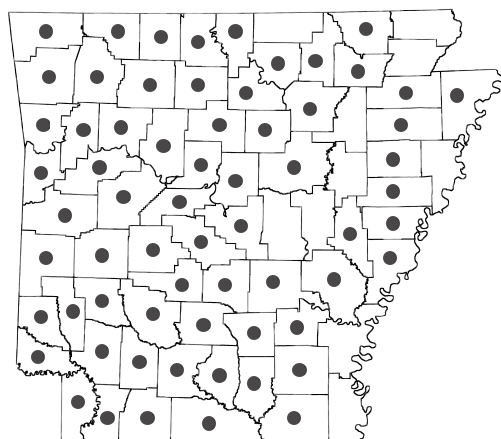
BETULACEAE
Betula nigra L.
 river birch



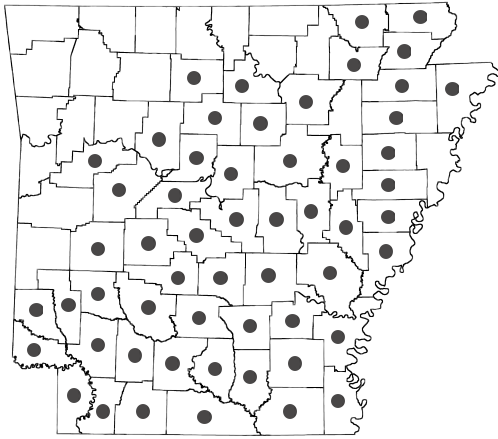
BETULACEAE
Carpinus caroliniana Walter
 musclewood, ironwood, American hornbeam
 See Appendix I for infraspecific taxa and species status.



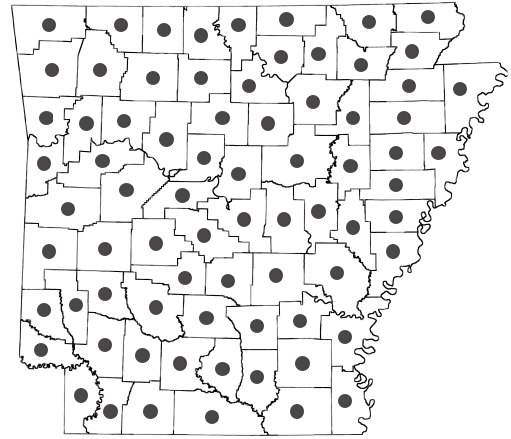
BETULACEAE
Corylus americana Walter
 hazelnut, American hazelnut



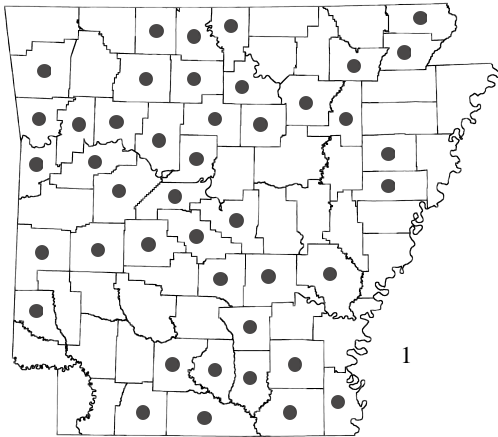
BETULACEAE
Ostrya virginiana (Mill.) K.Koch
 hop-hornbeam, ironwood



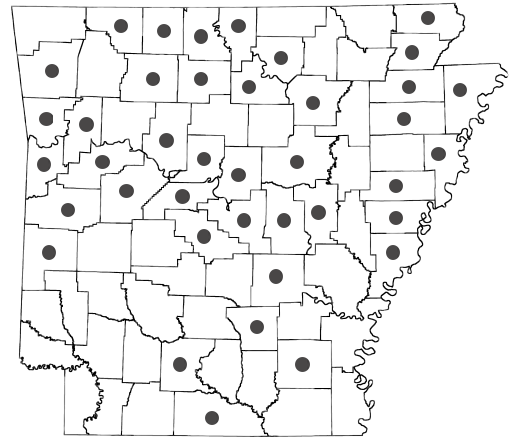
BIGNONIACEAE
Bignonia capreolata L.
cross-vine



BIGNONIACEAE
Campsis radicans (L.) Seem. ex Bureau
trumpet-creeper



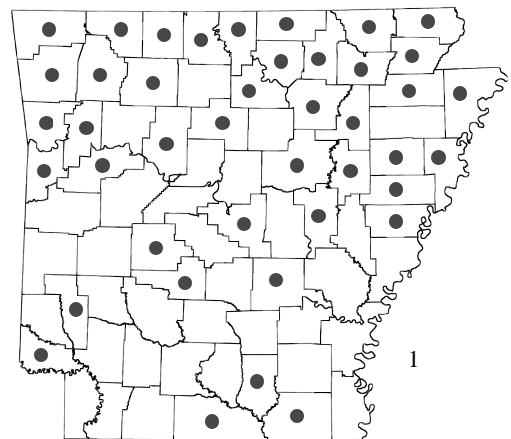
BIGNONIACEAE
Catalpa bignonioides Walter
southern catalpa



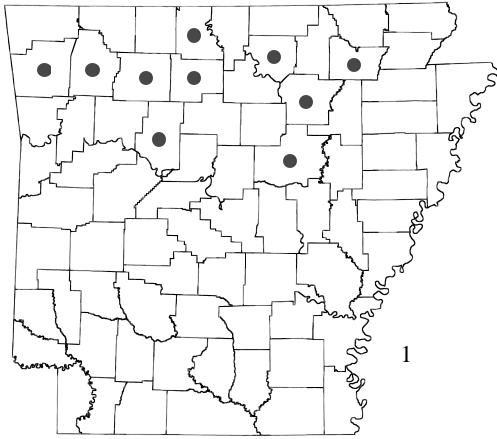
BIGNONIACEAE
Catalpa speciosa Warder ex Engelm.
northern catalpa



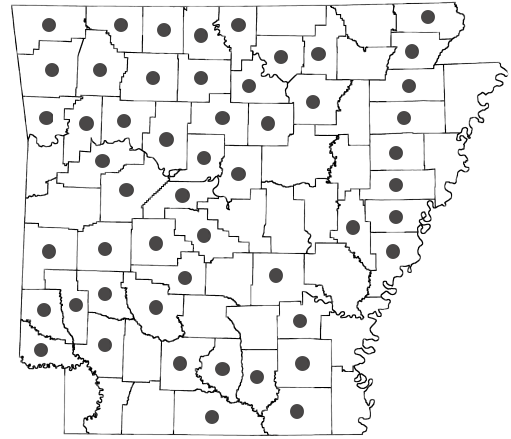
BORAGINACEAE
Anchusa arvensis (L.) M.Bieb.
small bugloss



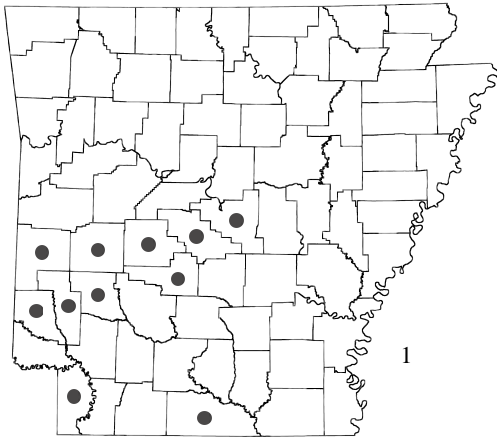
BORAGINACEAE
Buglossoides arvensis (L.) I.M.Johnst.
corn gromwell



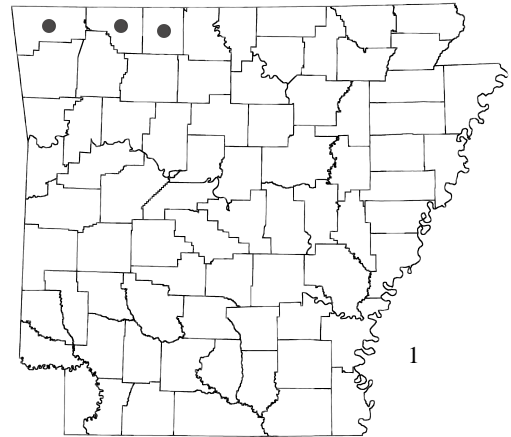
BORAGINACEAE
Cynoglossum officinale L.
 garden comfrey, hound's-tongue



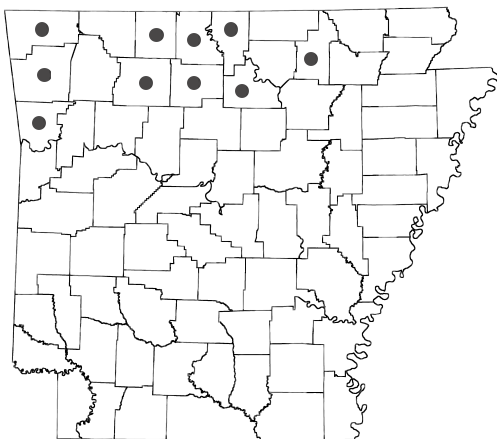
BORAGINACEAE
Cynoglossum virginianum L.
 wild comfrey



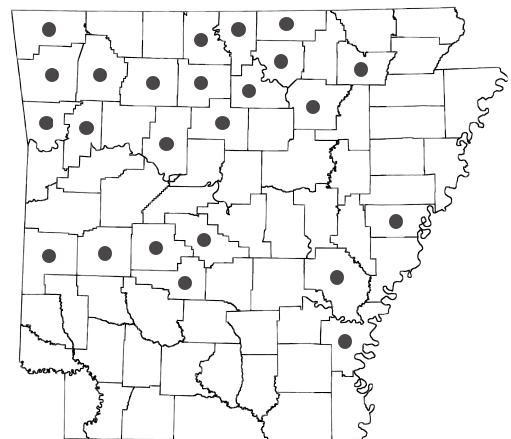
BORAGINACEAE
Cynoglossum zeylanicum Thunb. ex Lehm.
 Ceylon hound's-tongue



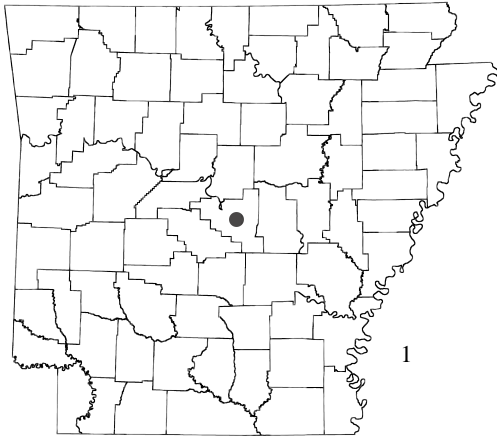
BORAGINACEAE
Echium vulgare L.
 blueweed, viper's-bugloss



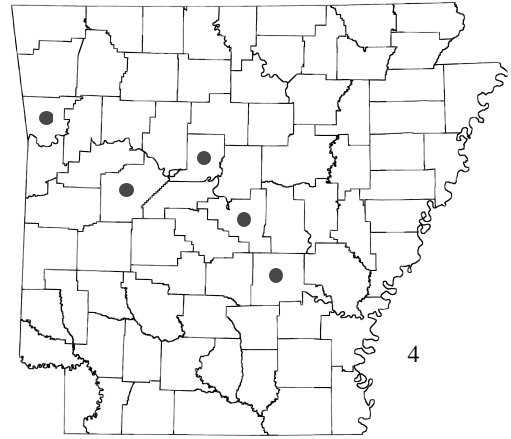
BORAGINACEAE
Ellisia nyctelea (L.) L.
 Aunt Lucy



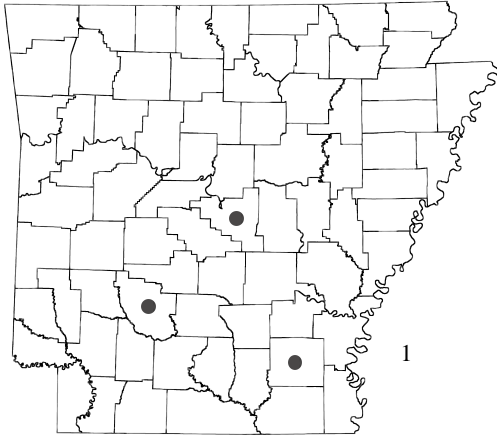
BORAGINACEAE
Hackelia virginiana (L.) I.M. Johnst.
 beggar's-lice, stickseed



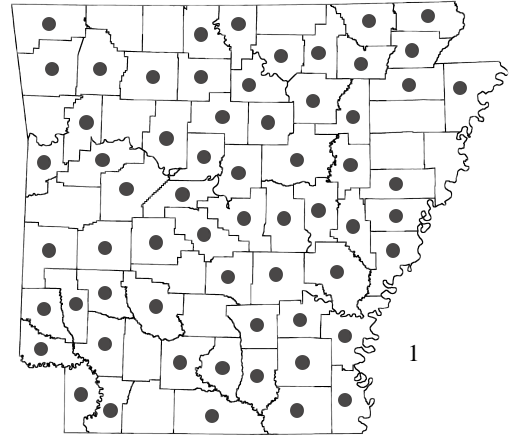
BORAGINACEAE
***Heliotropium amplexicaule* Vahl**
wild heliotrope



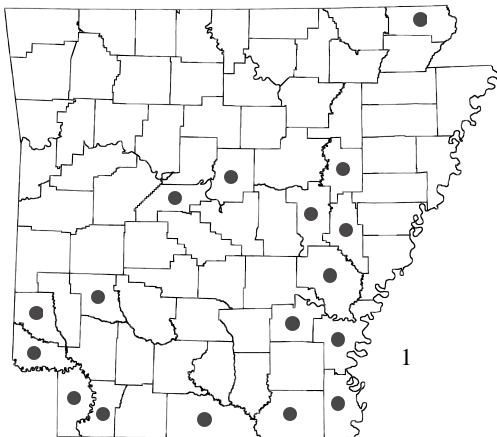
BORAGINACEAE
***Heliotropium convolvulaceum* (Nutt.) A.Gray**
phlox heliotrope, bindweed heliotrope



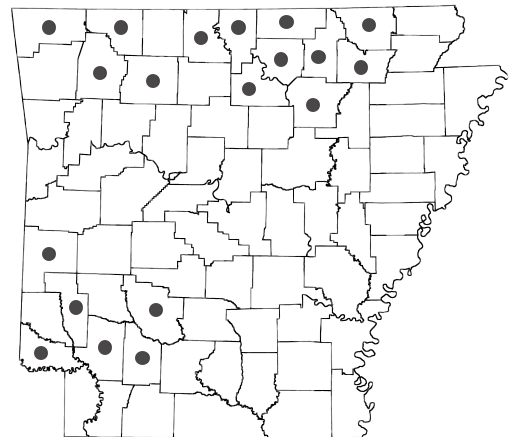
BORAGINACEAE
***Heliotropium curassavicum* L.**
seaside heliotrope



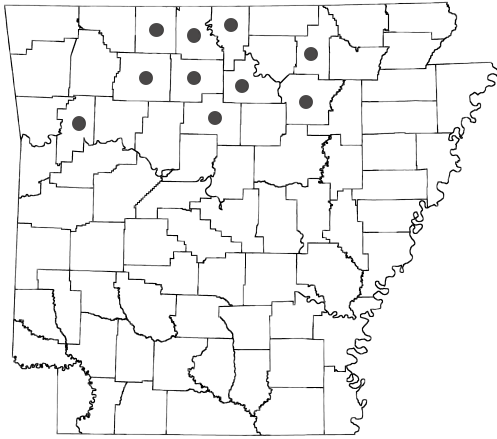
BORAGINACEAE
***Heliotropium indicum* L.**
Indian heliotrope, turnsole



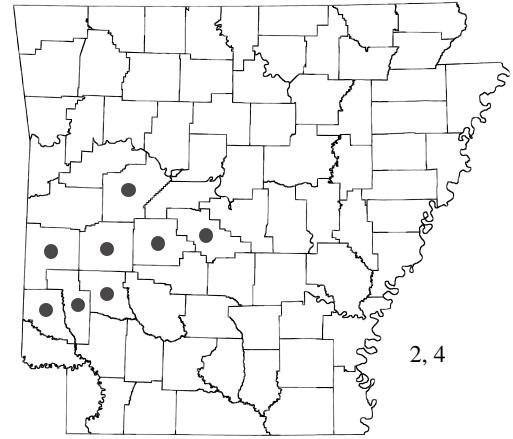
BORAGINACEAE
***Heliotropium procumbens* Mill.**
four-spike heliotrope



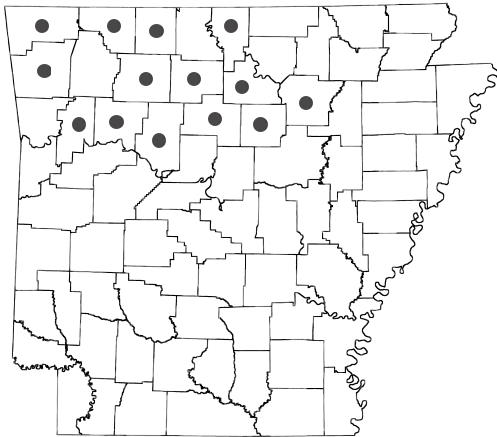
BORAGINACEAE
***Heliotropium tenellum* (Nutt.) Torr.**
heliotrope



BORAGINACEAE
Hydrophyllum appendiculatum Michx.
 woolen breeches, great waterleaf



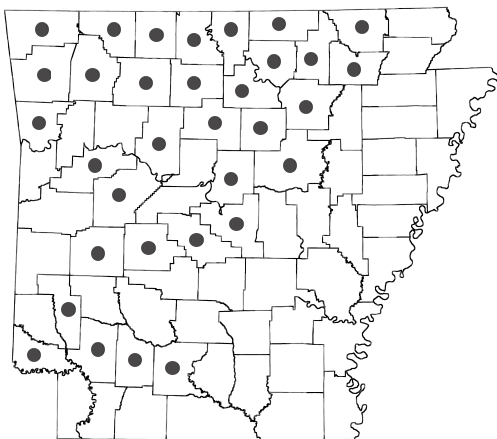
BORAGINACEAE
Hydrophyllum brownei Kral & V.M.Bates
 Browne's waterleaf



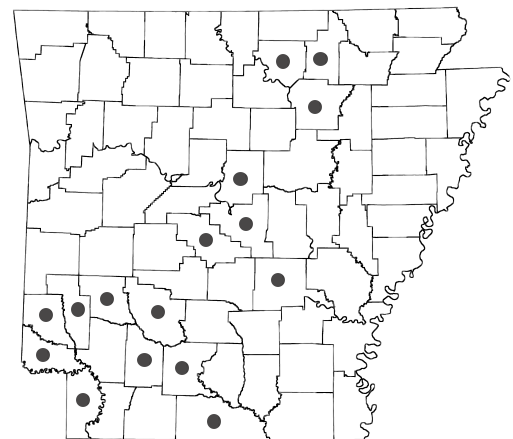
BORAGINACEAE
Hydrophyllum virginianum L.
var. virginianum
 Virginia waterleaf



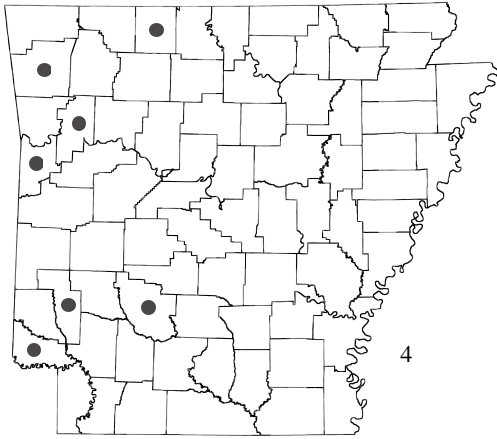
BORAGINACEAE
Lappula occidentalis (S.Watson) Greene
var. occidentalis
 stickseed



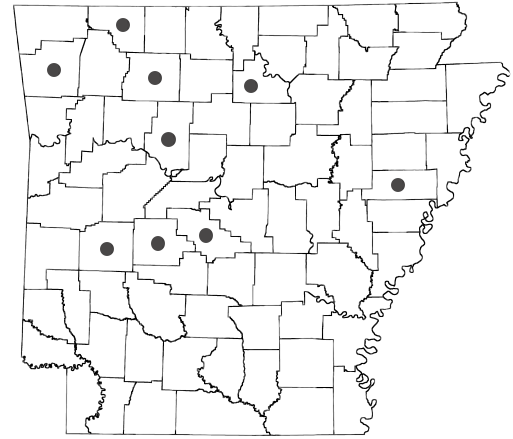
BORAGINACEAE
Lithospermum canescens (Michx.) Lehm.
 hoary puccoon, orange puccoon



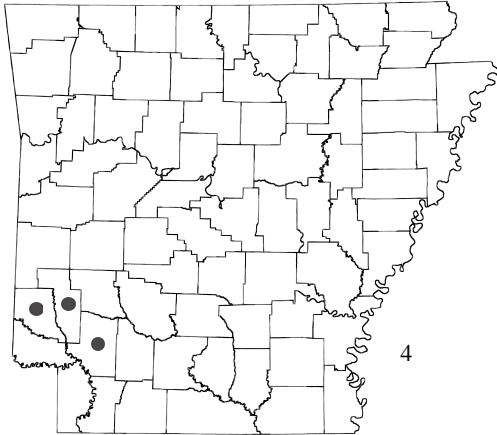
BORAGINACEAE
Lithospermum carolinense (Walter ex J.F.Gmel.) MacMill.
 Carolina puccoon



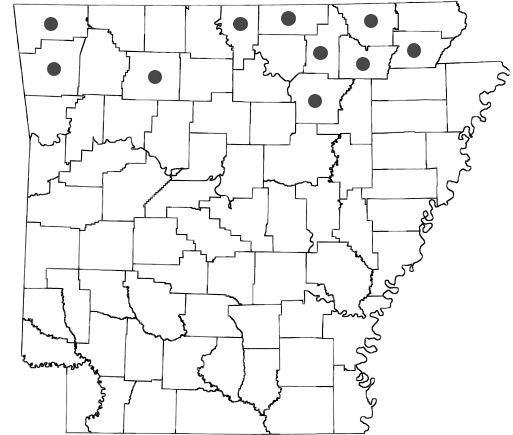
BORAGINACEAE
***Lithospermum incisum* Lehm.**
 fringed puccoon, yellow puccoon



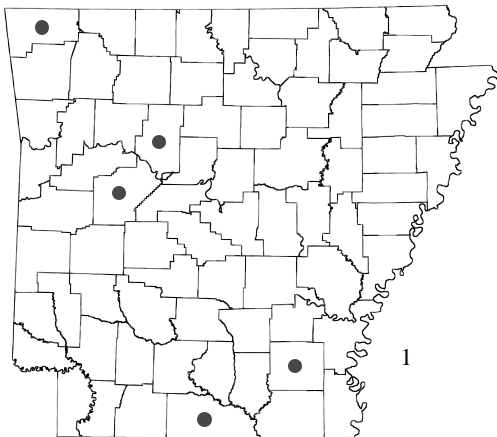
BORAGINACEAE
***Lithospermum latifolium* Michx.**
 American gromwell



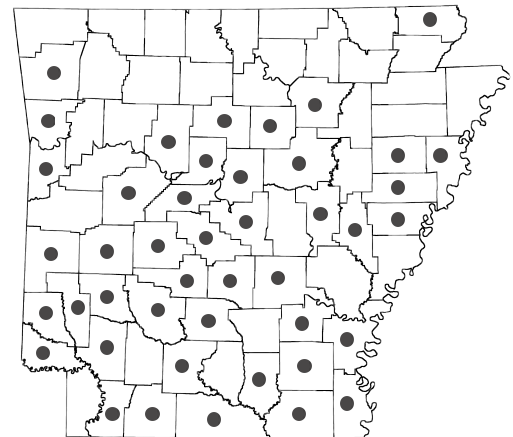
BORAGINACEAE
***Lithospermum tuberosum* Rugel ex DC.**
 tuberous puccoon



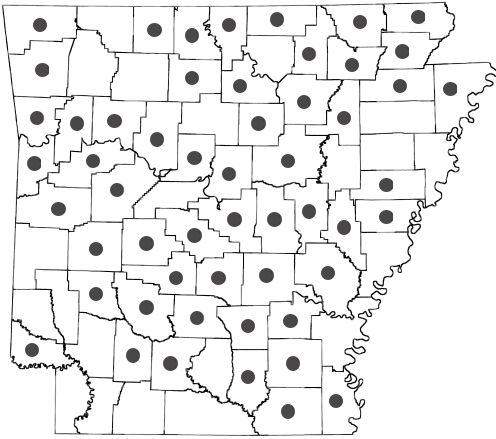
BORAGINACEAE
***Mertensia virginica* (L.) Pers. ex Link**
 bluebells



BORAGINACEAE
***Myosotis discolor* Pers. ex Murray**
 yellow-and-blue scorpion-grass, changing forget-me-not

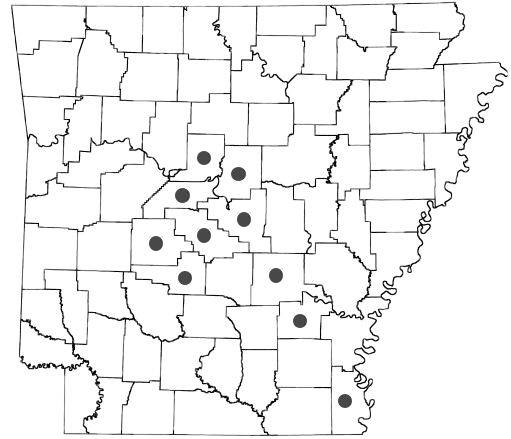


BORAGINACEAE
***Myosotis macrosperma* Engelm.**
 big-seed scorpion-grass, big-seed forget-me-not



BORAGINACEAE
Myosotis verna Nutt.

spring scorpion-grass, spring forget-me-not



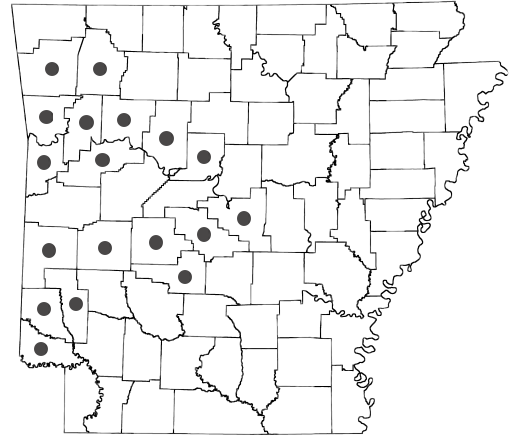
BORAGINACEAE
Nemophila aphylla (L.) Brummitt

small-flower baby-blue-eyes



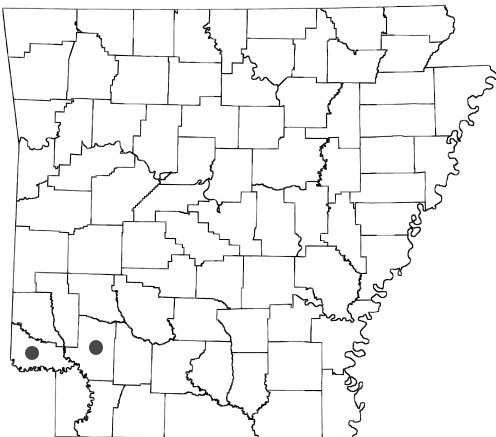
BORAGINACEAE
Nemophila maculata Benth. ex Lindl.

fivespot



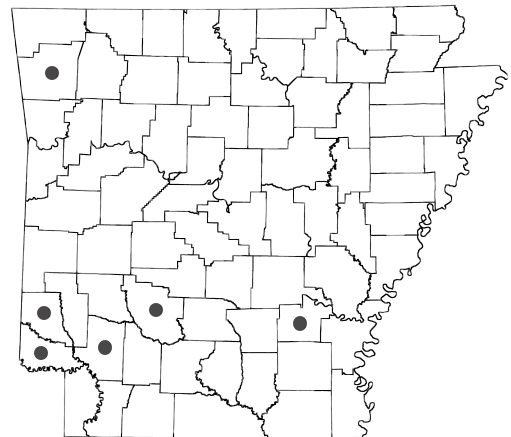
BORAGINACEAE
Nemophila phacelioides Nutt.

large-flower baby-blue-eyes



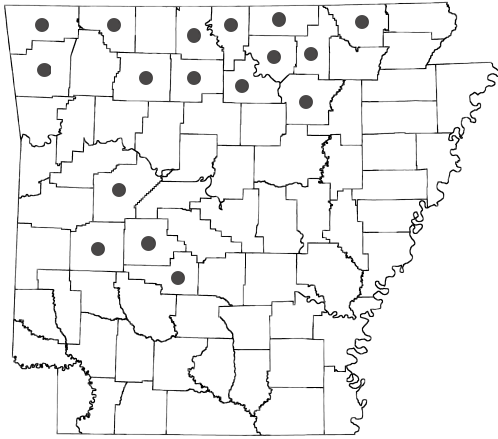
BORAGINACEAE
Onosmodium bejariense A.DC.
var. bejariense

marbleseed, false gromwell

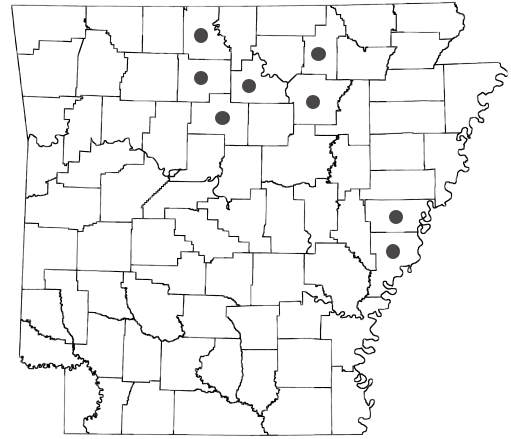


BORAGINACEAE
Onosmodium bejariense A.DC.
var. hispidissimum (Mack.) B.L.Turner

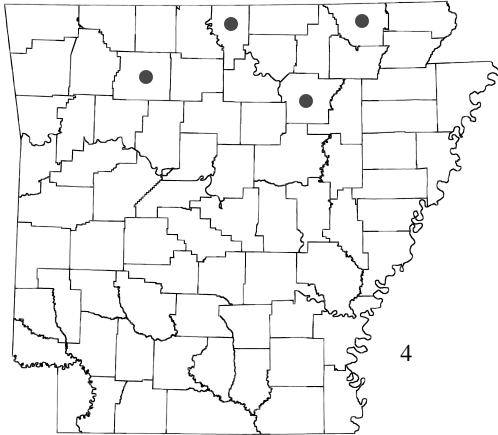
marbleseed, false gromwell



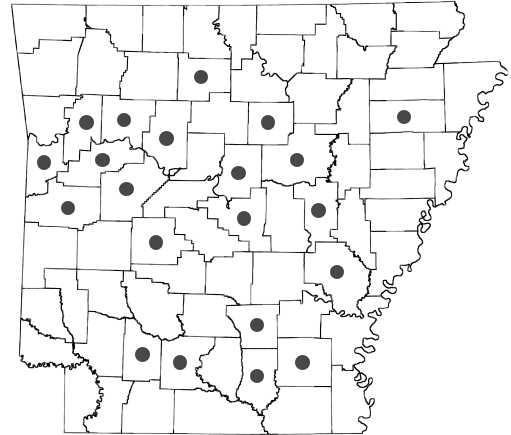
BORAGINACEAE
***Onosmodium bejariense* A.DC.**
var. subsetosum (Mack. & Bush ex Small) B.L.Turner
 marbledseed, false gromwell



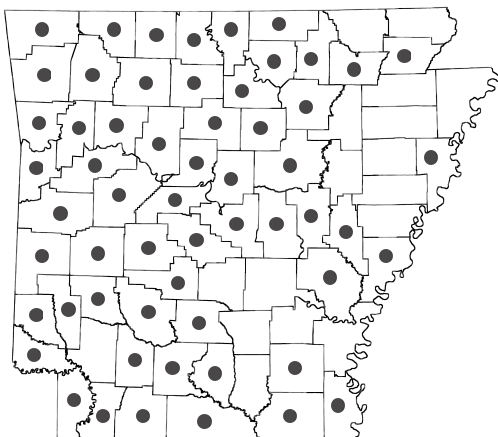
BORAGINACEAE
***Phacelia bipinnatifida* Michx.**
 fern-leaf scorpion-weed



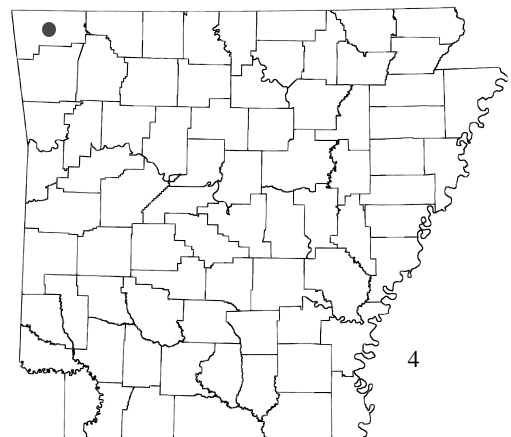
BORAGINACEAE
***Phacelia gilioides* Brand**
 Brand's scorpion-weed



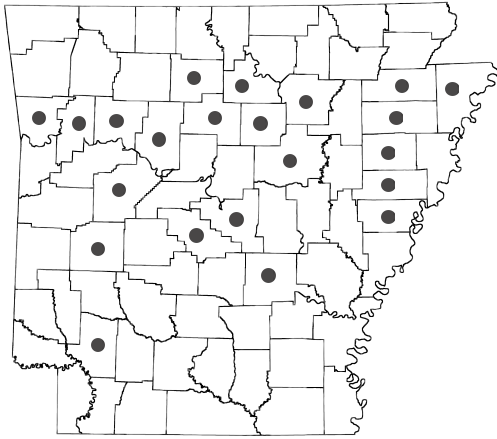
BORAGINACEAE
***Phacelia glabra* Nutt.**
 smooth scorpion-weed



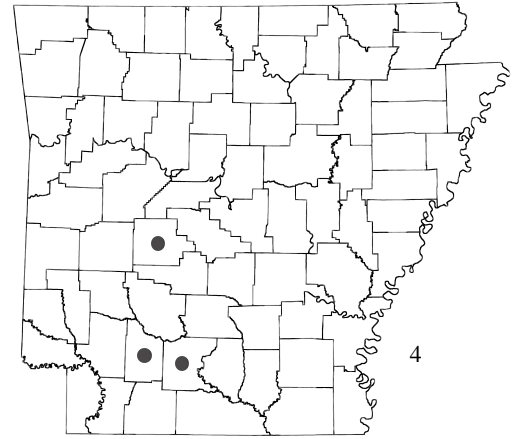
BORAGINACEAE
***Phacelia hirsuta* Nutt.**
 hairy scorpion-weed



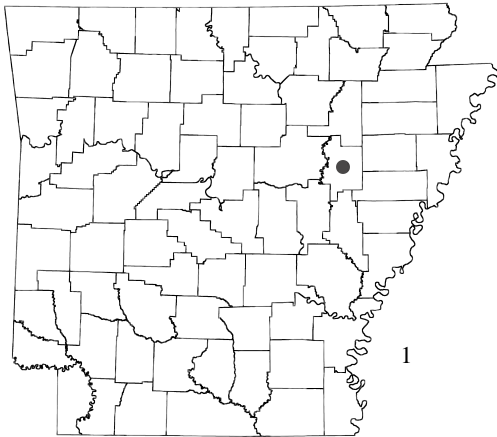
BORAGINACEAE
***Phacelia purshii* Buckley**
 Miami mist



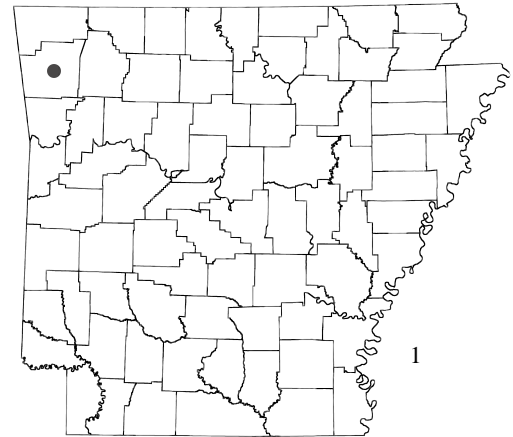
BORAGINACEAE
Phacelia ranunculacea (Nutt.) Constance
 buttercup scorpion-weed



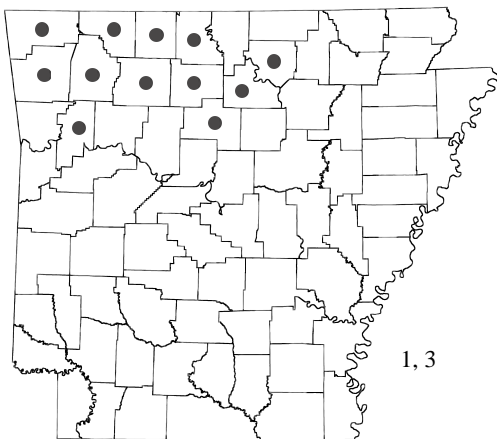
BORAGINACEAE
Phacelia strictiflora (Engelm. & A.Gray) A.Gray
var. robbinsii Constance
 Robbins' prairie scorpion-weed



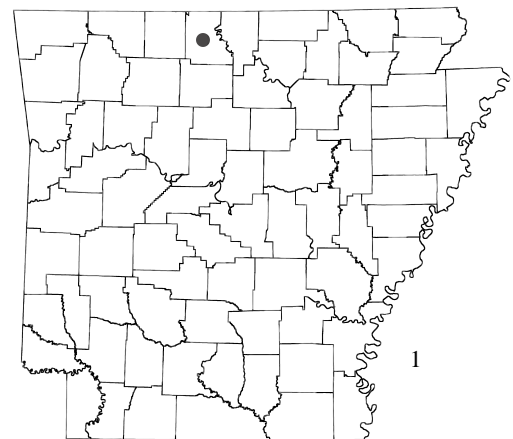
BORAGINACEAE
Plagiobothrys figuratus (Piper) I.M.Johnst. ex M.Peck
subsp. figuratus
 fragrant popcorn-flower



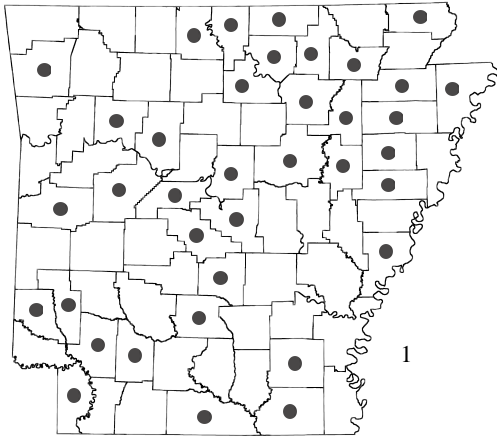
BORAGINACEAE
Symphytum officinale L.
 common comfrey



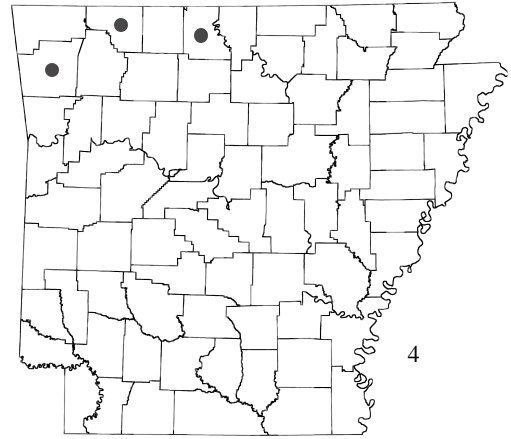
BRASSICACEAE
Alliaria petiolata (M.Bieb.) Cavara & Grande
 garlic-mustard



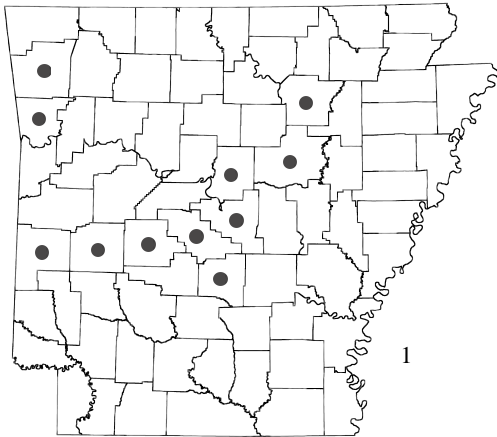
BRASSICACEAE
Alyssum alyssoides (L.) L.
 pale alyssum, yellow alyssum



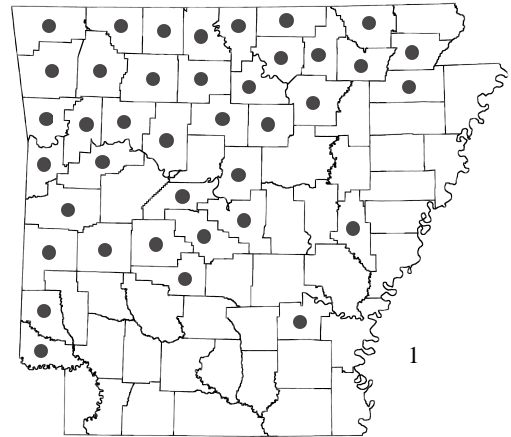
BRASSICACEAE
Arabidopsis thaliana (L.) Heynh. in Holl & Heynh.
 mouse-ear cress



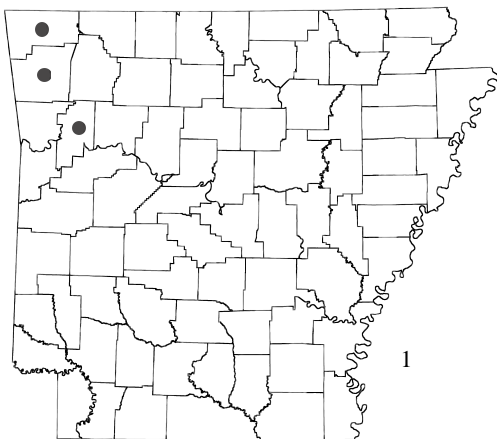
BRASSICACEAE
Arabis hirsuta (L.) Scop.
var. adpressipilis (M.Hopkins) Rollins
 hairy rockcress



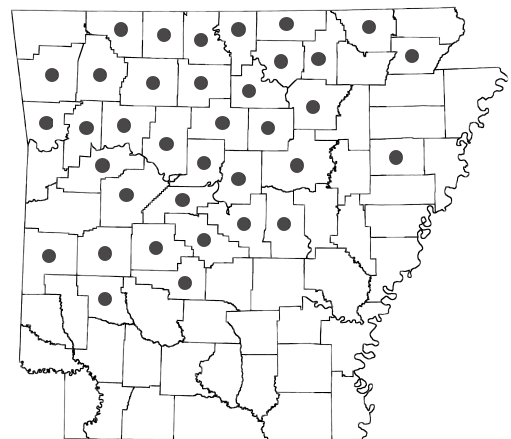
BRASSICACEAE
Barbarea verna (Mill.) Asch.
 early yellow-rocket, early wintercress



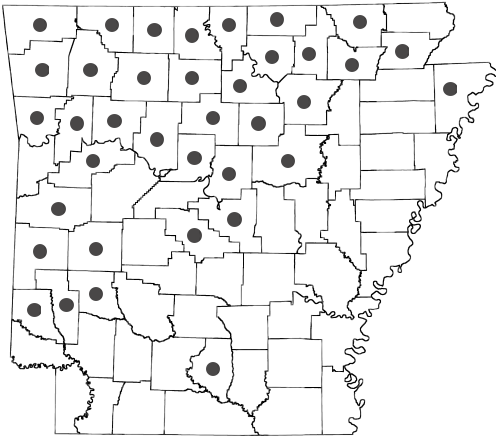
BRASSICACEAE
Barbarea vulgaris W.T.Aiton in Aiton & W.T.Aiton
 yellow-rocket, wintercress



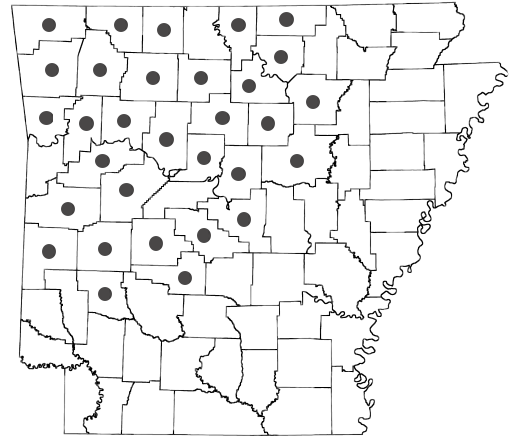
BRASSICACEAE
Berteroa incana (L.) DC.
 hoary-allysum



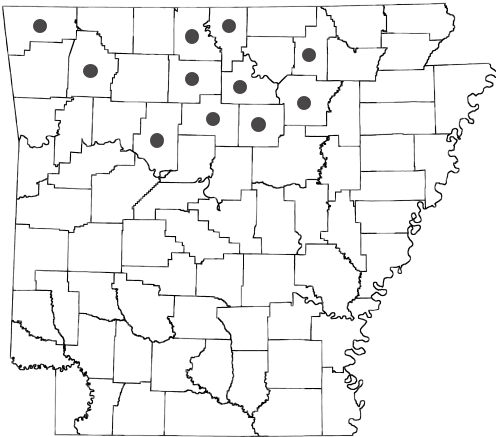
BRASSICACEAE
Boechera canadensis (L.) Al-Shehbaz
 Canadian rockcress, sicklepod



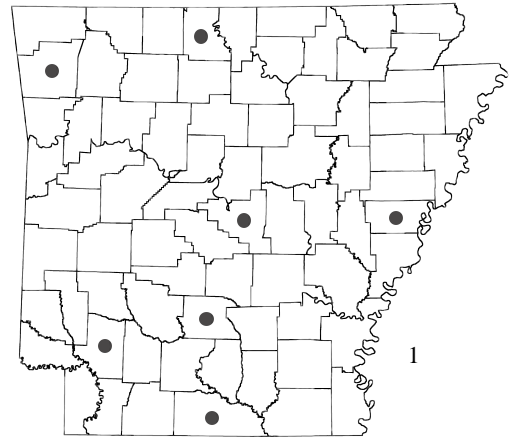
BRASSICACEAE
Boechera laevigata (Muhl. ex Willd.) Al-Shehbaz
 smooth rockcress



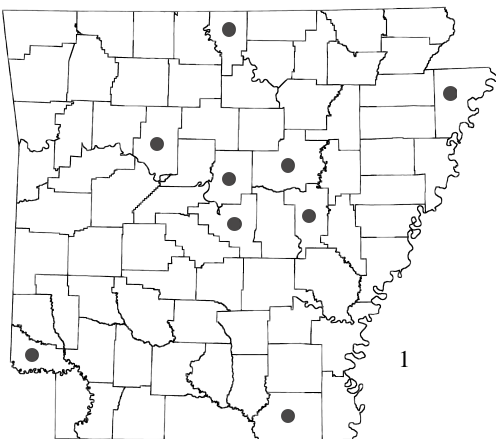
BRASSICACEAE
Boechera missouriensis (Greene) Al-Shehbaz
 Missouri rockcress



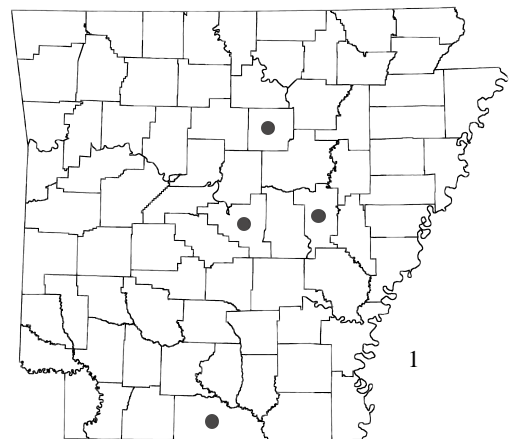
BRASSICACEAE
Boechera shortii (Fernald) Al-Shehbaz
 Short's rockcress



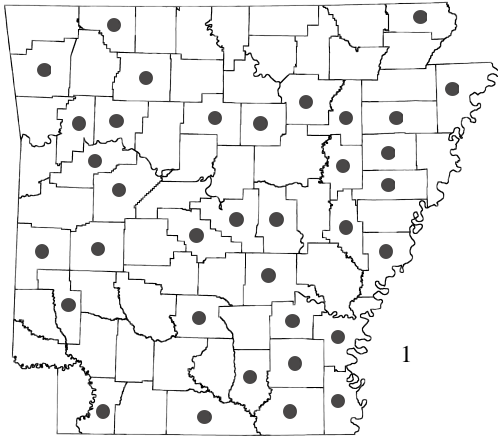
BRASSICACEAE
Brassica juncea (L.) Czern.
 Indian mustard, leaf mustard



BRASSICACEAE
Brassica napus L.
 rapeseed, canola



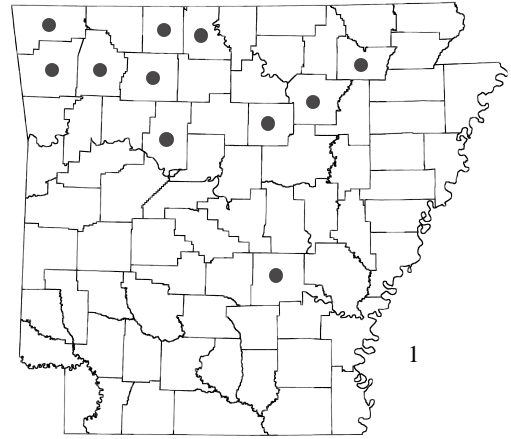
BRASSICACEAE
Brassica nigra (L.) W.D.J.Koch in Röhl.
 black mustard



BRASSICACEAE

***Brassica rapa* L.**

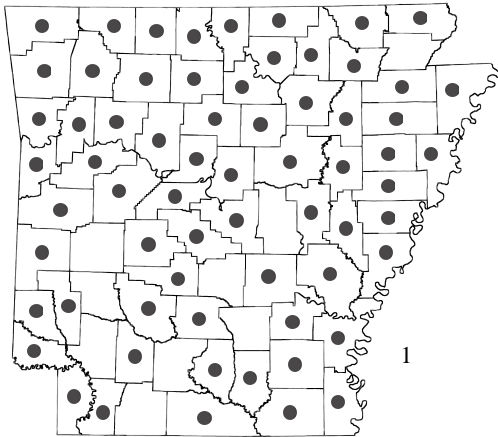
field mustard, turnip mustard



BRASSICACEAE

***Camelina microcarpa* Andr. ex DC.**

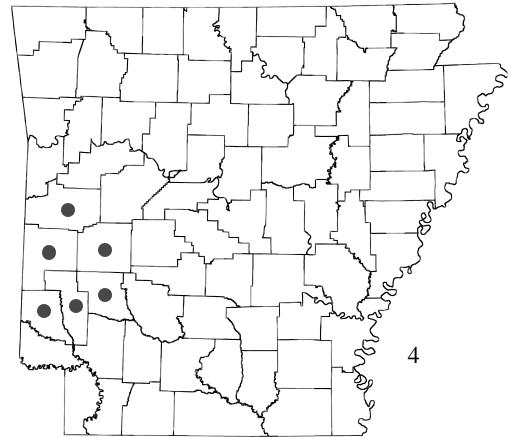
false flax



BRASSICACEAE

***Capsella bursa-pastoris* (L.) Medik.**

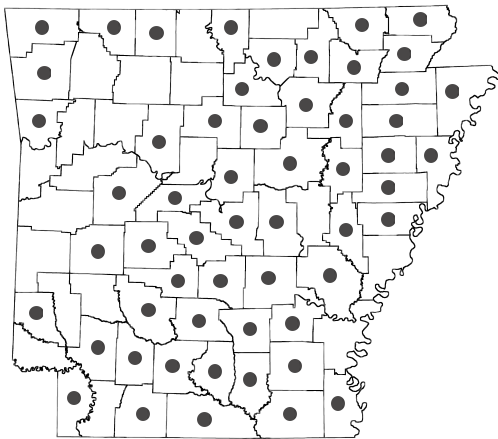
shepherd's-purse



BRASSICACEAE

***Cardamine angustata* O.E.Schulz**

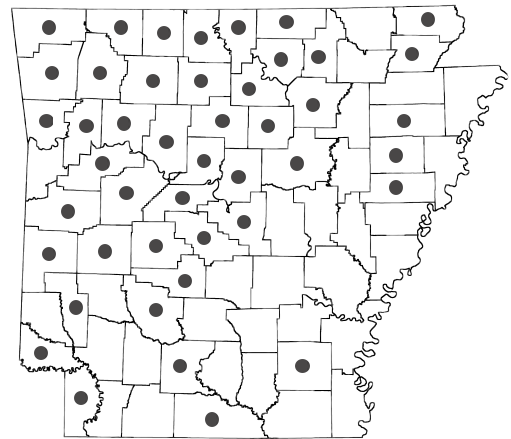
slender toothwort



BRASSICACEAE

***Cardamine bulbosa* (Schreb. ex Muhl.) Britton, Sterns & Poggenb.**

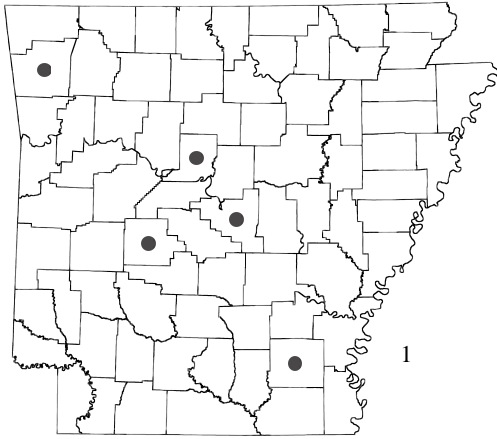
spring cress



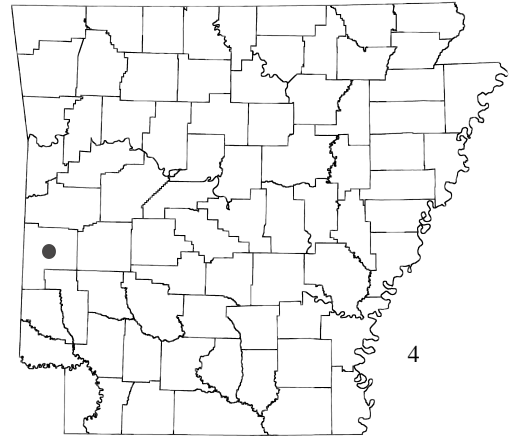
BRASSICACEAE

***Cardamine concatenata* (Michx.) O.Schwarz**

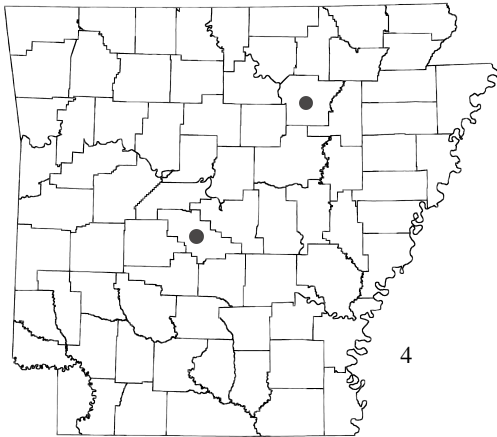
toothwort



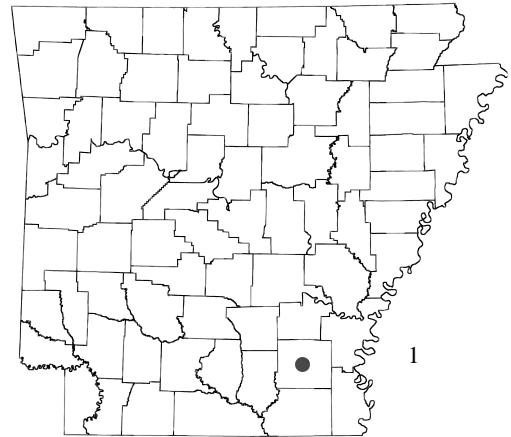
BRASSICACEAE
Cardamine debilis D. Don
 bittercress



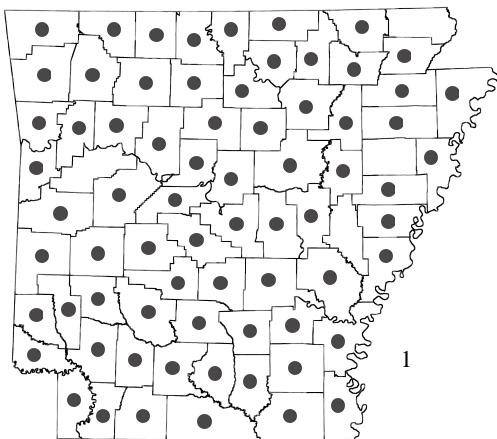
BRASSICACEAE
Cardamine dissecta (Leavenw.) Al-Shehbaz
 fork-leaf toothwort



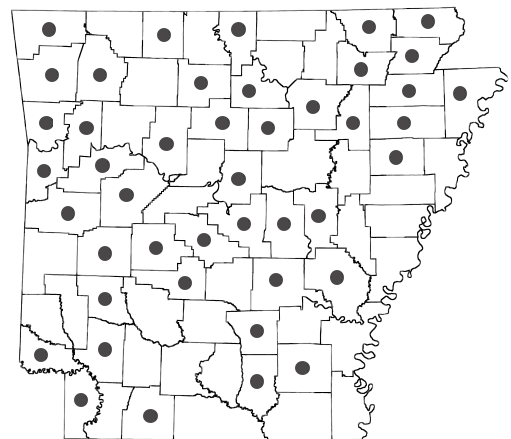
BRASSICACEAE
Cardamine douglassii Britton
 purple cress, limestone cress



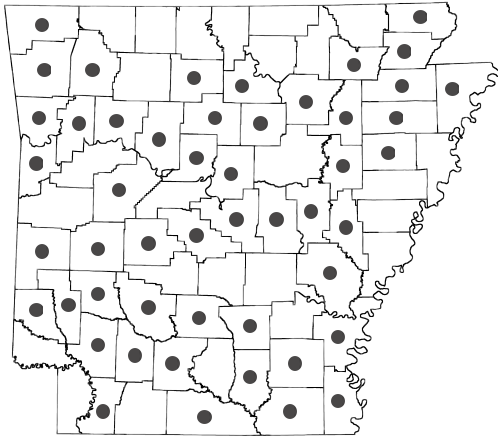
BRASSICACEAE
Cardamine flexuosa With.
 bittercress



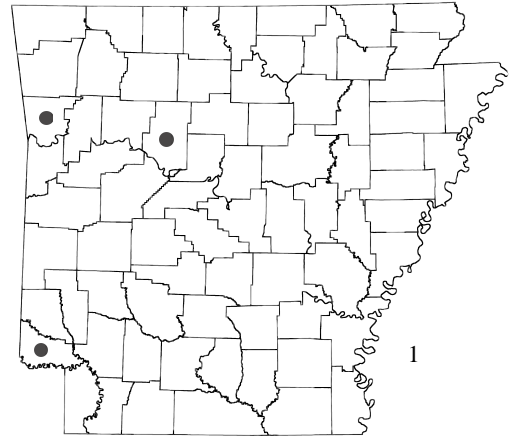
BRASSICACEAE
Cardamine hirsuta L.
 hairy bittercress



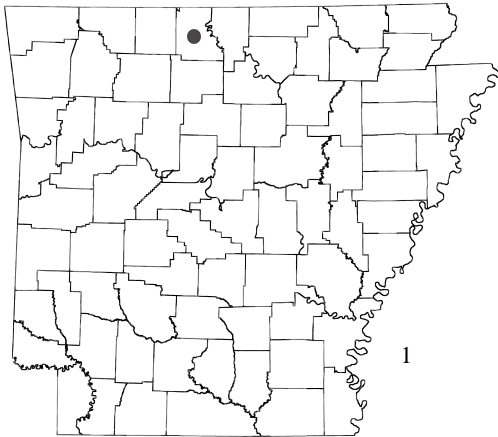
BRASSICACEAE
Cardamine parviflora L.
var. arenicola (Britton) O.E. Schulz
 small-flower bittercress



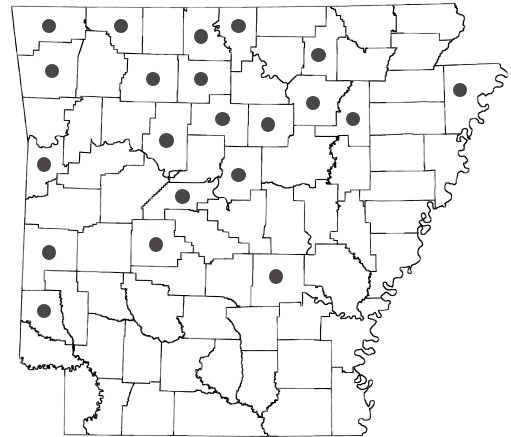
BRASSICACEAE
***Cardamine pensylvanica* Muhl. ex Willd.**
 Pennsylvania bittercress



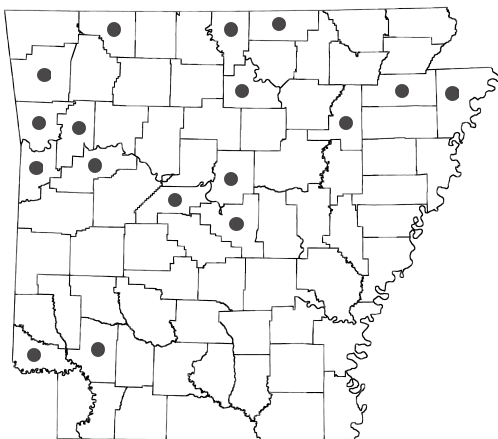
BRASSICACEAE
***Chorispora tenella* (Pall.) DC.**
 blue-mustard



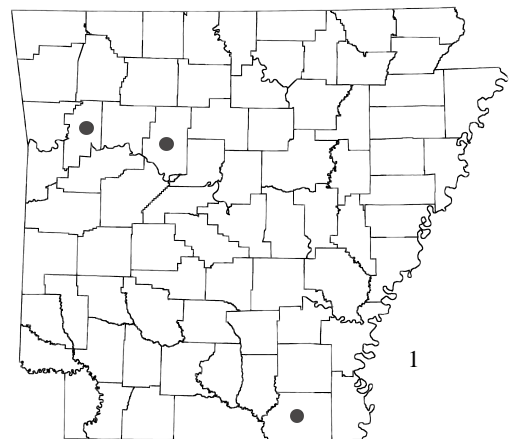
BRASSICACEAE
***Conringia orientalis* (L.) Dumort.**
 hare's-ear-mustard



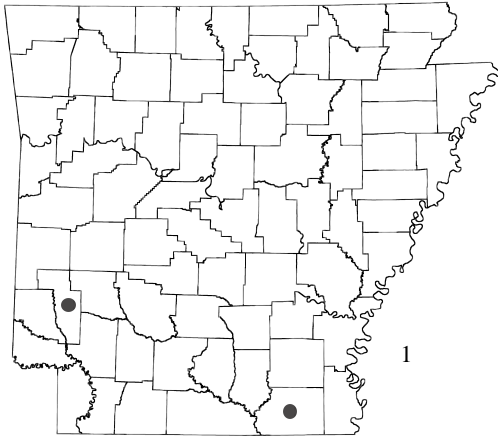
BRASSICACEAE
***Descurainia pinnata* (Walter) Britton**
subsp. *brachycarpa* (Richardson) Detling
 tansy-mustard



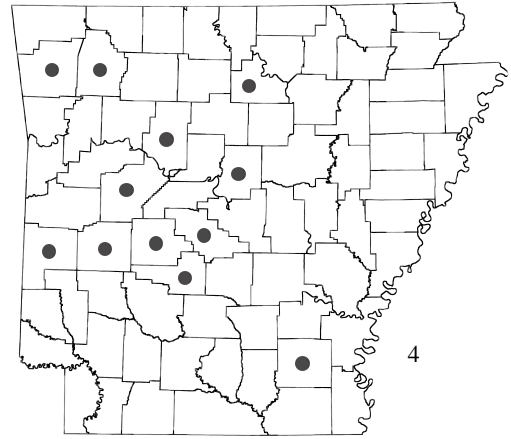
BRASSICACEAE
***Descurainia pinnata* (Walter) Britton**
subsp. *pinnata*
 tansy-mustard



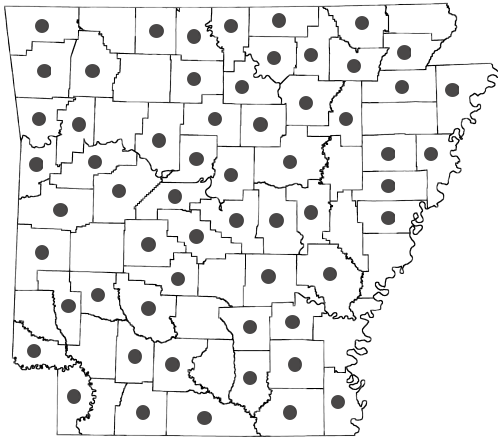
BRASSICACEAE
***Descurainia sophia* (L.) Webb ex Prantl in Engl. & Prantl**
 tansy-mustard, flixweed



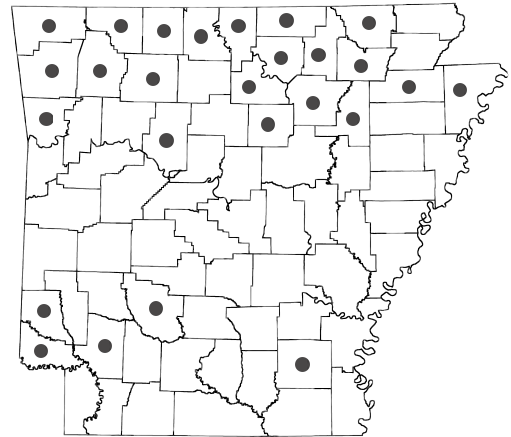
BRASSICACEAE
Diplotaxis muralis (L.) DC.
 stinking wall-rocket



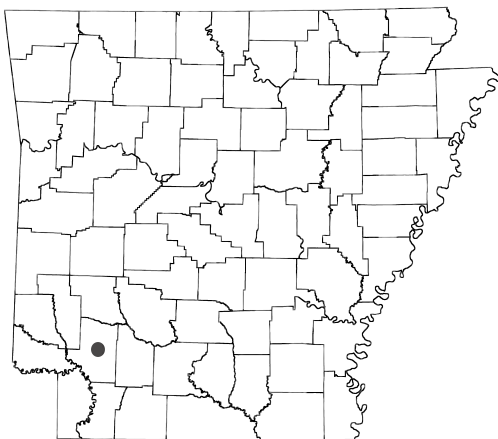
BRASSICACEAE
Draba aprica Beadle in Small
 open-ground whitlow-grass



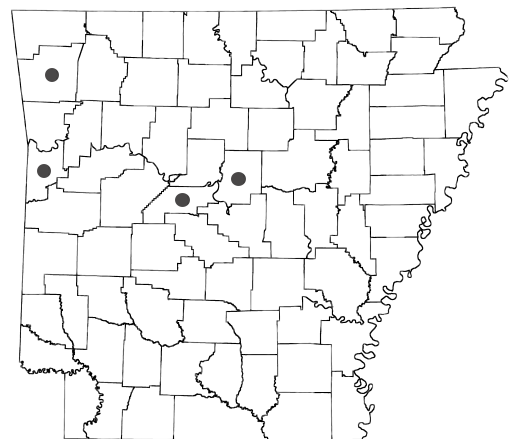
BRASSICACEAE
Draba brachycarpa Nutt. ex Torr. & A.Gray
 short-pod whitlow-grass



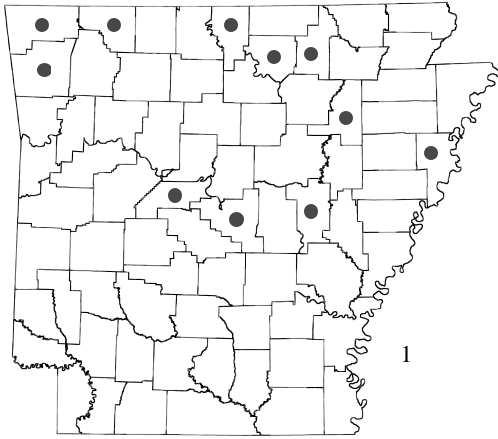
BRASSICACEAE
Draba cuneifolia Nutt. ex Torr. & A.Gray
var. cuneifolia
 wedge-leaf whitlow-grass



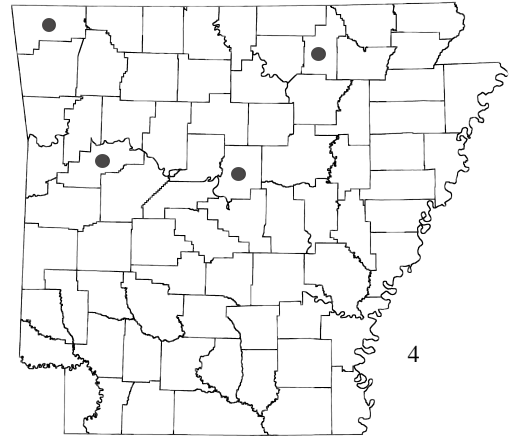
BRASSICACEAE
Draba platycarpa Torr. & A.Gray
 whitlow-grass



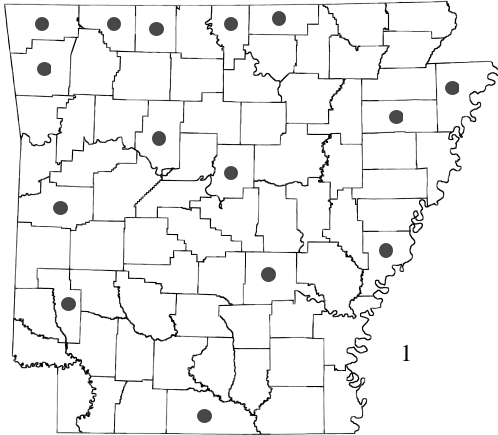
BRASSICACEAE
Draba reptans (Lam.) Fernald
 whitlow-grass



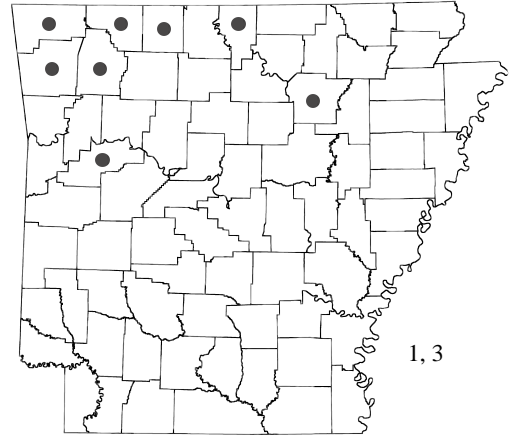
BRASSICACEAE
***Draba verna* L.**
 whitlow-grass



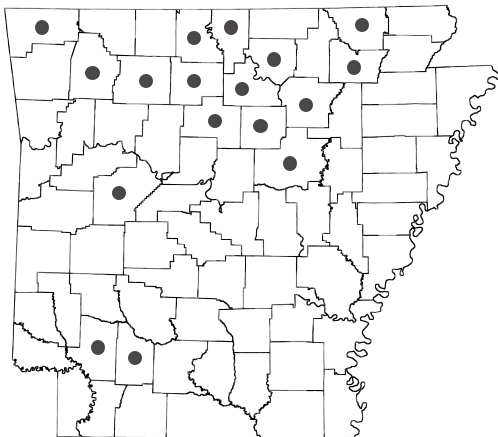
BRASSICACEAE
***Erysimum capitatum* (Douglas ex Hook.) Greene**
var. capitatum
 western wallflower



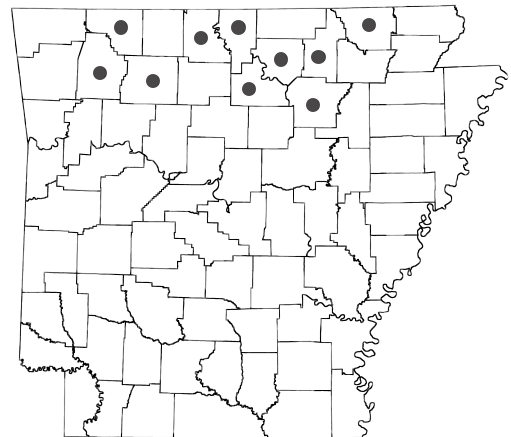
BRASSICACEAE
***Erysimum repandum* L.**
 spreading wallflower, bushy wallflower



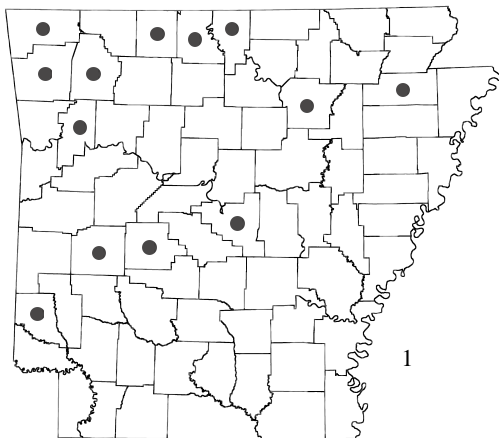
BRASSICACEAE
***Hesperis matronalis* L.**
 dame's-rocket



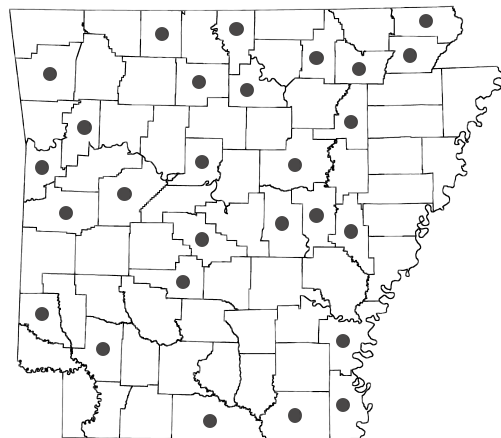
BRASSICACEAE
***Iodanthus pinnatifidus* (Michx.) Steud.**
 purple-rocket



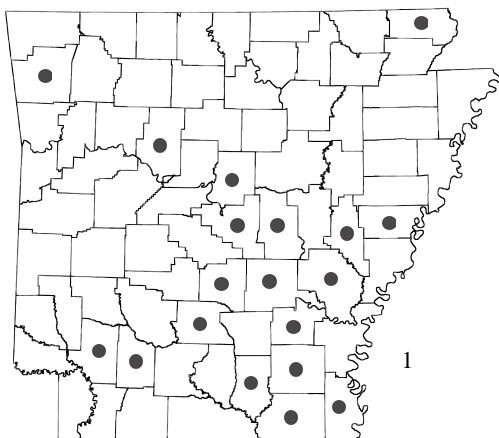
BRASSICACEAE
***Leavenworthia uniflora* (Michx.) Britton**
 glade cress



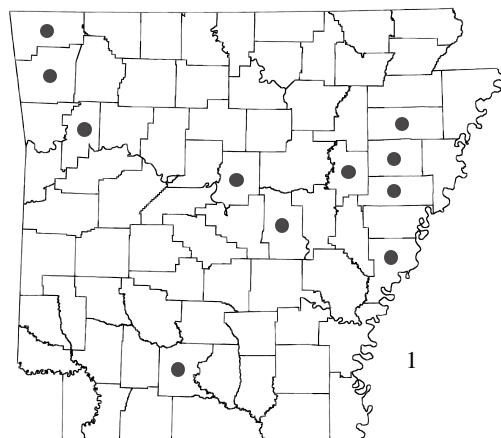
BRASSICACEAE
Lepidium campestre (L.) W.T.Aiton in Aiton & W.T.Aiton
 field pepper-grass, field cress



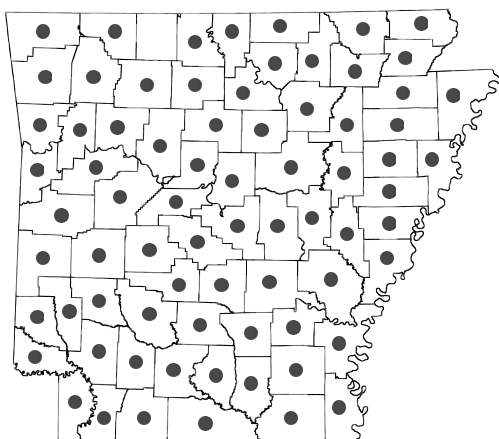
BRASSICACEAE
Lepidium densiflorum Schrad.
 pepper-grass



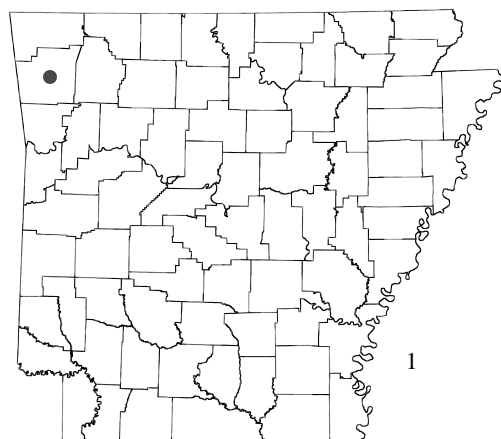
BRASSICACEAE
Lepidium didymum L.
 swine cress



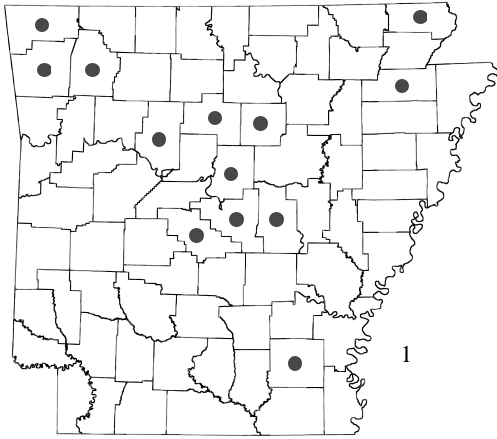
BRASSICACEAE
Lepidium oblongum Small
var. oblongum
 pepper-grass



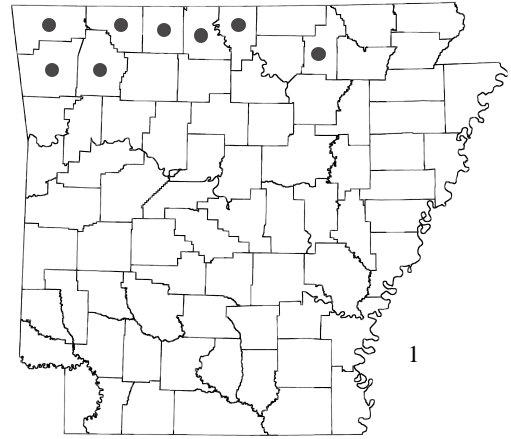
BRASSICACEAE
Lepidium virginicum L.
 Virginia pepper-grass, poor-man's-pepper



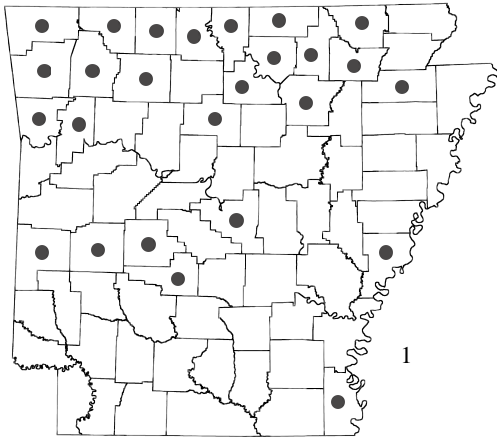
BRASSICACEAE
Lobularia maritima (L.) Desv.
 sweet-alyssum



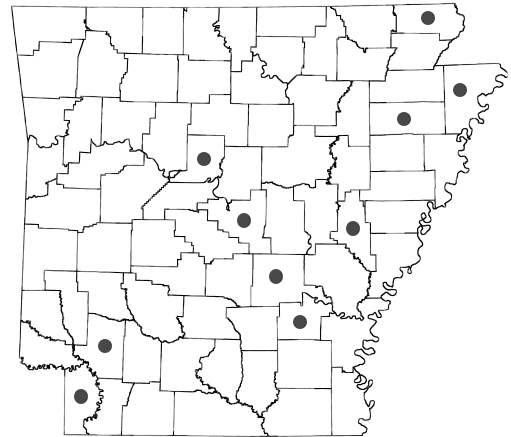
BRASSICACEAE
***Lunaria annua* L.**
 money-plant, honesty



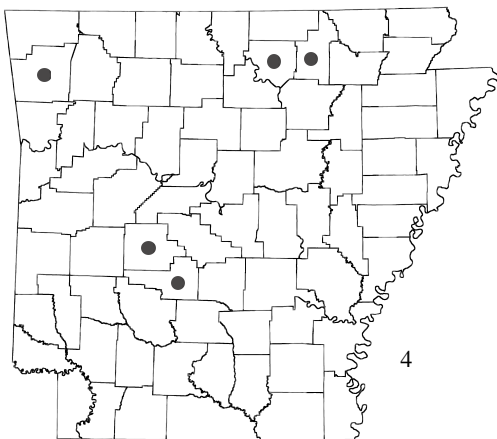
BRASSICACEAE
***Microthlaspi perfoliatum* (L.) F.K.Mey.**
 pennycress



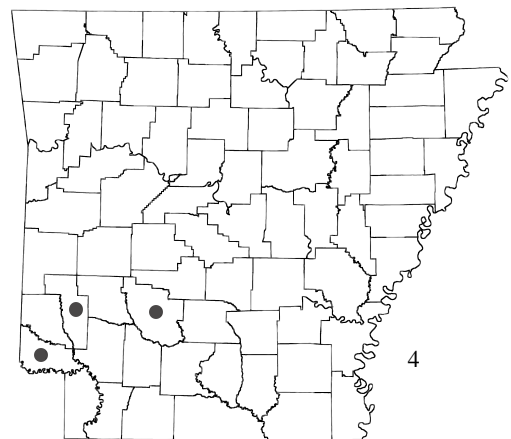
BRASSICACEAE
***Nasturtium officinale* W.T.Aiton in Aiton & W.T.Aiton**
 watercress



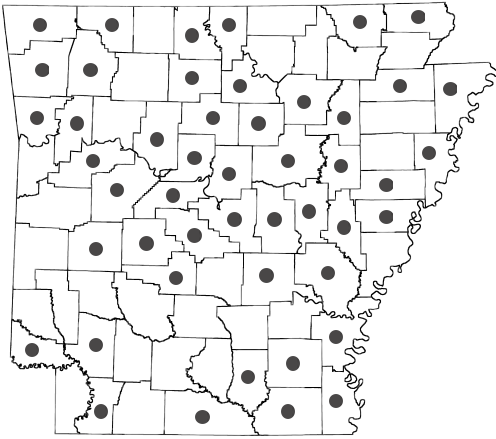
BRASSICACEAE
***Neobeckia aquatica* (Eaton) Greene**
 lake cress



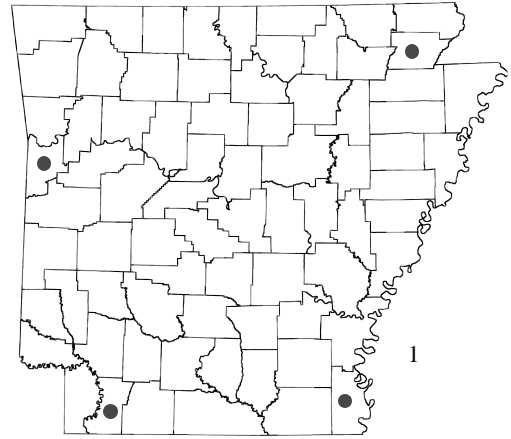
BRASSICACEAE
***Physaria filiformis* (Rollins) O'Kane & Al-Shehbaz**
 Missouri bladderpod



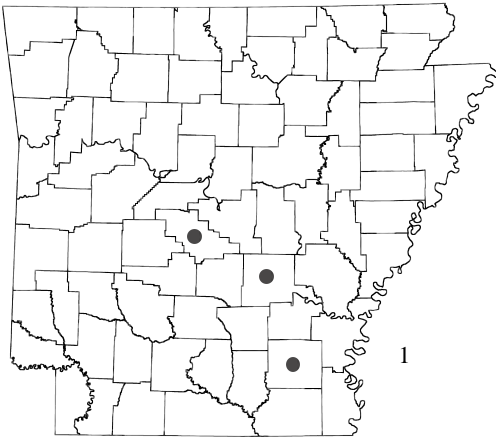
BRASSICACEAE
***Physaria gracilis* (Hook.) O'Kane & Al-Shehbaz**
 subsp. ***gracilis***
 slender bladderpod



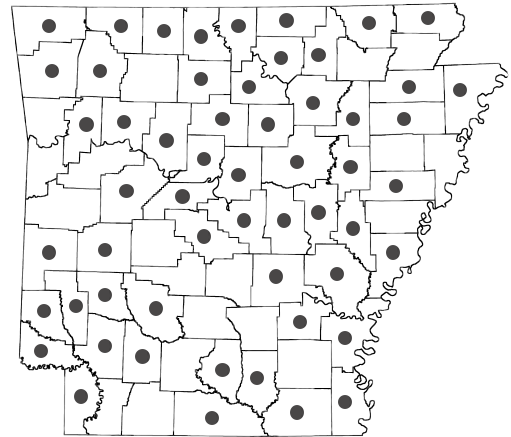
BRASSICACEAE
Planodes virginicum (L.) Greene
 Virginia rockcress, false bittercress



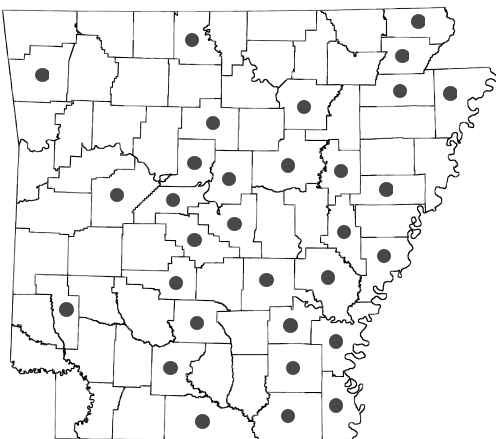
BRASSICACEAE
Raphanus raphanistrum L.
 wild radish



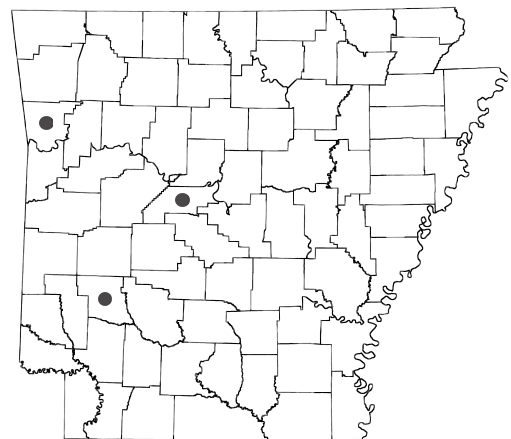
BRASSICACEAE
Raphanus sativus L.
 garden radish



BRASSICACEAE
Rorippa palustris (L.) Besser
var. fernaldiana (Butters & Abbe) Stuckey
 marsh yellowcress



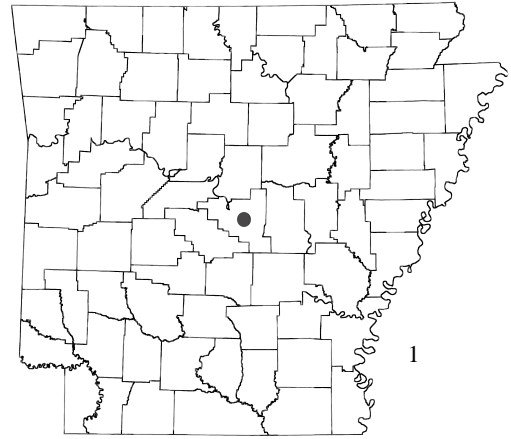
BRASSICACEAE
Rorippa sessiliflora (Nutt. ex Torr. & A.Gray) Hitchc.
 sessile-flower yellowcress



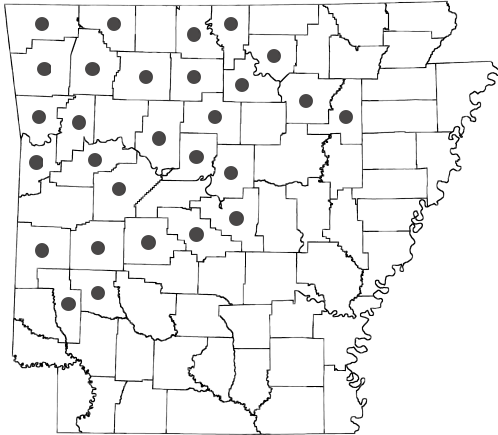
BRASSICACEAE
Rorippa sinuata (Nutt. ex Torr. & A.Gray) Hitchc.
 spreading yellowcress



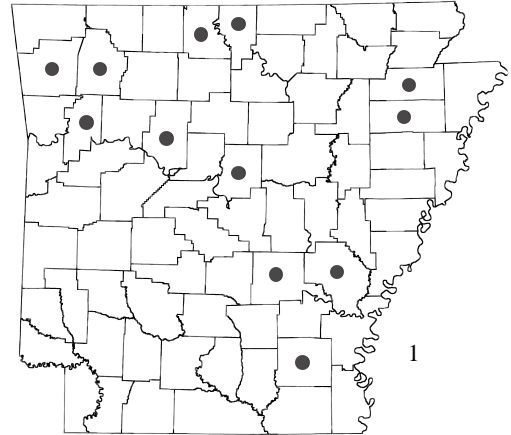
BRASSICACEAE
Rorippa sylvestris (L.) Besser
creeping yellowcress



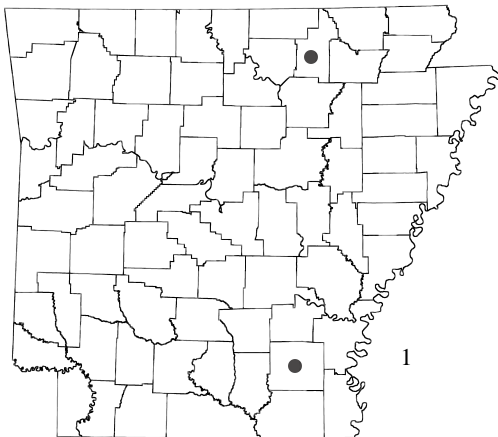
BRASSICACEAE
Rorippa teres (Michx.) Stuckey
var. teres
yellowcress



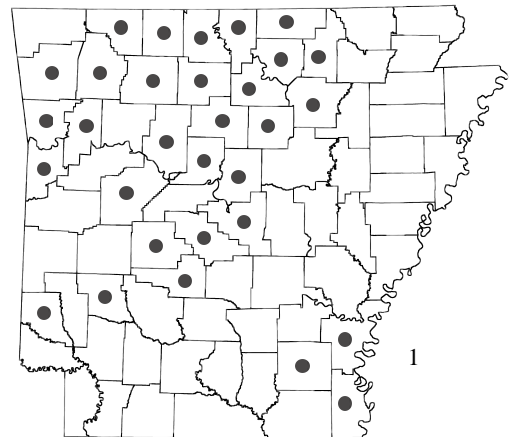
BRASSICACEAE
Selenia aurea Nutt.
golden selenia



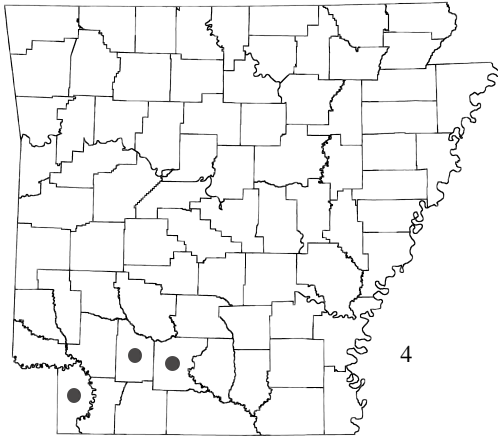
BRASSICACEAE
Sinapis arvensis L.
charlock, wild mustard



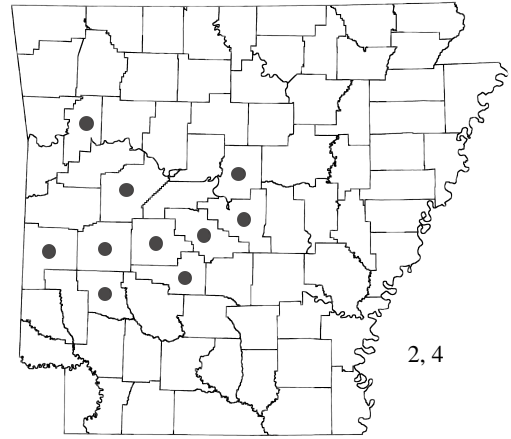
BRASSICACEAE
Sisymbrium altissimum L.
tumble-mustard



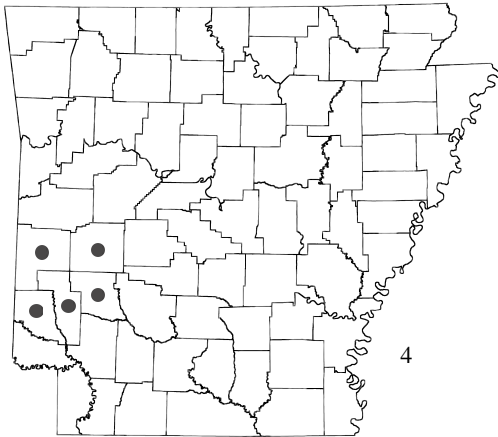
BRASSICACEAE
Sisymbrium officinale (L.) Scop.
hedge-mustard



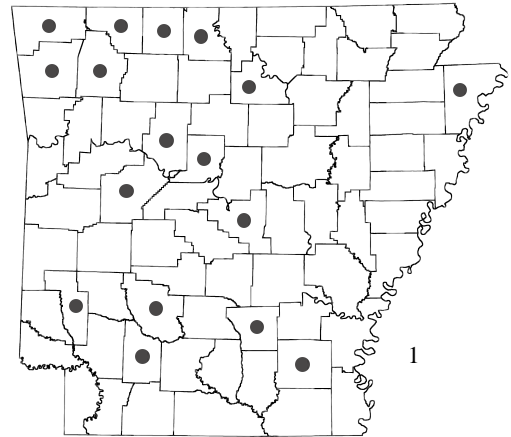
BRASSICACEAE
Streptanthus hyacinthoides Hook.
 sandhill twistflower



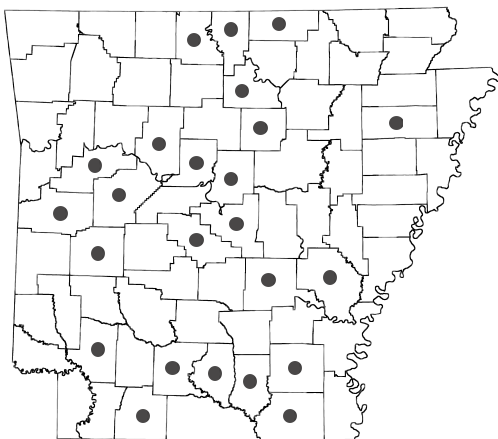
BRASSICACEAE
Streptanthus maculatus Nutt.
 subsp. **obtusifolius** (Hook.) Rollins
 Arkansas twistflower, Arkansas cabbage



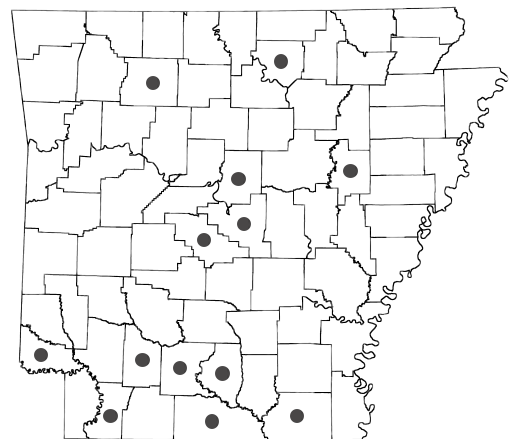
BRASSICACEAE
Streptanthus squamiformis Goodman
 Ouachita twistflower



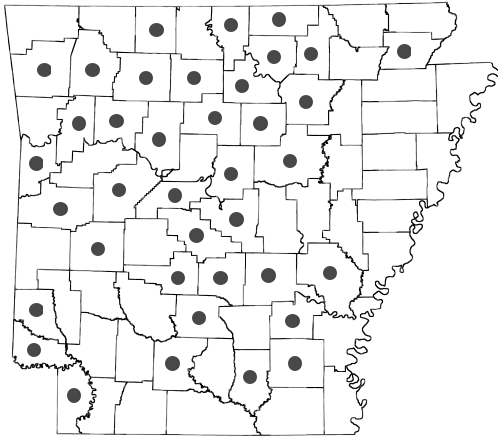
BRASSICACEAE
Thlaspi arvense L.
 field pennycress



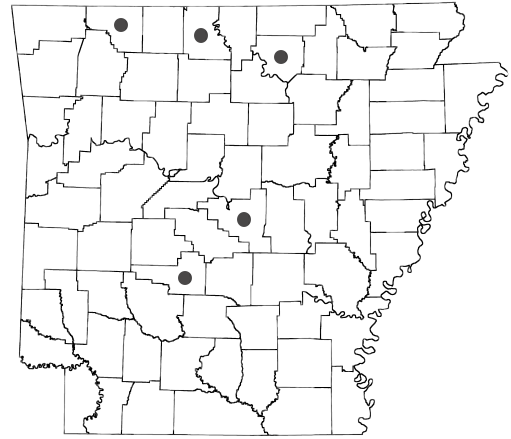
CABOMBACEAE
Brasenia schreberi J.F.Gmel.
 water-shield



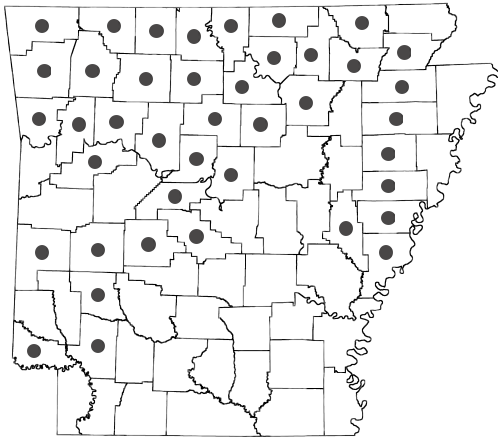
CABOMBACEAE
Cabomba caroliniana A.Gray
 fanwort



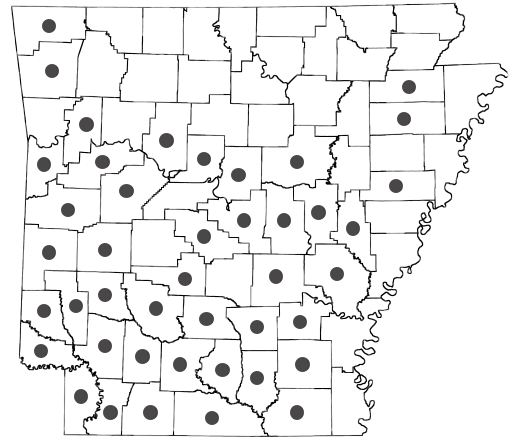
CACTACEAE
Opuntia humifusa (Raf.) Raf.
var. humifusa
eastern prickly-pear



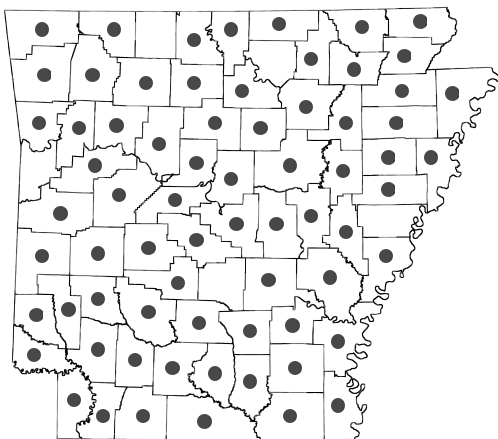
CACTACEAE
Opuntia macrorhiza Engelm.
western prickly-pear



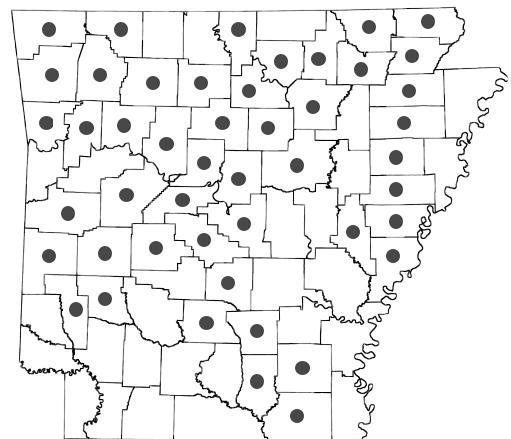
CAMPANULACEAE
Campanula americana L.
tall bellflower



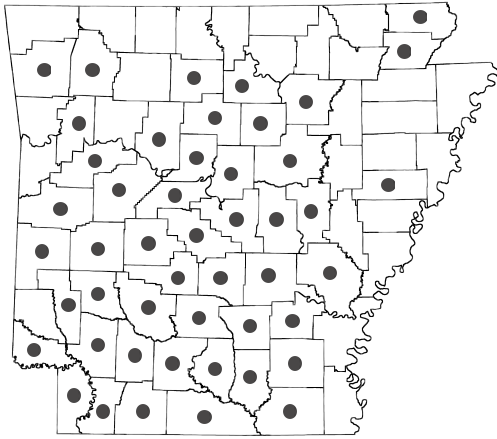
CAMPANULACEAE
Lobelia appendiculata A.DC.
pale lobelia



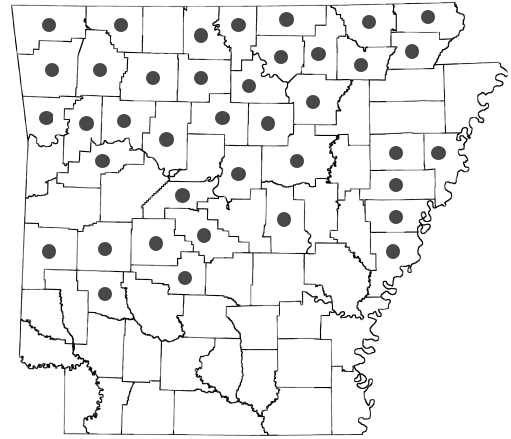
CAMPANULACEAE
Lobelia cardinalis L.
cardinal-flower



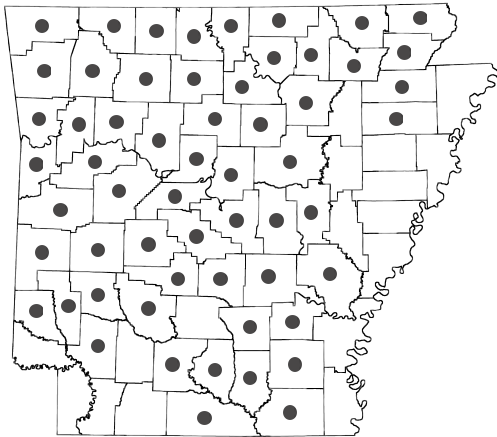
CAMPANULACEAE
Lobelia inflata L.
Indian-tobacco



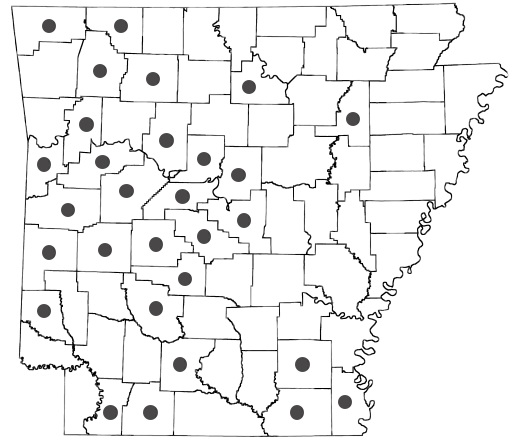
CAMPANULACEAE
Lobelia puberula Michx.
 downy lobelia



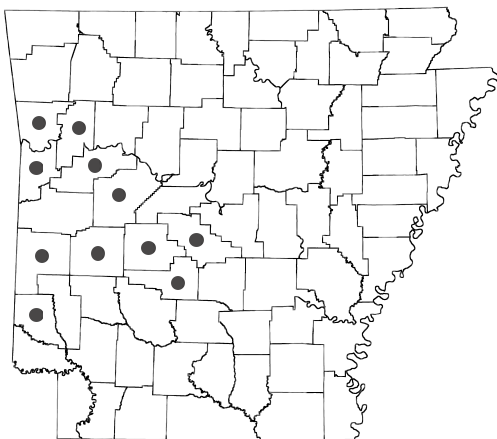
CAMPANULACEAE
Lobelia siphilitica L.
 great blue lobelia



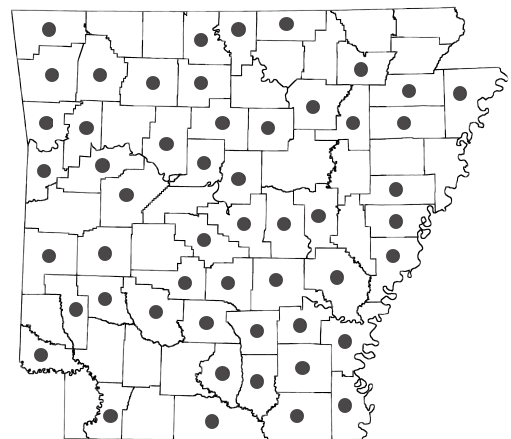
CAMPANULACEAE
Lobelia spicata Lam.
 pale-spike lobelia, highbelia



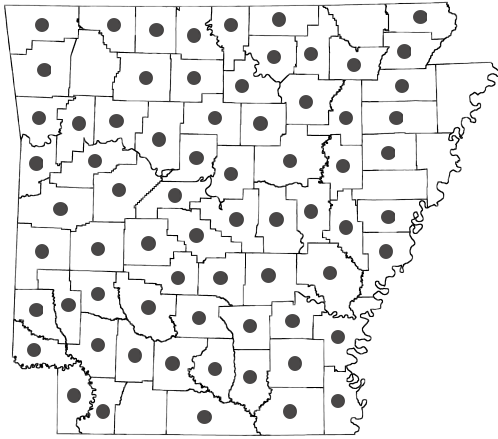
CAMPANULACEAE
Triodanis lamprosperma McVaugh
 slim-pod Venus'-looking-glass



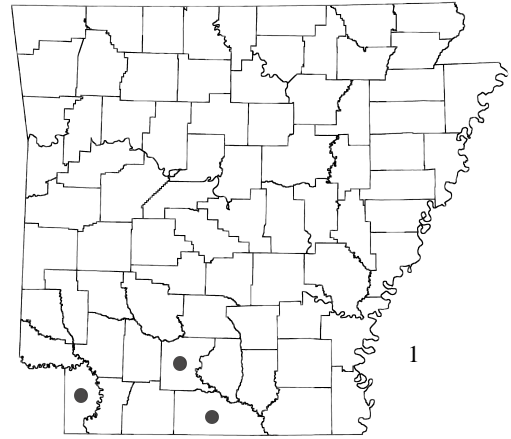
CAMPANULACEAE
Triodanis leptocarpa (Nutt.) Nieuwl.
 prairie Venus'-looking-glass



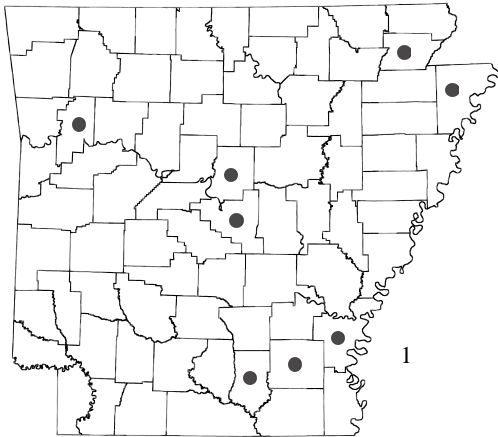
CAMPANULACEAE
Triodanis perfoliata (L.) Nieuwl.
subsp. biflora (Ruiz & Pav.) Lammers
 small Venus'-looking-glass



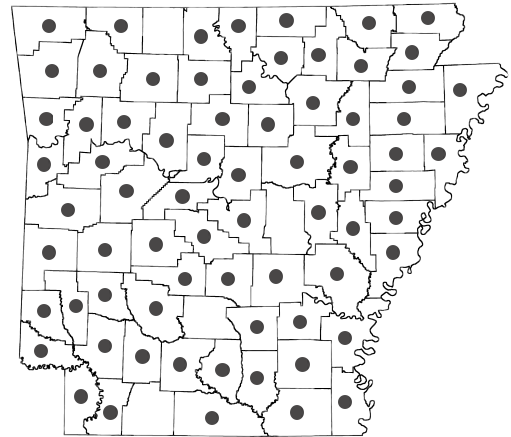
CAMPANULACEAE
***Triodanis perfoliata* (L.) Nieuwl.**
subsp. perfoliata
clasping-leaf Venus'-looking-glass



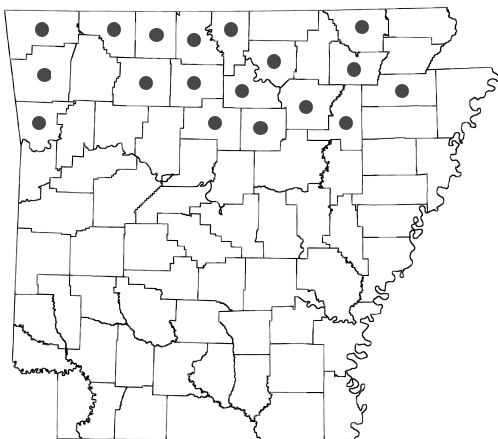
CAMPANULACEAE
***Wahlenbergia marginata* (Thunb.) A.DC.**
southern rockbell



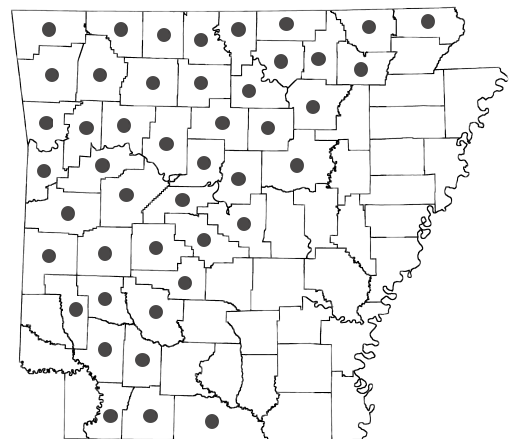
CANNABACEAE
***Cannabis sativa* L.**
hemp, marijuana



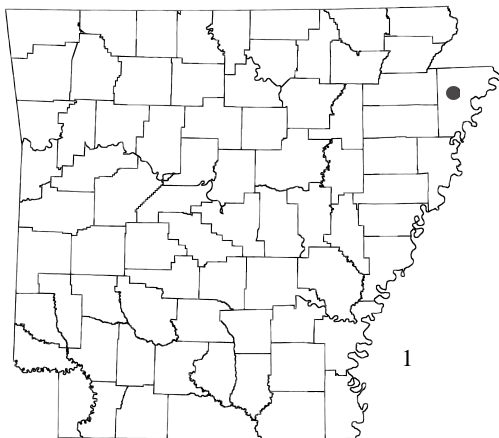
CANNABACEAE
***Celtis laevigata* Willd.**
sugarberry



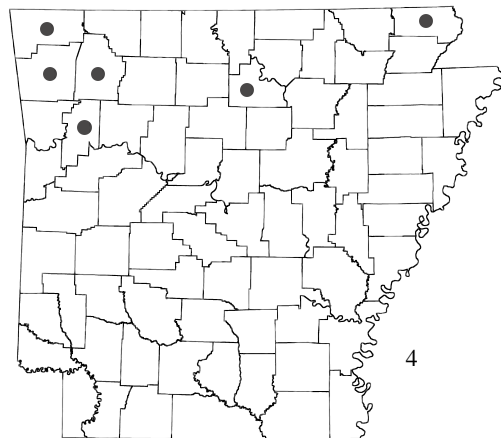
CANNABACEAE
***Celtis occidentalis* L.**
hackberry



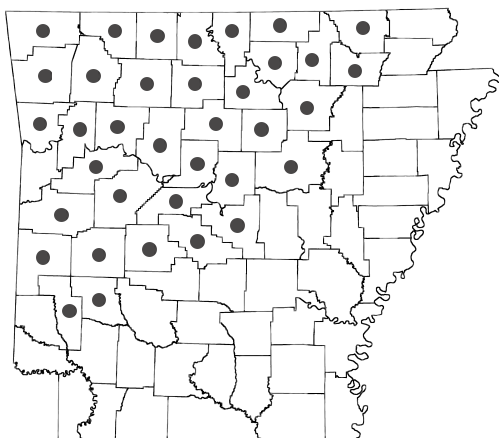
CANNABACEAE
***Celtis tenuifolia* Nutt.**
dwarf hackberry



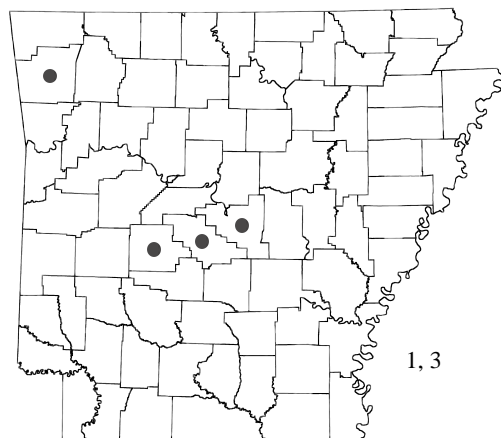
CANNABACEAE
Humulus japonicus Siebold & Zucc.
 Japanese hop



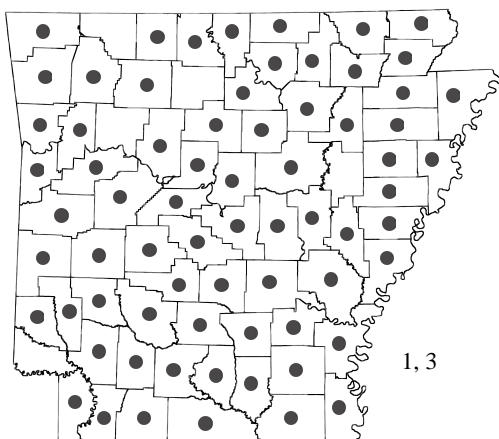
CANNABACEAE
Humulus lupulus L.
var. pubescens E.Small
 wild hop



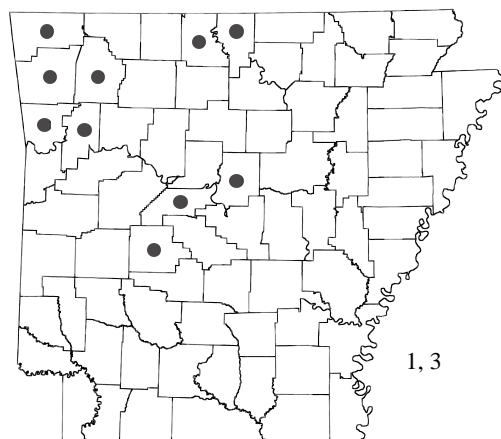
CAPRIFOLIACEAE
Lonicera flava Sims
 yellow honeysuckle



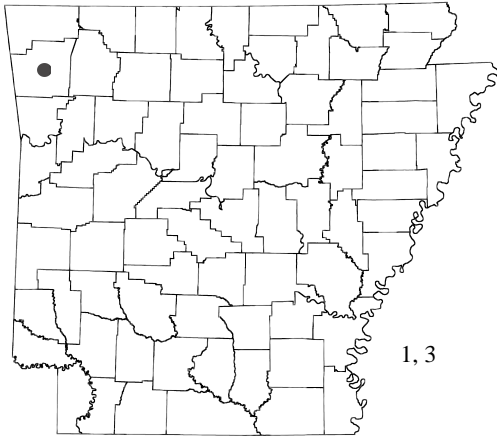
CAPRIFOLIACEAE
Lonicera fragrantissima Lindl. & Paxton
 fragrant honeysuckle, sweet-breath-of-spring



CAPRIFOLIACEAE
Lonicera japonica Thunb. ex Murray
 Japanese honeysuckle



CAPRIFOLIACEAE
Lonicera maackii (Rupr.) Maxim.
 Amur honeysuckle, bush honeysuckle

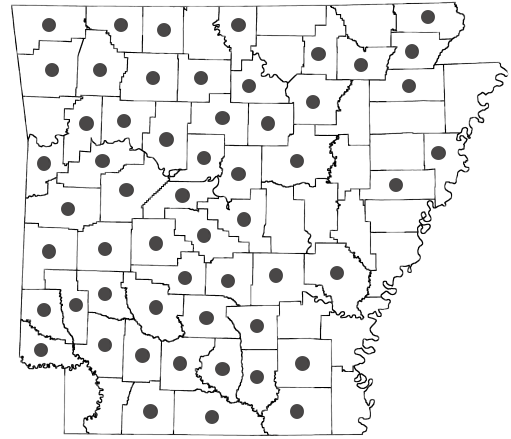


1, 3

CAPRIFOLIACEAE

***Lonicera morrowii* A.Gray**

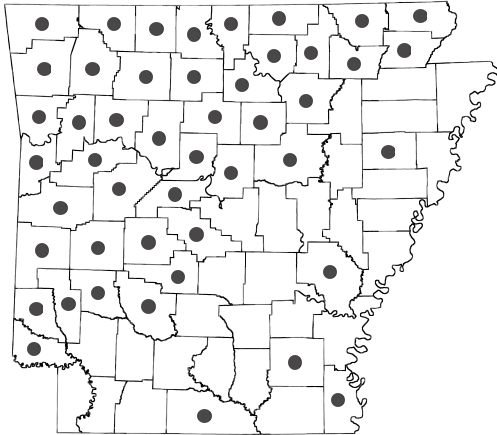
Morrow's honeysuckle, bush honeysuckle



CAPRIFOLIACEAE

***Lonicera sempervirens* L.**

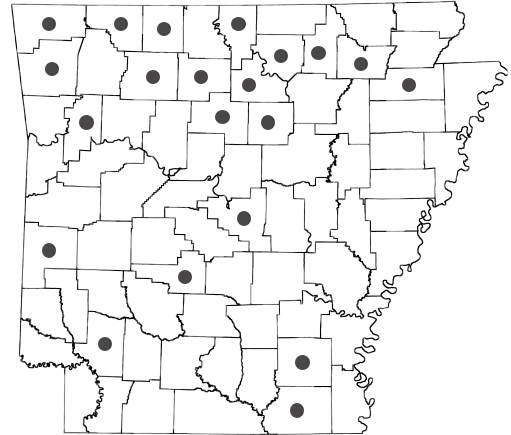
trumpet honeysuckle, coral honeysuckle



CAPRIFOLIACEAE

***Symphoricarpos orbiculatus* Moench**

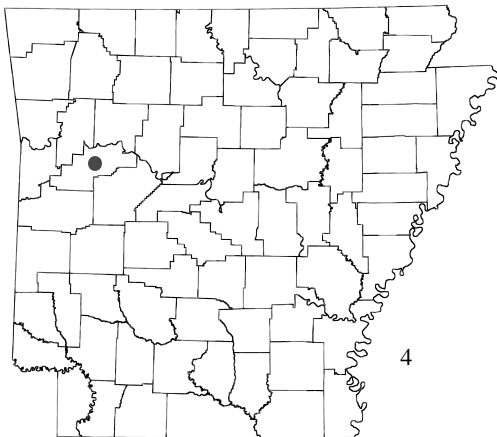
coral-berry



CAPRIFOLIACEAE

***Triosteum angustifolium* L.**

yellow-flower horse-gentian



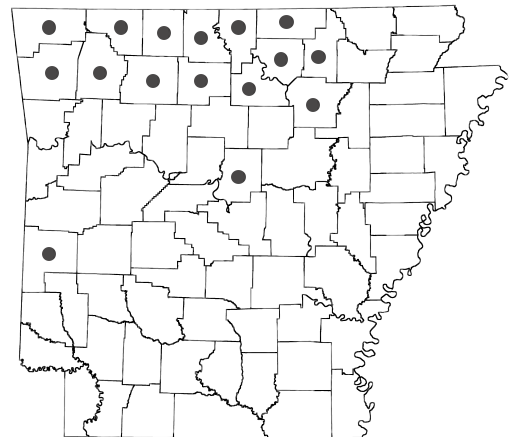
4

CAPRIFOLIACEAE

***Triosteum aurantiacum* E.P.Bicknell**

var. *illinoense* (Wiegand) E.J.Palmer & Steyer.

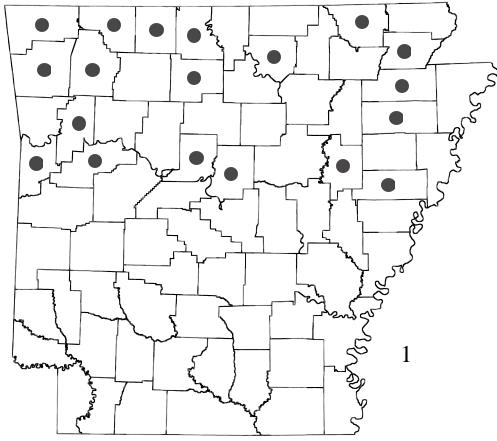
red-fruit horse-gentian



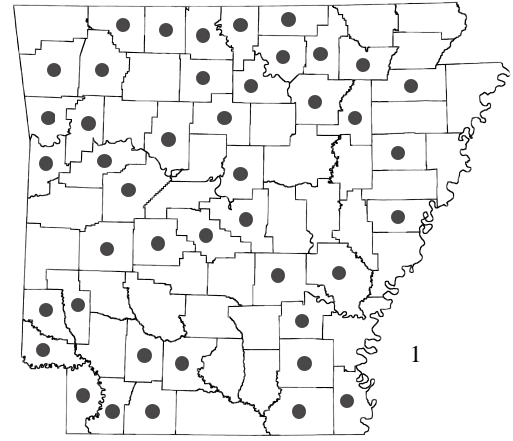
CAPRIFOLIACEAE

***Triosteum perfoliatum* L.**

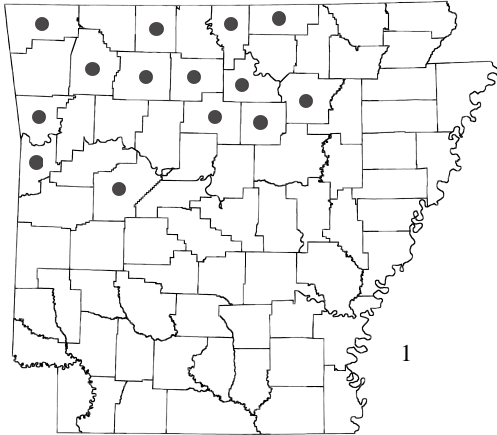
horse-gentian



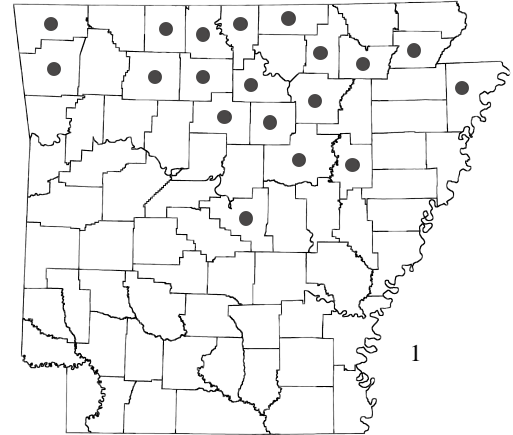
CARYOPHYLLACEAE
Agrostemma githago L.
var. githago
 corncockle



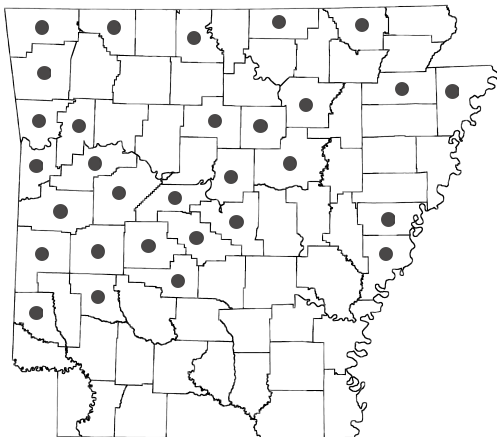
CARYOPHYLLACEAE
Arenaria serpyllifolia L.
var. serpyllifolia
 thyme-leaf sandwort



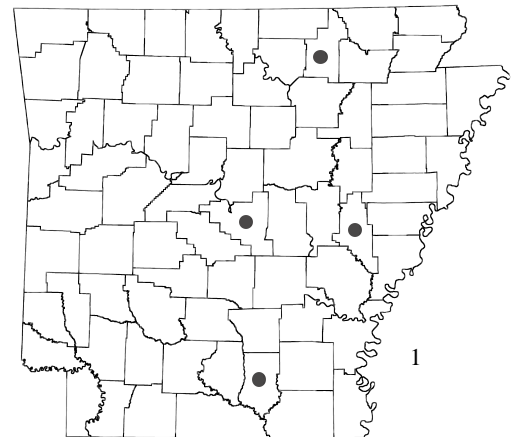
CARYOPHYLLACEAE
Arenaria serpyllifolia L.
var. tenuior Mert. & W.D.J.Koch in Röhl. et al.
 thyme-leaf sandwort



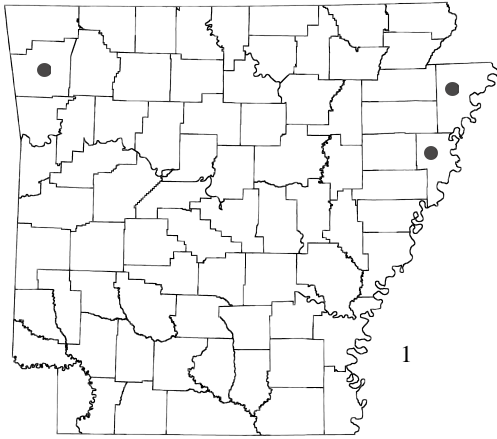
CARYOPHYLLACEAE
Cerastium brachypetalum Pers.
 gray mouse-ear chickweed



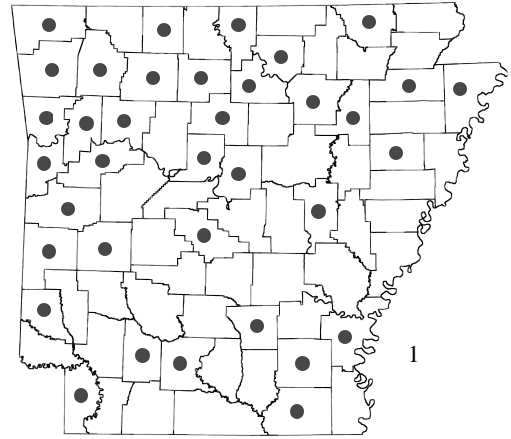
CARYOPHYLLACEAE
Cerastium brachypodum (Engelm. ex A.Gray) B.L.Rob.
 mouse-ear chickweed



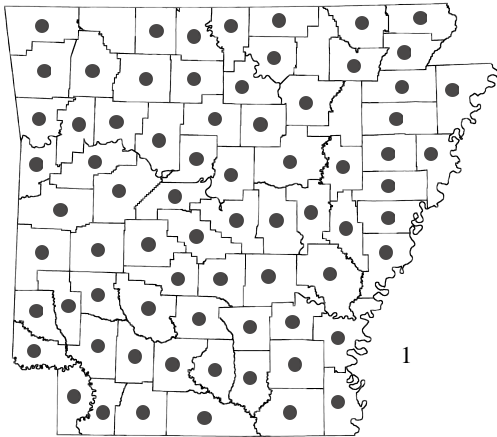
CARYOPHYLLACEAE
Cerastium diffusum Pers.
 mouse-ear chickweed



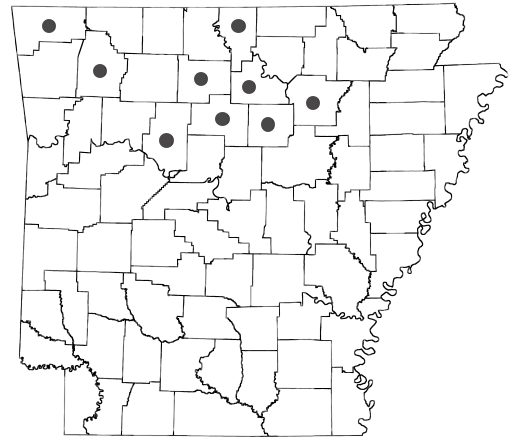
CARYOPHYLLACEAE
***Cerastium dubium* (Bastard) Guépin**
 mouse-ear chickweed



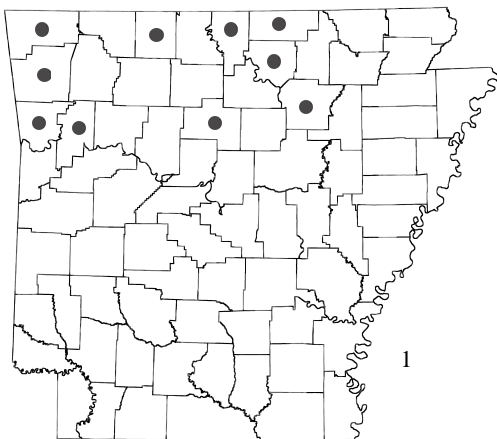
CARYOPHYLLACEAE
***Cerastium fontanum* Baumg.**
subsp. vulgare (Hartm.) Greuter & Burdet
 common mouse-ear chickweed



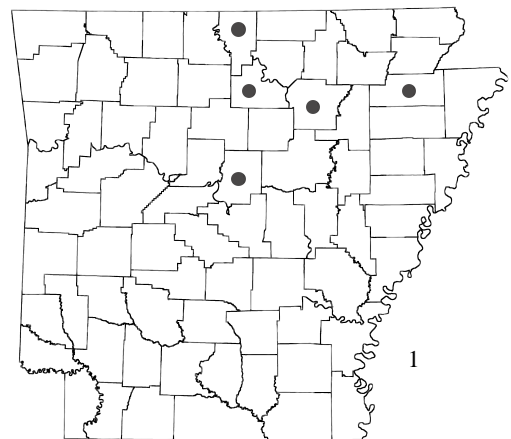
CARYOPHYLLACEAE
***Cerastium glomeratum* Thuill.**
 sticky mouse-ear chickweed



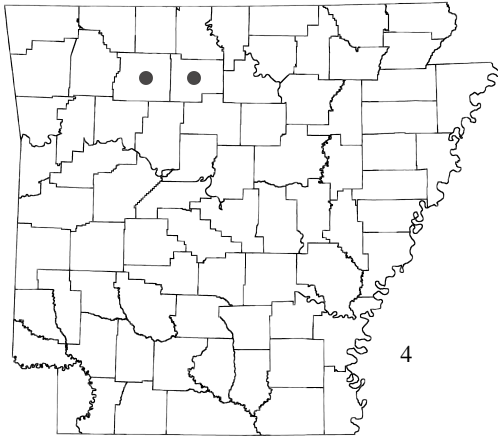
CARYOPHYLLACEAE
***Cerastium nutans* Raf.**
var. nutans
 nodding mouse-ear chickweed



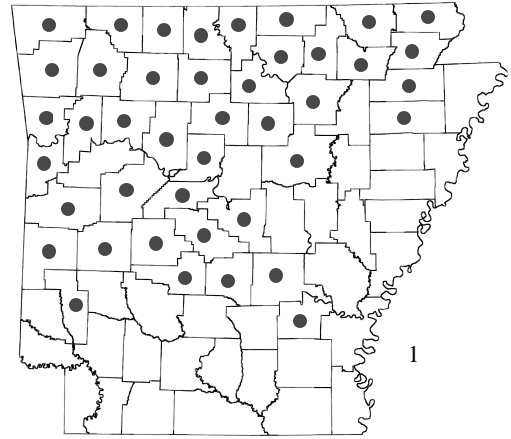
CARYOPHYLLACEAE
***Cerastium pumilum* Curtis**
 dwarf mouse-ear chickweed



CARYOPHYLLACEAE
***Cerastium semidecandrum* L.**
 small mouse-ear chickweed



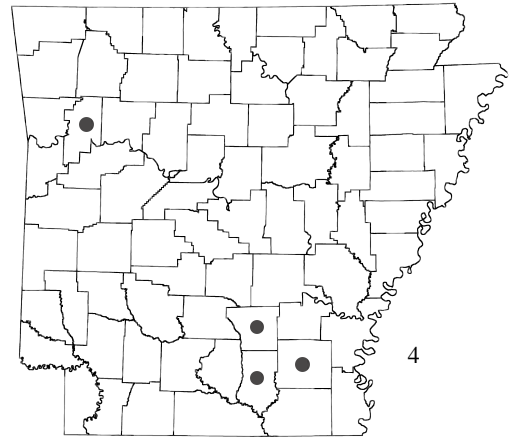
CARYOPHYLLACEAE
Cerastium velutinum Raf.
var. velutinum
 velvety chickweed



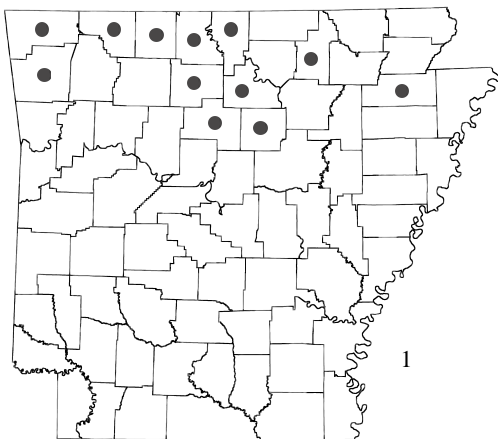
CARYOPHYLLACEAE
Dianthus armeria L.
subsp. armeria
 Deptford pink



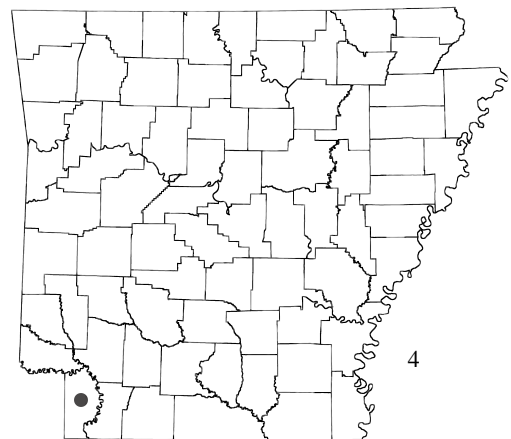
CARYOPHYLLACEAE
Dianthus barbatus L.
subsp. barbatus
 sweet-William



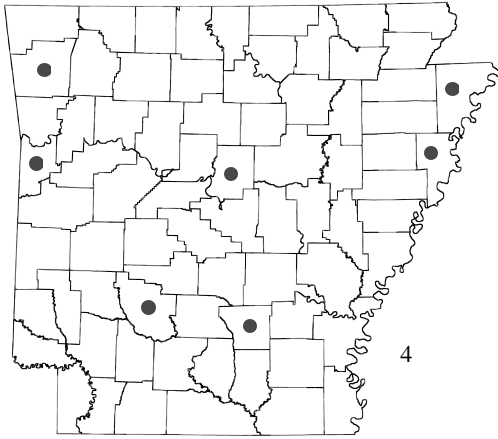
CARYOPHYLLACEAE
Geocarpon minimum Mack.
 geocarpon, tiny-Tim



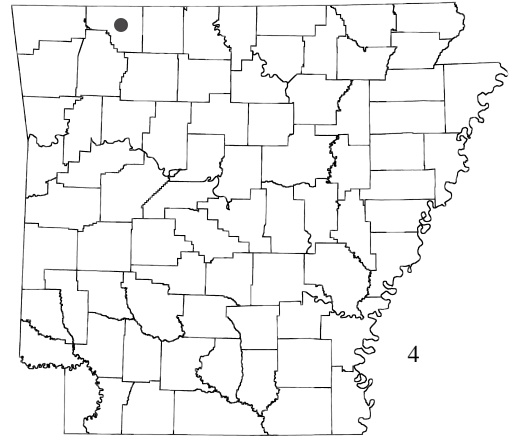
CARYOPHYLLACEAE
Holosteum umbellatum L.
subsp. umbellatum
 jagged-chickweed



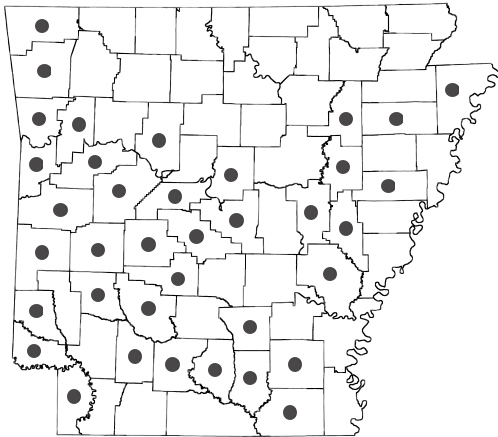
CARYOPHYLLACEAE
Loefflingia squarrosa Nutt. in Torr. & A.Gray
 spreading loefflingia, spreading pygmyleaf



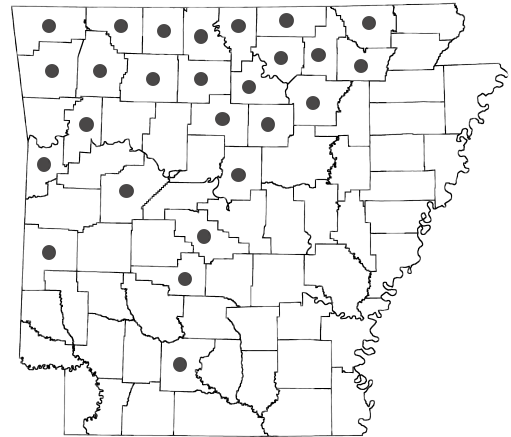
CARYOPHYLLACEAE
***Minuartia drummondii* (Shinners) McNeill**
 Drummond's sandwort



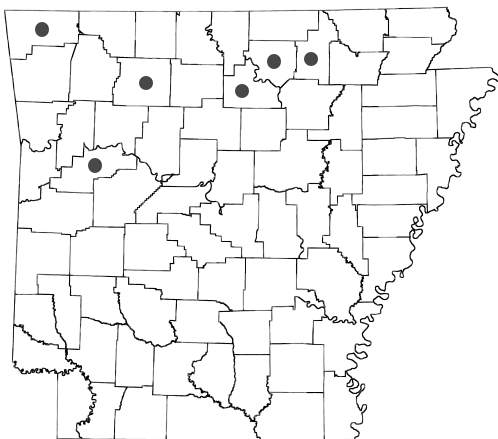
CARYOPHYLLACEAE
***Minuartia michauxii* (Fenzl) Farw.**
 rock sandwort



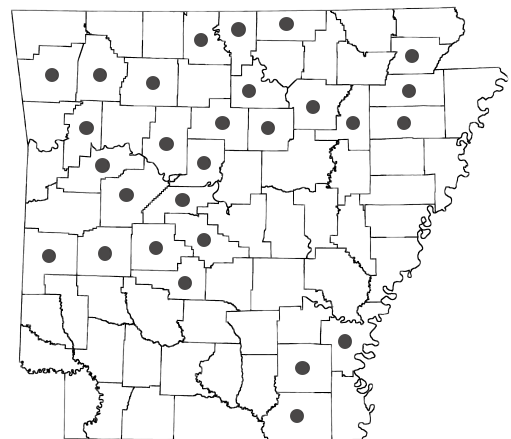
CARYOPHYLLACEAE
***Minuartia muscorum* (Fassett) Rabeler**
 sandwort



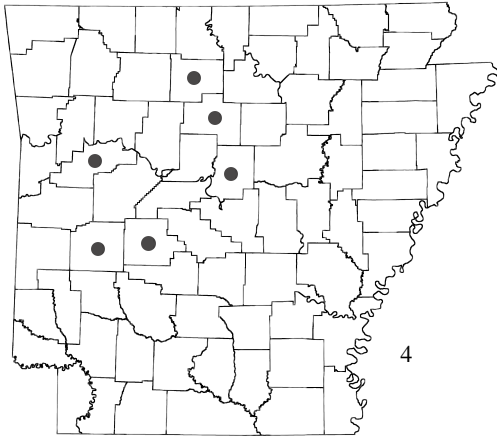
CARYOPHYLLACEAE
***Minuartia patula* (Michx.) Mattf.**
 sandwort



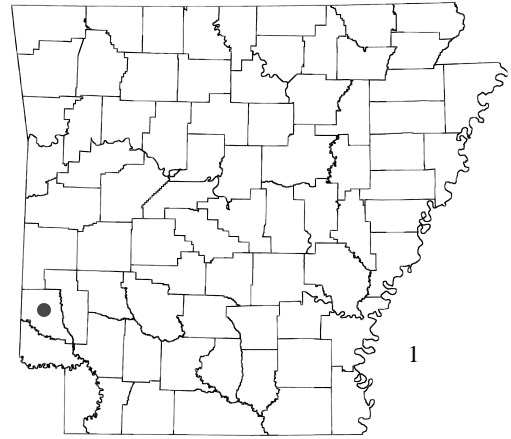
CARYOPHYLLACEAE
***Paronychia canadensis* (L.) A.W.Wood**
 forked-chickweed, smooth forked nailwort



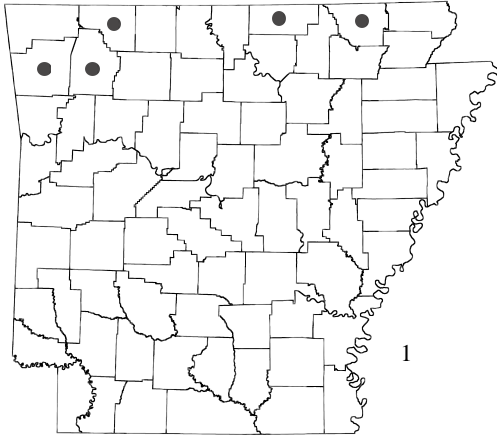
CARYOPHYLLACEAE
***Paronychia fastigiata* (Raf.) Fernald**
var. *fastigiata*
 forked-chickweed, hairy forked nailwort



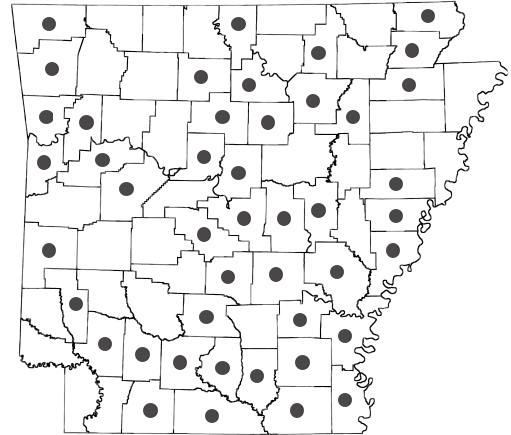
CARYOPHYLLACEAE
Paronychia virginica Spreng.
 yellow nailwort, Virginia nailwort



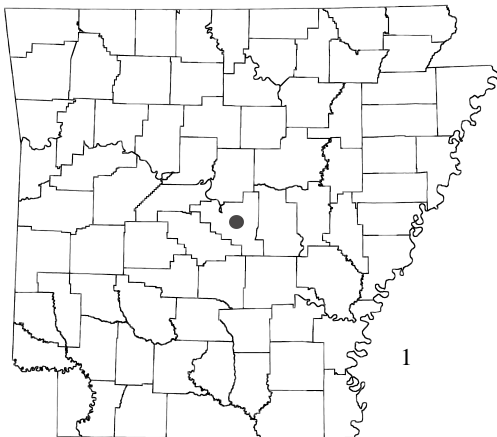
CARYOPHYLLACEAE
Petrorhagia dubia (Raf.) G.Lopéz & Romo
 childing-pink



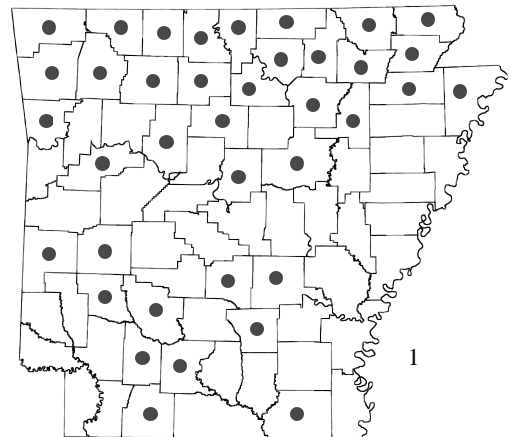
CARYOPHYLLACEAE
Petrorhagia prolifera (L.) P.W.Ball & Heyw.
 childing-pink



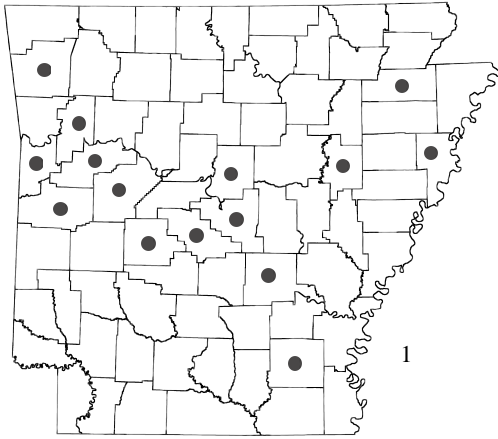
CARYOPHYLLACEAE
Sagina decumbens (Elliott) Torr. & A.Gray
subsp. decumbens
 pearlwort



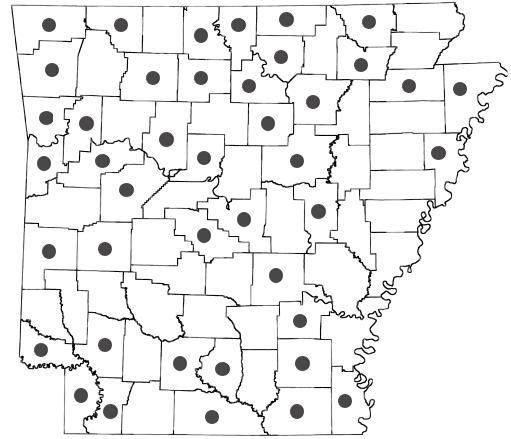
CARYOPHYLLACEAE
Sagina procumbens L.
 bird's-eye pearlwort, matted pearlwort



CARYOPHYLLACEAE
Saponaria officinalis L.
 bouncing-bet, soapwort



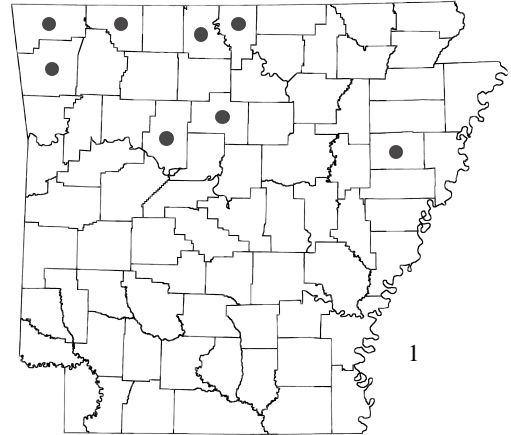
CARYOPHYLLACEAE
Scleranthus annuus L.
subsp. **annuus**
knewel



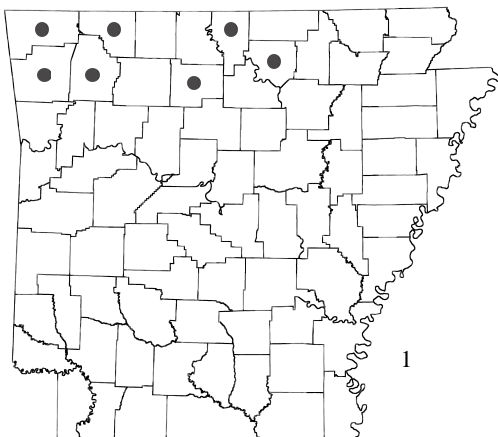
CARYOPHYLLACEAE
Silene antirrhina L.
sleepy catchfly



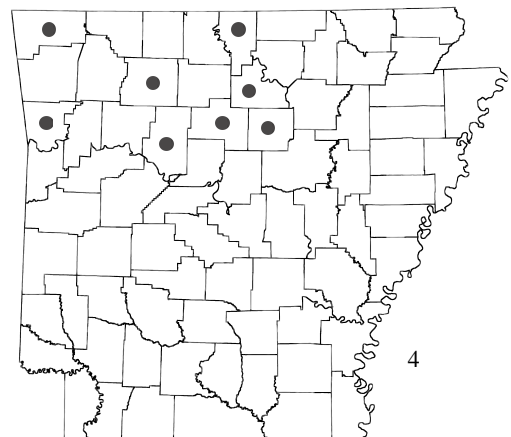
CARYOPHYLLACEAE
Silene armeria L.
sweet-William catchfly



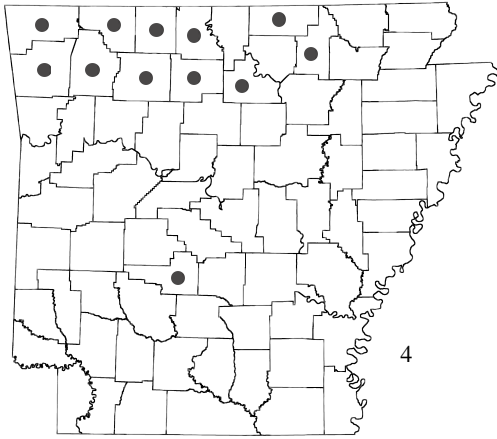
CARYOPHYLLACEAE
Silene coronaria (L.) Clairville
rose-campion, mullein-pink



CARYOPHYLLACEAE
Silene latifolia Poir.
white-campion



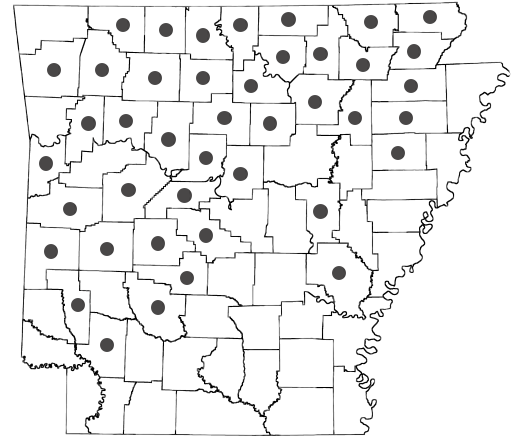
CARYOPHYLLACEAE
Silene ovata Pursh
ovate-leaf catchfly



CARYOPHYLLACEAE

Silene regia Sims

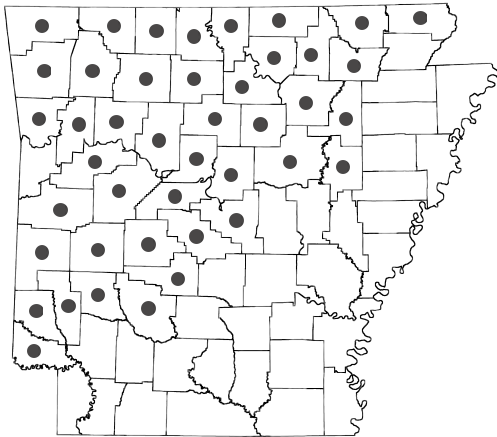
royal catchfly



CARYOPHYLLACEAE

Silene stellata (L.) W.T.Aiton in Aiton & W.T.Aiton

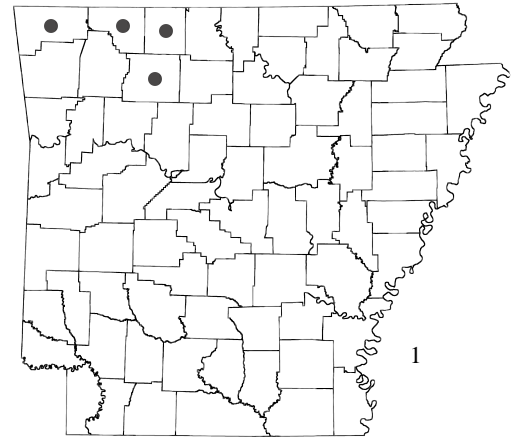
starry-campion



CARYOPHYLLACEAE

Silene virginica L.

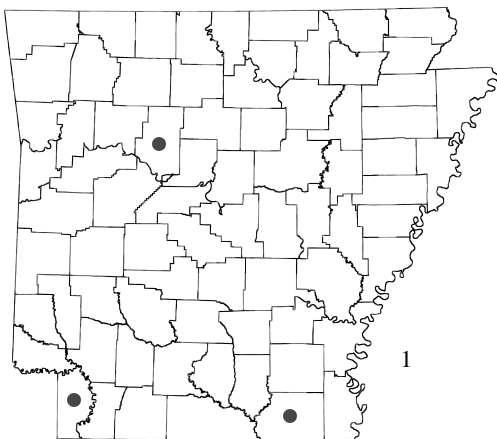
fire-pink



CARYOPHYLLACEAE

Silene vulgaris (Moench) Garcke

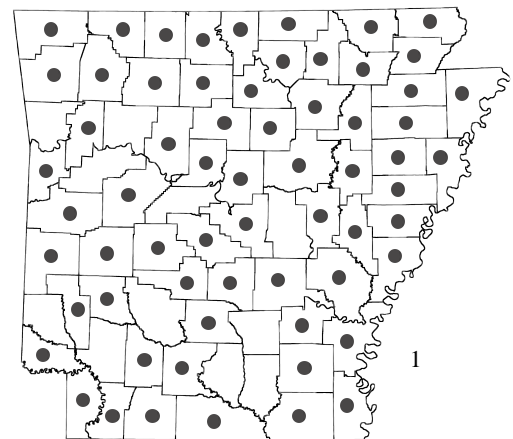
bladder-campion



CARYOPHYLLACEAE

Spergula arvensis L.

corn spurrey



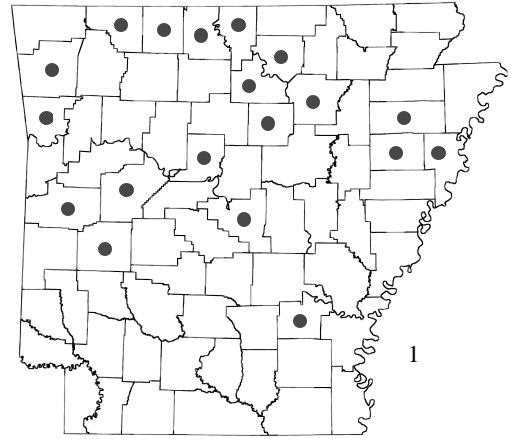
CARYOPHYLLACEAE

Stellaria media (L.) Vill.

common chickweed



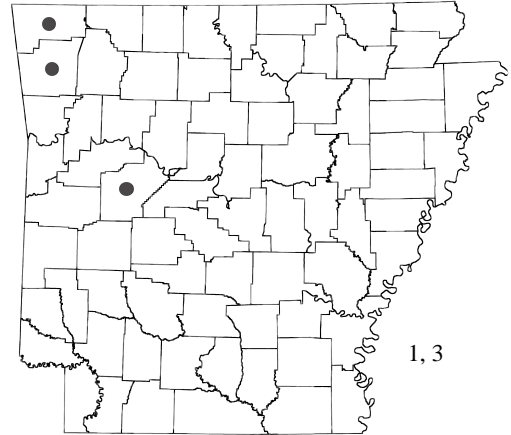
CARYOPHYLLACEAE
***Stellaria neglecta* Weihe in Bluff et al.**
 greater chickweed



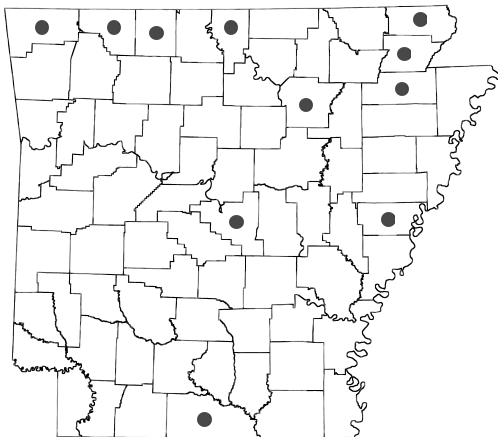
CARYOPHYLLACEAE
***Stellaria pallida* (Dumort.) Crép.**
 lesser chickweed



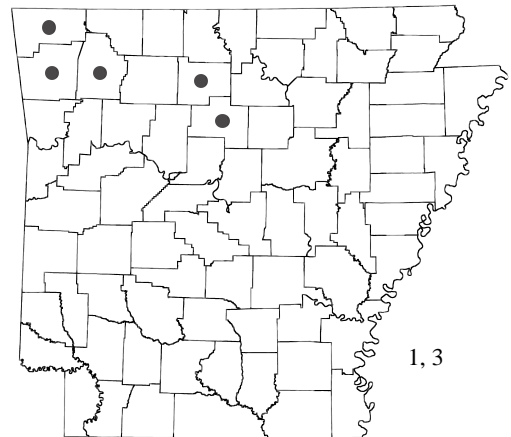
CARYOPHYLLACEAE
***Vaccaria hispanica* (Mill.) Rauschert**
 cow-soapwort, cow-herb



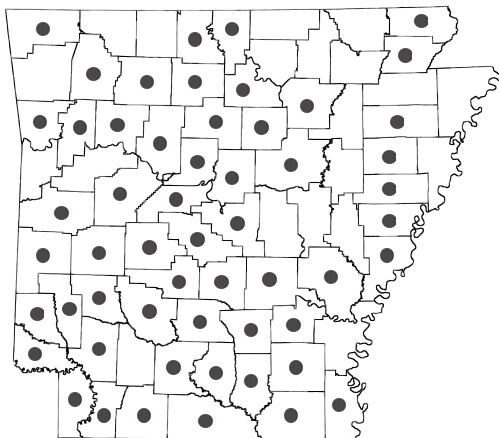
CELASTRACEAE
***Celastrus orbiculatus* Thunb.**
 Oriental bittersweet



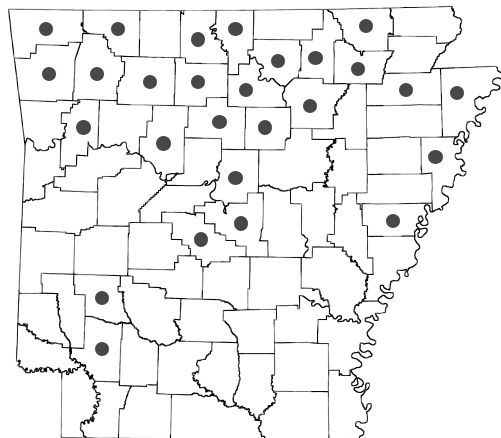
CELASTRACEAE
***Celastrus scandens* L.**
 American bittersweet



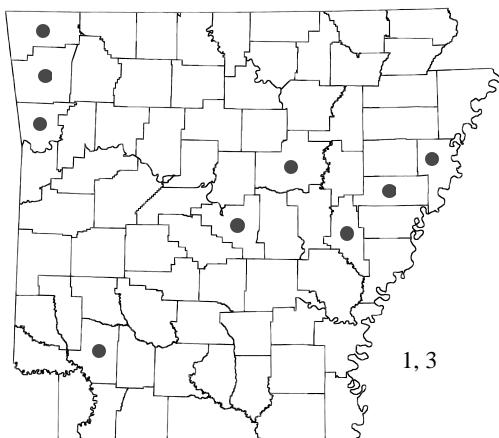
CELASTRACEAE
***Euonymus alatus* (Thunb.) Siebold**
 burning-bush, winged euonymus



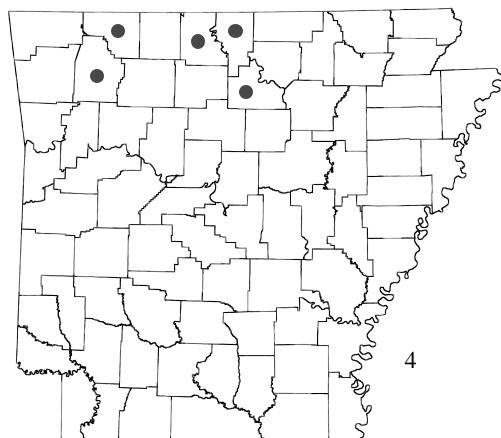
CELASTRACEAE
Euonymus americanus L.
 strawberry-bush, hearts-a-bursting-with-love



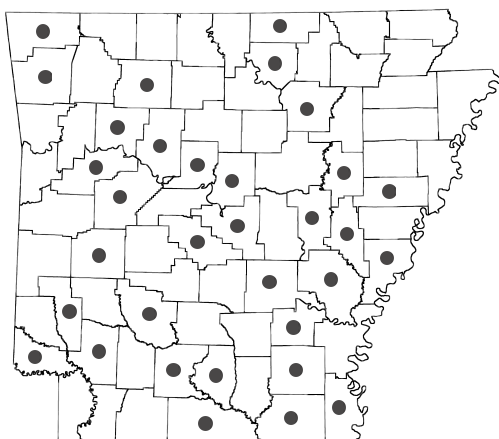
CELASTRACEAE
Euonymus atropurpureus Jacq.
var. atropurpureus
 wahoo, burning-bush



CELASTRACEAE
Euonymus fortunei (Turcz.) Hand.-Mazz.
 winter-creeper



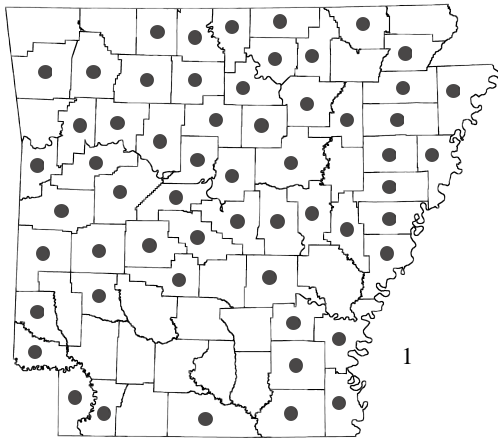
CELASTRACEAE
Euonymus obovatus Nutt.
 running strawberry-bush



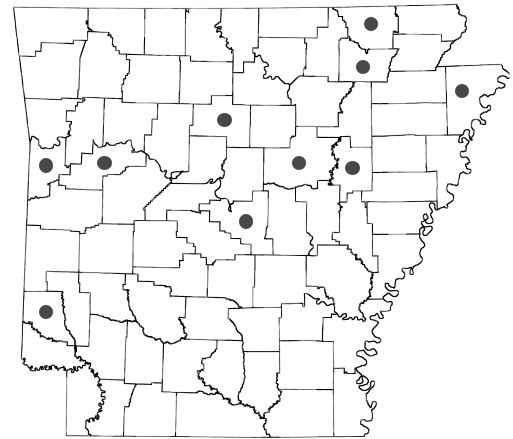
CERATOPHYLLACEAE
Ceratophyllum demersum L.
 coontail, hornwort



CERATOPHYLLACEAE
Ceratophyllum echinatum A.Gray
 prickly coontail, hornwort

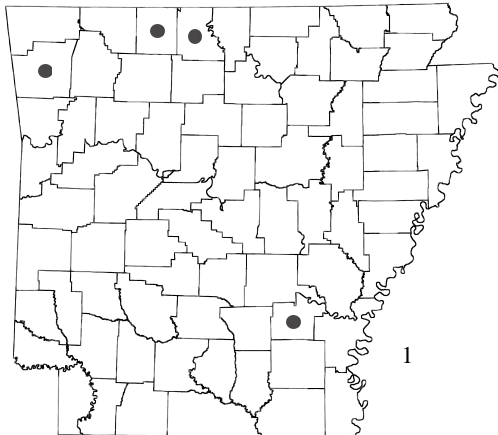


CHENOPODIACEAE
***Chenopodium album* L.**
 lamb's-quarters, pigweed

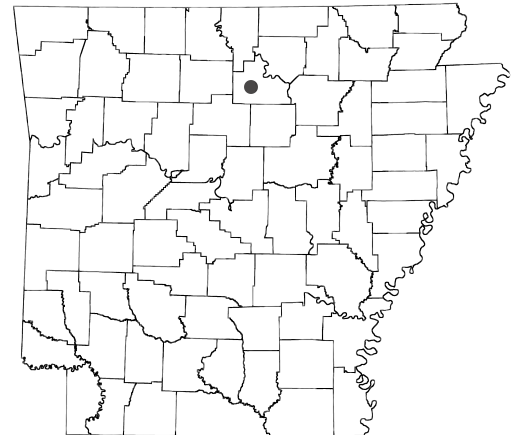


CHENOPODIACEAE
***Chenopodium berlandieri* Moq.**
 pit-seed goosefoot

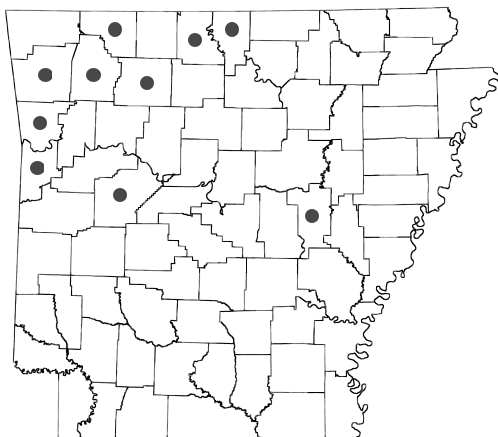
See *Appendix I* for infraspecific taxa and species status.



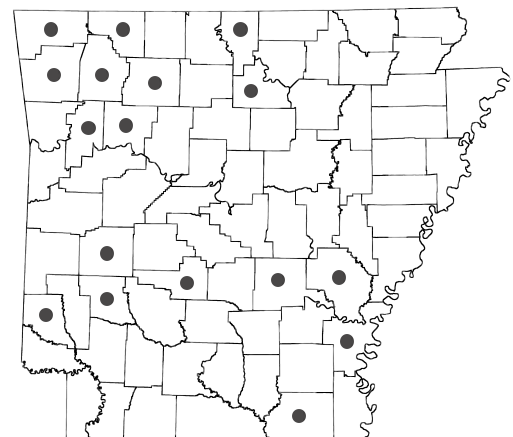
CHENOPODIACEAE
***Chenopodium murale* L.**
 nettle-leaf goosefoot



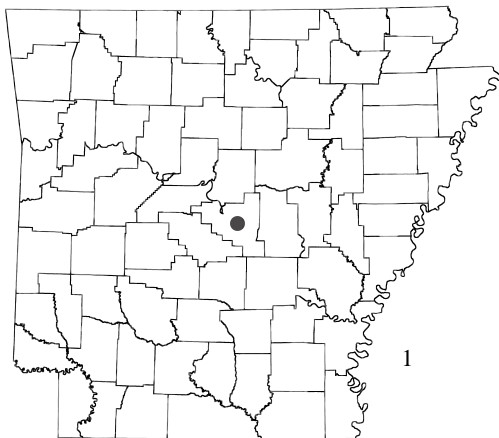
CHENOPODIACEAE
***Chenopodium pratericola* Rydb.**
 desert goosefoot



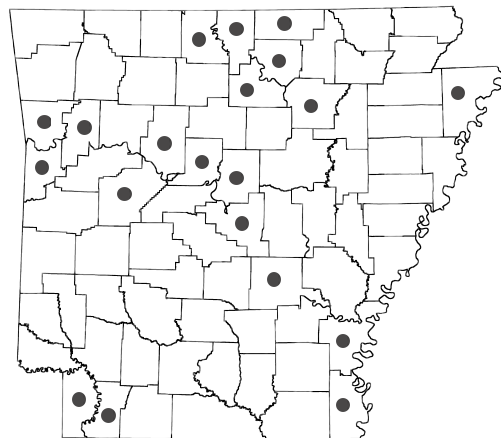
CHENOPODIACEAE
***Chenopodium simplex* (Torr.) Raf.**
 maple-leaf goosefoot



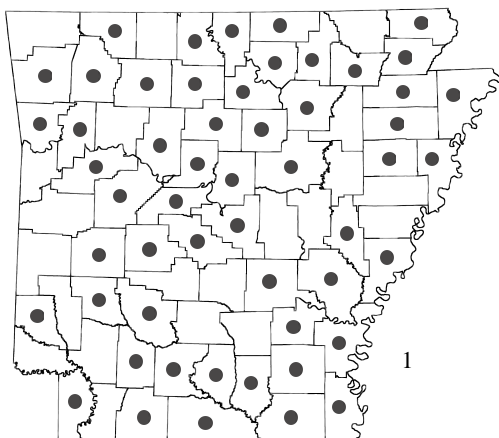
CHENOPODIACEAE
***Chenopodium standleyanum* Aellen**
 woodland goosefoot



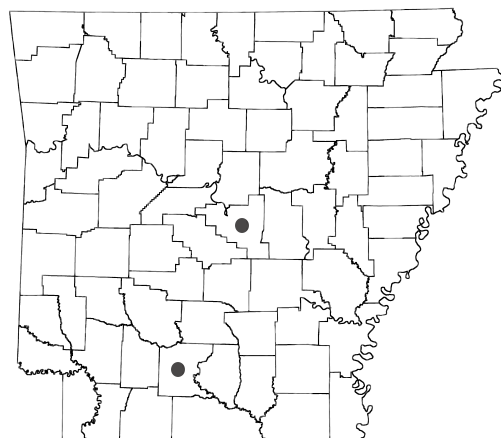
CHENOPODIACEAE
Corispermum americanum (Nutt.) Nutt.
 var. **americanum**
 bugseed



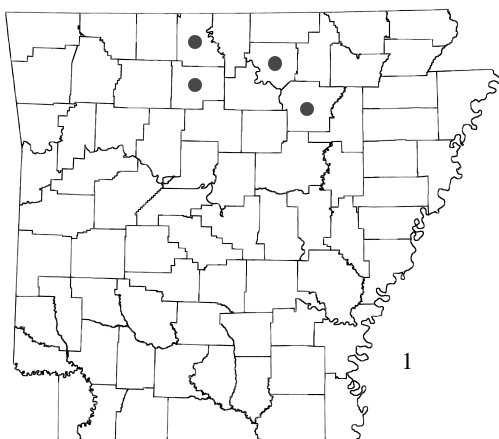
CHENOPODIACEAE
Cycloloma atriplicifolium (Spreng.) J.M.Coult.
 winged pigweed



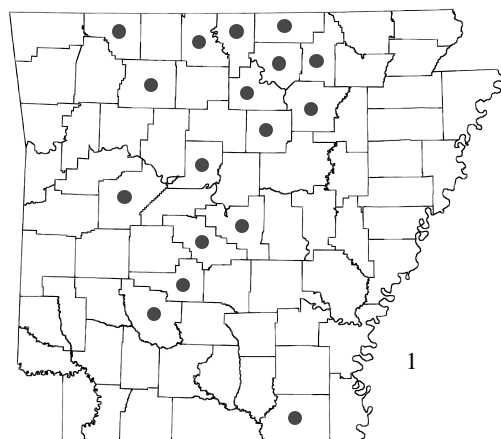
CHENOPODIACEAE
Dysphania ambrosioides (L.) Mosyakin & Clemants
 Mexican-tea, wormseed



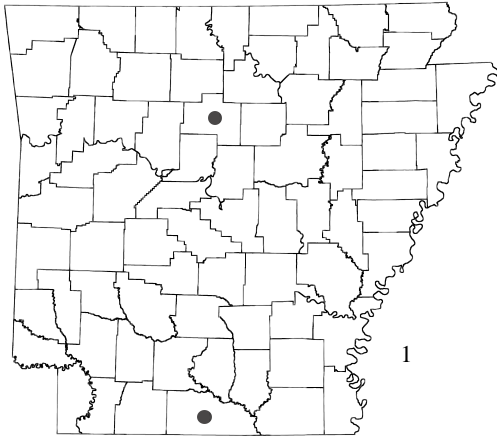
CHENOPODIACEAE
Dysphania anthelmintica (L.) Mosyakin & Clemants
 wormseed



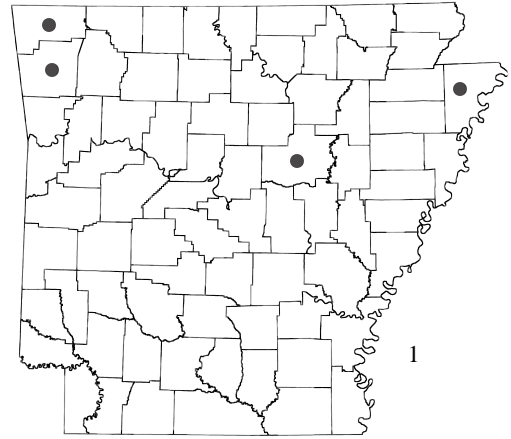
CHENOPODIACEAE
Dysphania carinata (R.Br.) Mosyakin & Clemants
 goosefoot



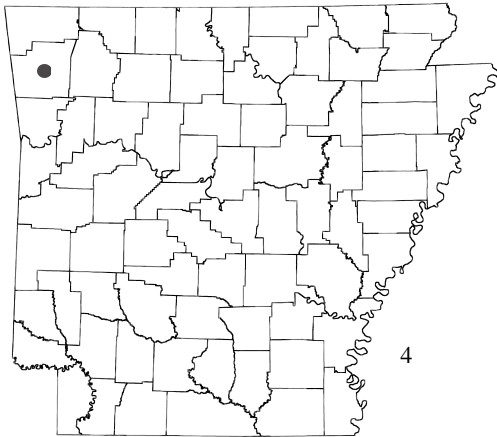
CHENOPODIACEAE
Dysphania pumilio (R.Br.) Mosyakin & Clemants
 clammy goosefoot



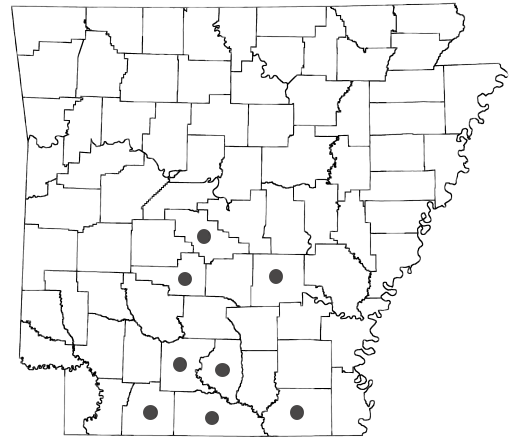
CHENOPODIACEAE
Kochia scoparia (L.) Schrad.
 subsp. *scoparia*
 summer-cypress, Mexican-fireweed



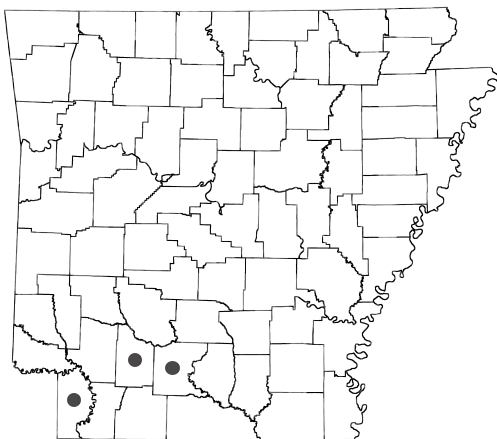
CHENOPODIACEAE
Salsola tragus L.
 Russian-thistle, tumbleweed



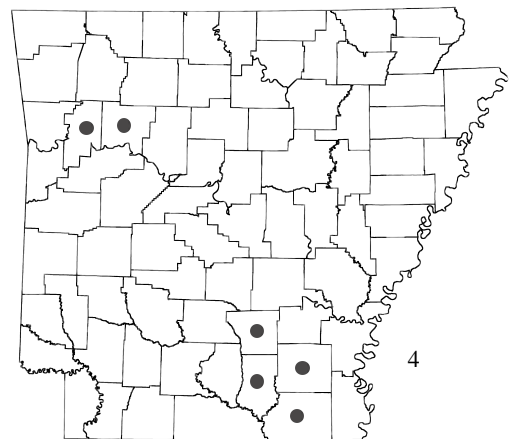
CISTACEAE
Crocanthemum bicknellii (Fernald) Barnhart
 hoary frostweed, Bicknell's rock-rose



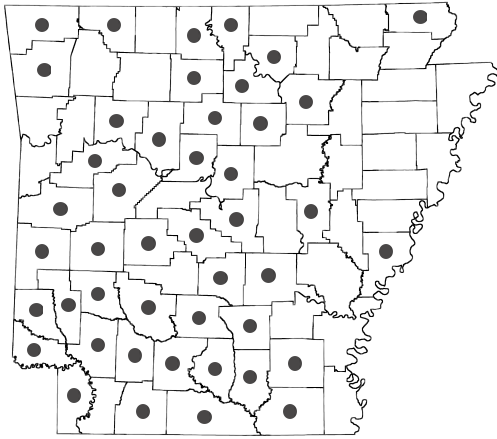
CISTACEAE
Crocanthemum carolinianum (Walter) Spach
 Carolina rock-rose, sun-rose, frostweed



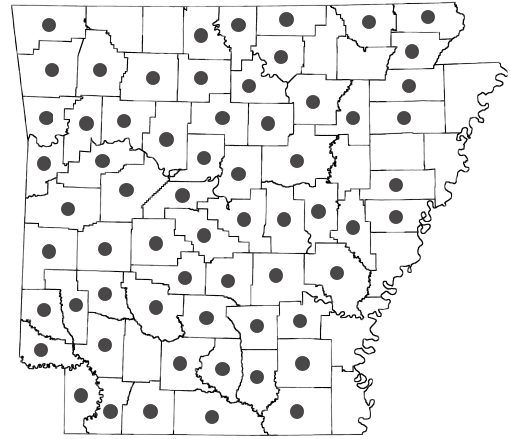
CISTACEAE
Crocanthemum georgianum (Chapm.) Barnhart
 Georgia rock-rose, sun-rose, frostweed



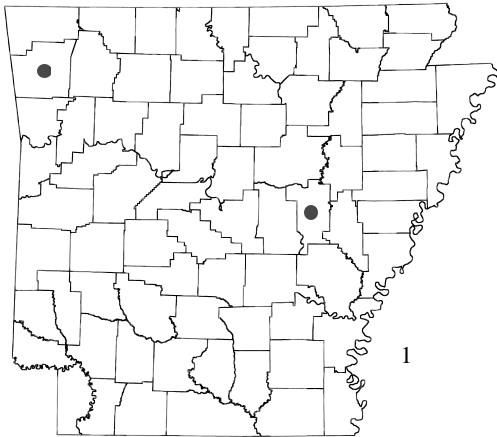
CISTACEAE
Crocanthemum rosmarinifolium (Pursh) Barnhart
 rosemary rock-rose, sun-rose, frostweed



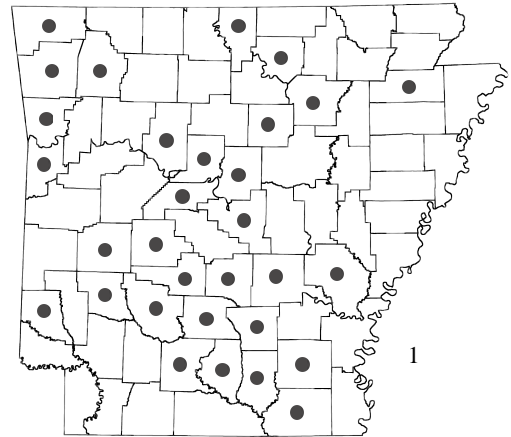
CISTACEAE
Lechea mucronata Raf.
 pinweed



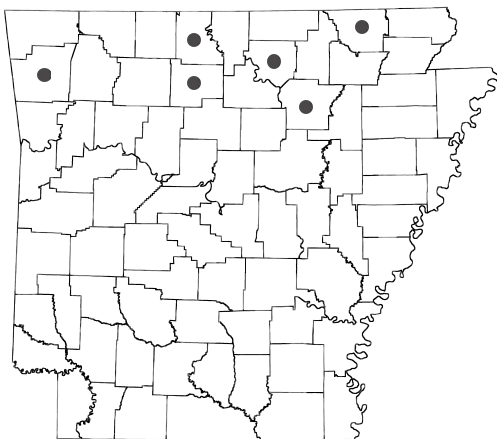
CISTACEAE
Lechea tenuifolia Michx.
 pinweed



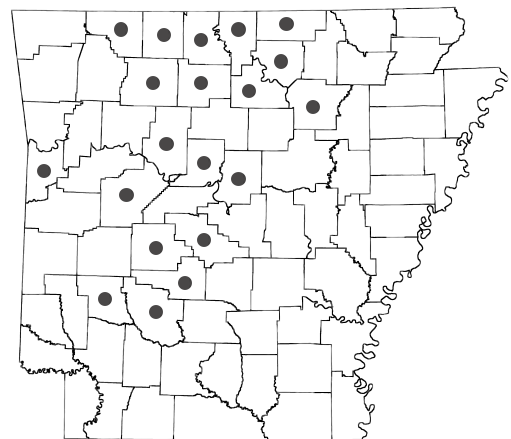
CLEOMACEAE
Cleome gynandra L.
 spider-wisp



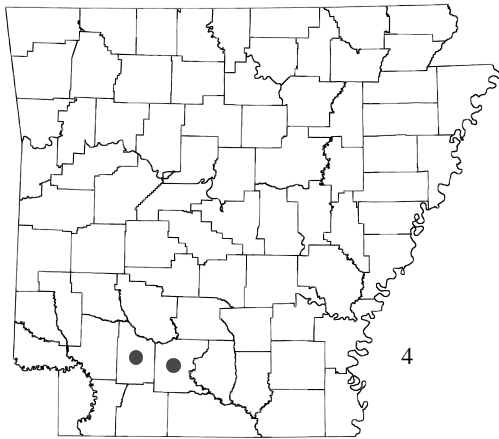
CLEOMACEAE
Cleome hassleriana Chodat
 spider-flower



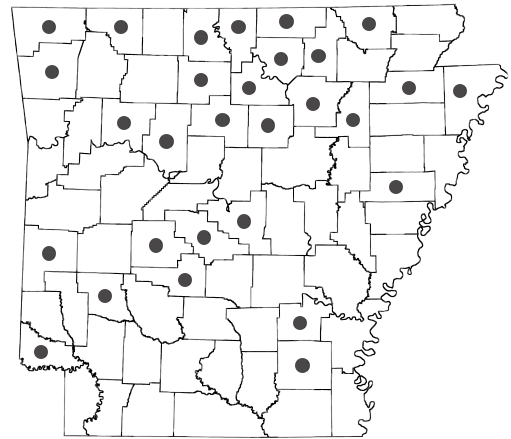
CLEOMACEAE
Polanisia dodecandra (L.) DC. in DC. & A.D.C.
 subsp. **dodecandra**
 clammy-weed



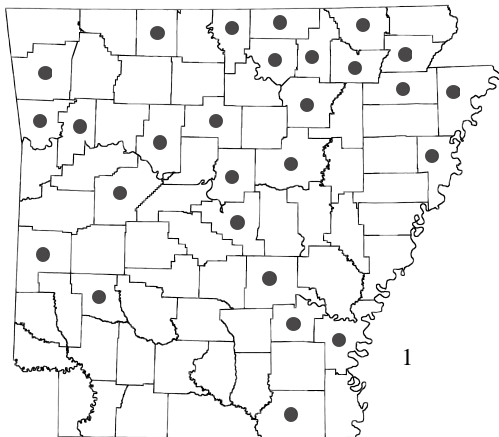
CLEOMACEAE
Polanisia dodecandra (L.) DC. in DC. & A.D.C.
 subsp. **trachysperma (Torr. & A.Gray) H.H.Iltis**
 clammy-weed



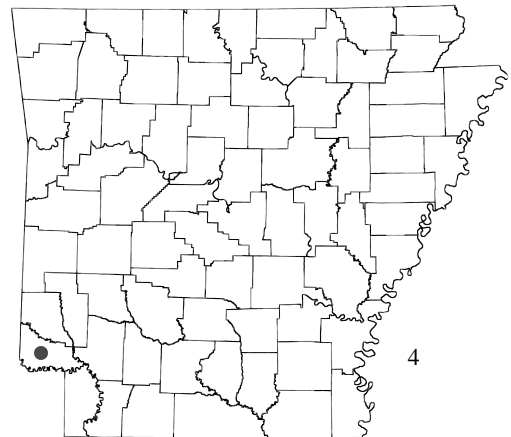
CLEOMACEAE
Polarisia erosa (Nutt.) H.H.Iltis
 subsp. **erosa**
 sandhill clammy-weed



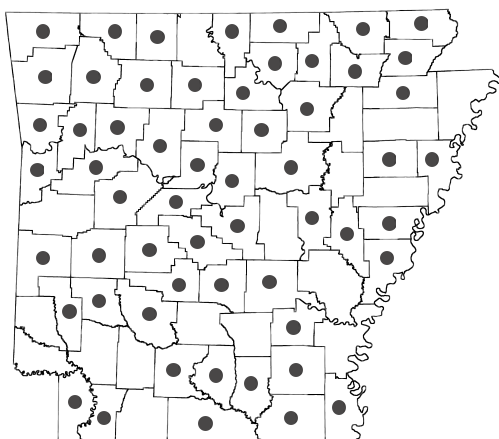
CONVOLVULACEAE
Calystegia sepium (L.) R.Br.
 subsp. **angulata Brummitt**
 hedge bindweed



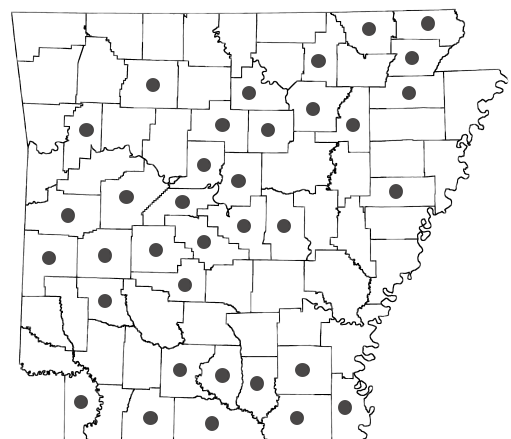
CONVOLVULACEAE
Convolvulus arvensis L.
 field bindweed



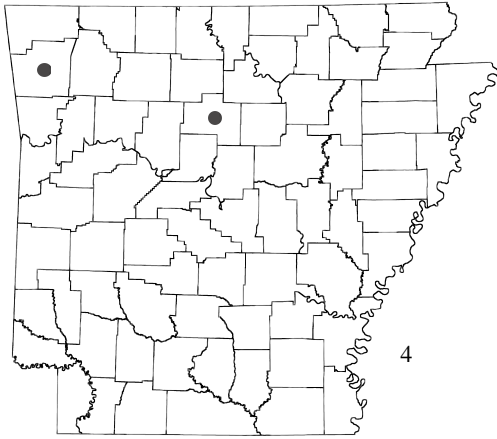
CONVOLVULACEAE
Convolvulus equitans Benth.
 Texas bindweed



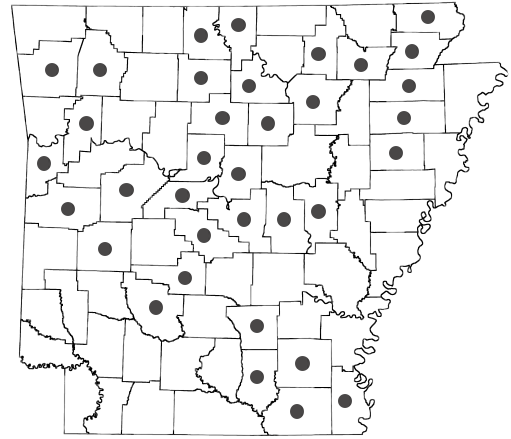
CONVOLVULACEAE
Cuscuta campestris Yunck.
 field dodder



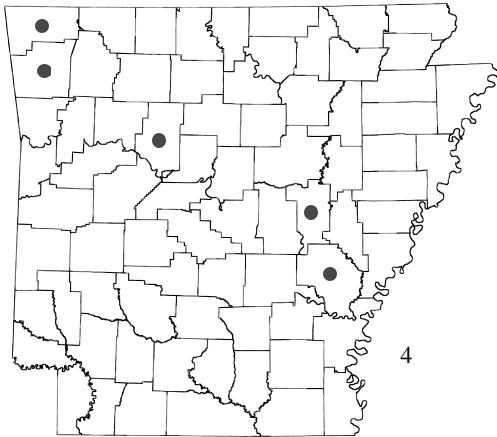
CONVOLVULACEAE
Cuscuta compacta Juss. ex Choisy
 compact dodder



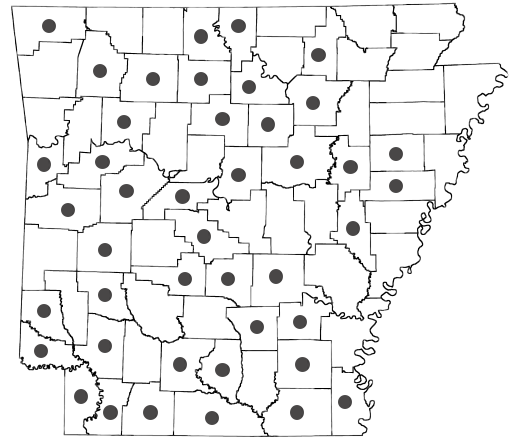
CONVOLVULACEAE
Cuscuta coryli Engelm.
 hazel dodder



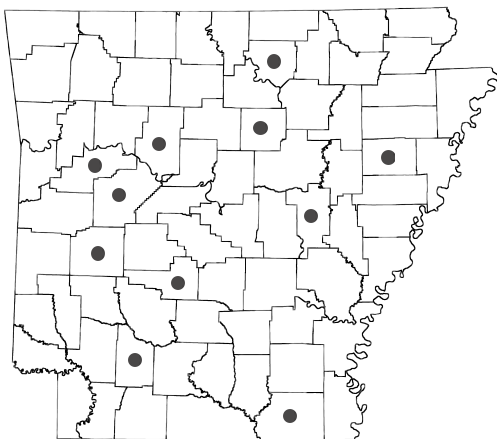
CONVOLVULACEAE
Cuscuta cuspidata Engelm.
 cusp dodder



CONVOLVULACEAE
Cuscuta glomerata Choisy
 rope dodder



CONVOLVULACEAE
Cuscuta gronovii Willd. ex Roem. & Schult.
 common dodder

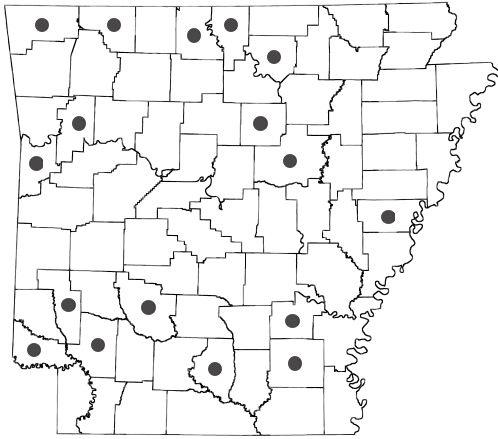


CONVOLVULACEAE
Cuscuta indecora Choisy
 large-seed dodder

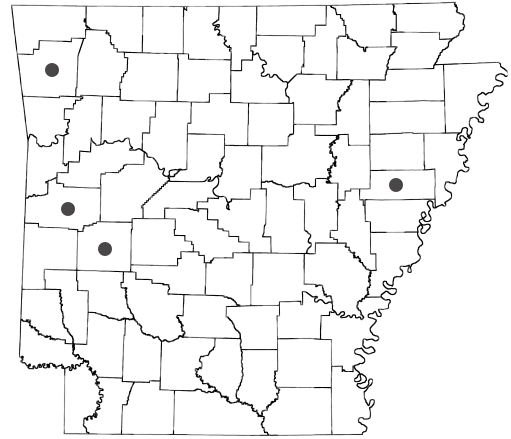


CONVOLVULACEAE
Cuscuta obtusiflora Kunth
var. glandulosa Engelm.
 glandular dodder

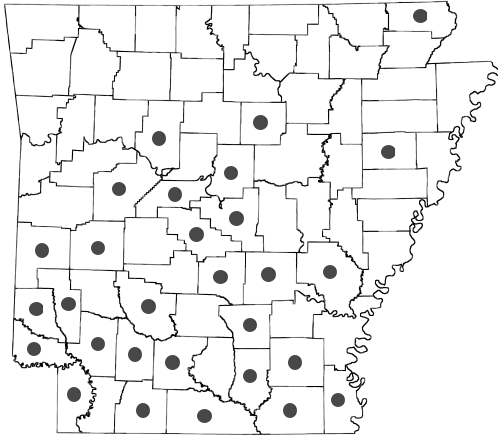
See *Appendix I* for infraspecific taxa and species status.



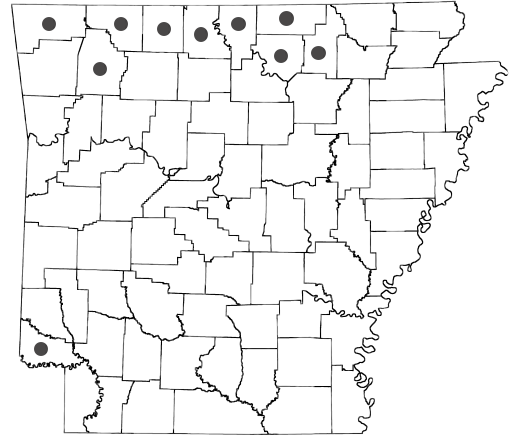
CONVOLVULACEAE
***Cuscuta pentagona* Engelm.**
field dodder



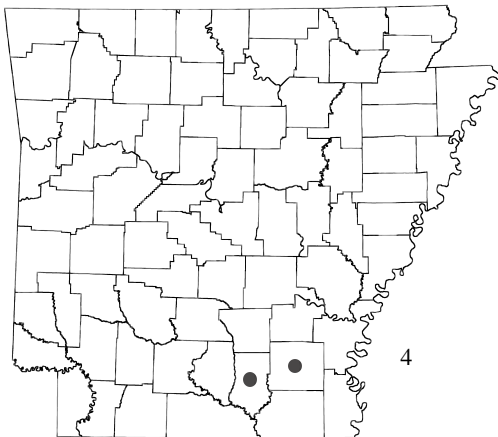
CONVOLVULACEAE
***Cuscuta polygonorum* Engelm.**
smartweed dodder



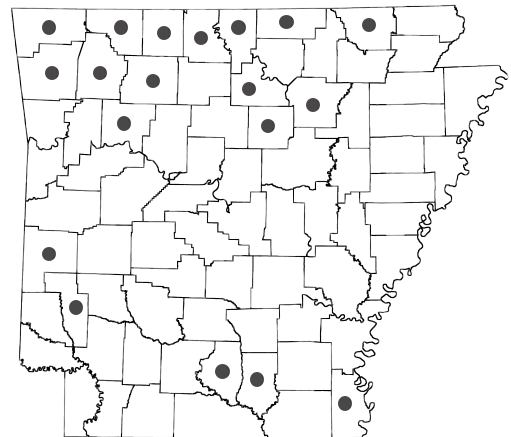
CONVOLVULACEAE
***Dichondra carolinensis* Michx.**
pony-foot



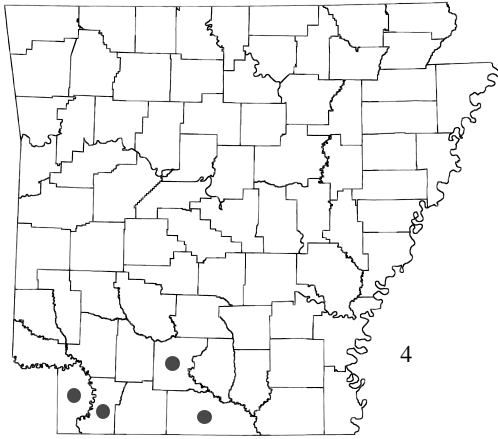
CONVOLVULACEAE
***Evolvulus nuttallianus* Roem. & Schult.**
shaggy dwarf morning-glory



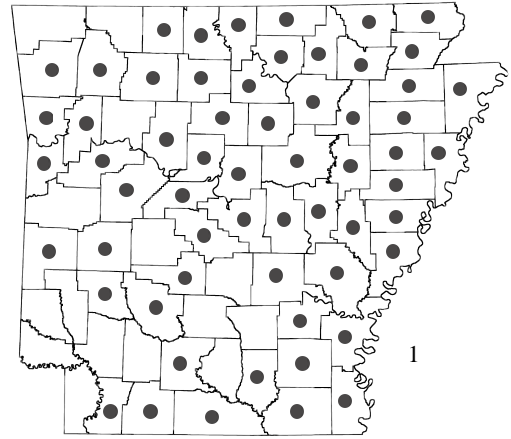
CONVOLVULACEAE
***Evolvulus sericeus* Sw.**
silver dwarf morning-glory



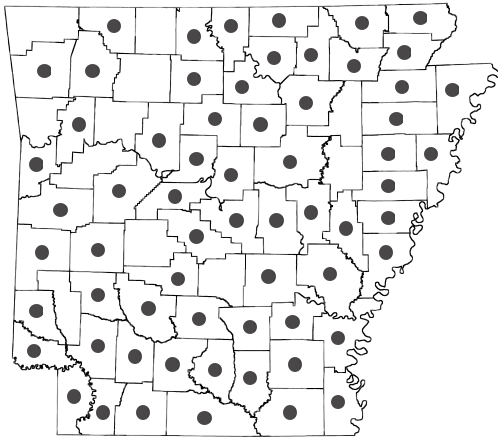
CONVOLVULACEAE
***Ipomoea coccinea* L.**
red morning-glory, scarlet-creeper



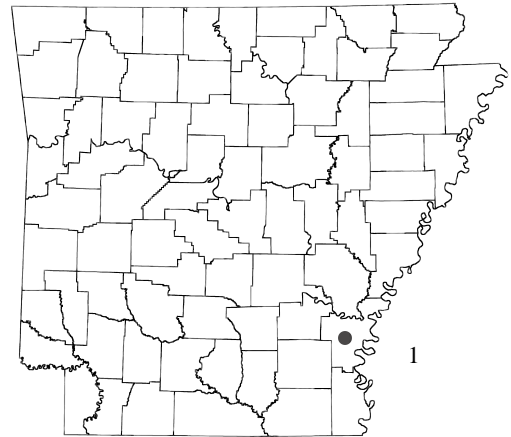
CONVOLVULACEAE
Ipomoea cordatotriloba Dennst.
 var. **cordatotriloba**
 tie-vine morning-glory



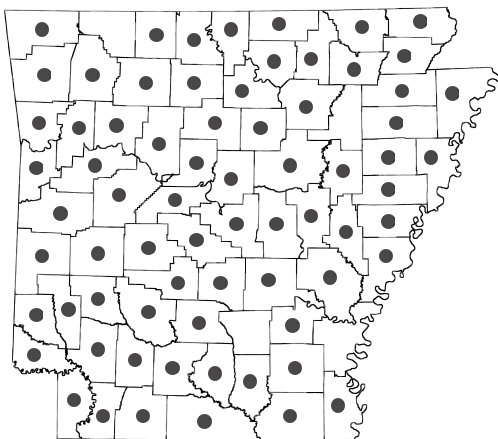
CONVOLVULACEAE
Ipomoea hederacea Jacq.
 ivy-leaf morning-glory



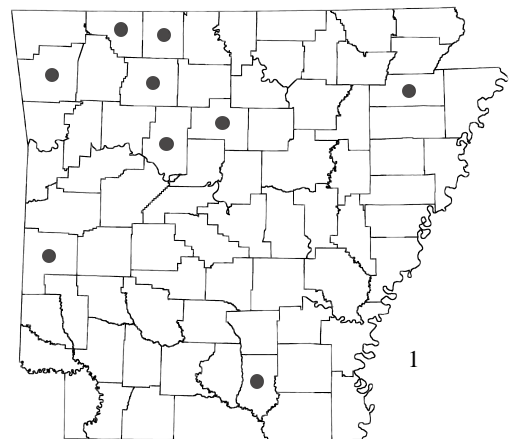
CONVOLVULACEAE
Ipomoea lacunosa L.
 small white morning-glory



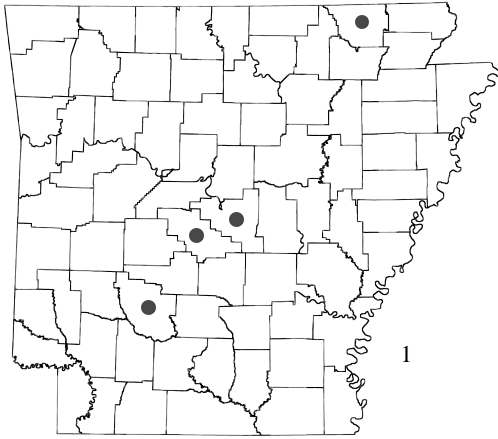
CONVOLVULACEAE
Ipomoea muricata (L.) Jacq.
 lilacbell, purple moonflower



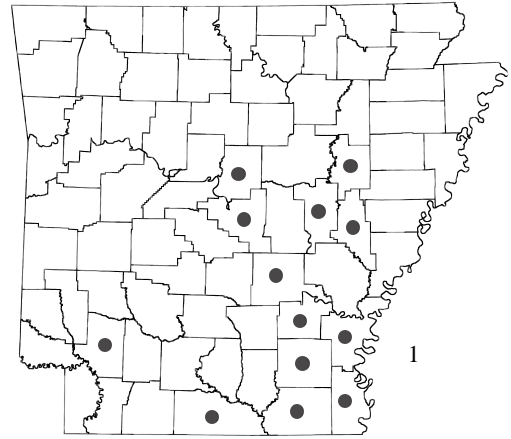
CONVOLVULACEAE
Ipomoea pandurata (L.) G.Mey.
 wild potato vine, man-of-the-earth



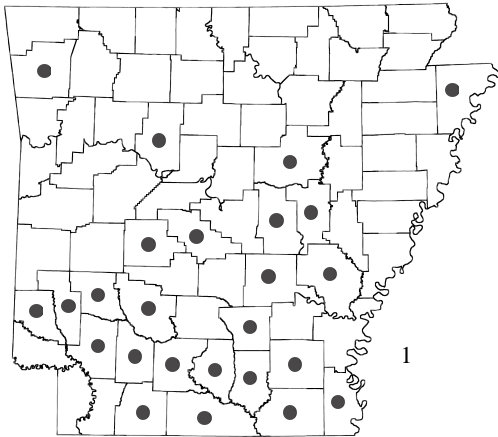
CONVOLVULACEAE
Ipomoea purpurea (L.) Roth
 morning-glory



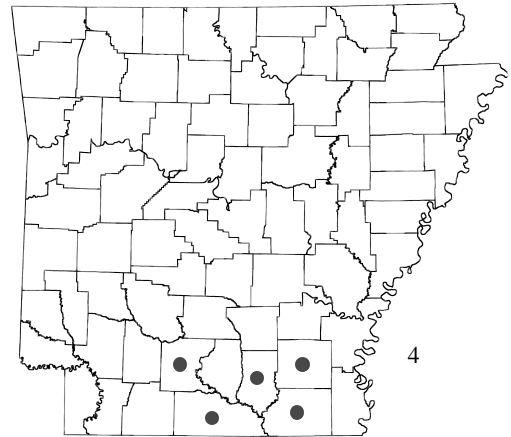
CONVOLVULACEAE
***Ipomoea quamoclit* L.**
 cypress-vine



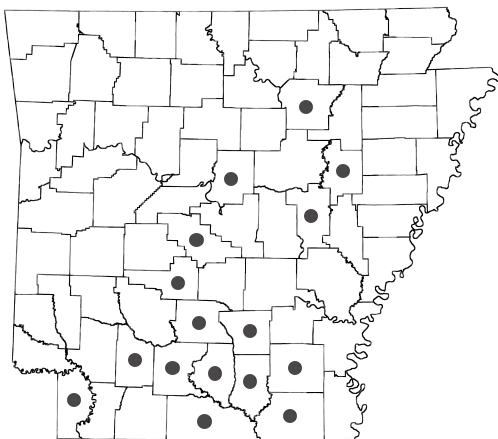
CONVOLVULACEAE
***Ipomoea wrightii* A.Gray**
 Wright's morning-glory



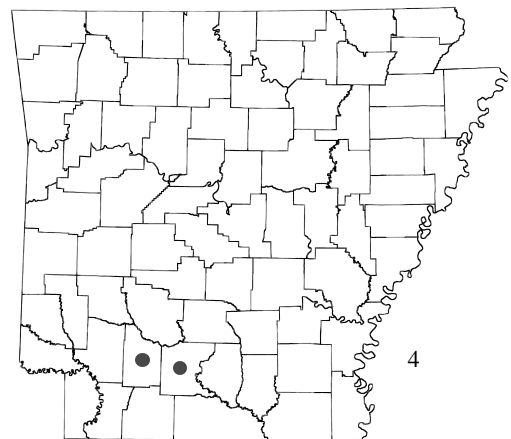
CONVOLVULACEAE
***Jacquemontia tamnifolia* (L.) Griseb.**
 hairy tie-vine



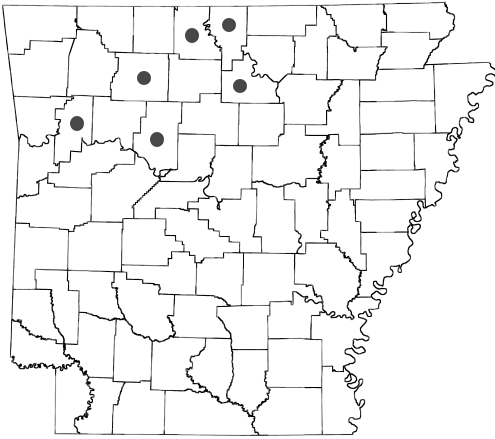
CONVOLVULACEAE
***Stylisma aquatica* (Walter) Raf.**
 water dawnflower



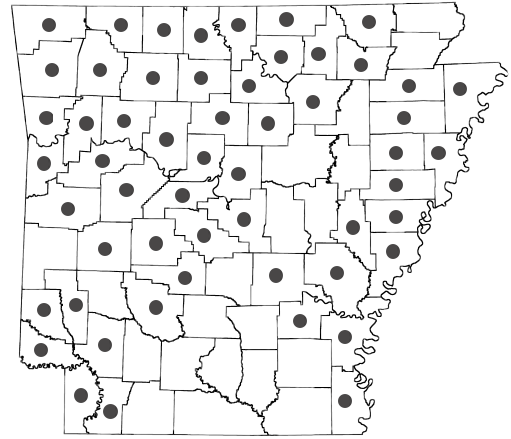
CONVOLVULACEAE
***Stylisma humistrata* (Walter) Chapm.**
 southern dawnflower



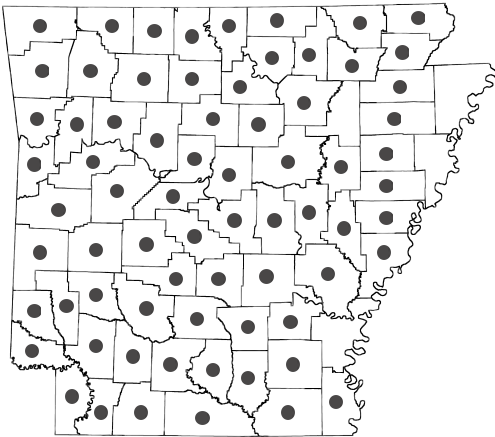
CONVOLVULACEAE
***Stylisma pickeringii* (Torr. ex M.A.Curtis) A.Gray
 var. *pattersonii* (Fernald & B.G.Schub.) Myint**
 Patterson's dawnflower



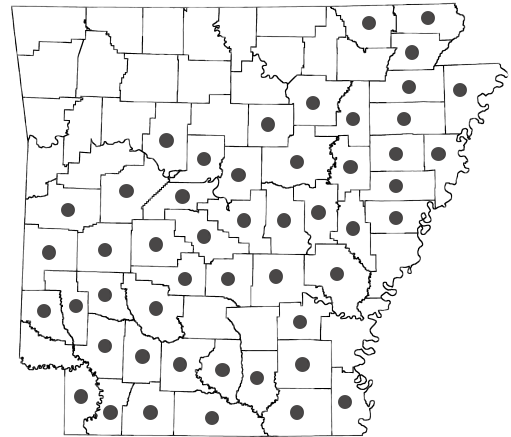
CORNACEAE
***Cornus alternifolia* L.f.**
alternate-leaf dogwood



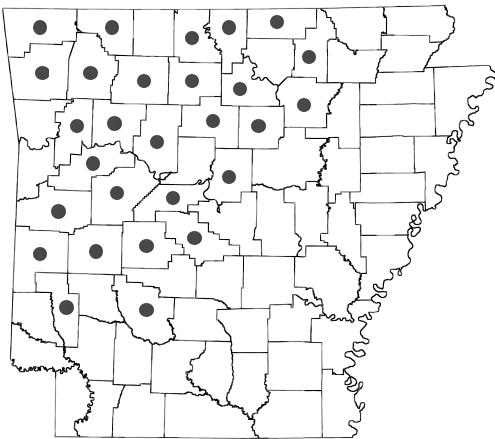
CORNACEAE
***Cornus drummondii* C.A.Mey.**
rough-leaf dogwood



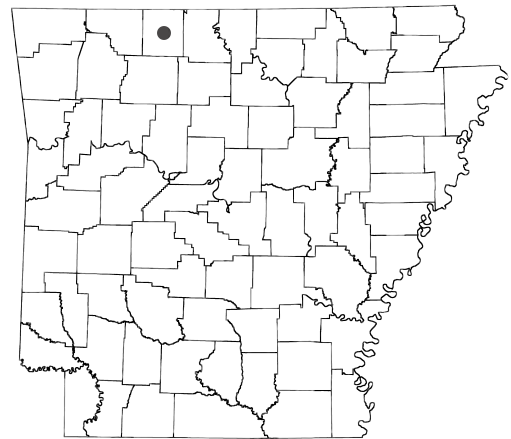
CORNACEAE
***Cornus florida* L.**
flowering dogwood



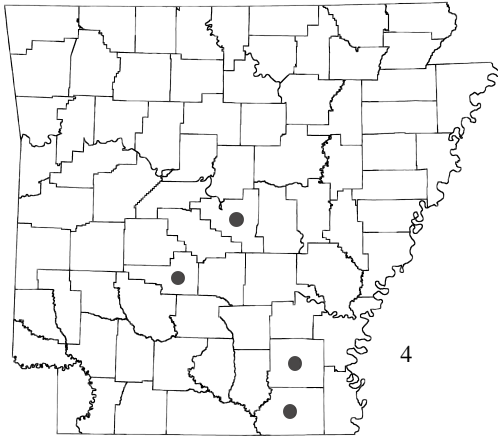
CORNACEAE
***Cornus foemina* Mill.**
stiff dogwood



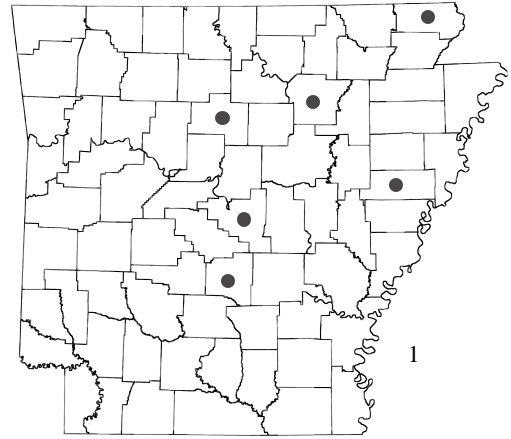
CORNACEAE
***Cornus obliqua* Raf.**
silky dogwood



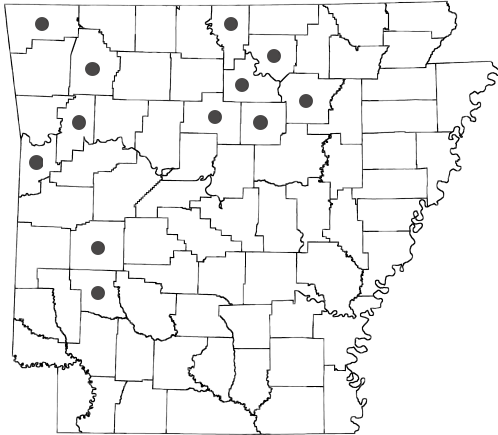
CORNACEAE
***Cornus racemosa* Lam.**
gray dogwood



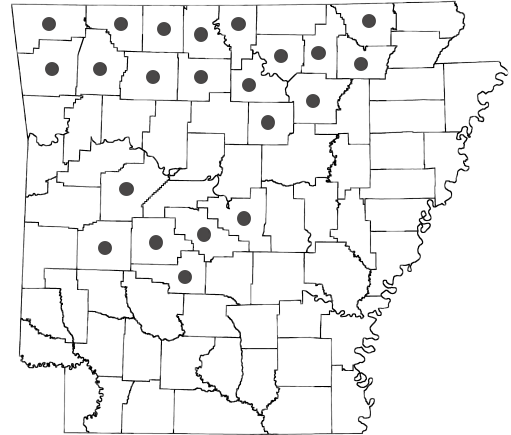
CRASSULACEAE
***Crassula aquatica* (L.) Schönland in Engler & Prantl**
 water pygmyweed



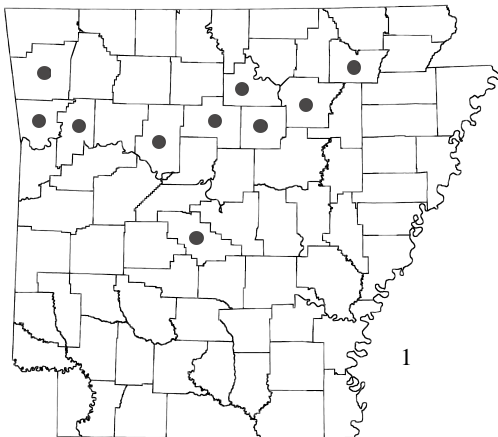
CRASSULACEAE
***Hylotelephium erythrostictum* (Miq.) H. Ohba**
 garden stonecrop, live-forever



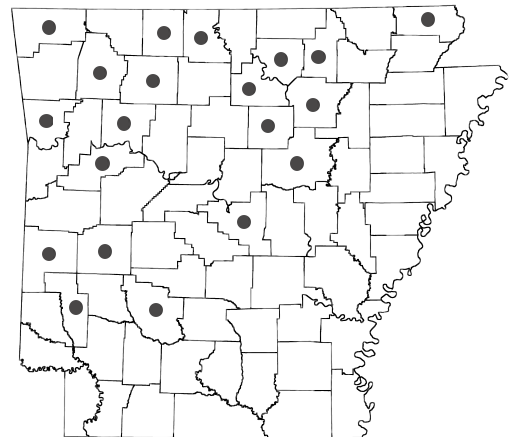
CRASSULACEAE
***Sedum nuttallii* Torr. & E. James ex Eaton**
 Nuttall's stonecrop, yellow stonecrop



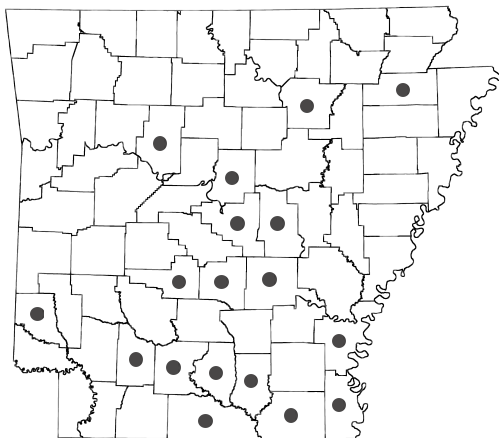
CRASSULACEAE
***Sedum pulchellum* Michx.**
 widow's-cross



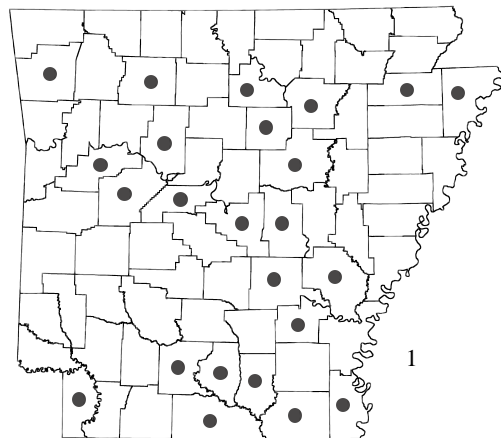
CRASSULACEAE
***Sedum sarmentosum* Bunge**
 yellow stonecrop



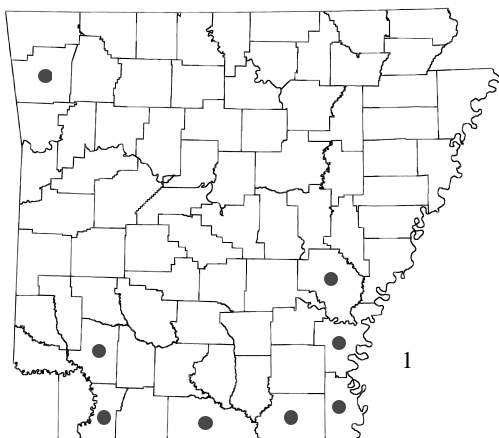
CRASSULACEAE
***Sedum ternatum* Michx.**
 woodland stonecrop



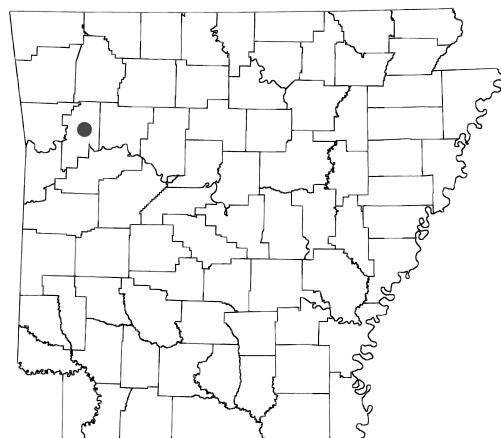
CUCURBITACEAE
Cayaponia quinqueloba (Raf.) Shinnars
 cucumber vine, melonleaf



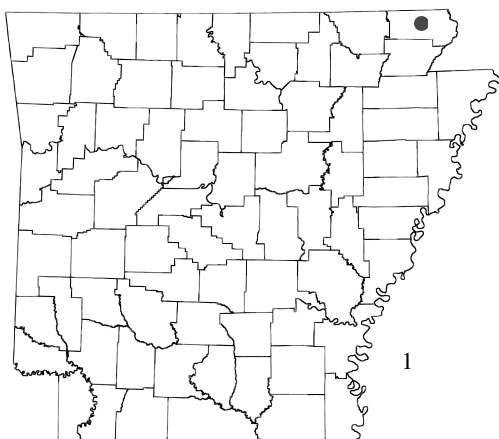
CUCURBITACEAE
Citrullus lanatus (Thunb.) Matsum. & Nakai
var. lanatus
 watermelon



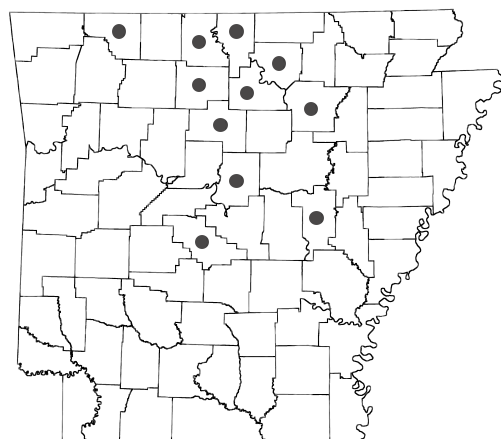
CUCURBITACEAE
Cucumis melo L.
 Queen Anne's pocket melon



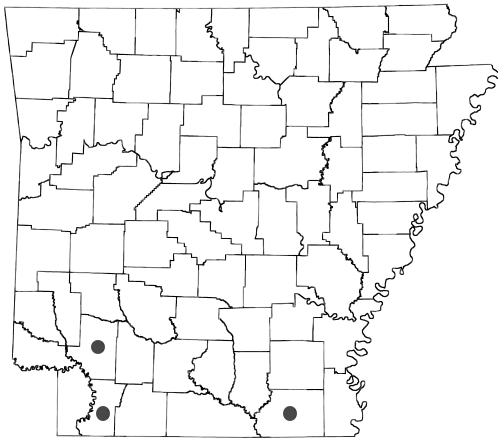
CUCURBITACEAE
Cucurbita foetidissima Kunth
 buffalo gourd, Missouri gourd, stinking gourd



CUCURBITACEAE
Cucurbita maxima Duchesne
 winter squash

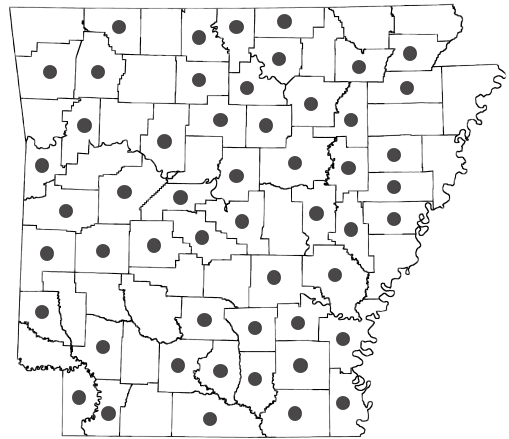


CUCURBITACEAE
Cucurbita pepo L.
subsp. ovifera (L.) D.S.Decker var. ozarkana Deck.-Walt.
 wild pear gourd, yellow-flower gourd



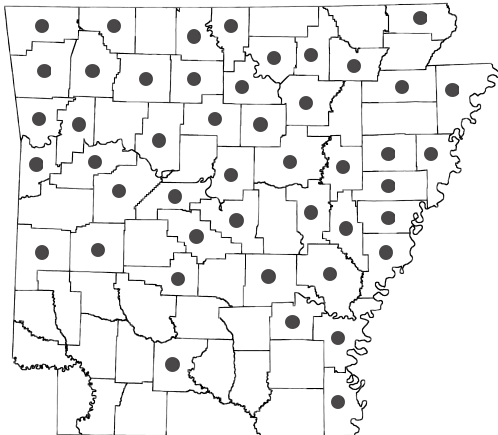
CUCURBITACEAE
Cucurbita pepo L.

subsp. *ovifera* (L.) D.S.Decker var. *texana* (Scheele) D.S.Decker
Texas gourd



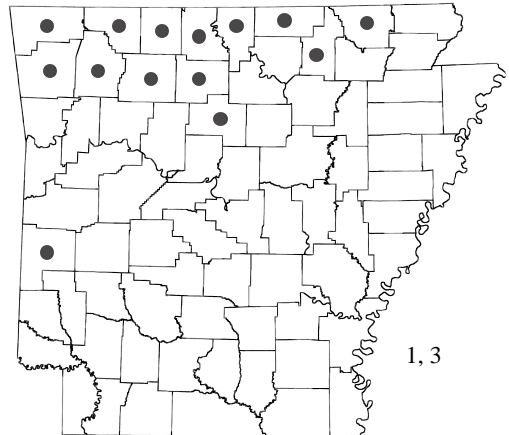
CUCURBITACEAE
Melothria pendula L.

creeping-cucumber



CUCURBITACEAE
Sicyos angulatus L.

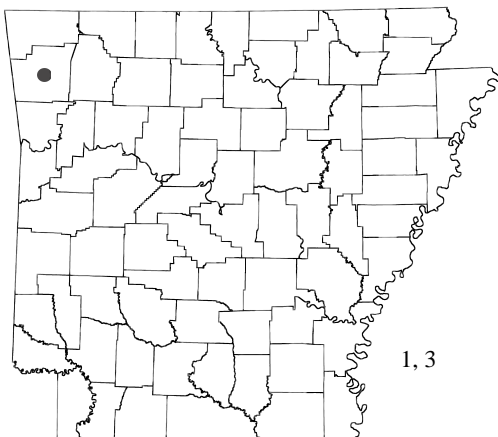
bur-cucumber



DIPSACACEAE
Dipsacus fullonum L.

common teasel

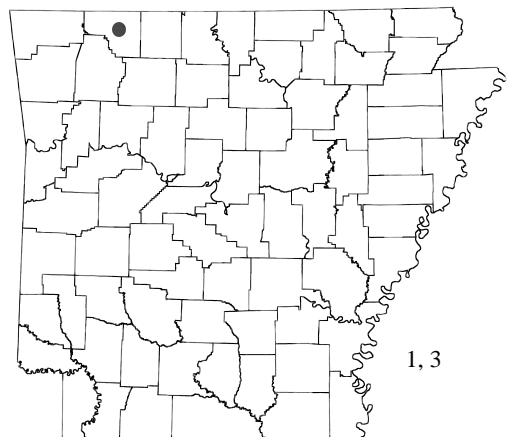
1, 3



DIPSACACEAE
Dipsacus laciniatus L.

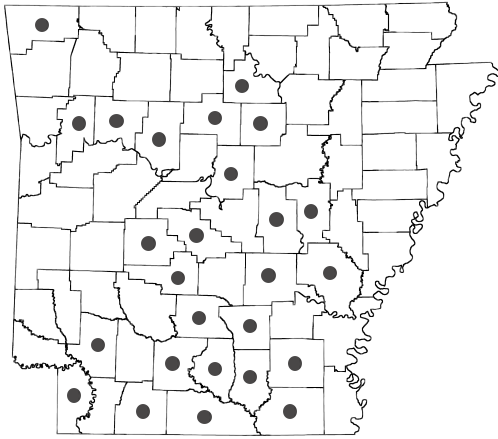
cut-leaf teasel

1, 3

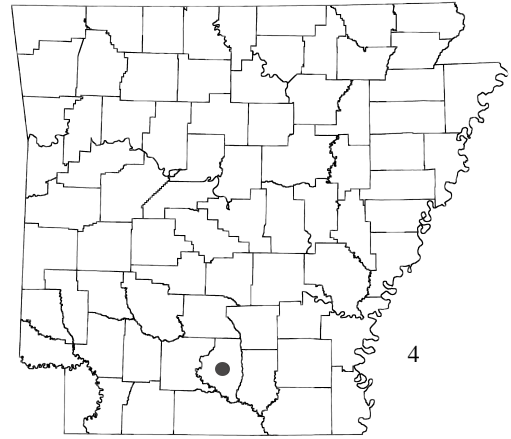


DIPSACACEAE
Scabiosa atropurpurea L.
pincushions, mourning-bride

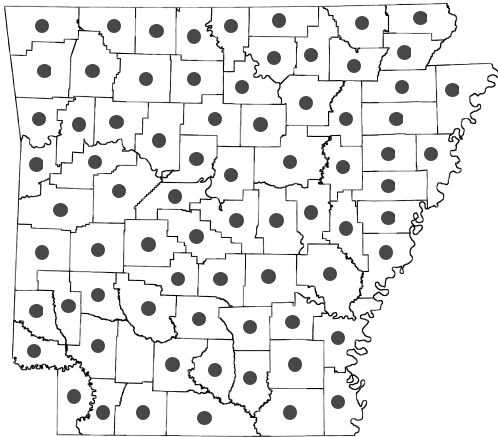
1, 3



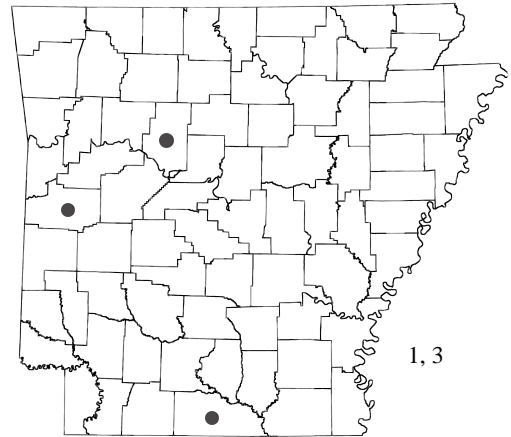
DROSERACEAE
Drosera brevifolia Pursh
 sundew



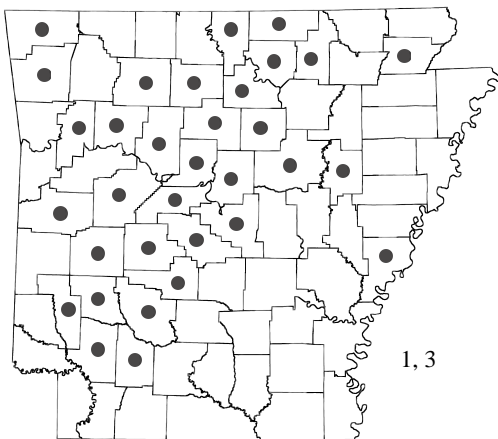
DROSERACEAE
Drosera capillaris Poir.
 pink sundew



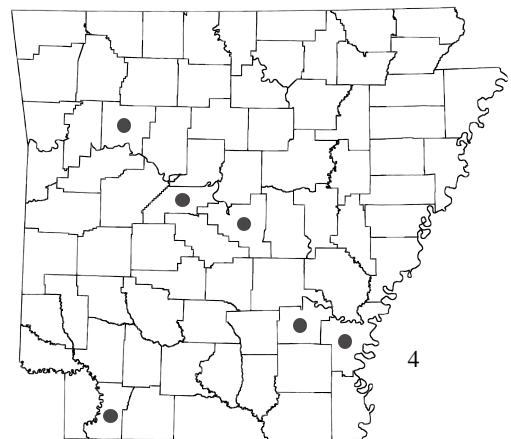
EBENACEAE
Diospyros virginiana L.
 persimmon



ELAEAGNACEAE
Elaeagnus pungens Thunb.
 thorny-olive



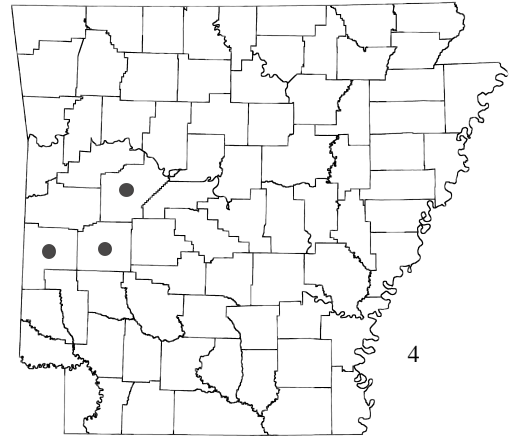
ELAEAGNACEAE
Elaeagnus umbellata Thunb.
 autumn-olive



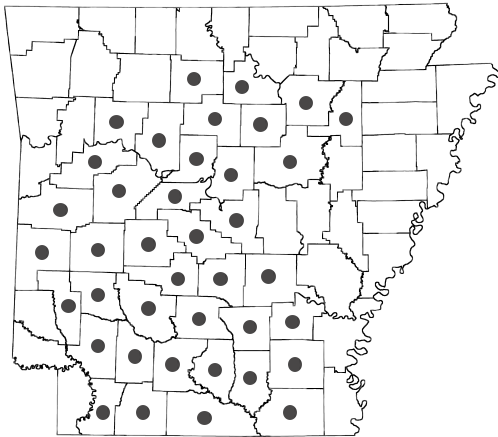
ELATINACEAE
Bergia texana (Hook.) Seub. ex Walpers
 Texas bergia



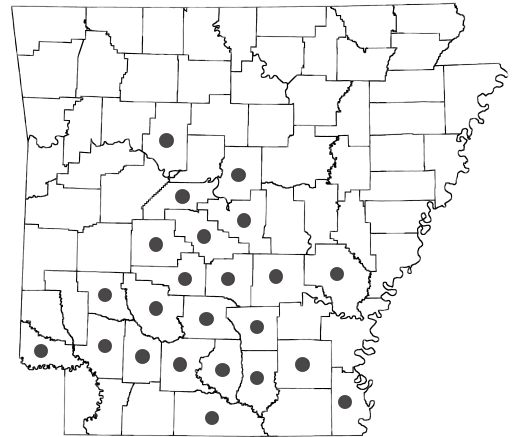
ELATINACEAE
Elatine rubella Rydb.
 waterwort



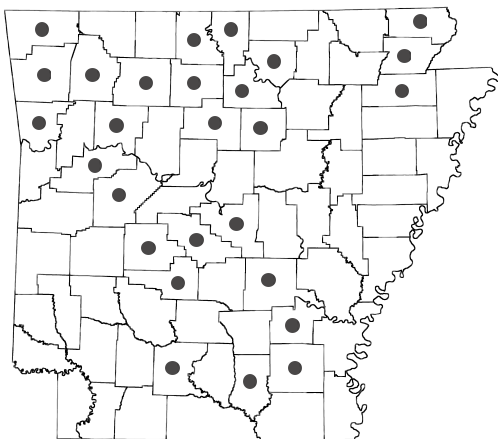
ERICACEAE
Gaylussacia baccata (Wangenh.) K.Koch
 black huckleberry



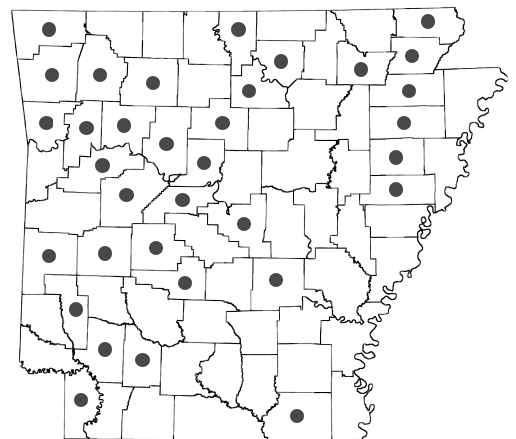
ERICACEAE
Lyonia ligustrina (L.) DC. in DC. & A.DC.
var. foliosiflora (Michx.) Fernald
 maleberry



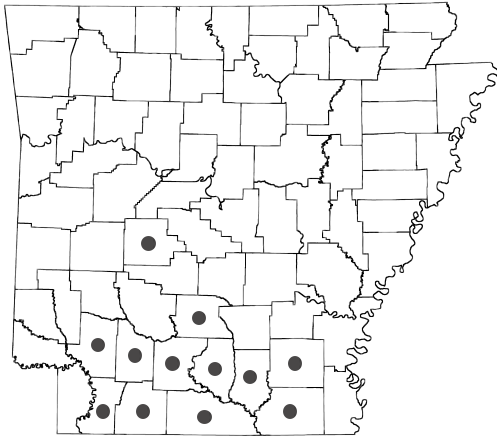
ERICACEAE
Lyonia mariana (L.) D.Don
 staggerbush



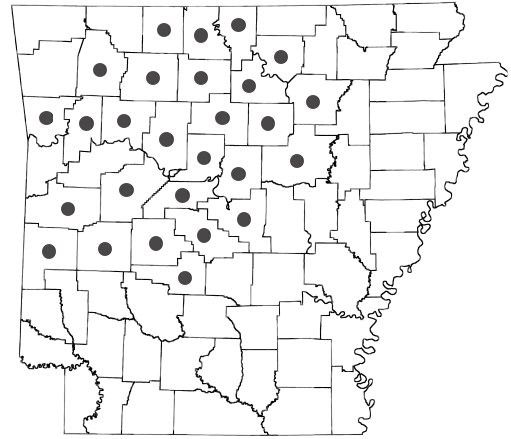
ERICACEAE
Monotropa hypopitys L.
 pinesap



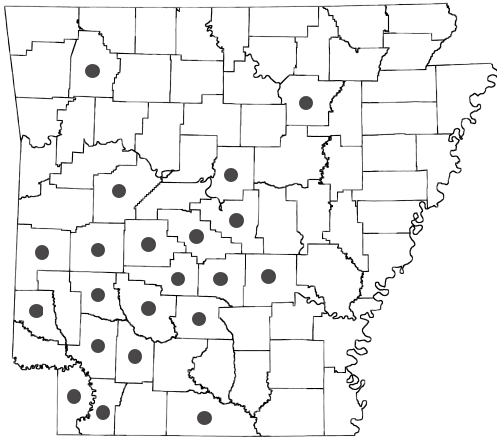
ERICACEAE
Monotropa uniflora L.
 Indian-pipe



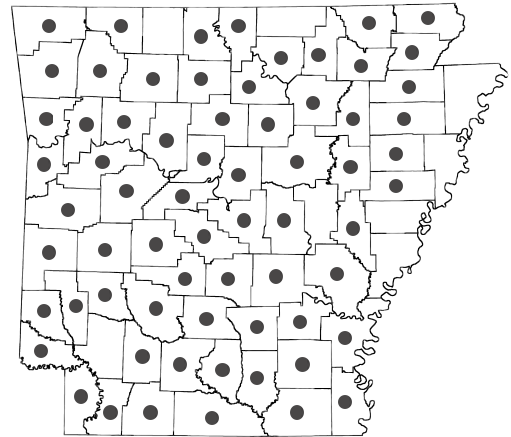
ERICACEAE
Rhododendron canescens (Michx.) Sweet
 swamp azalea, hoary azalea



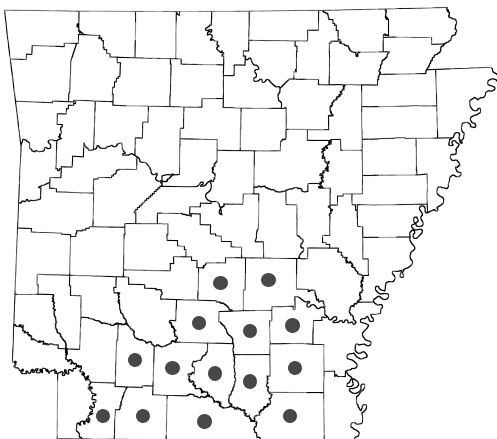
ERICACEAE
Rhododendron prinophyllum (Small) Millais
 pink azalea, mountain azalea



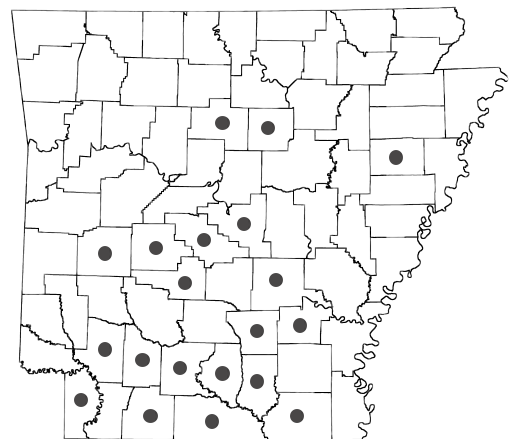
ERICACEAE
Rhododendron viscosum (L.) Torr.
 white azalea



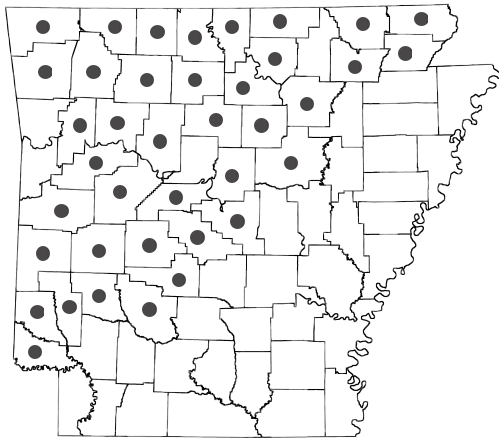
ERICACEAE
Vaccinium arboreum Marshall
 farkleberry, sparkleberry



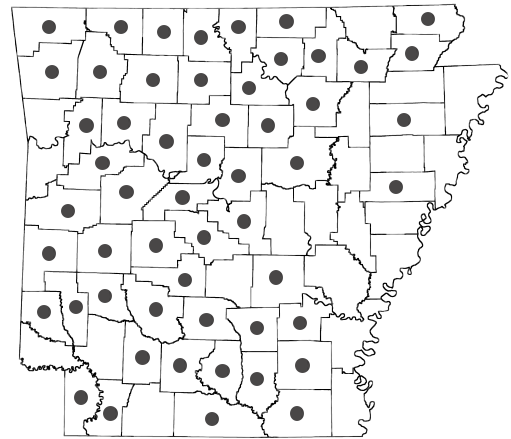
ERICACEAE
Vaccinium elliottii Chapm.
 mayberry, Elliott's blueberry



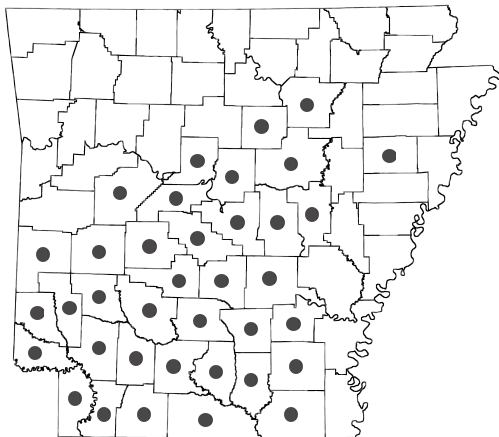
ERICACEAE
Vaccinium fuscatum Aiton
 black high-bush blueberry



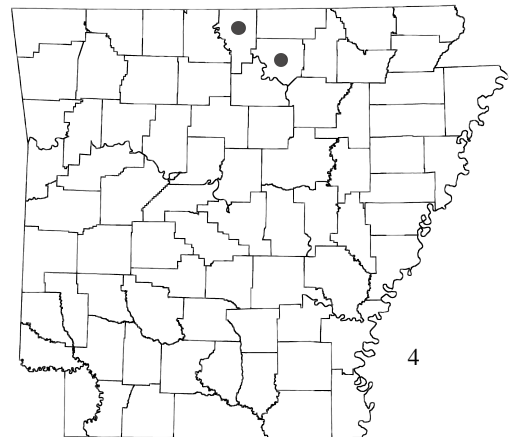
ERICACEAE
Vaccinium pallidum Aiton
 low-bush blueberry



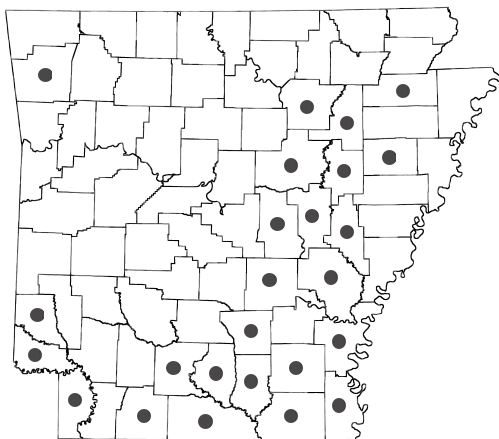
ERICACEAE
Vaccinium stamineum L.
 deerberry



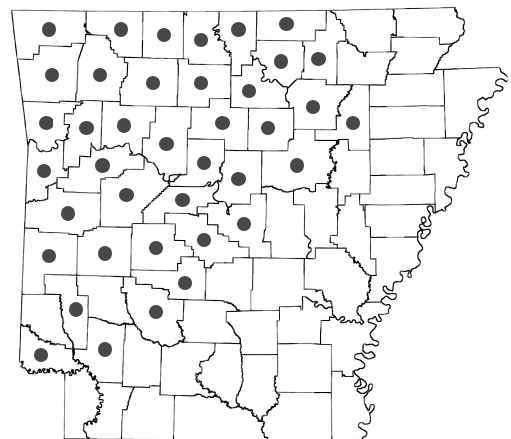
ERICACEAE
Vaccinium virgatum Aiton
 high-bush blueberry



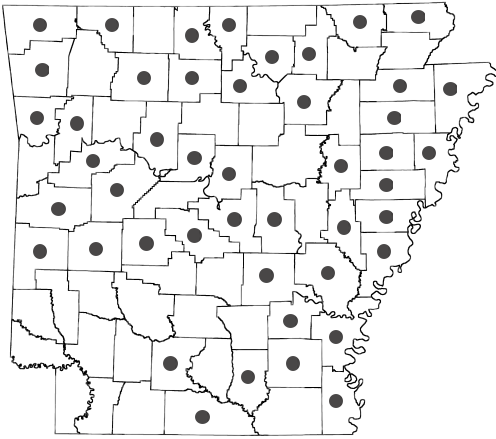
EUPHORBIACEAE
Acalypha deamii (Weath.) H.E.Ahles
 Deam's copperleaf, two-seed mercury



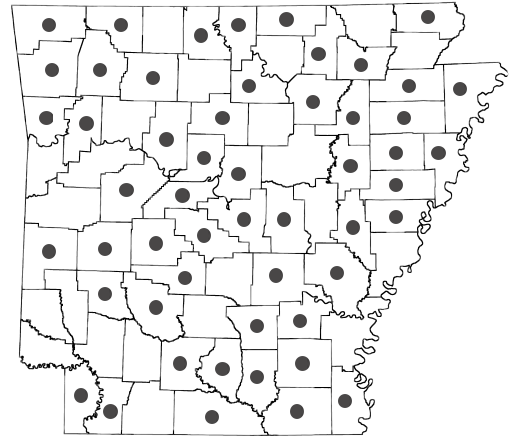
EUPHORBIACEAE
Acalypha gracilens A.Gray
 slender three-seed mercury, slender copperleaf



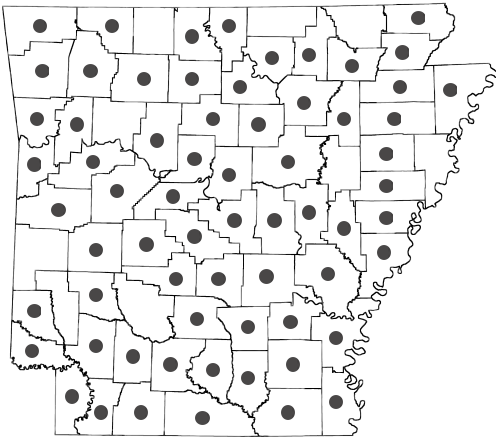
EUPHORBIACEAE
Acalypha monococca (Engelm. ex A.Gray) Lill.W.Mill. & Gandhi
 one-seed mercury, slender copperleaf



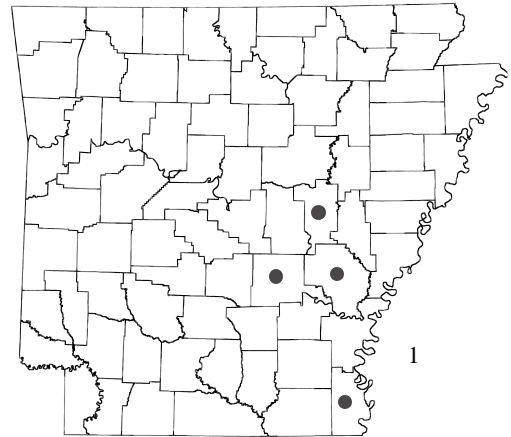
EUPHORBIACEAE
Acalypha ostryifolia Riddell
 hop-hornbeam copperleaf



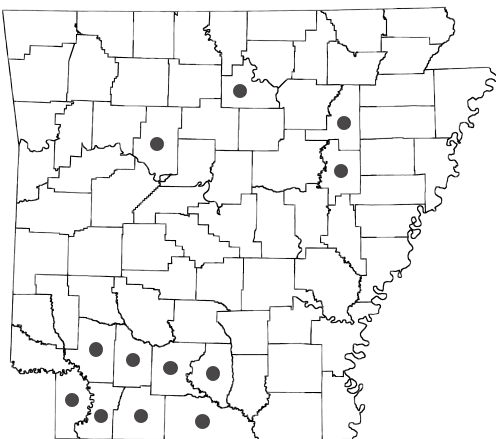
EUPHORBIACEAE
Acalypha rhomboidea Raf.
 rhombic copperleaf, three-seed mercury



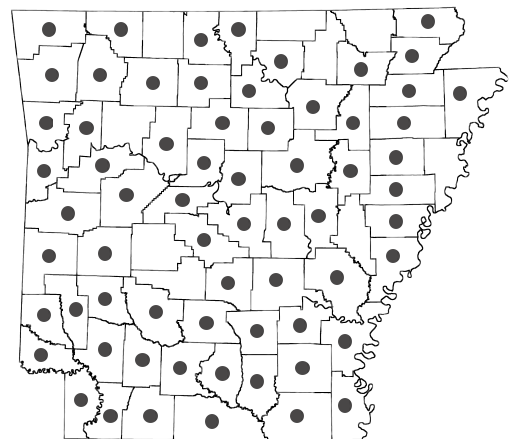
EUPHORBIACEAE
Acalypha virginica L.
 Virginia copperleaf, three-seed mercury



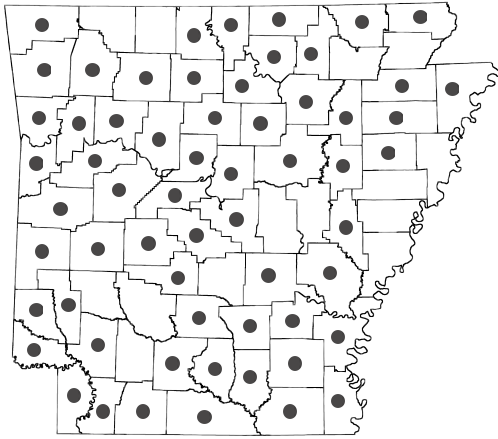
EUPHORBIACEAE
Caperonia palustris (L.) J.St.-Hil.
 Mexican-weed, sacatrapo



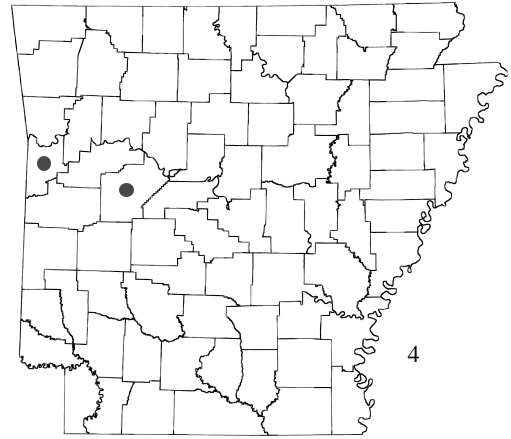
EUPHORBIACEAE
Cnidoscolus texanus (Müll.Arg.) Small
 bull-nettle



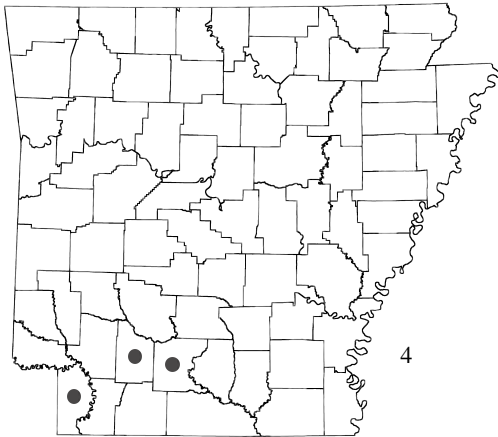
EUPHORBIACEAE
Croton capitatus Michx.
 woolly croton, hogwort, goatweed



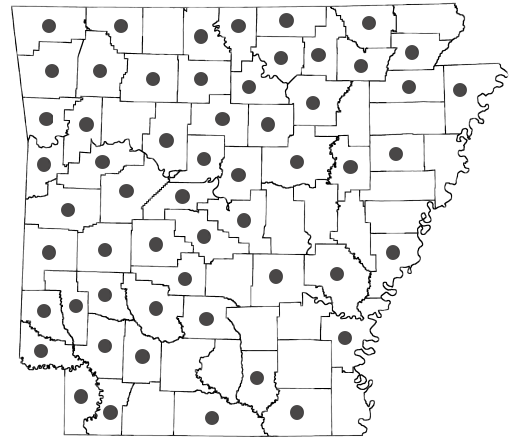
EUPHORBIACEAE
Croton glandulosus L.
var. septentrionalis Müll.Arg.
 tropic croton, sand croton



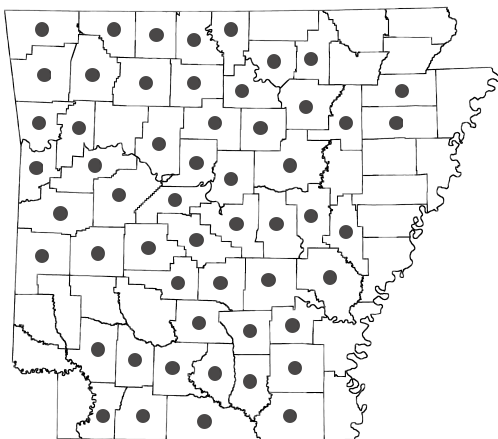
EUPHORBIACEAE
Croton lindheimerianus Scheele
var. lindheimerianus
 Lindheimer's croton



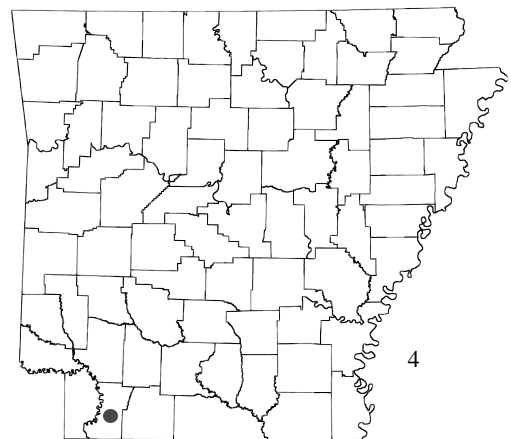
EUPHORBIACEAE
Croton michauxii G.L.Webster
 narrow-leaf rushfoil



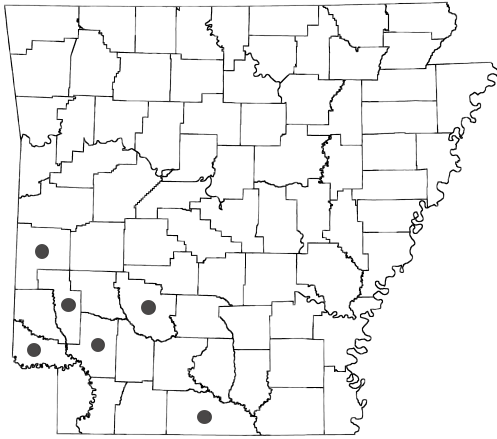
EUPHORBIACEAE
Croton monanthogynus Michx.
 prairie-tea



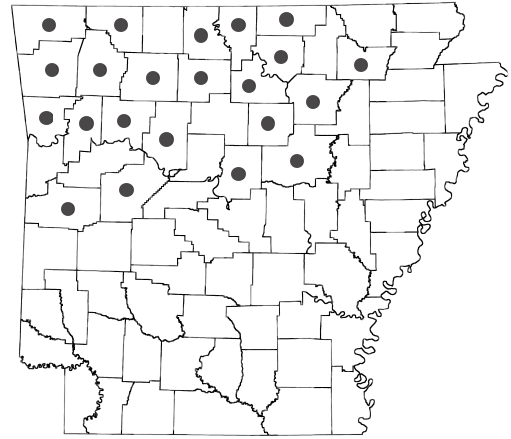
EUPHORBIACEAE
Croton willdenowii G.L.Webster
 rushfoil



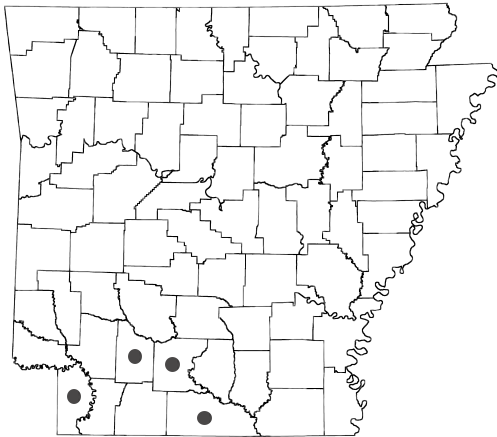
EUPHORBIACEAE
Ditrysinia fruticosa (W.Bartram) Govaerts & Frodin
 Sebastian-bush



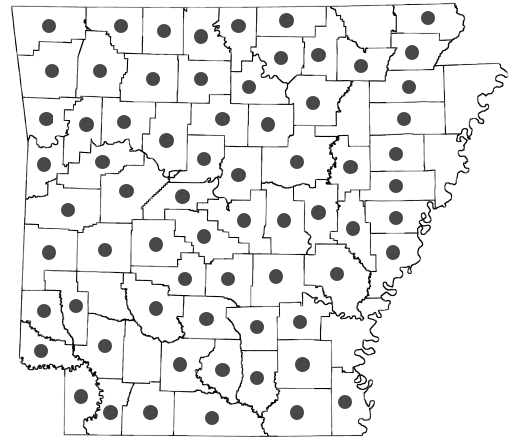
EUPHORBIACEAE
Euphorbia bicolor Engelm. & A.Gray
snow-on-the-prairie



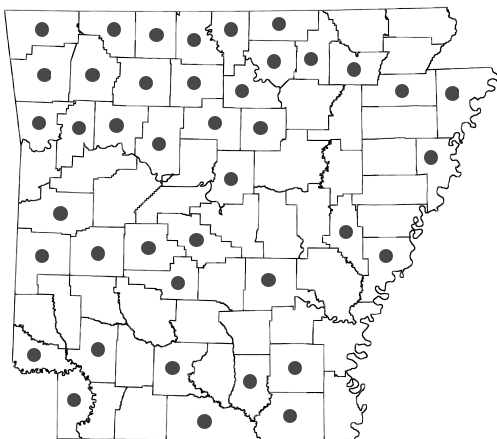
EUPHORBIACEAE
Euphorbia commutata Engelm. ex A.Gray
wood spurge



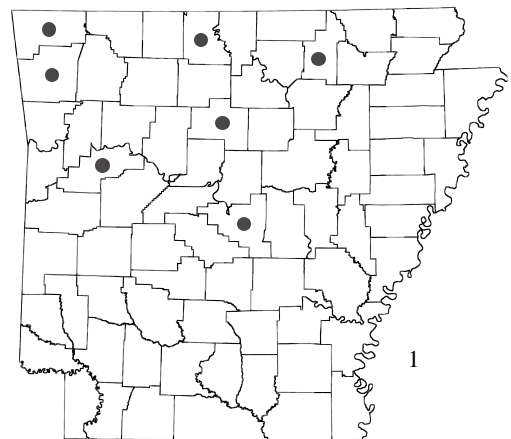
EUPHORBIACEAE
Euphorbia cordifolia Elliott
heart-leaf spurge, heart-leaf sandmat



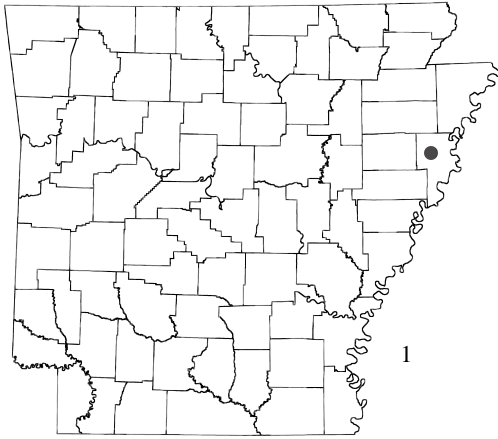
EUPHORBIACEAE
Euphorbia corollata L.
flowering spurge



EUPHORBIACEAE
Euphorbia cyathophora Murray
wild poinsettia, painted-leaf, fire-on-the-mountain

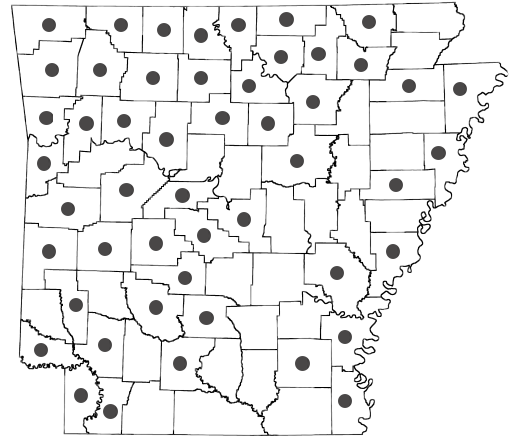


EUPHORBIACEAE
Euphorbia cyparissias L.
cypress spurge



EUPHORBIACEAE
***Euphorbia davidii* Subils**

David's spurge, toothed spurge



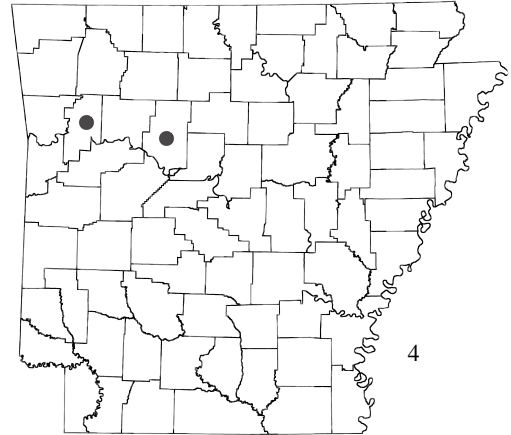
EUPHORBIACEAE
***Euphorbia dentata* Michx.**

toothed spurge, summer poinsettia



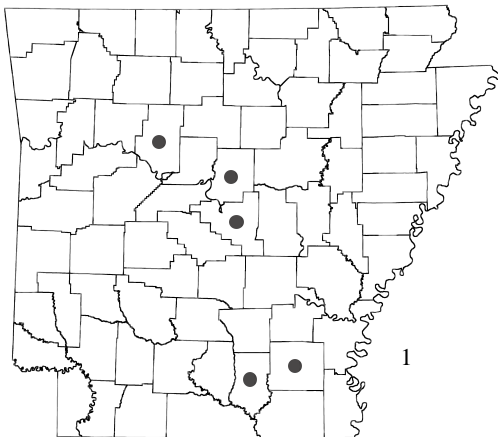
EUPHORBIACEAE
***Euphorbia graminea* Jacq.**

grass-leaf spurge



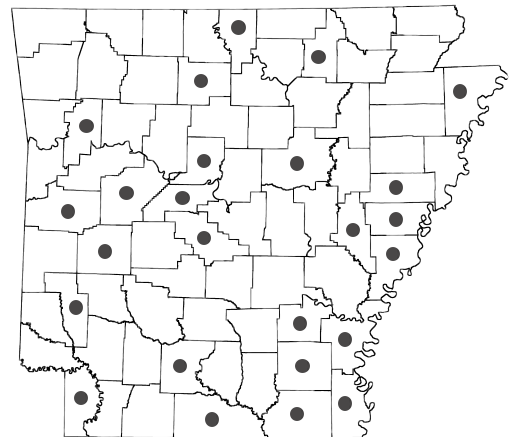
EUPHORBIACEAE
***Euphorbia hexagona* Nutt. ex Spreng.**

six-angle spurge



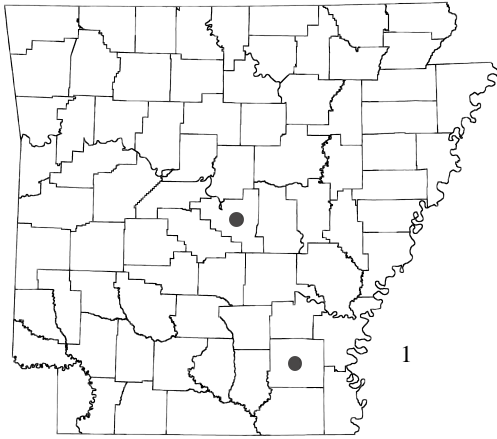
EUPHORBIACEAE
***Euphorbia hirta* L.**

pill-pod spurge, pill-pod sandmat

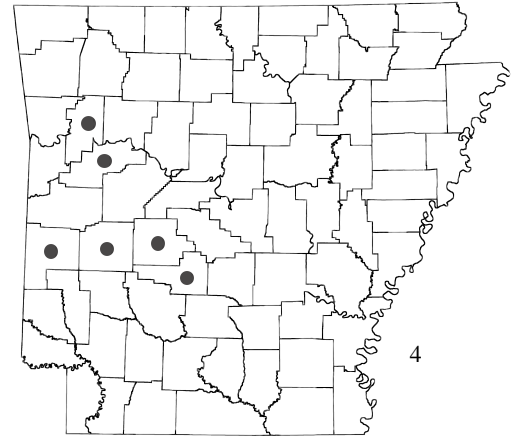


EUPHORBIACEAE
***Euphorbia humistrata* Engelm. ex A.Gray**

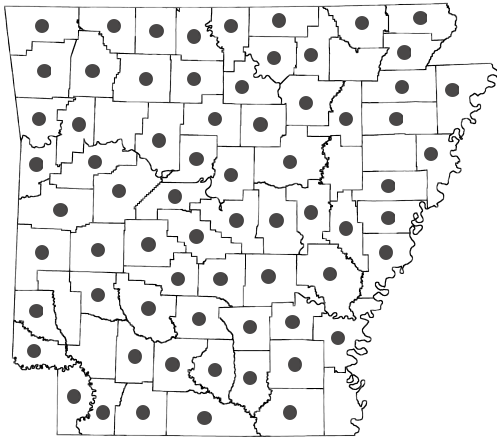
spreading sandmat



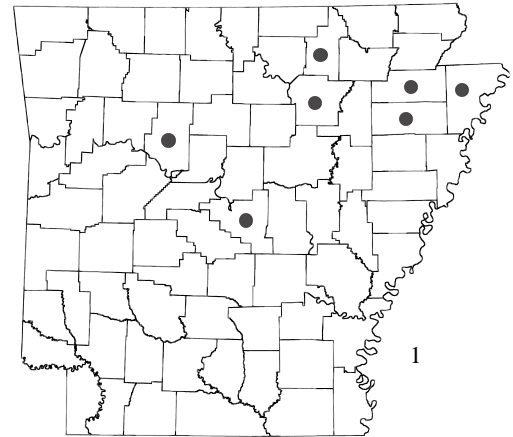
EUPHORBIACEAE
Euphorbia hypericifolia L.
 graceful spurge, tropical spurge



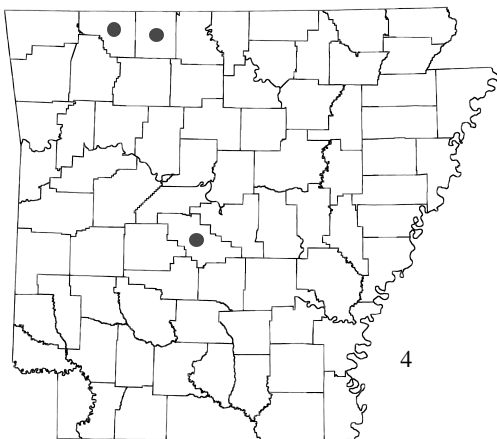
EUPHORBIACEAE
Euphorbia longicuris Scheele
 wedge-leaf spurge



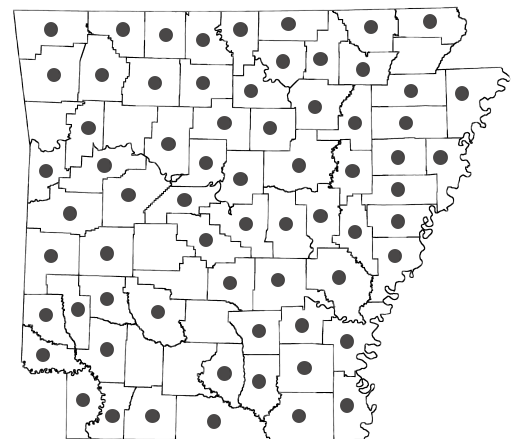
EUPHORBIACEAE
Euphorbia maculata L.
 spotted spurge, spotted sandmat



EUPHORBIACEAE
Euphorbia marginata Pursh
 snow-on-the-mountain



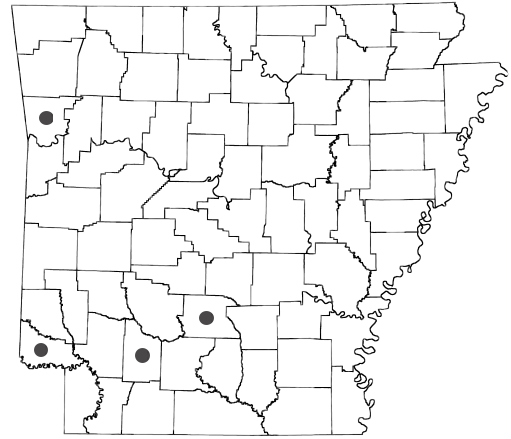
EUPHORBIACEAE
Euphorbia missurica Raf.
 Missouri spurge, prairie spurge



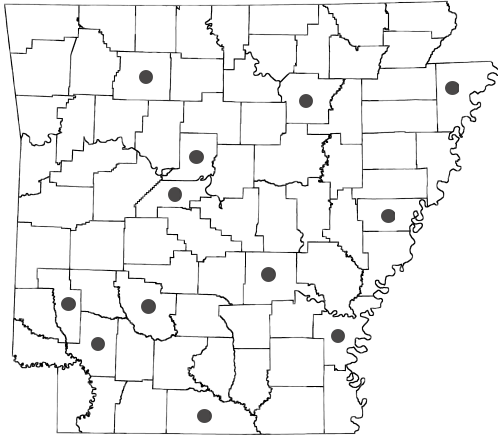
EUPHORBIACEAE
Euphorbia nutans Lag.
 nodding spurge, eyebane



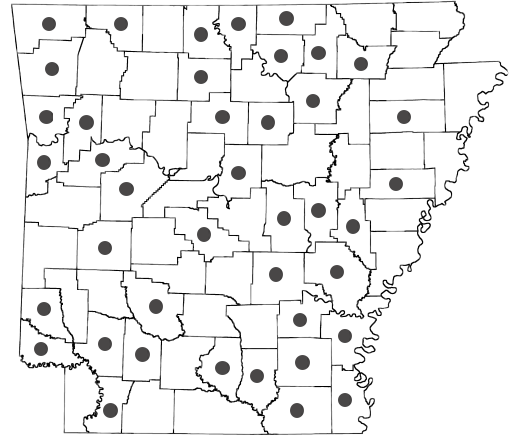
EUPHORBIACEAE
***Euphorbia ophthalmica* Pers.**
vagrant spurge



EUPHORBIACEAE
***Euphorbia prostrata* Aiton**
prostrate spurge, prostrate sandmat



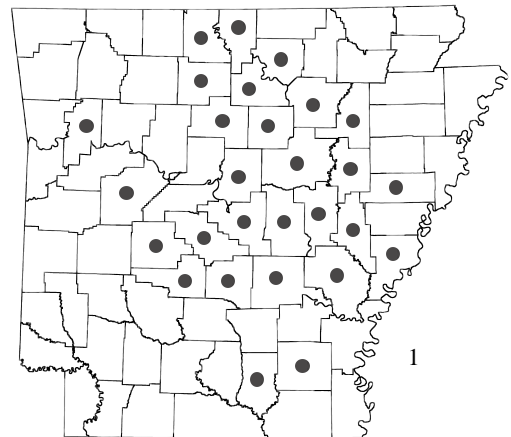
EUPHORBIACEAE
***Euphorbia serpens* Kunth**
ground spurge, matted sandmat



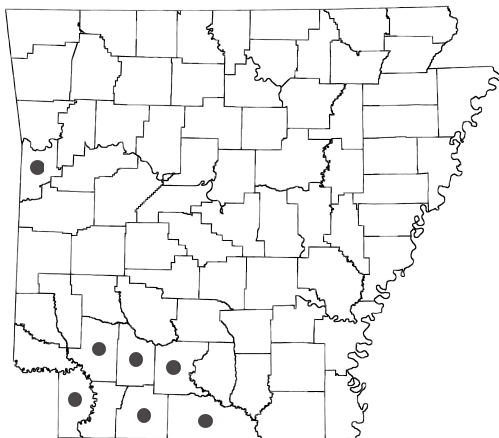
EUPHORBIACEAE
***Euphorbia spathulata* Lam.**
wartly spurge



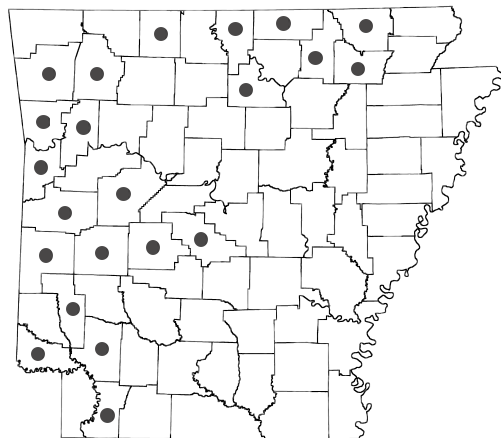
EUPHORBIACEAE
***Manihot grahamii* Hook.**
Graham's cassava



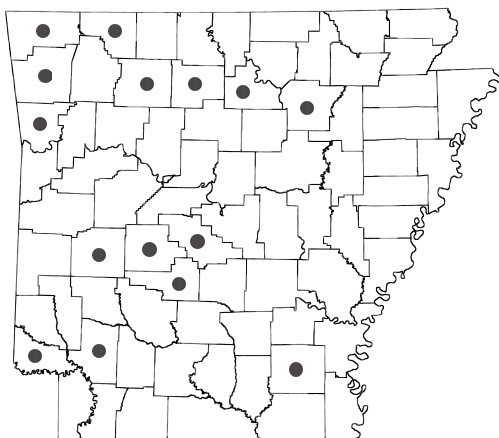
EUPHORBIACEAE
***Ricinus communis* L.**
castor-bean, castor-oil-plant



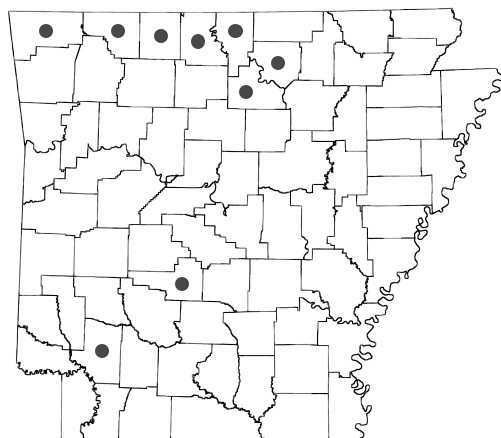
EUPHORBIACEAE
Stillingia sylvatica Garden ex L.
 queen's-delight



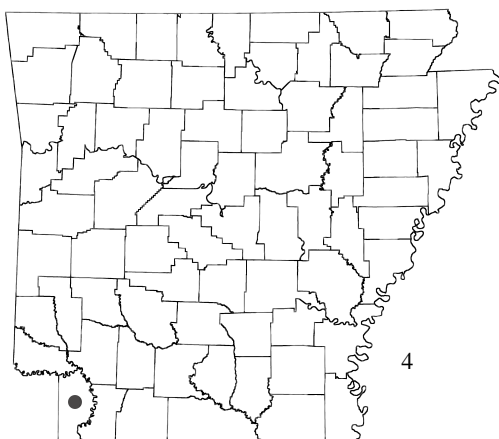
EUPHORBIACEAE
Tragia betonicifolia Nutt.
 noseburn



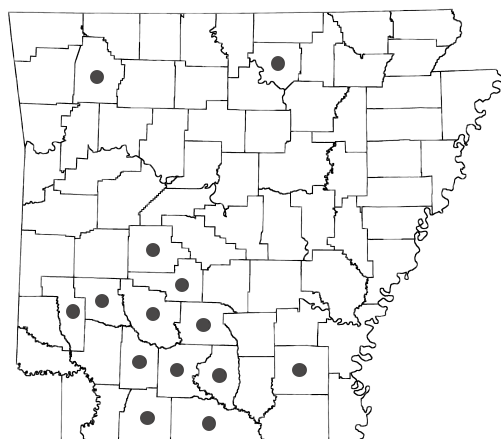
EUPHORBIACEAE
Tragia cordata Michx.
 heart-leaf noseburn



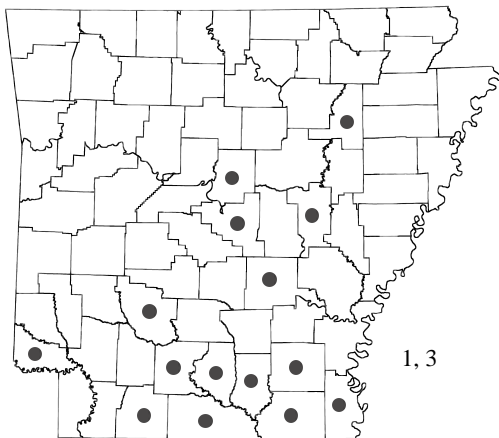
EUPHORBIACEAE
Tragia ramosa Torr.
 noseburn



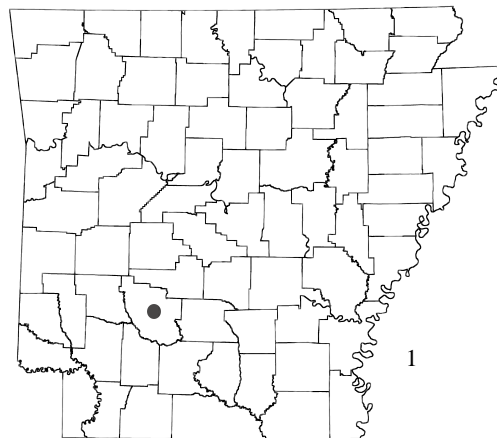
EUPHORBIACEAE
Tragia smallii Shinnery
 Small's noseburn



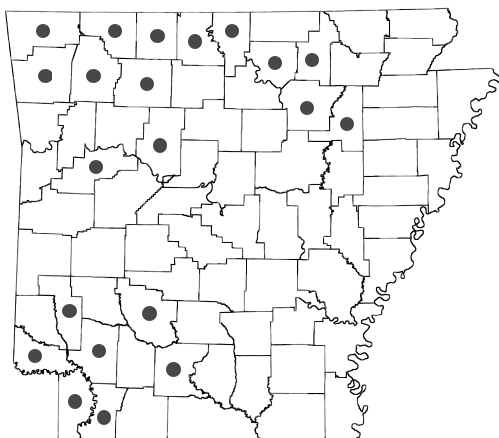
EUPHORBIACEAE
Tragia urticifolia Michx.
 noseburn



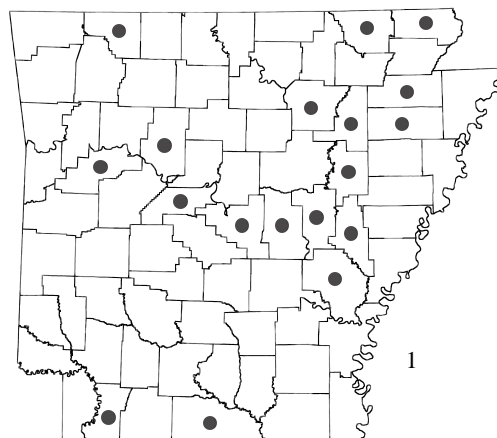
EUPHORBIACEAE
Triadica sebifera (L.) Small
 Chinese tallow-tree, popcorn-tree



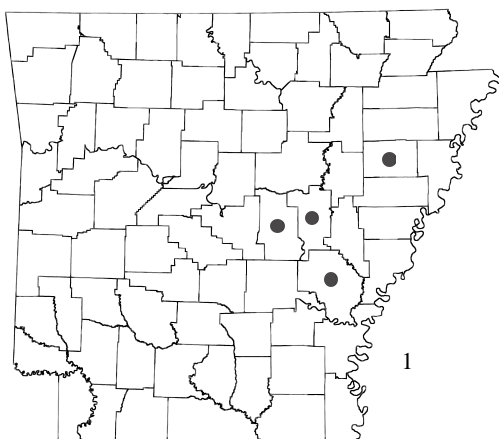
EUPHORBIACEAE
Vernicia fordii (Hemsl.) Airy Shaw
 tung-oil-tree



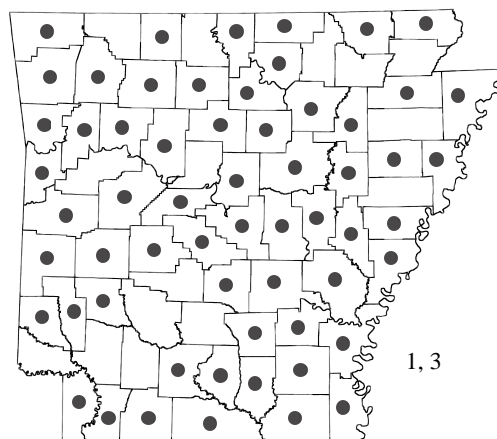
FABACEAE
Acaciella angustissima (Mill.) Britton & Rose
 prairie acacia



FABACEAE
Aeschynomene indica L.
 joint-vetch



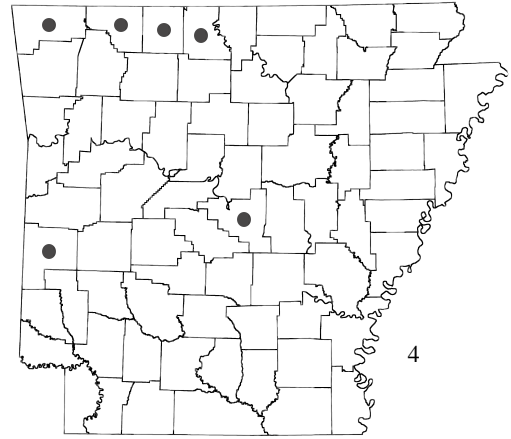
FABACEAE
Aeschynomene rudis Benth.
 joint-vetch



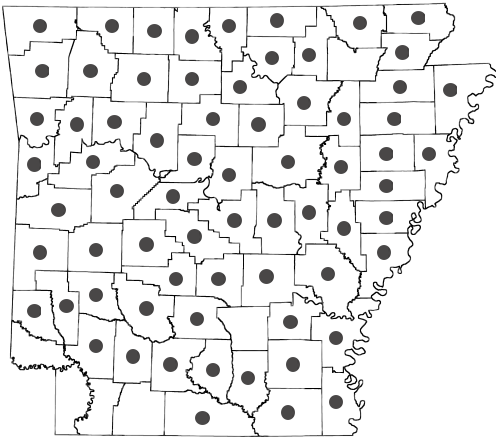
FABACEAE
Albizia julibrissin Durazz.
 mimosa, silk-tree



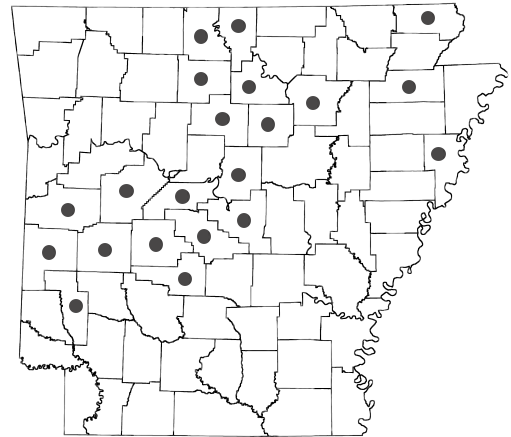
FABACEAE
Alysicarpus vaginalis (L.) DC.
 alyce-clover



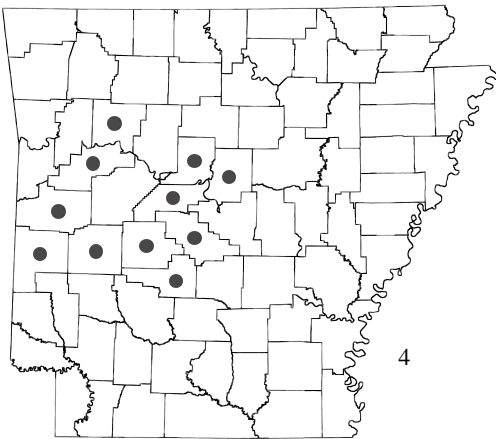
FABACEAE
Amorpha canescens Pursh
 lead-plant



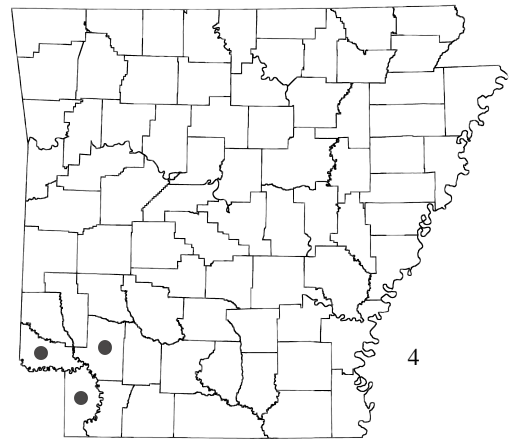
FABACEAE
Amorpha fruticosa L.
 indigo-bush, false indigo



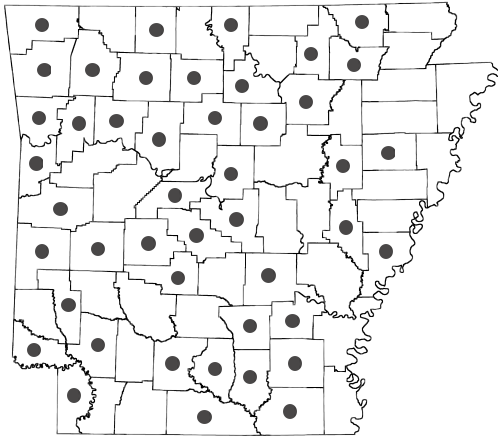
FABACEAE
Amorpha nitens F.E.Boynton
 shining indigo-bush



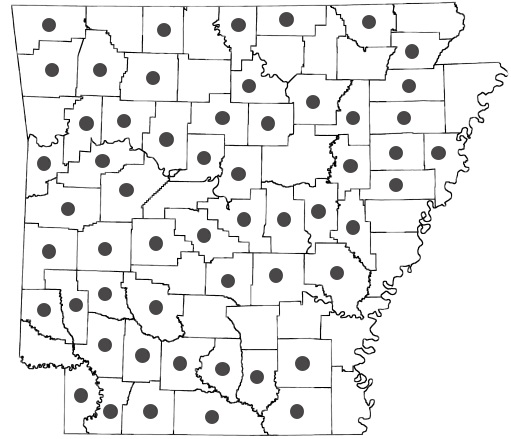
FABACEAE
Amorpha ouachitensis Wilbur
 Ouachita indigo-bush, Ouachita lead-plant



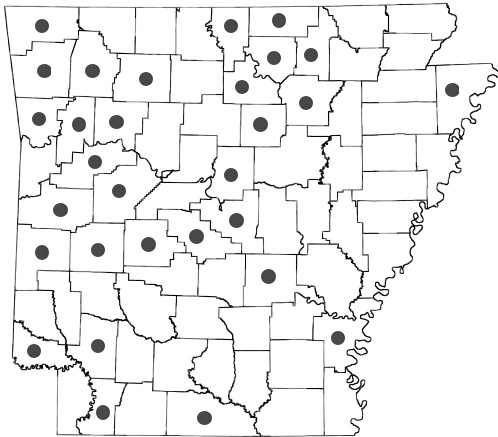
FABACEAE
Amorpha paniculata Torr. & A.Gray
 panicled indigo-bush



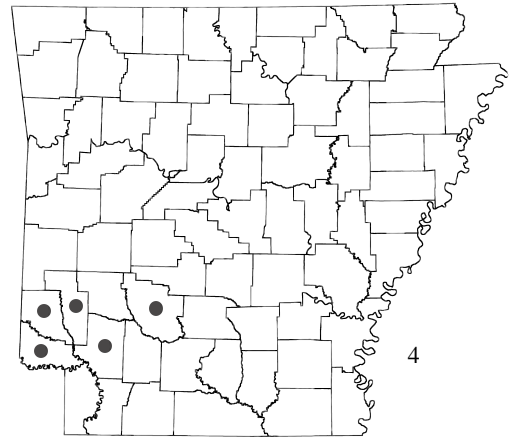
FABACEAE
Amphicarpaea bracteata (L.) Fernald
 hog-peanut



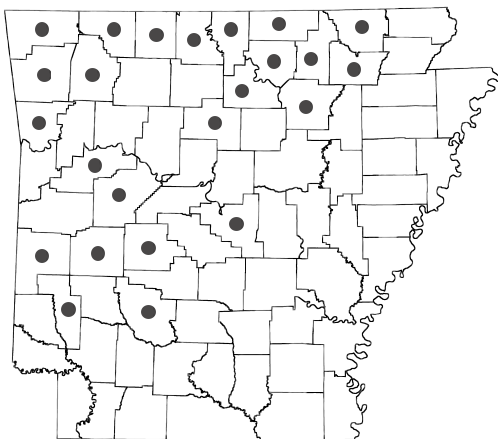
FABACEAE
Apios americana Medik.
 groundnut



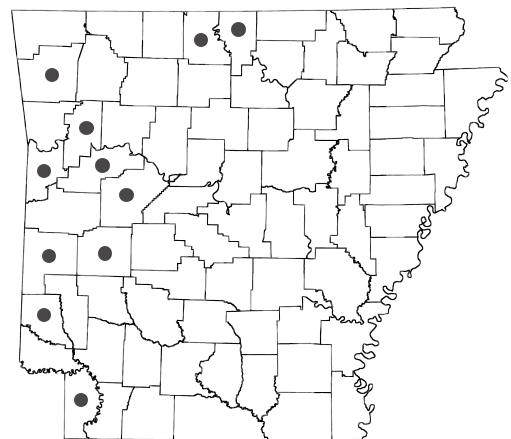
FABACEAE
Astragalus canadensis L.
var. canadensis
 rattle-weed, Canadian milk-vetch



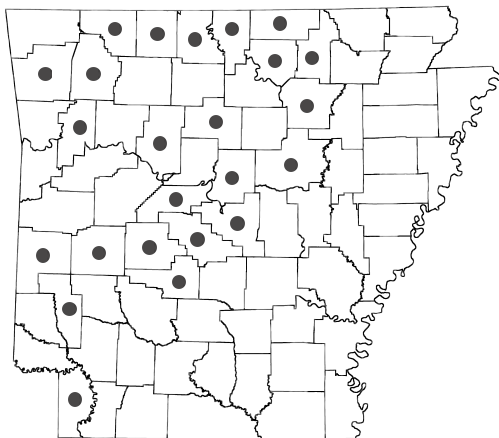
FABACEAE
Astragalus crassicaarpus Nutt.
var. crassicaarpus
 purple ground-plum



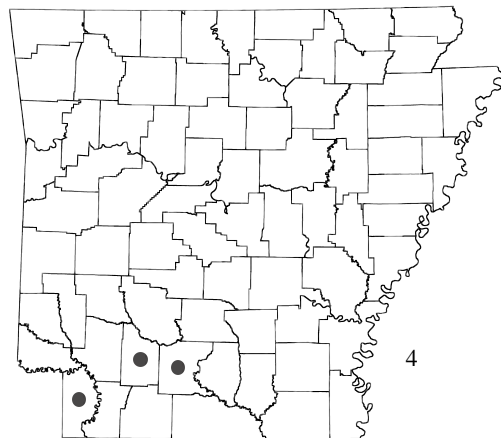
FABACEAE
Astragalus crassicaarpus Nutt.
var. trichocalyx (Nutt.) Barneby
 cream ground-plum



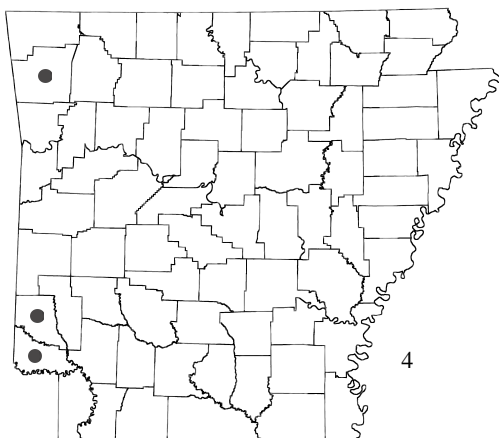
FABACEAE
Astragalus distortus Torr. & A.Gray
var. distortus
 bent milk-vetch



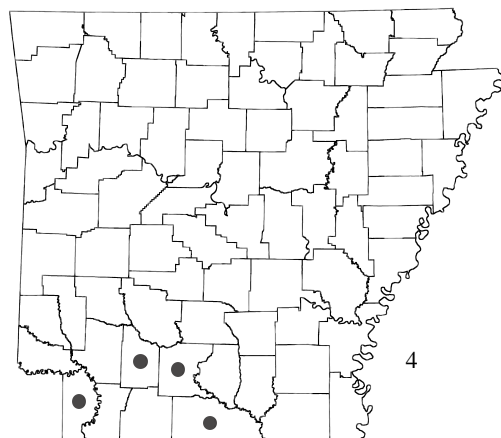
FABACEAE
Astragalus distortus Torr. & A.Gray
var. engelmannii (E.Sheld.) M.E.Jones
 bent milk-vetch



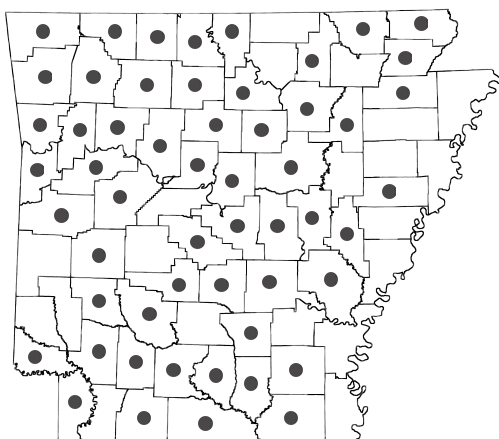
FABACEAE
Astragalus leptocarpus Torr. & A.Gray
 slim-pod milk-vetch



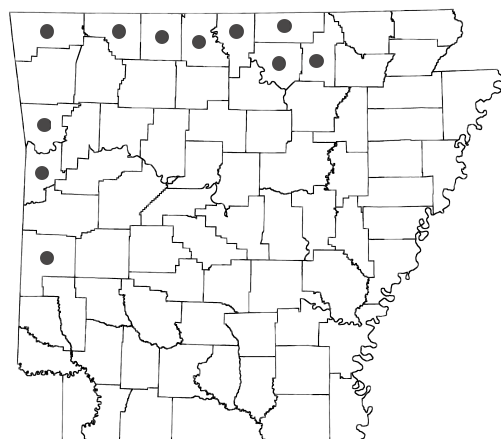
FABACEAE
Astragalus nuttallianus DC.
var. nuttallianus
 Nuttall's milk-vetch, turkey-pea



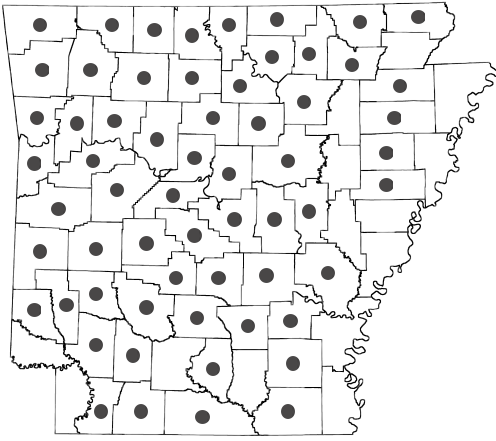
FABACEAE
Astragalus soxmaniorum Lundell
 Soxman's milk-vetch



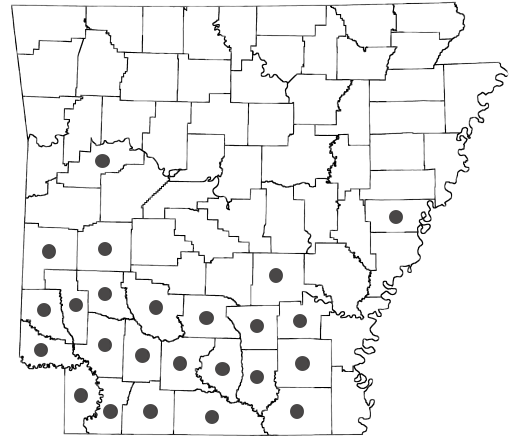
FABACEAE
Baptisia alba (L.) Vent.
var. macrophylla (Larisey) Isely
 white wild indigo



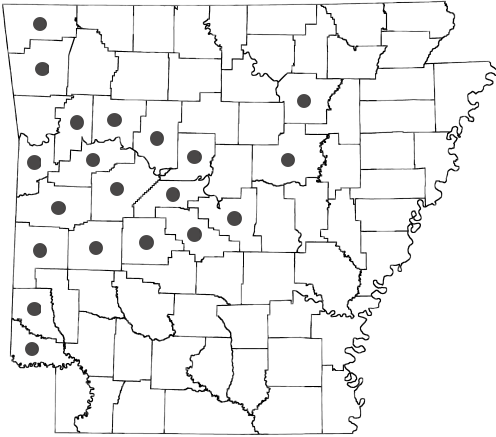
FABACEAE
Baptisia australis (L.) R.Br. in W.T.Aiton
var. minor (Lehm.) Fernald
 blue wild indigo



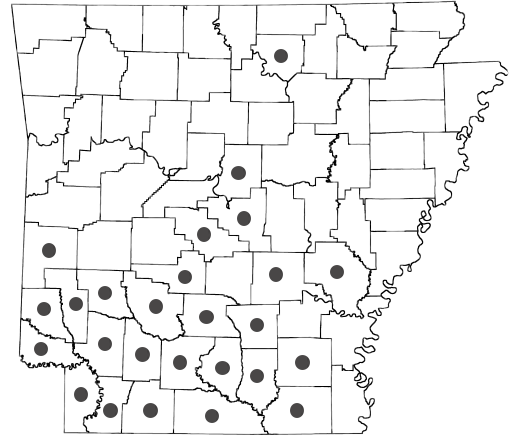
FABACEAE
Baptisia bracteata Muhl. ex Elliott
var. leucophaea (Nutt.) Kartesz & Gandhi
cream wild indigo



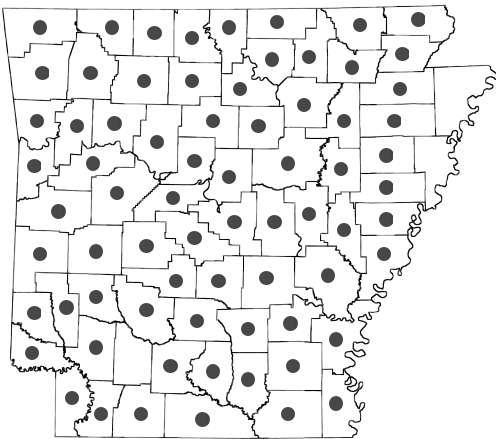
FABACEAE
Baptisia nuttalliana Small
Nuttall's wild indigo



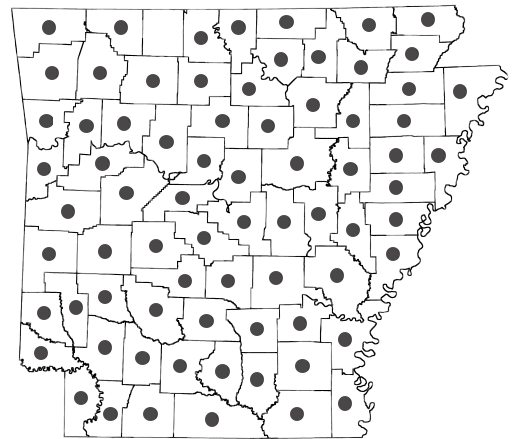
FABACEAE
Baptisia sphaerocarpa Nutt.
yellow wild indigo



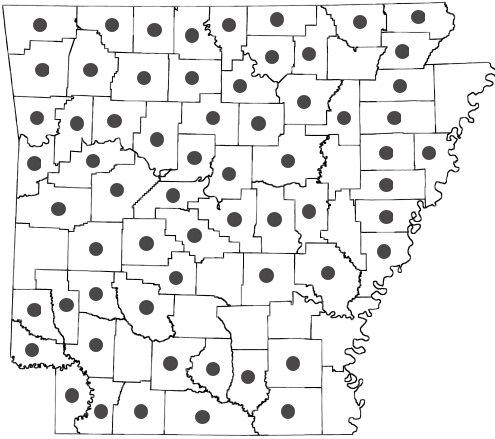
FABACEAE
Centrosema virginianum (L.) Benth.
butterfly-pea



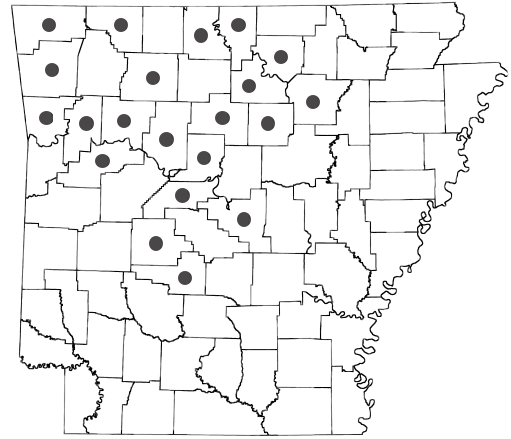
FABACEAE
Cercis canadensis L.
var. canadensis
eastern redbud



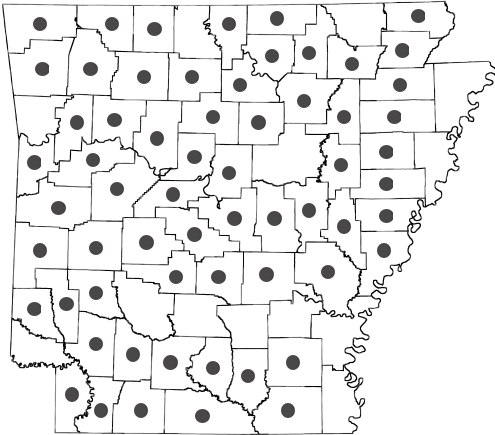
FABACEAE
Chamaecrista fasciculata (Michx.) Greene
var. fasciculata
showy partridge-pea



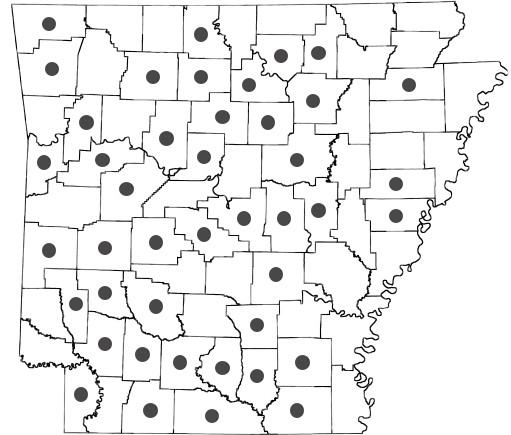
FABACEAE
Chamaecrista nictitans (L.) Moench
var. nictitans
 sensitive partridge-pea



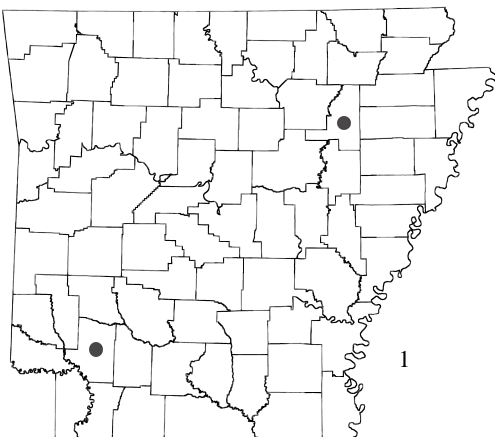
FABACEAE
Cladrastis kentukea (Dum.Cours.) Rudd
 yellow-wood



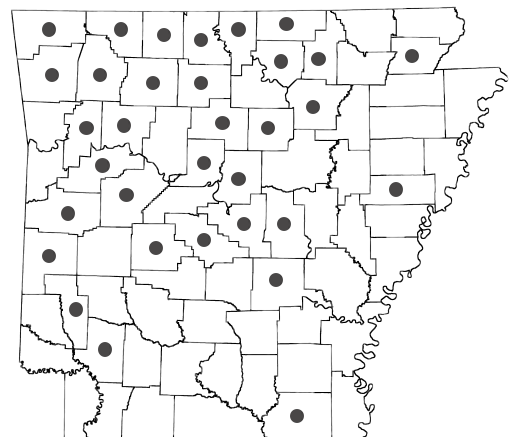
FABACEAE
Clitoria mariana L.
 butterfly-pea



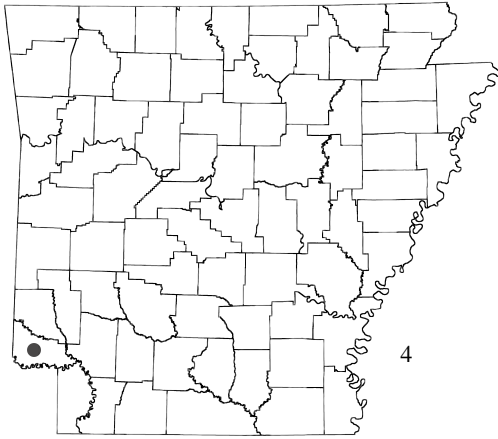
FABACEAE
Crotalaria sagittalis L.
 rattlebox



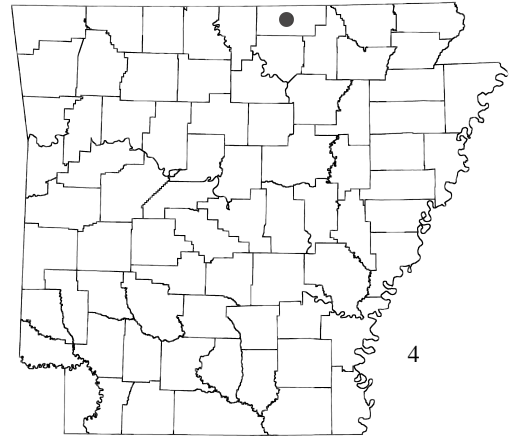
FABACEAE
Crotalaria spectabilis Roth
 showy rattlebox



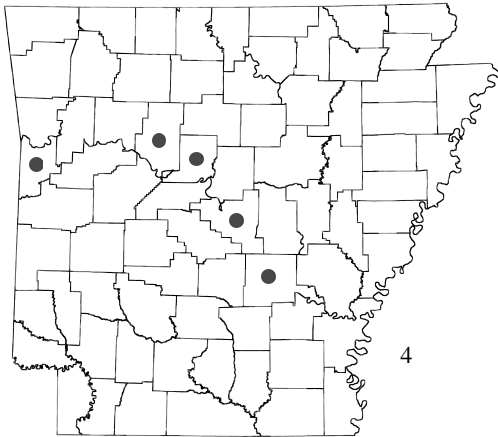
FABACEAE
Dalea candida Michx. ex Willd.
var. candida
 white prairie-clover



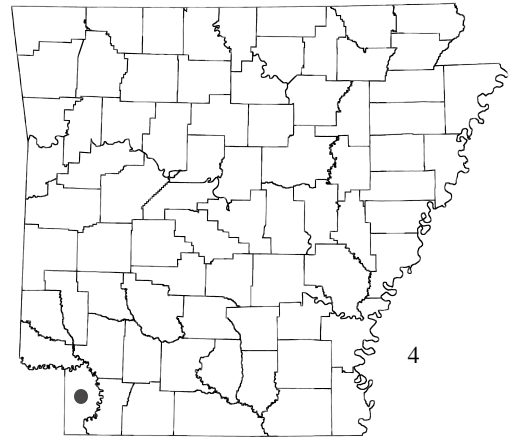
FABACEAE
Dalea compacta Spreng.
var. compacta
 compact prairie-clover



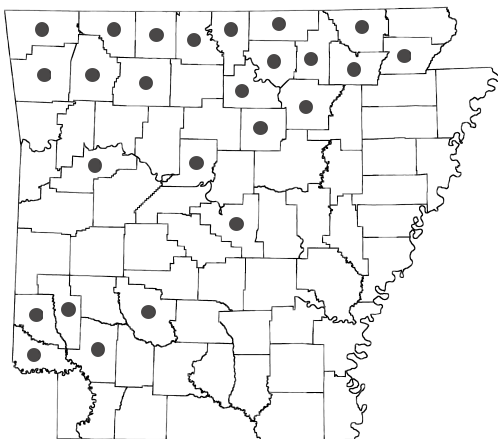
FABACEAE
Dalea gattingeri (A.Heller) Barneby
 Gattinger's prairie-clover



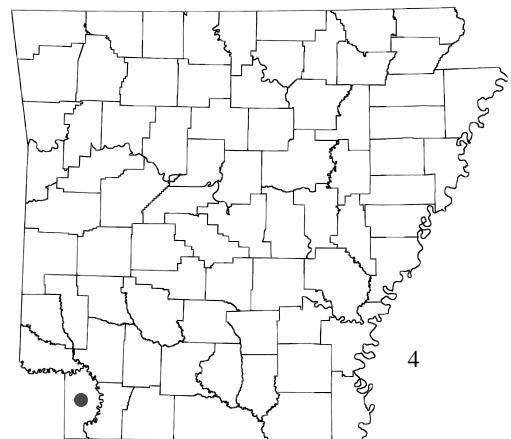
FABACEAE
Dalea lanata Spreng.
var. lanata
 woolly prairie-clover



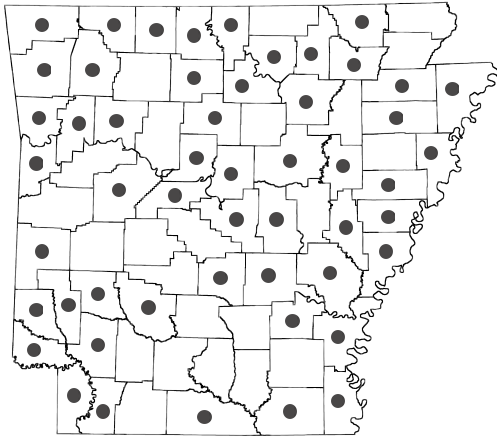
FABACEAE
Dalea phleoides (Torr. & A.Gray) Shinnery
var. microphylla (Torr. & A.Gray) Barneby
 little-leaf prairie-clover



FABACEAE
Dalea purpurea Vent.
var. purpurea
 purple prairie-clover



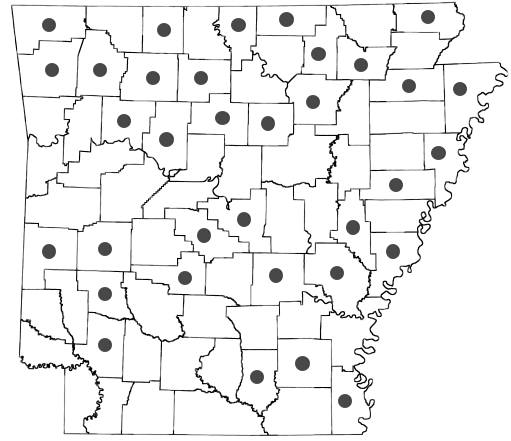
FABACEAE
Dalea villosa (Nutt.) Spreng.
var. grisea (Torr. & A.Gray) Barneby
 silky prairie-clover



FABACEAE

Desmanthus illinoensis (Michx.) MacMill. ex B.L.Rob. & Fernald

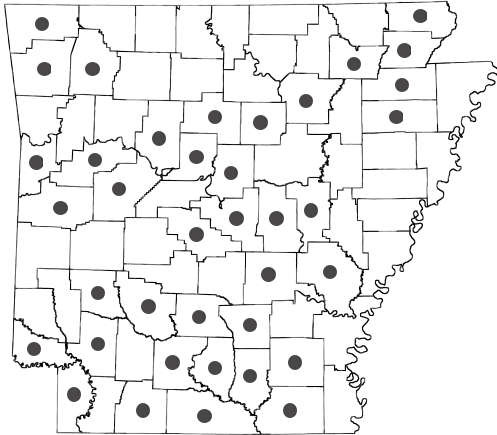
Illinois bundleflower, prairie-mimosa



FABACEAE

Desmodium canescens (L.) DC.

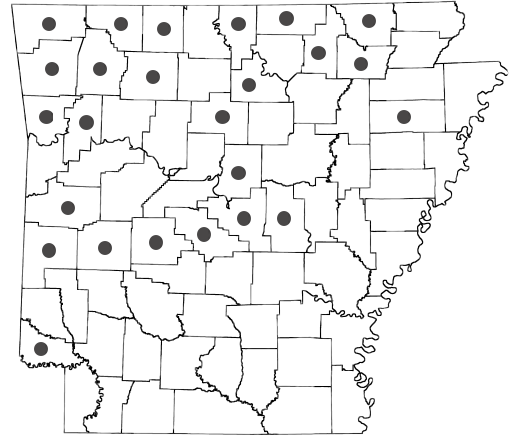
hoary tick-trefoil, beggar's-lice



FABACEAE

Desmodium ciliare (Muhl. ex Willd.) DC.

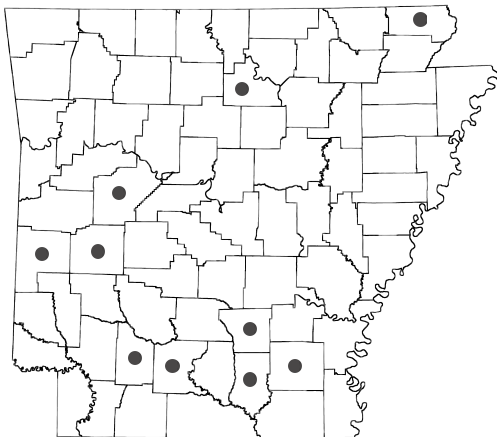
tick-trefoil, beggar's-lice



FABACEAE

Desmodium cuspidatum (Muhl. ex Willd.) DC. ex Loudon

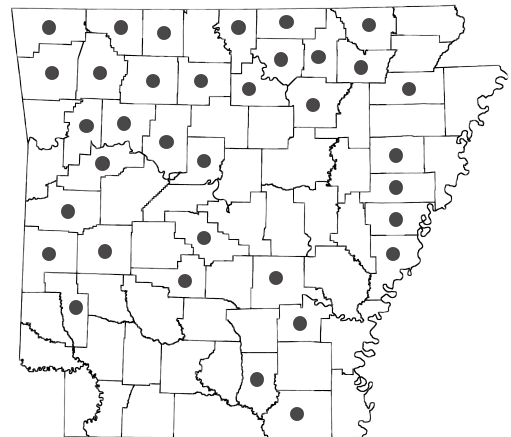
tick-trefoil, beggar's-lice



FABACEAE

Desmodium glabellum (Michx.) DC.

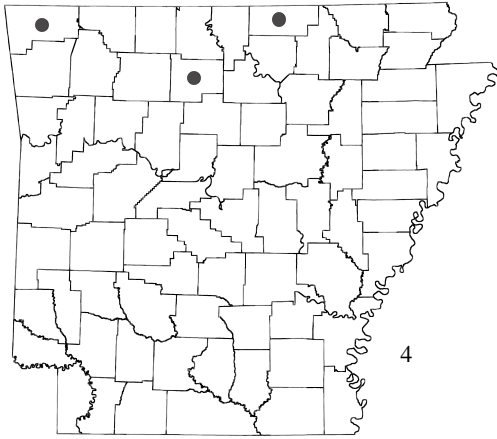
tick-trefoil, beggar's-lice



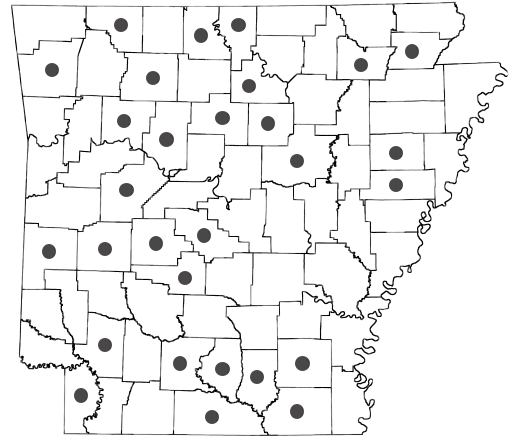
FABACEAE

Desmodium glutinosum (Muhl. ex Willd.) A.W.Wood

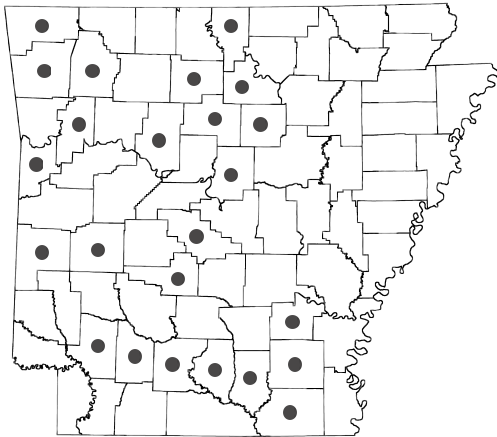
tick-trefoil, beggar's-lice



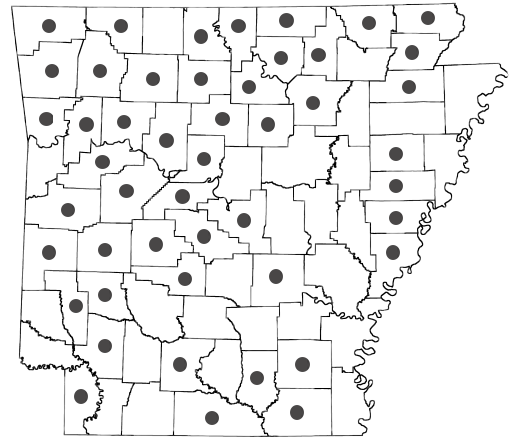
FABACEAE
Desmodium illinoense A.Gray
Illinois tick-trefoil, beggar's-lice



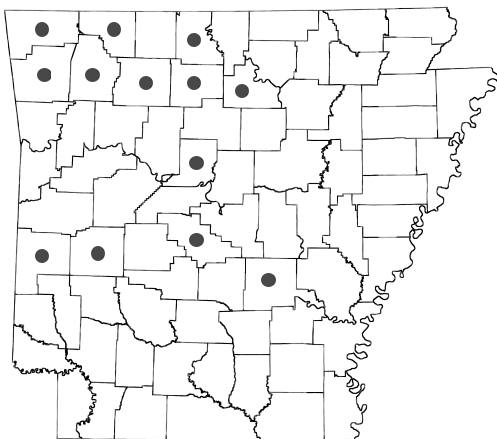
FABACEAE
Desmodium laevigatum (Nutt.) DC.
smooth tick-trefoil, beggar's-lice



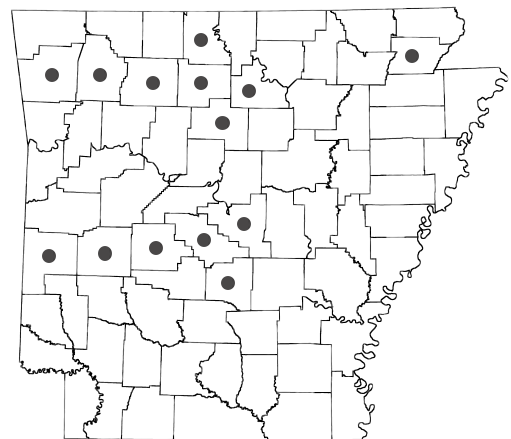
FABACEAE
Desmodium marilandicum (L.) DC.
tick-trefoil, beggar's-lice



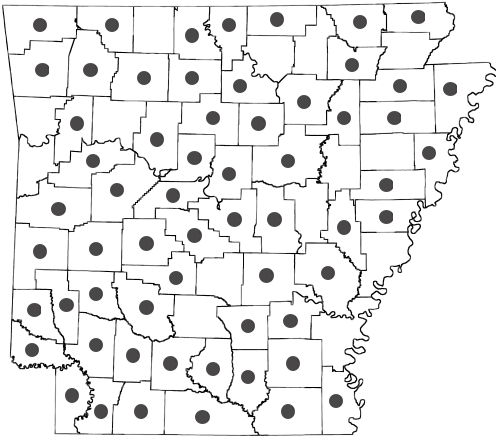
FABACEAE
Desmodium nudiflorum (L.) DC.
naked-flower tick-trefoil, beggar's-lice



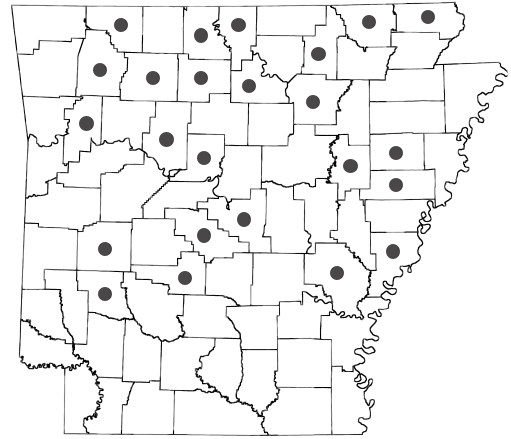
FABACEAE
Desmodium nuttallii (Schindl.) B.G.Schub.
Nuttall's tick-trefoil, beggar's-lice



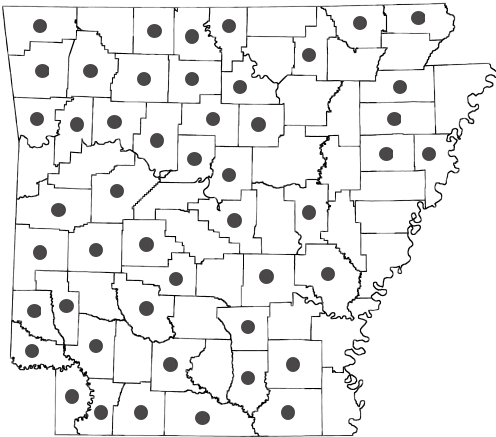
FABACEAE
Desmodium obtusum (Muhl. ex Willd.) DC.
tick-trefoil, beggar's-lice



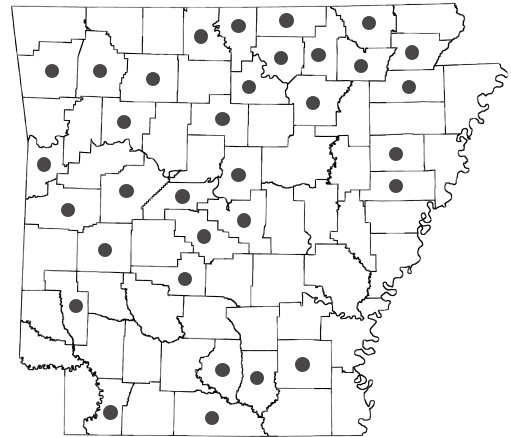
FABACEAE
Desmodium paniculatum (L.) DC.
 panicked tick-trefoil, beggar's-lice



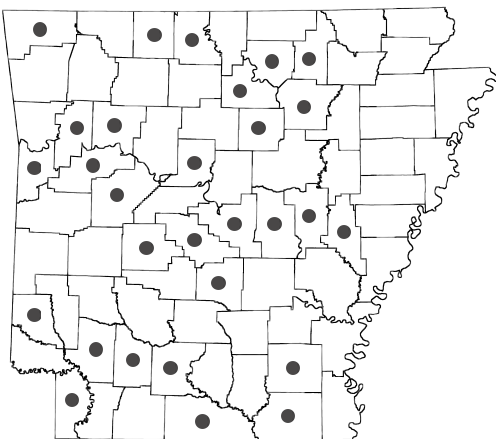
FABACEAE
Desmodium pauciflorum (Nutt.) DC.
 few-flower tick-trefoil, beggar's-lice



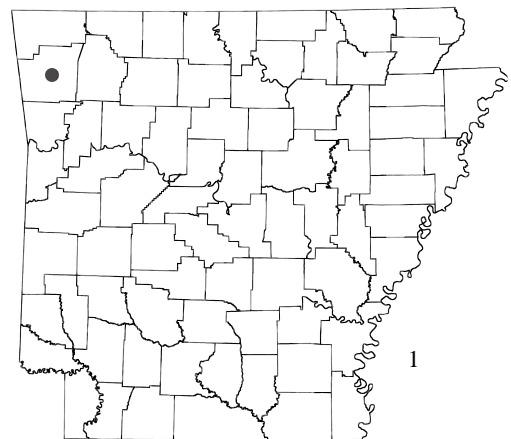
FABACEAE
Desmodium perplexum B.G.Schub.
 tick-trefoil, beggar's-lice



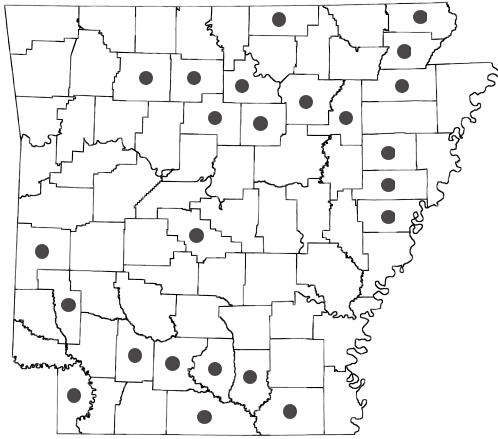
FABACEAE
Desmodium rotundifolium (Michx.) DC.
 dollar-leaf, round-leaf tick-trefoil



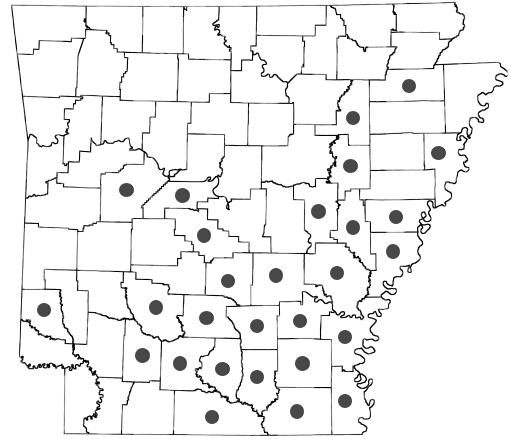
FABACEAE
Desmodium sessilifolium (Torr. ex M.A.Curtis) Torr. & A.Gray
 sessile-leaf tick-trefoil, beggar's-lice



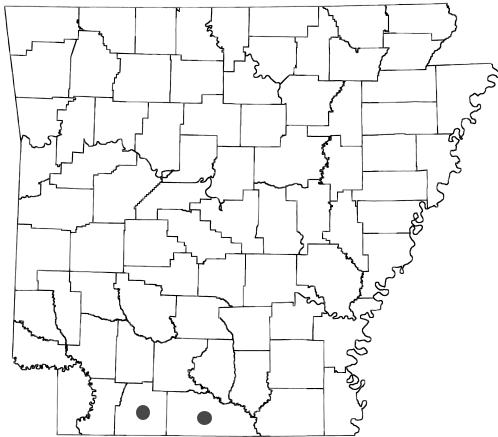
FABACEAE
Desmodium tortuosum (Sw.) DC.
 Florida beggarweed, beggar's-lice



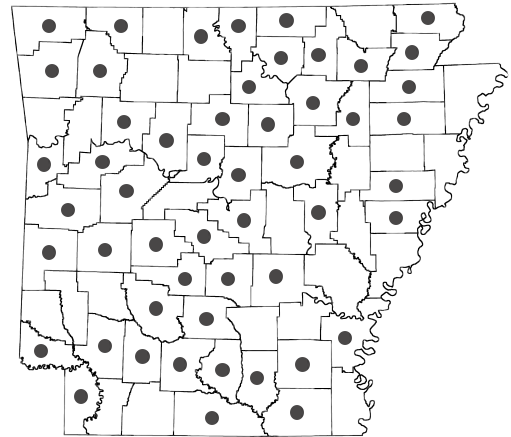
FABACEAE
Desmodium viridiflorum (L.) DC.
velvet-leaf tick-trefoil, beggar's-lice



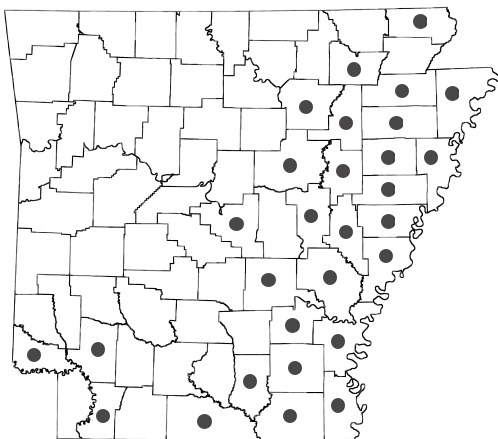
FABACEAE
Dioclea multiflora (Torr. & A.Gray) C.Mohr
cluster-pea



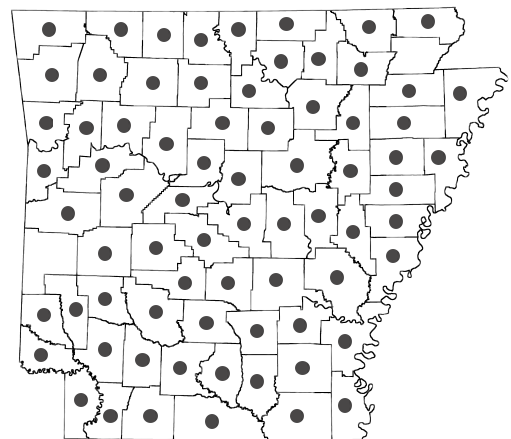
FABACEAE
Erythrina herbacea L.
coral-bean, Cherokee-bean, cardinal-spear



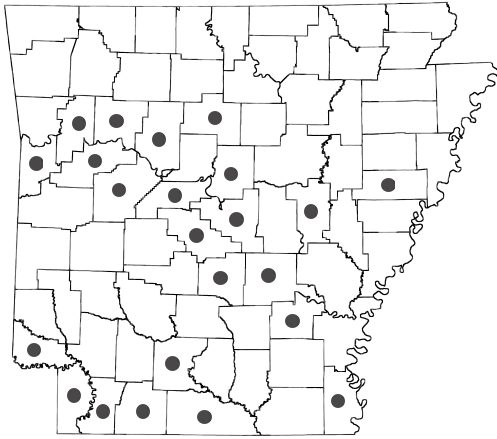
FABACEAE
Galactia volubilis (L.) Britton
downy milk-pea



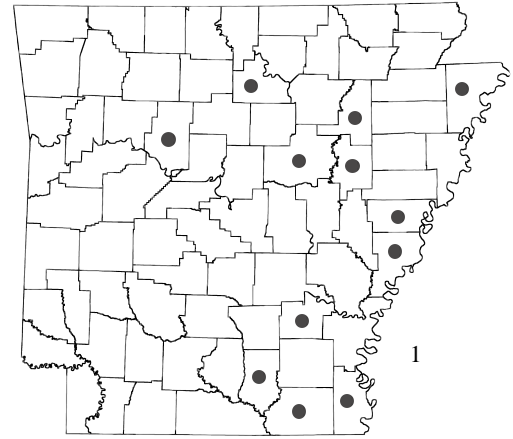
FABACEAE
Gleditsia aquatica Marshall
water locust



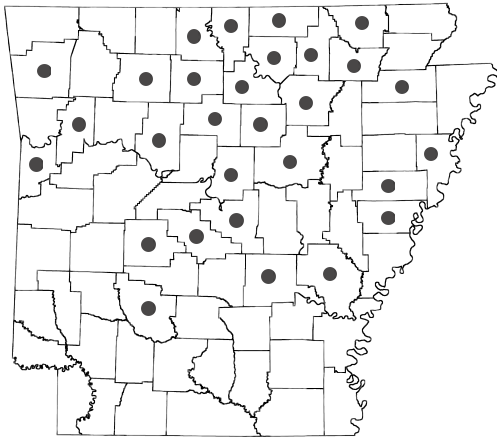
FABACEAE
Gleditsia triacanthos L.
honey locust



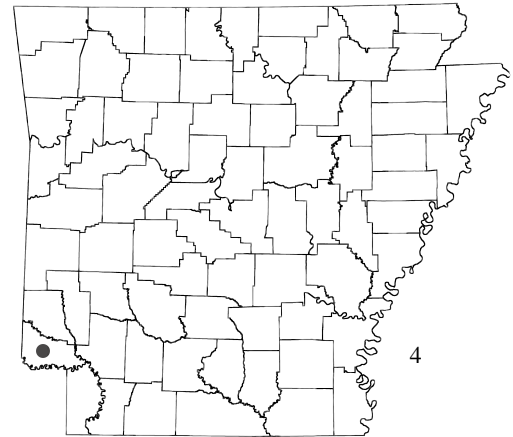
FABACEAE
Glottidium vesicarium (Jacq.) R.M.Harper
 bladderpod, bagpod



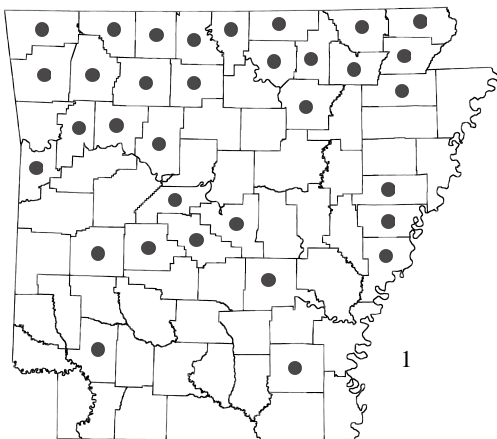
FABACEAE
Glycine max (L.) Merr.
 soybean



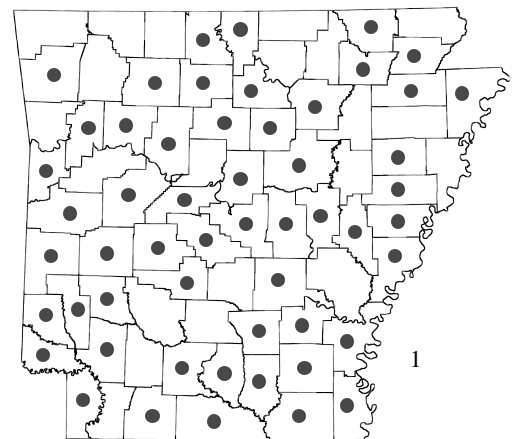
FABACEAE
Gymnocladus dioica (L.) K.Koch
 Kentucky coffee-tree



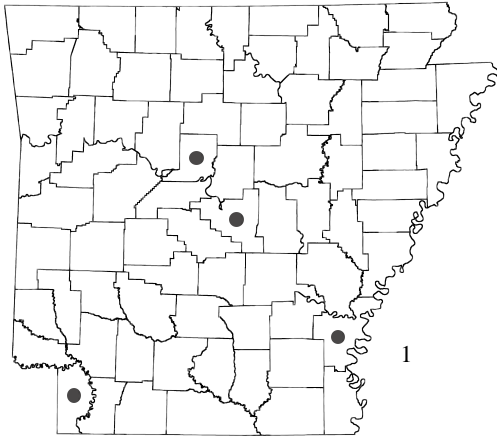
FABACEAE
Indigofera miniata Ortega
 scarlet-pea



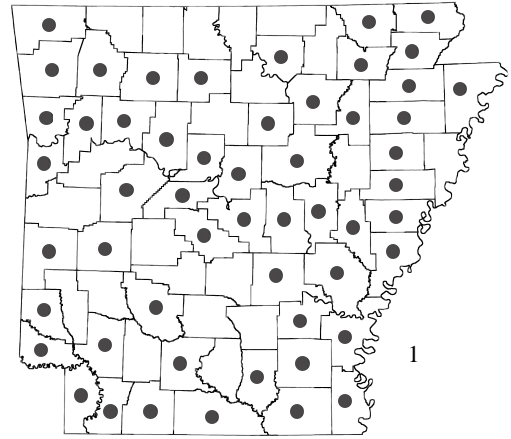
FABACEAE
Kummerowia stipulacea (Maxim.) Makino
 Korean bush-clover, Korean lespedeza



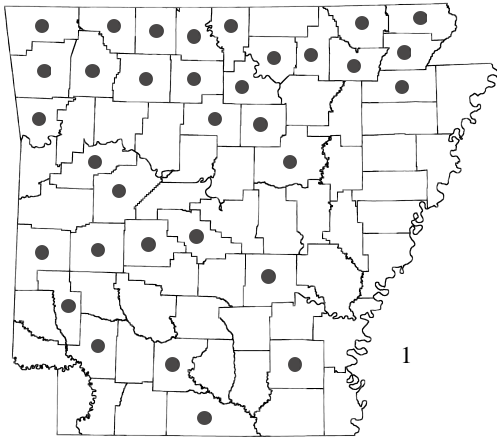
FABACEAE
Kummerowia striata (Thunb.) Schindl.
 Japanese bush-clover, Japanese lespedeza



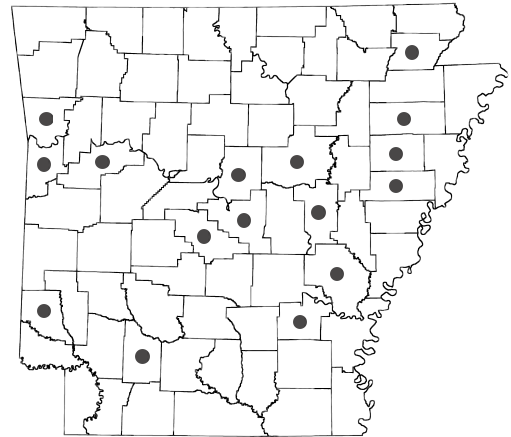
FABACEAE
Lathyrus aphaca L.
yellow vetchling



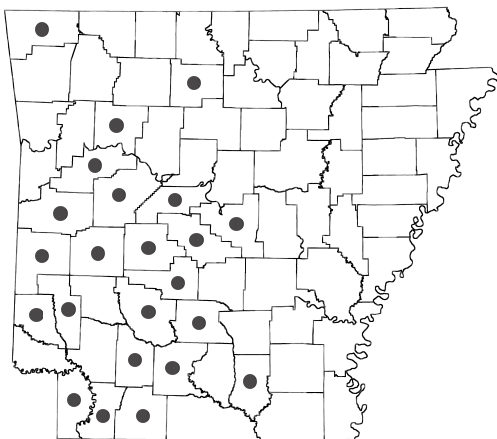
FABACEAE
Lathyrus hirsutus L.
singletary-pea, caley-pea



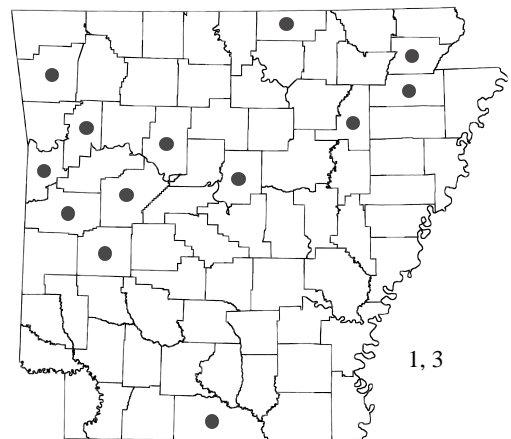
FABACEAE
Lathyrus latifolius L.
everlasting-pea, perennial sweet-pea



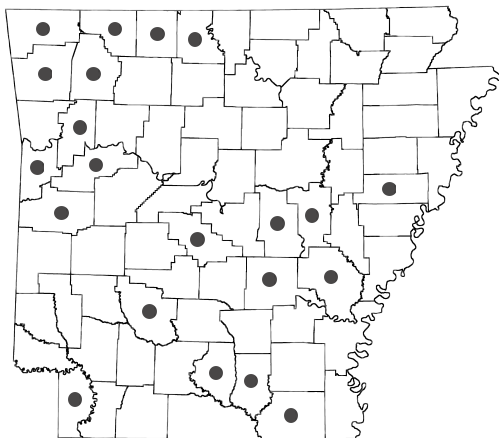
FABACEAE
Lathyrus pusillus Elliott
low vetchling



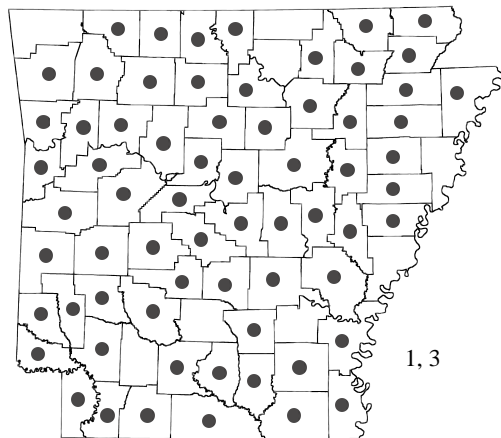
FABACEAE
Lathyrus venosus Muhl. ex Willd.
bushy-vetch, forest-pea, veiny vetchling



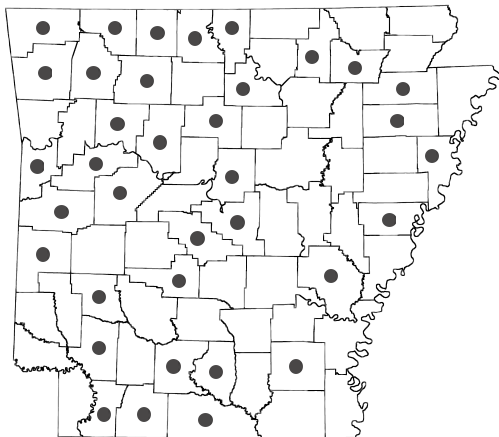
FABACEAE
Lespedeza bicolor Turcz.
bicolor lespedeza



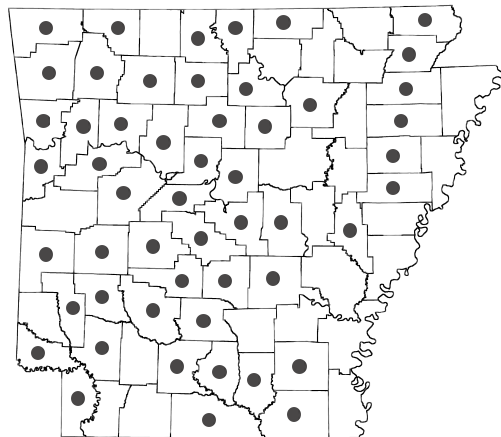
FABACEAE
Lespedeza capitata Michx.
 round-head bush-clover



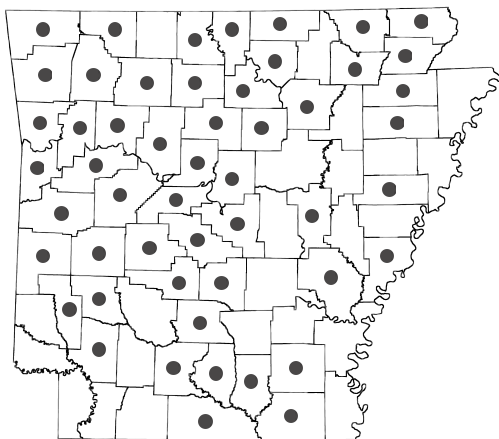
FABACEAE
Lespedeza cuneata (Dum.Cours.) G.Don
 sericea lespedeza



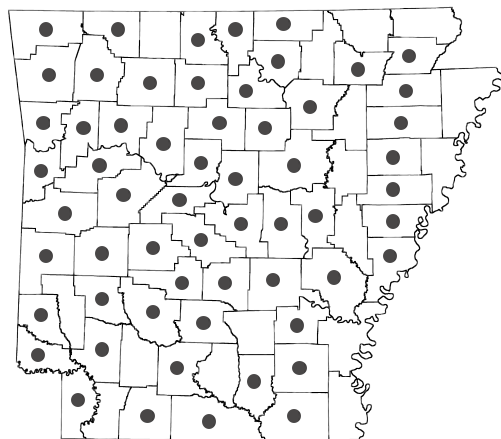
FABACEAE
Lespedeza frutescens (L.) Hornem.
 violet bush-clover



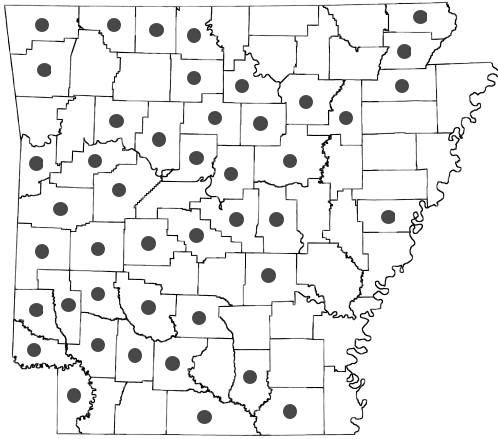
FABACEAE
Lespedeza hirta (L.) Hornem.
var. hirta
 hairy bush-clover



FABACEAE
Lespedeza procumbens Michx.
 trailing bush-clover



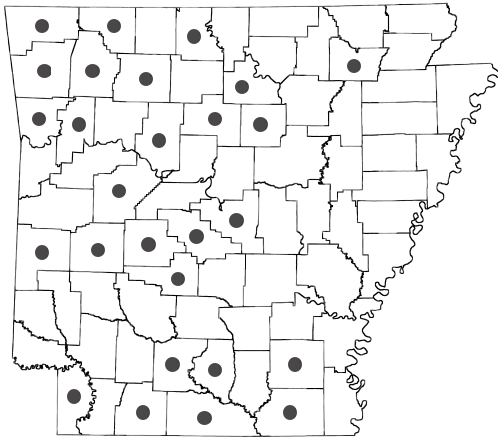
FABACEAE
Lespedeza repens (L.) W.P.C.Barton
 creeping bush-clover



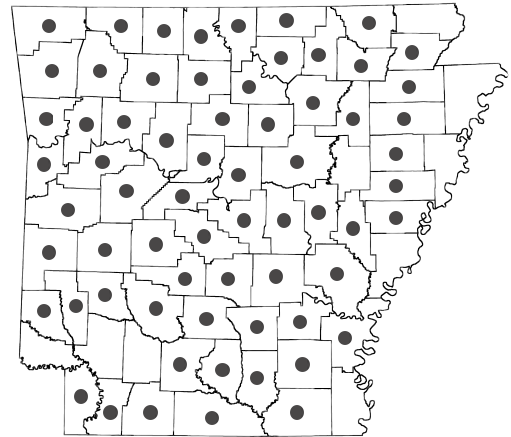
FABACEAE
Lespedeza stuevei Nutt.
 tall bush-clover



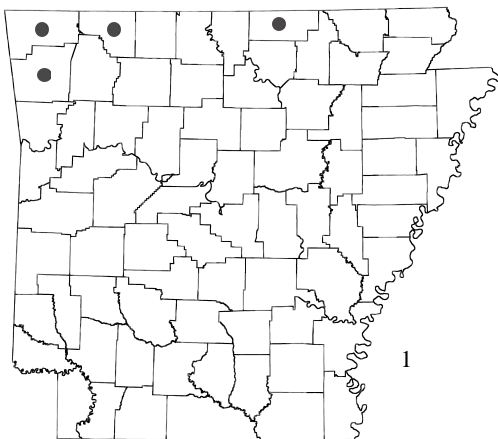
FABACEAE
Lespedeza thunbergii (DC.) Nakai
 Thunberg's bush-clover



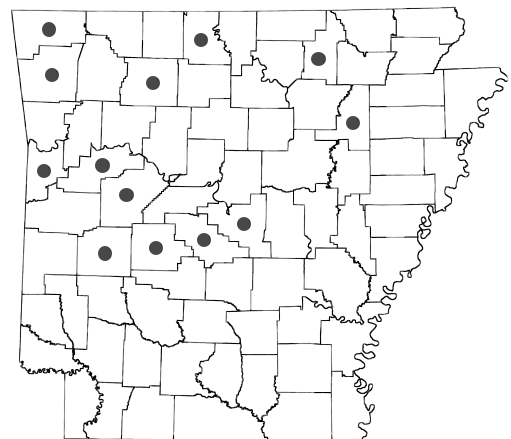
FABACEAE
Lespedeza violacea (L.) Pers.
 bush-clover



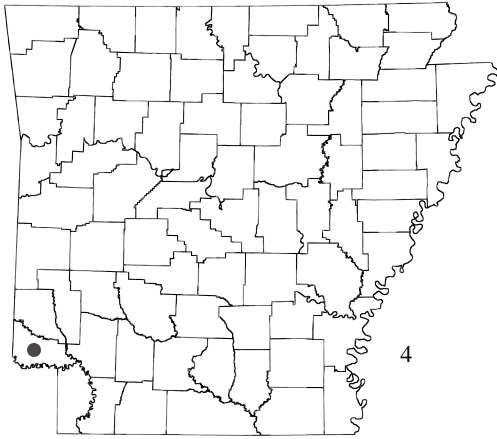
FABACEAE
Lespedeza virginica (L.) Britton
 slender bush-clover



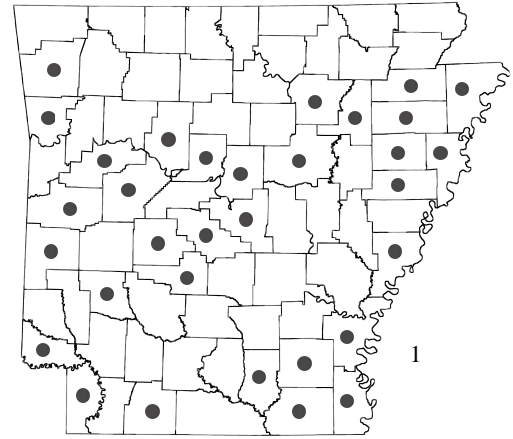
FABACEAE
Lotus corniculatus L.
 bird's-foot-trefoil



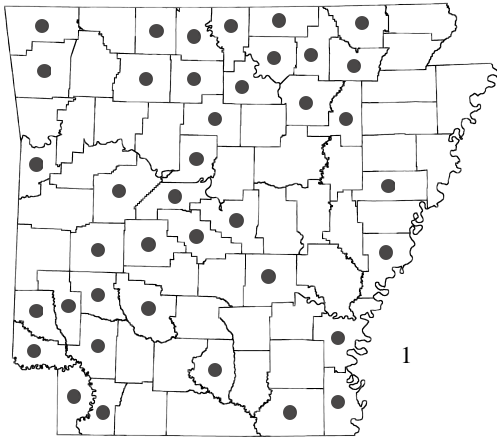
FABACEAE
Lotus unifoliolatus (Hook.) Benth.
var. unifoliolatus
 American bird's-foot-trefoil



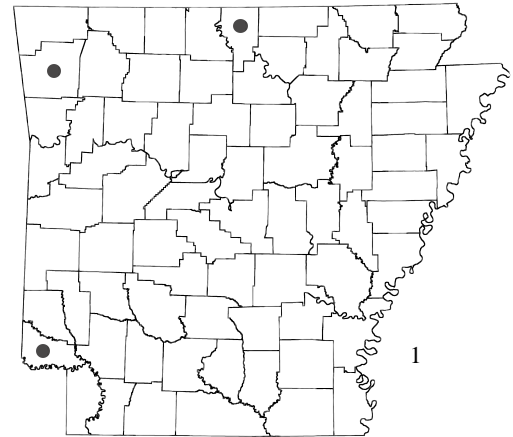
FABACEAE
Lupinus texensis Hook.
 Texas bluebonnet



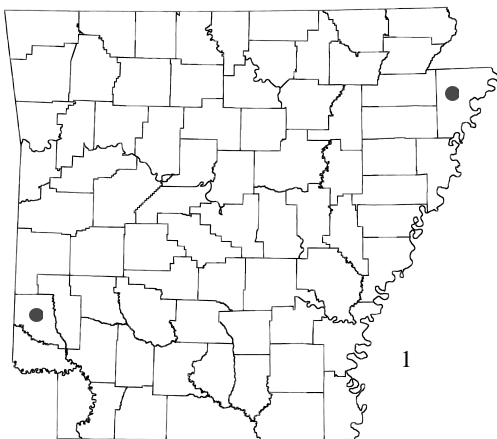
FABACEAE
Medicago arabica (L.) Huds.
 spotted medick, spotted bur-clover



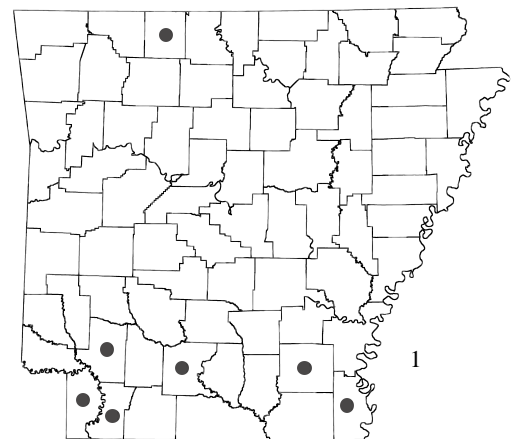
FABACEAE
Medicago lupulina L.
 black medick



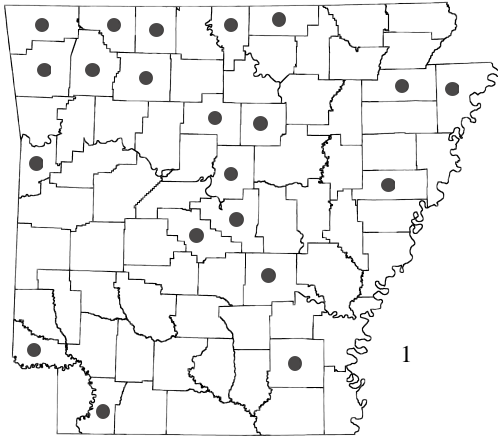
FABACEAE
Medicago minima (L.) L. ex Bartal.
 bur medick, little bur-clover



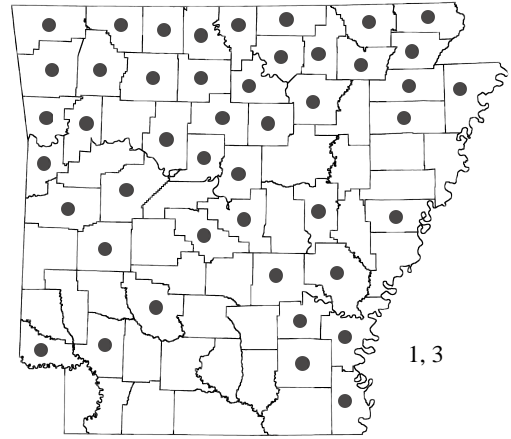
FABACEAE
Medicago orbicularis (L.) Bartal.
 button medick



FABACEAE
Medicago polymorpha L.
 toothed medick, bur-clover



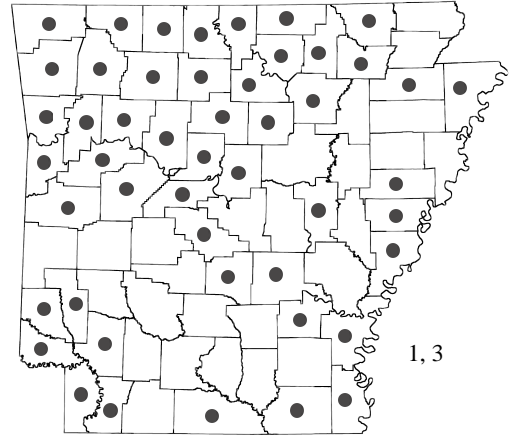
FABACEAE
Medicago sativa L.
alfalfa



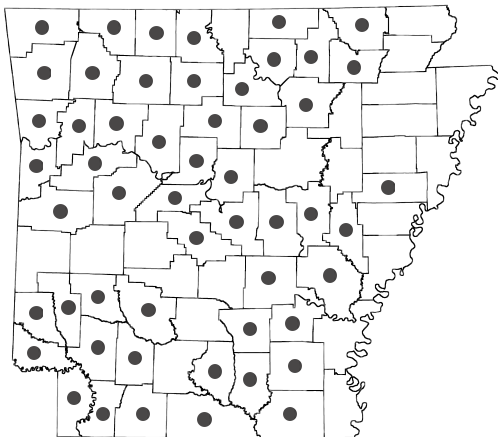
FABACEAE
Melilotus albus Medik.
white sweet-clover



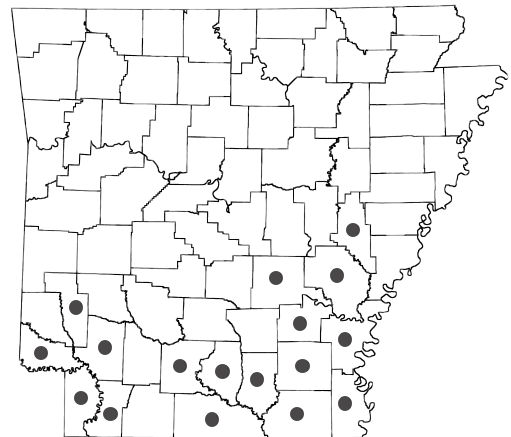
FABACEAE
Melilotus indicus (L.) All.
sour-clover



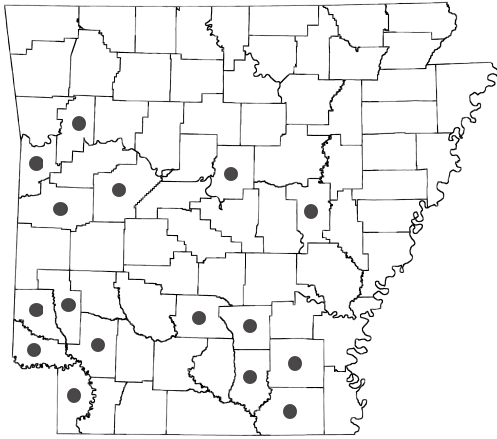
FABACEAE
Melilotus officinalis (L.) Pall.
yellow sweet-clover



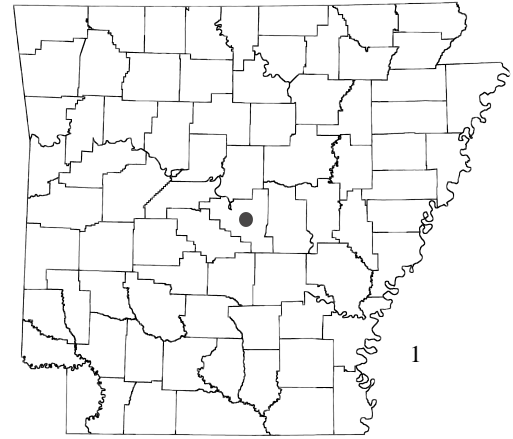
FABACEAE
Mimosa quadrivalvis L.
var. nuttallii (DC. ex Britton & Rose) Beard ex Barneby
sensitive-brier



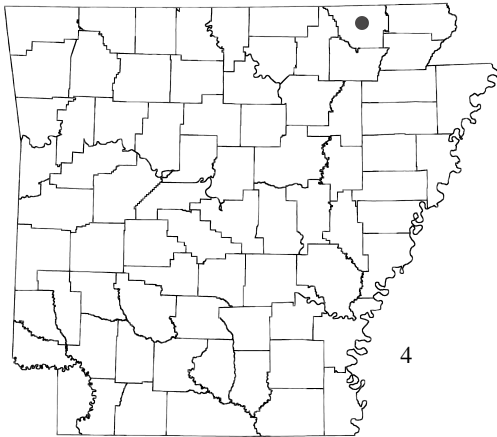
FABACEAE
Mimosa strigillosa Torr. & A.Gray
powderpuff



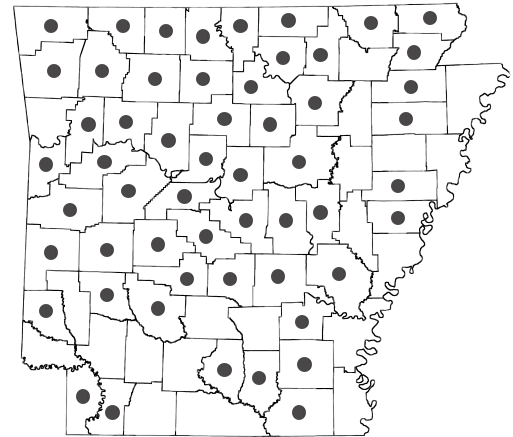
FABACEAE
Neptunia lutea (Leavenw.) Benth.
 yellow-puff



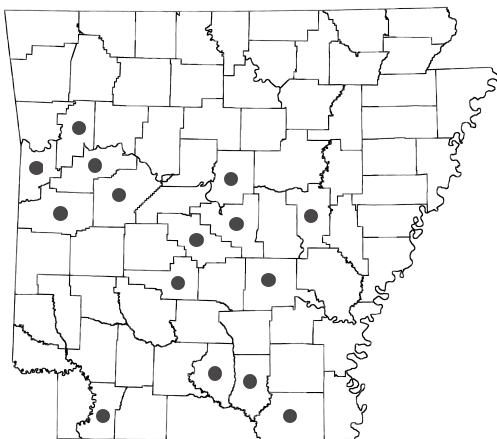
FABACEAE
Neptunia oleracea Lour.
 water-mimosa, garden-puff, water sensitive plant



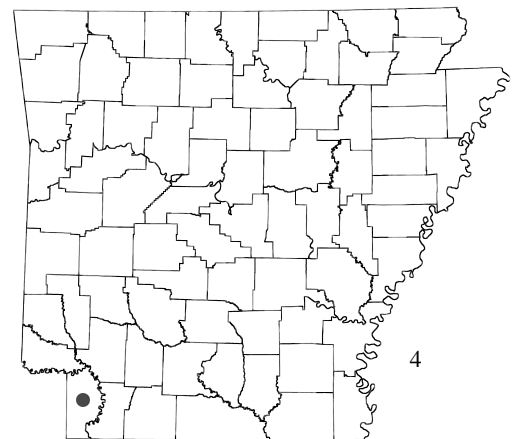
FABACEAE
Orbexilum onobrychis (Nutt.) Rydb.
 French-grass



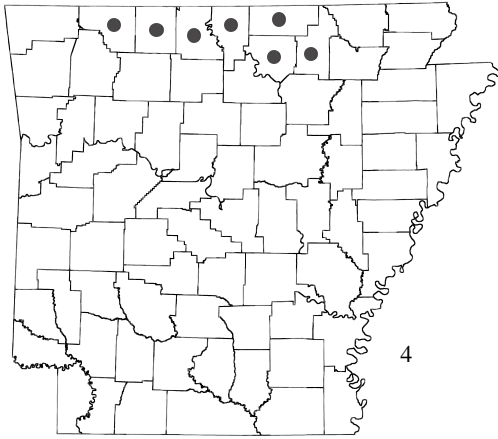
FABACEAE
Orbexilum pedunculatum (Mill.) Rydb.
var. pedunculatum
 Sampson's-snakeroot



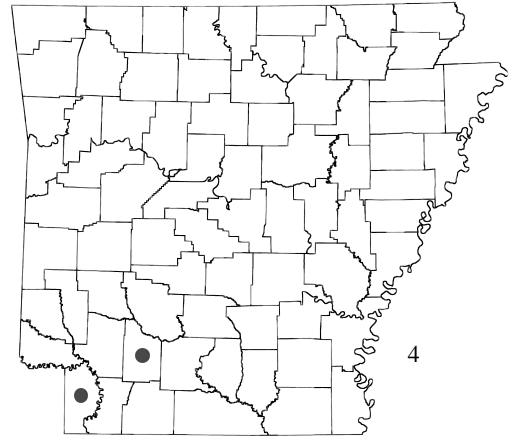
FABACEAE
Orbexilum simplex (Nutt. ex Torr. & A.Gray) Rydb.
 leather-root



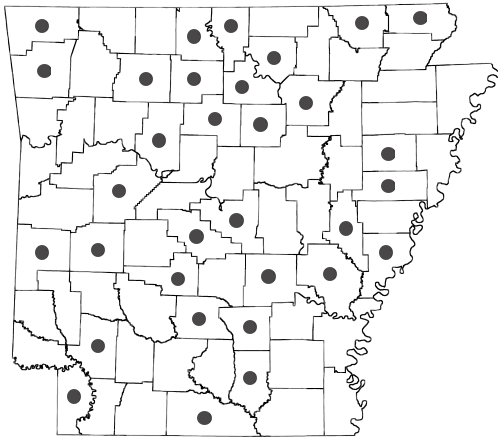
FABACEAE
Pedimelum digitatum (Nutt. ex Torr. & A.Gray) Isely
 palm-leaf Indian-breadroot, palm-leaf scurf-pea



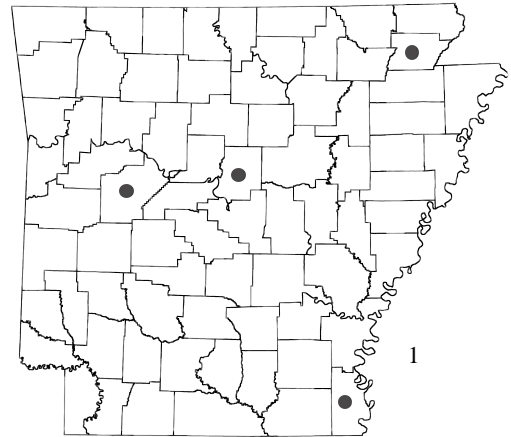
FABACEAE
Pedimelum esculentum (Pursh) Rydb.
 large Indian-breadroot, prairie-turnip



FABACEAE
Pedimelum hypogaeum (Nutt. ex Torr. & A.Gray) Rydb.
var. subulatum (Bush) J.W.Grimes
 buried Indian-breadroot



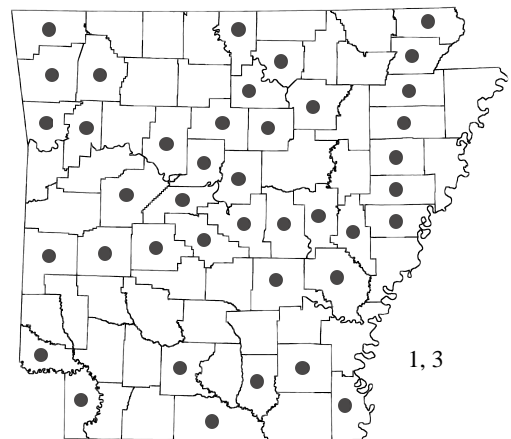
FABACEAE
Phaseolus polystachios (L.) Britton, Sterns & Poggenb.
 wild bean



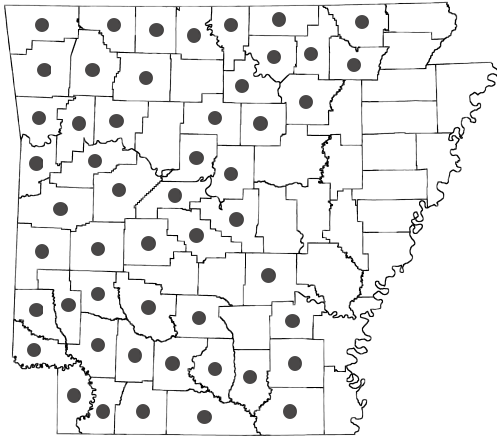
FABACEAE
Pisum sativum L.
 garden pea



FABACEAE
Prosopis glandulosa Torr.
var. glandulosa
 mesquite



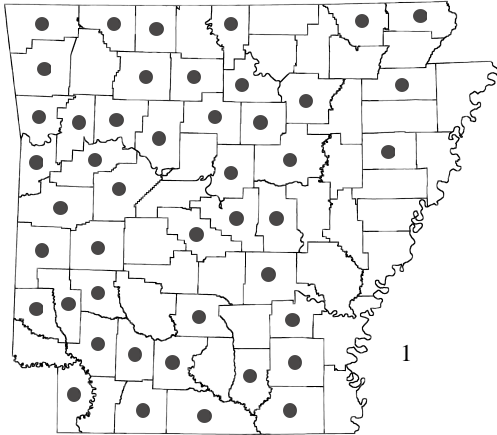
FABACEAE
Pueraria montana (Lour.) Merr.
var. lobata (Willd.) Maesen & Almeida ex Sanjappa & Preedeeep
 kudzu



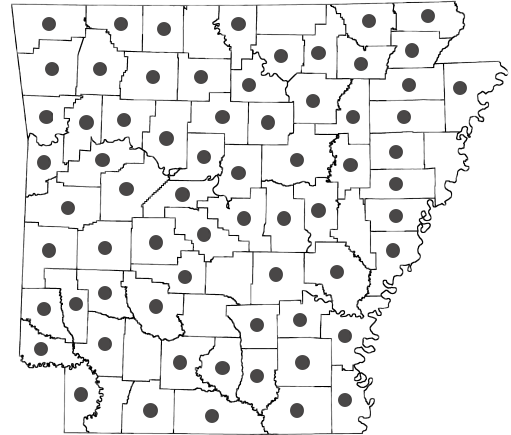
FABACEAE
Rhynchosia latifolia Nutt. ex Torr. & A.Gray
 snout-bean



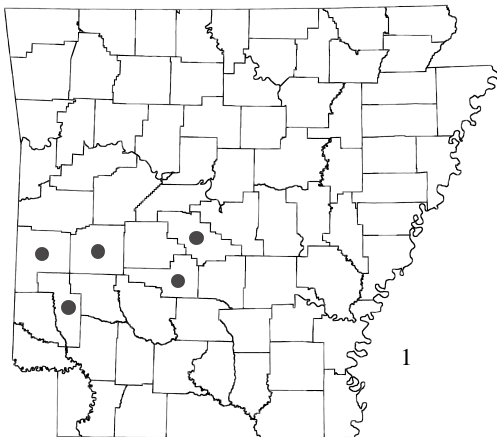
FABACEAE
Rhynchosia minima (L.) DC.
 least snout-bean



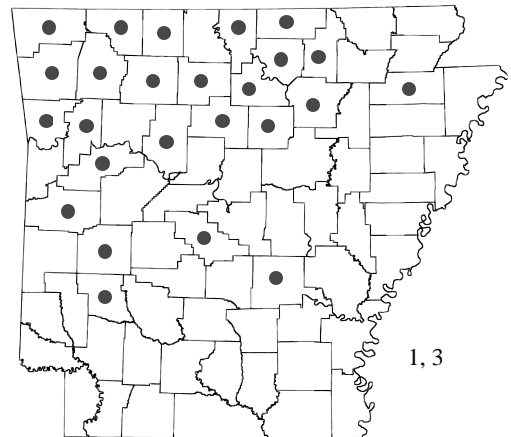
FABACEAE
Robinia hispida L.
var. hispida
 bristly locust



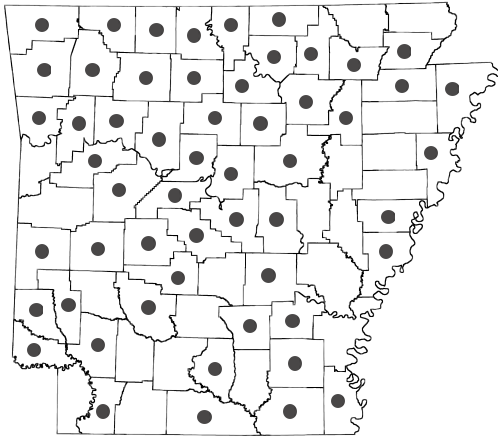
FABACEAE
Robinia pseudoacacia L.
 black locust



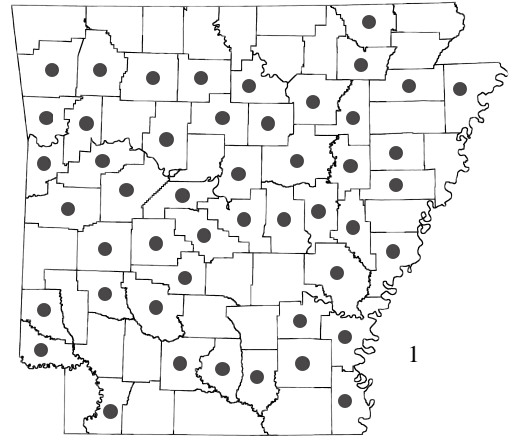
FABACEAE
Robinia viscosa Vent.
var. hartwigii (Koehne) Ashe
 clammy locust



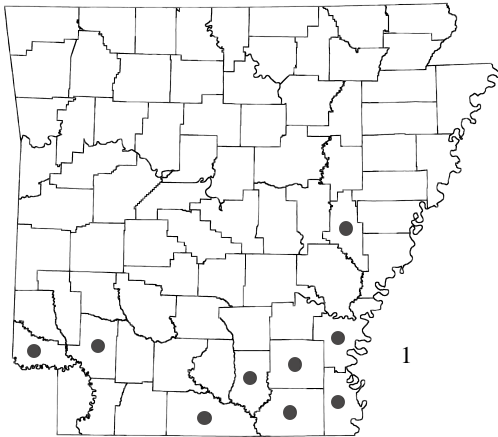
FABACEAE
Securigera varia (L.) Lassen
 crown-vetch



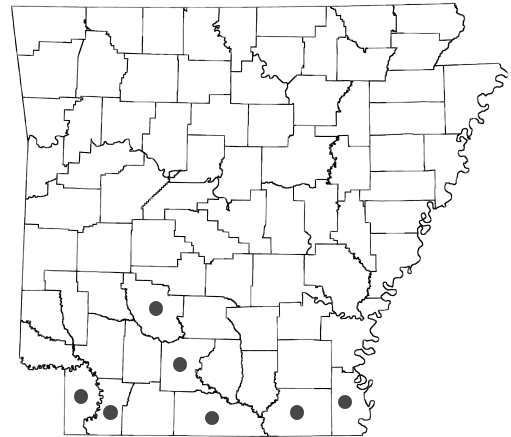
FABACEAE
Senna marilandica (L.) Link
wild senna



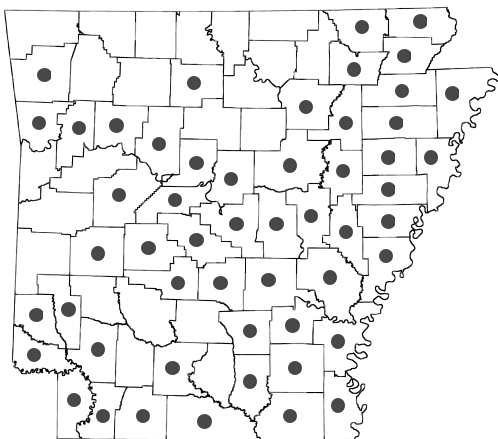
FABACEAE
Senna obtusifolia (L.) H.S. Irwin & Barneby
sicklepod, coffee-weed



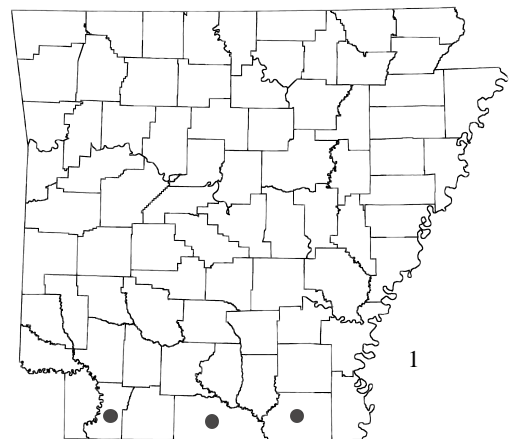
FABACEAE
Senna occidentalis (L.) Link
coffee senna, coffee-weed



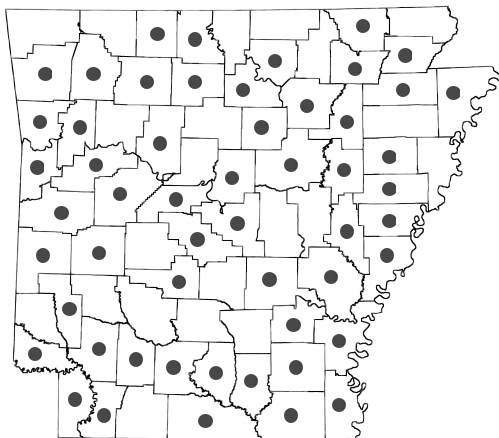
FABACEAE
Sesbania drummondii (Rydb.) Cory
rattlebush, poison-bean



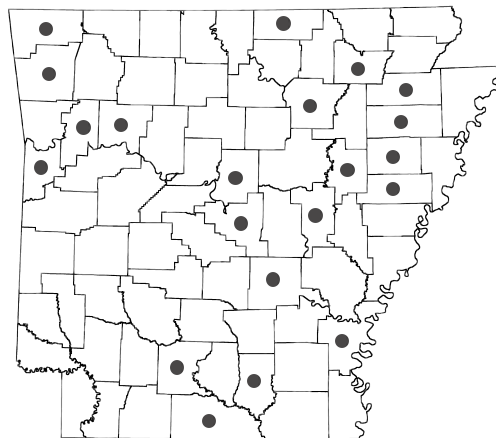
FABACEAE
Sesbania herbacea (Mill.) McVaugh
coffee-bean, coffee-weed



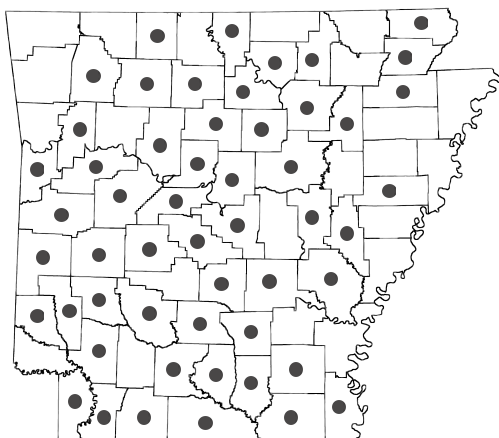
FABACEAE
Sesbania punicea (Cav.) Benth.
scarlet rattlebox



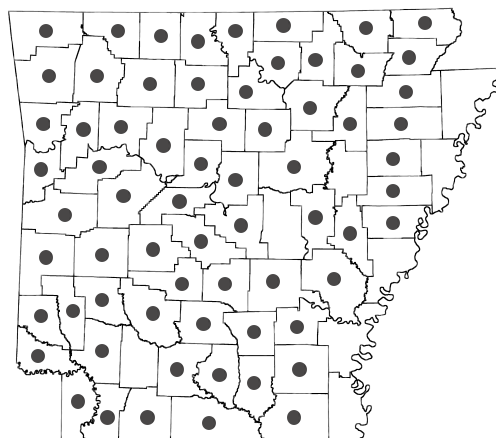
FABACEAE
***Strophostyles helvola* (L.) Elliott**
 wild bean



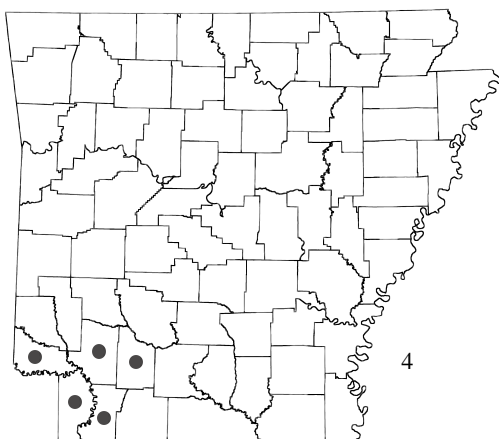
FABACEAE
***Strophostyles leiosperma* (Torr. & A.Gray) Piper**
 wild bean



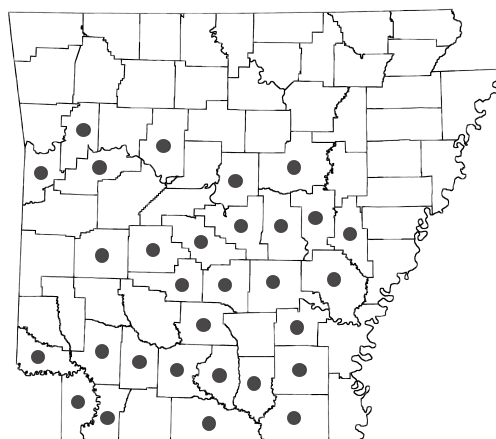
FABACEAE
***Strophostyles umbellata* (Muhl. ex Willd.) Britton in Britton & A.Br.**
 wild bean



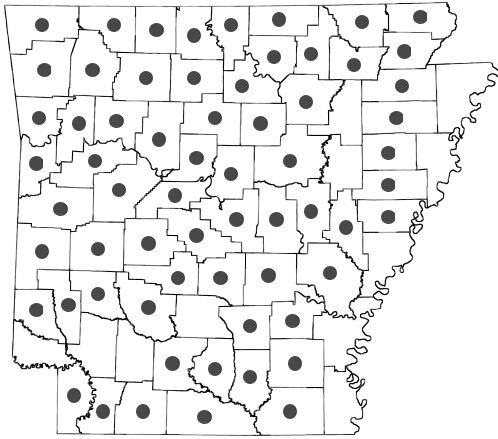
FABACEAE
***Stylosanthes biflora* (L.) Britton, Sterns & Poggenb.**
 pencil-flower



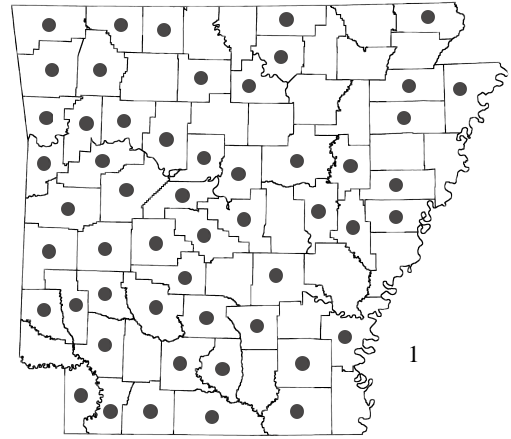
FABACEAE
***Styphnolobium affine* (Torr. & A.Gray) Walp.**
 Eve's necklace, Texas sophora



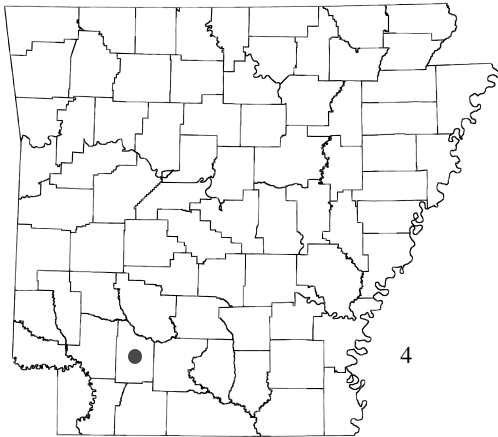
FABACEAE
***Tephrosia onobrychoides* Nutt.**
 hoary-pea



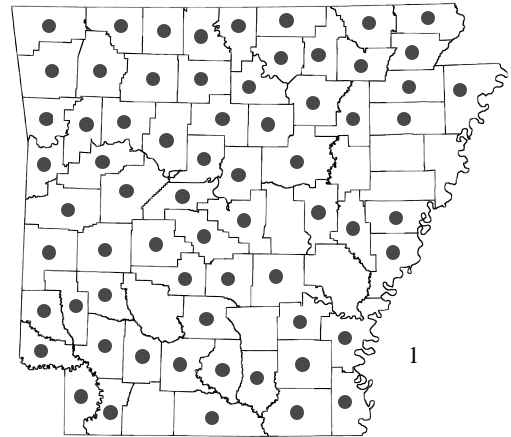
FABACEAE
***Tephrosia virginiana* (L.) Pers.**
goat's-rue



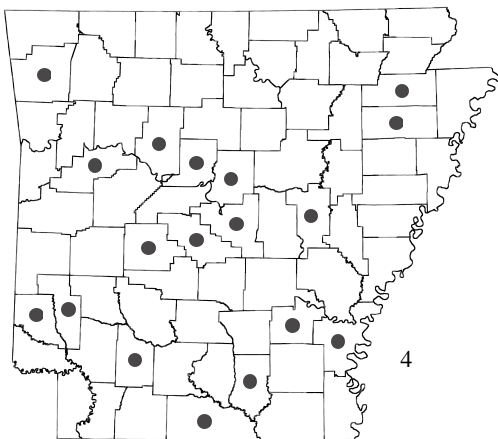
FABACEAE
***Trifolium arvense* L.**
rabbit's-foot clover



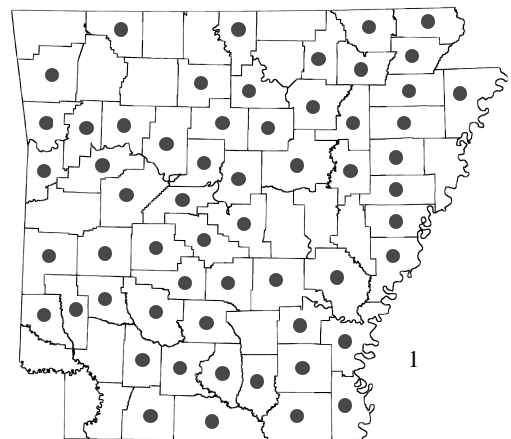
FABACEAE
***Trifolium bejariense* Moric.**
Bejar clover



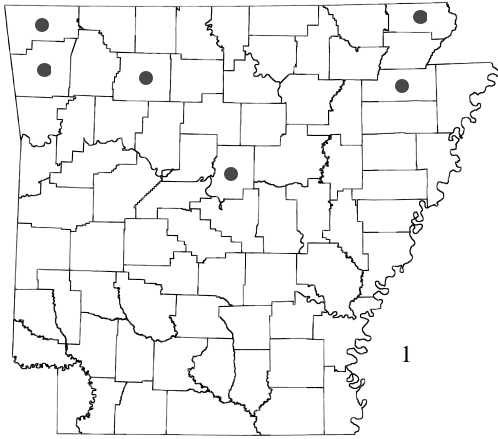
FABACEAE
***Trifolium campestre* Schreb.**
hop clover



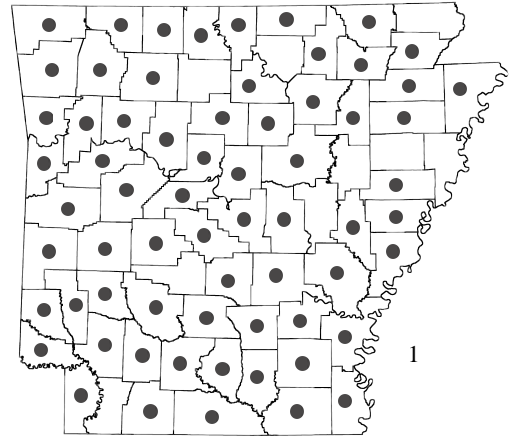
FABACEAE
***Trifolium carolinianum* Michx.**
Carolina clover, wild white clover



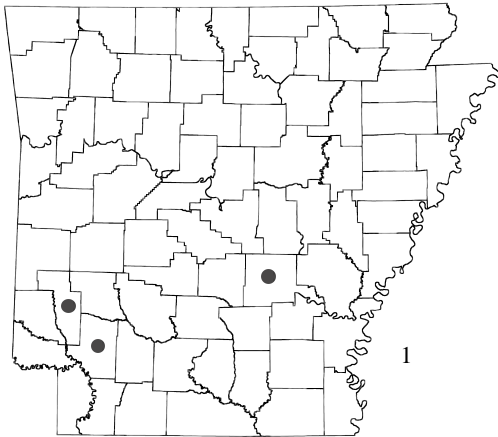
FABACEAE
***Trifolium dubium* Sibth.**
small hop clover



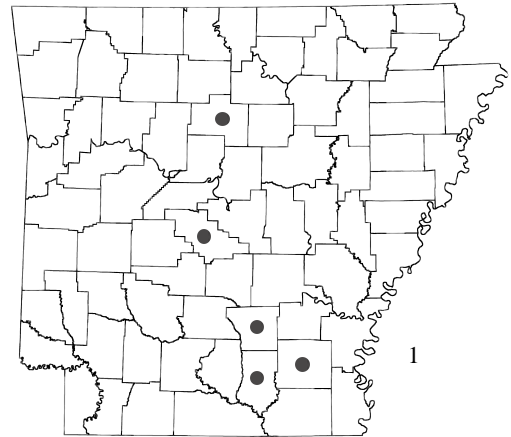
FABACEAE
Trifolium hybridum L.
Alsike clover



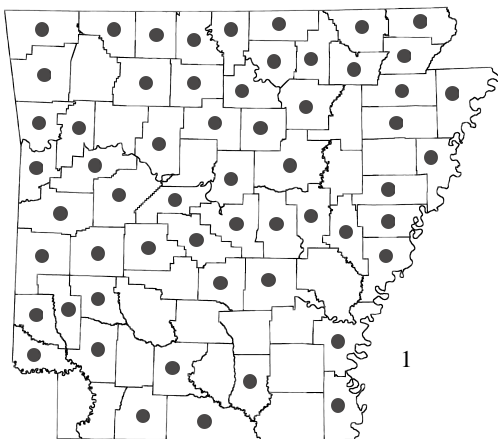
FABACEAE
Trifolium incarnatum L.
crimson clover



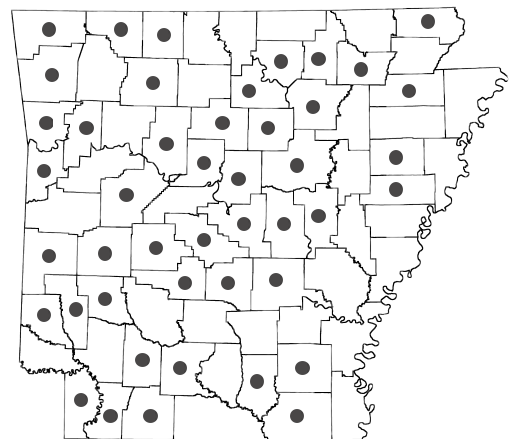
FABACEAE
Trifolium lappaceum L.
lappa clover, burdock clover



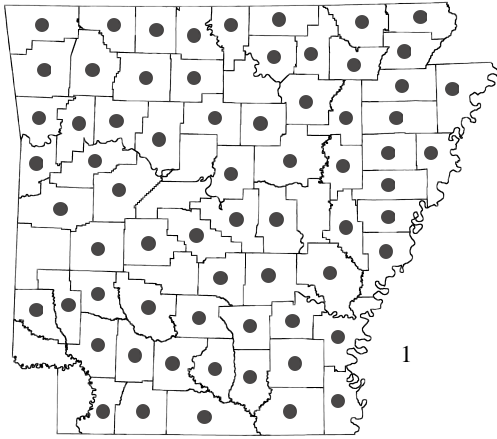
FABACEAE
Trifolium nigrescens Viv.
ball clover



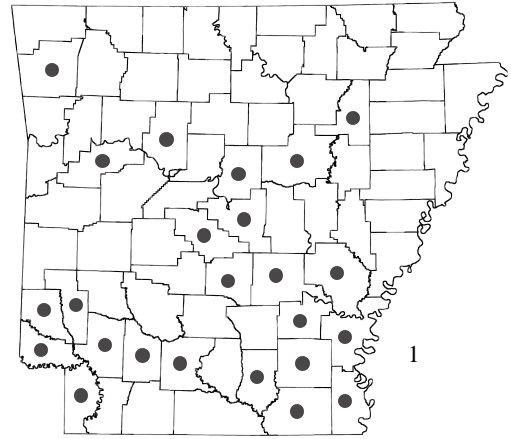
FABACEAE
Trifolium pratense L.
red clover



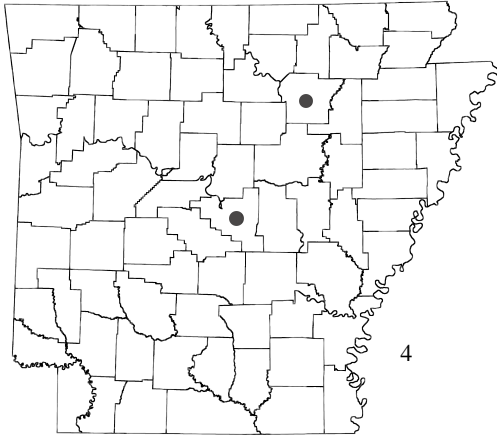
FABACEAE
Trifolium reflexum L.
buffalo clover



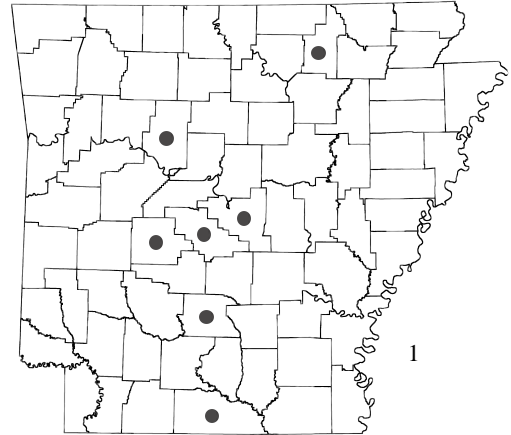
FABACEAE
Trifolium repens L.
white clover



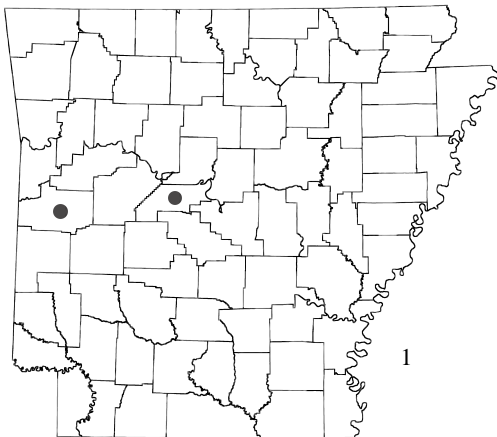
FABACEAE
Trifolium resupinatum L.
Persian clover, reversed clover



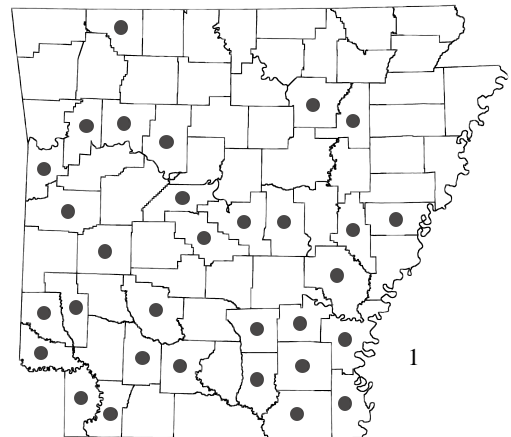
FABACEAE
Trifolium stoloniferum Muhl. ex Eaton
running buffalo clover



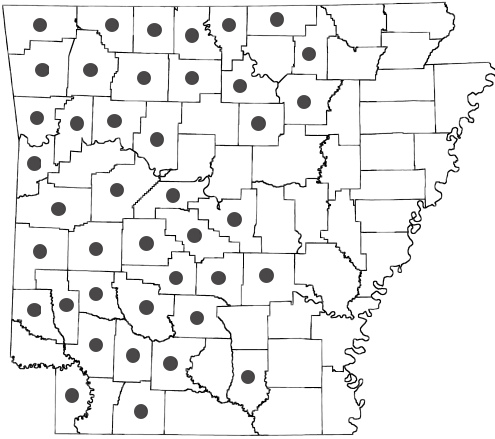
FABACEAE
Trifolium striatum L.
knotted clover



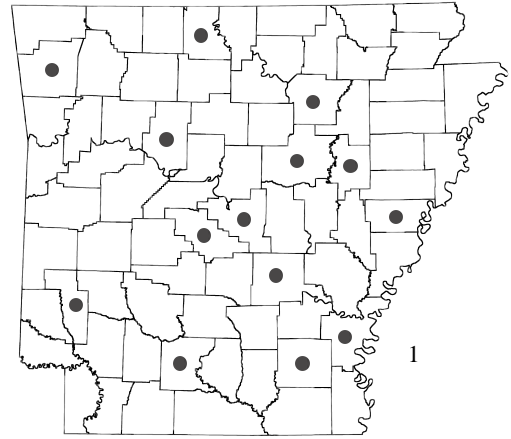
FABACEAE
Trifolium subterraneum L.
subterranean clover



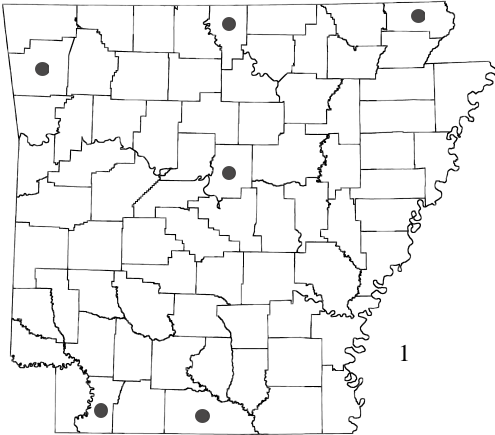
FABACEAE
Trifolium vesiculosum Savi
arrow-leaf clover



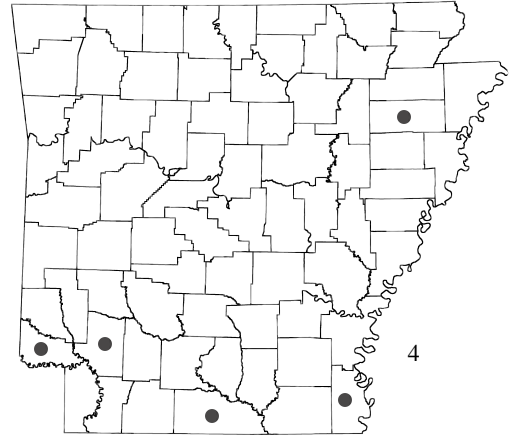
FABACEAE
Vicia caroliniana Walter
 wood vetch



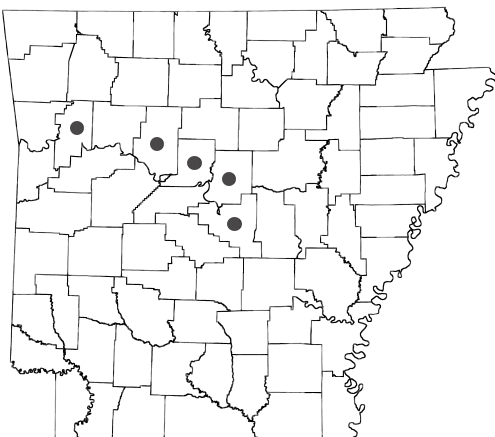
FABACEAE
Vicia grandiflora Scop.
 large yellow vetch



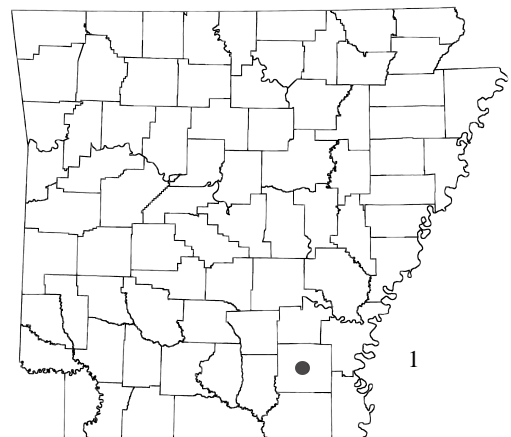
FABACEAE
Vicia hirsuta (L.) Gray
 tiny vetch



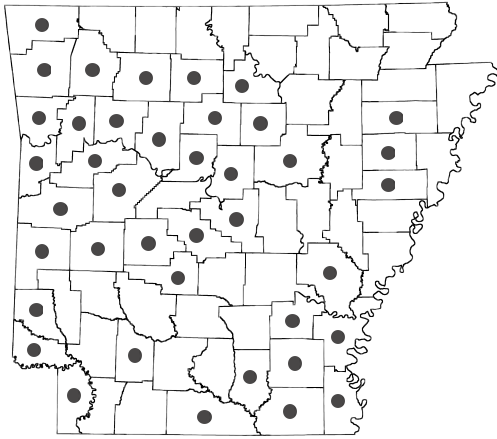
FABACEAE
Vicia ludoviciana Nutt. ex Torr. & A.Gray
subsp. leavenworthii (Torr. & A.Gray) Lassetter & C.R.Gunn
 Leavenworth's vetch, deer pea vetch



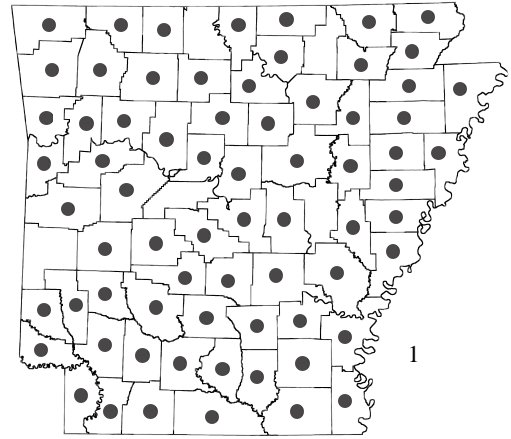
FABACEAE
Vicia ludoviciana Nutt. ex Torr. & A.Gray
subsp. ludoviciana
 Louisiana vetch, deer pea vetch



FABACEAE
Vicia lutea L.
 yellow vetch



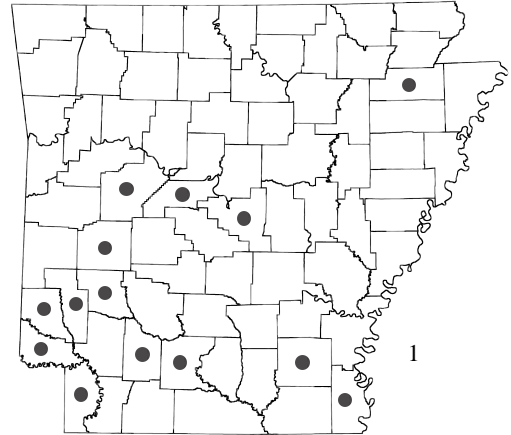
FABACEAE
***Vicia minutiflora* D.Dietr.**
 small-flower vetch, pygmy-flower vetch



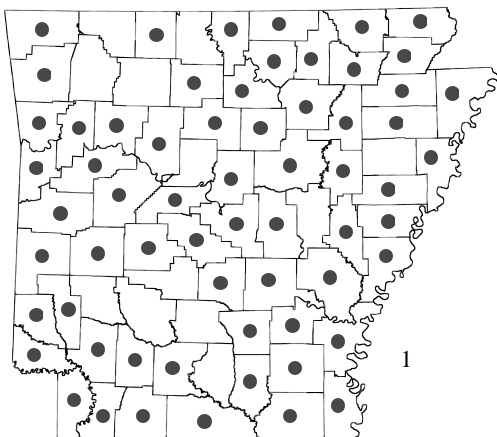
FABACEAE
***Vicia sativa* L.**
subsp. *nigra* (L.) Ehrh.
 common vetch, narrow-leaf vetch



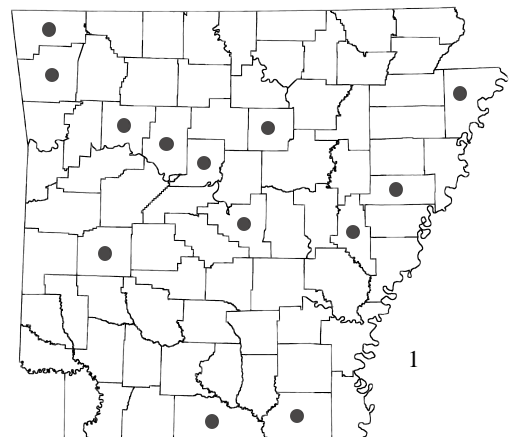
FABACEAE
***Vicia sativa* L.**
subsp. *sativa*
 common vetch



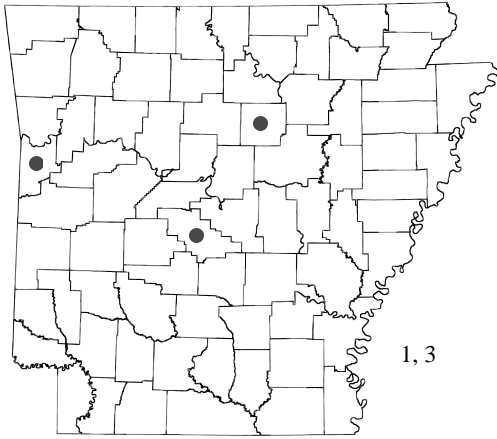
FABACEAE
***Vicia tetrasperma* (L.) Schreb.**
 lentil vetch



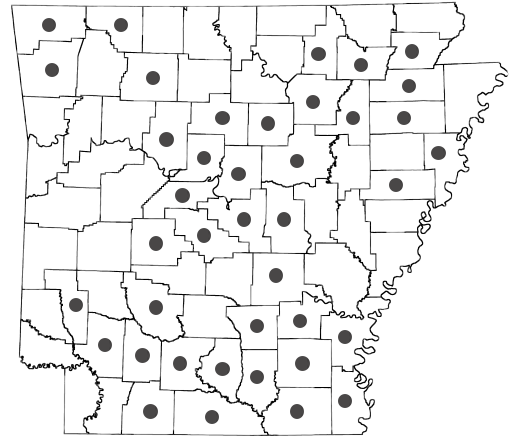
FABACEAE
***Vicia villosa* Roth.**
subsp. *varia* (Host) Corb.
 smooth vetch, winter vetch



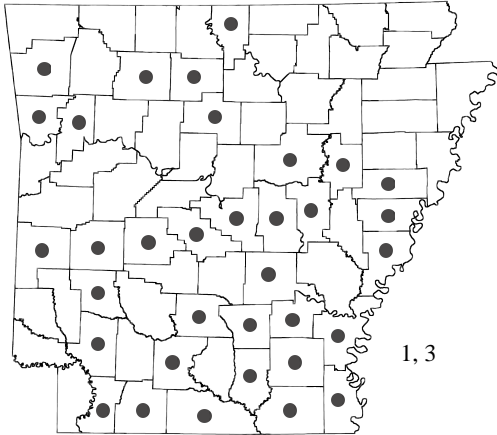
FABACEAE
***Vicia villosa* Roth.**
subsp. *villosa*
 hairy vetch, winter vetch



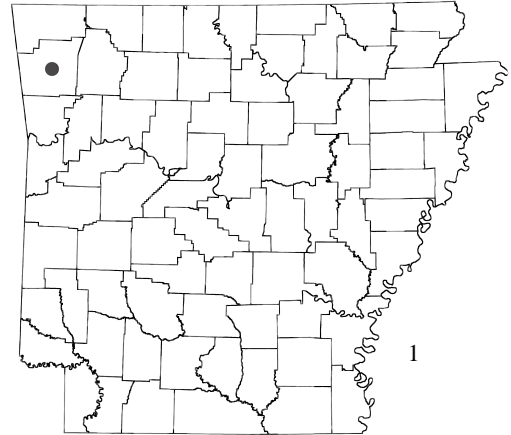
FABACEAE
Wisteria floribunda (Willd.) DC.
 Japanese wisteria



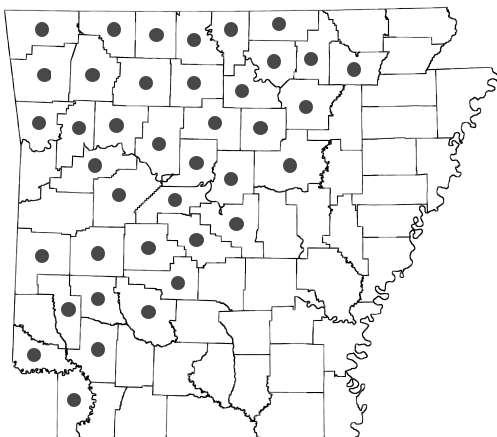
FABACEAE
Wisteria frutescens (L.) Poir.
 American wisteria



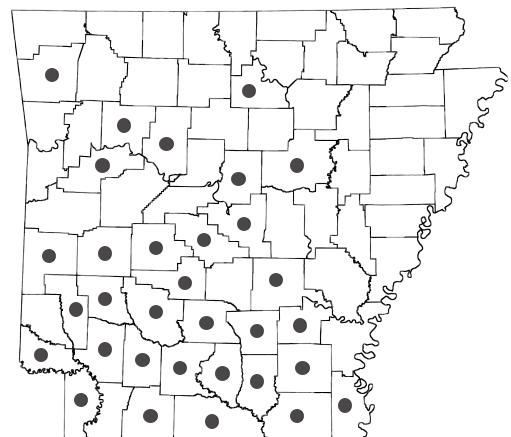
FABACEAE
Wisteria sinensis (Sims) Sweet
 Chinese wisteria



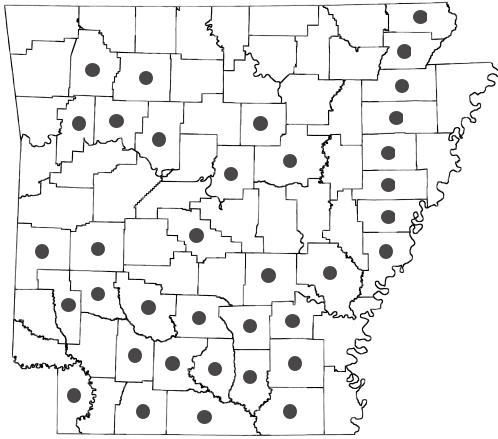
FAGACEAE
Castanea mollissima Blume
 Chinese chestnut



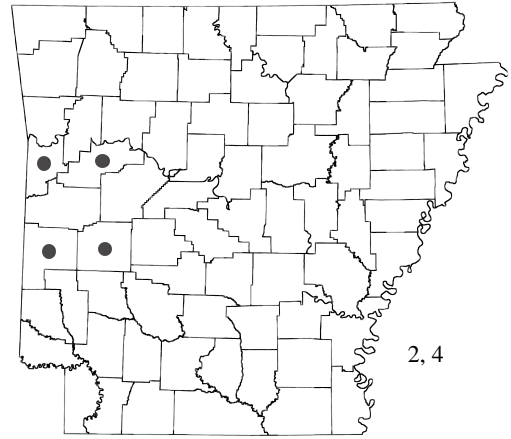
FAGACEAE
Castanea pumila (L.) Mill.
var. ozarkensis (Ashe) G.E. Tucker
 Ozark chinquapin



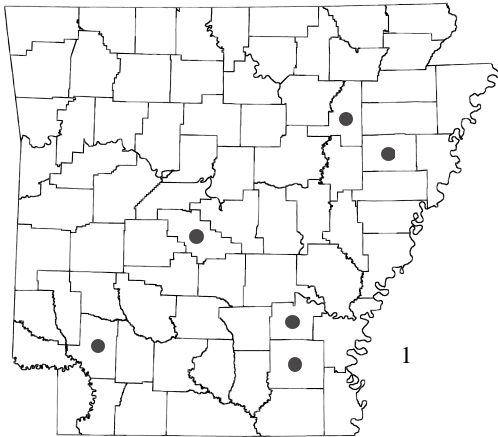
FAGACEAE
Castanea pumila (L.) Mill.
var. pumila
 Allegheny chinquapin



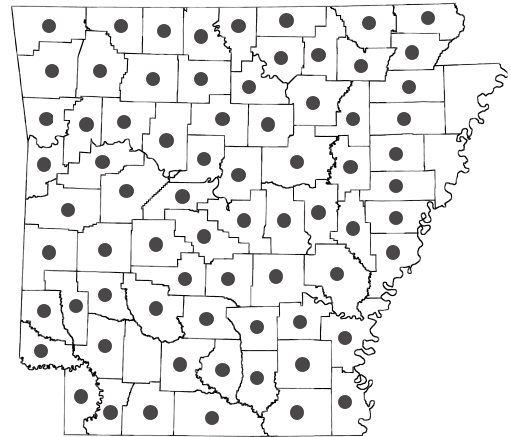
FAGACEAE
Fagus grandifolia Ehrh.
beech



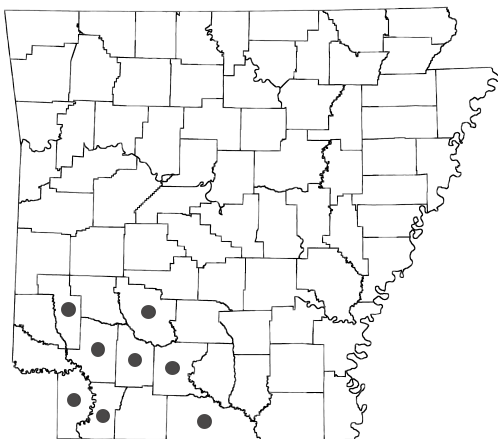
FAGACEAE
Quercus acerifolia (E.J.Palmer) Stoyloff & W.J.Hess
maple-leaf oak



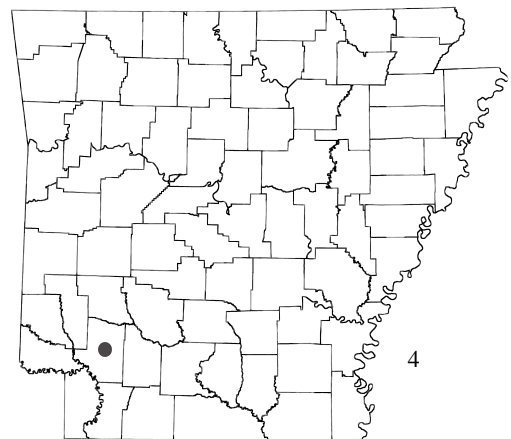
FAGACEAE
Quercus acutissima Carruth.
sawtooth oak



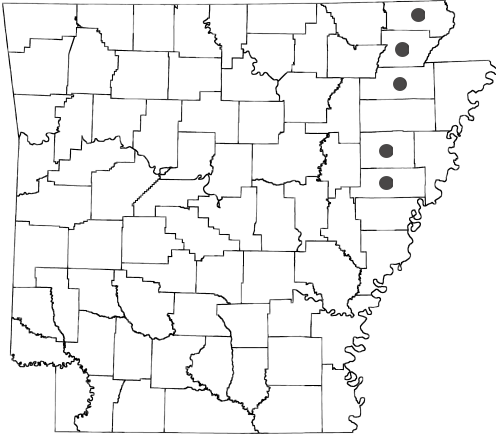
FAGACEAE
Quercus alba L.
white oak



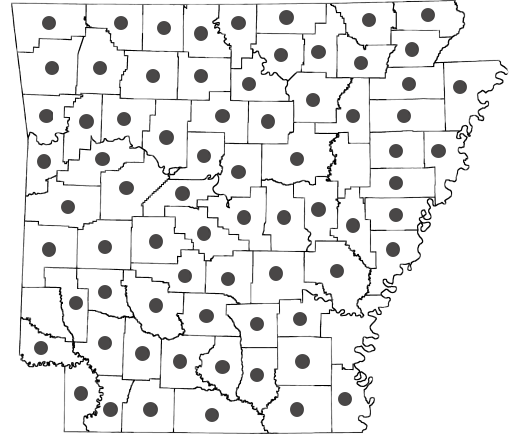
FAGACEAE
Quercus arkansana Sarg.
Arkansas oak



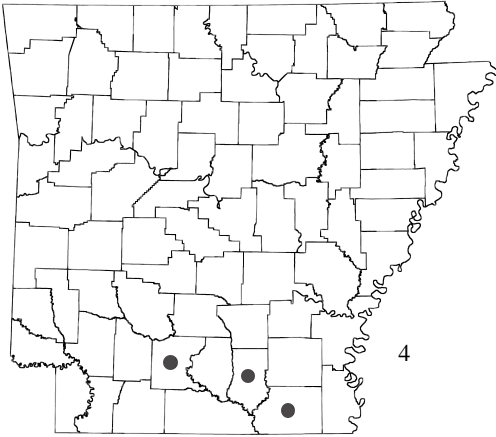
FAGACEAE
Quercus austrina Small
bluff oak, bastard white oak



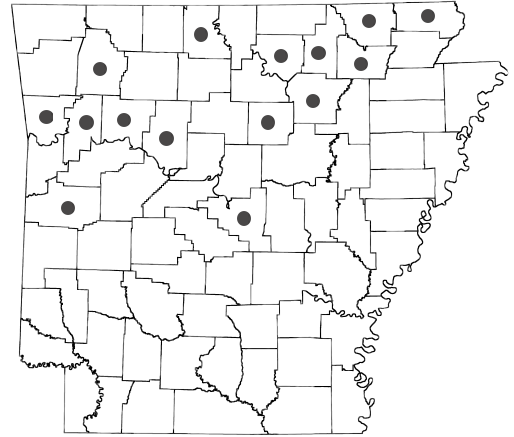
FAGACEAE
Quercus coccinea Münchh.
 scarlet oak



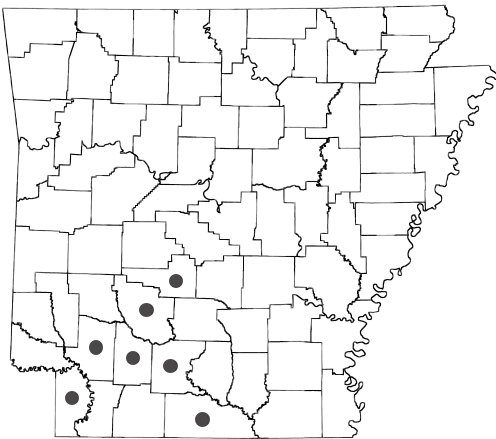
FAGACEAE
Quercus falcata Michx.
 southern red oak, Spanish oak



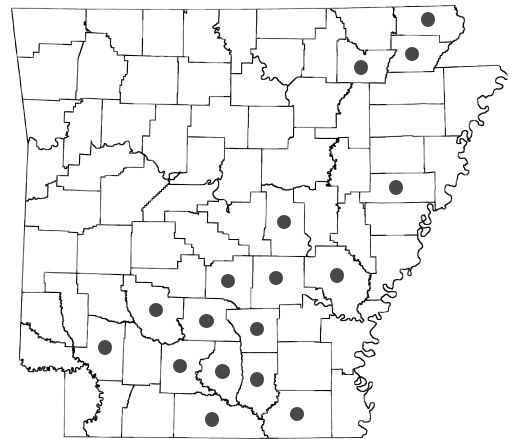
FAGACEAE
Quercus hemisphaerica W.Bartram ex Willd.
 Darlington's oak, laurel oak



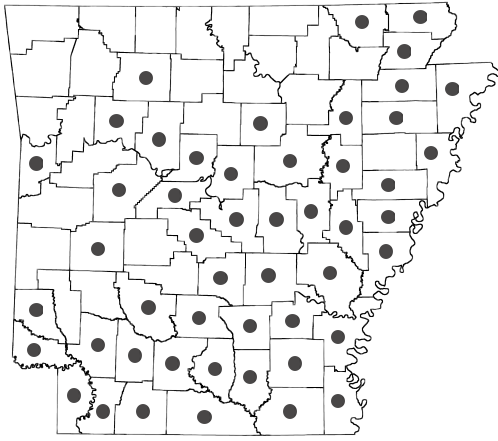
FAGACEAE
Quercus imbricaria Michx.
 shingle oak



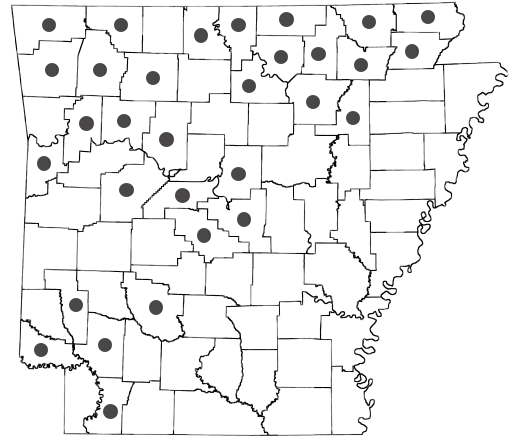
FAGACEAE
Quercus incana W.Bartram
 bluejack oak



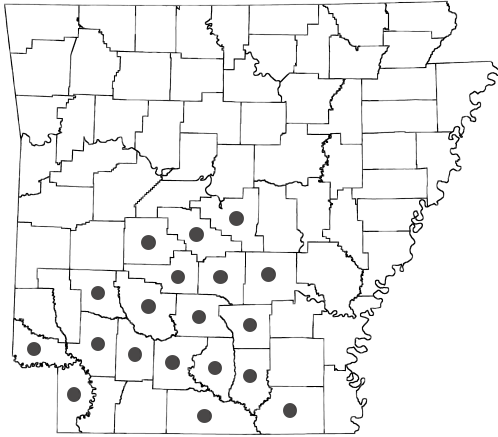
FAGACEAE
Quercus laurifolia Michx.
 laurel oak



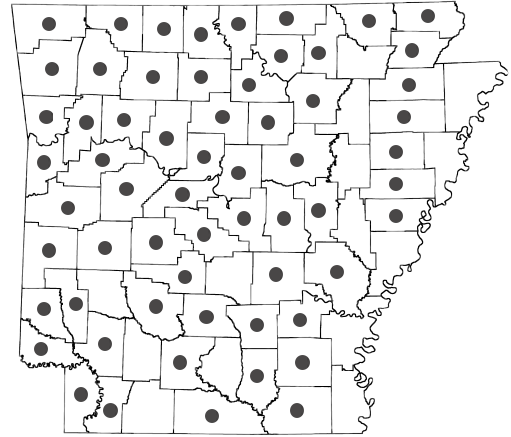
FAGACEAE
Quercus lyrata Walter
overcup oak



FAGACEAE
Quercus macrocarpa Michx.
bur oak

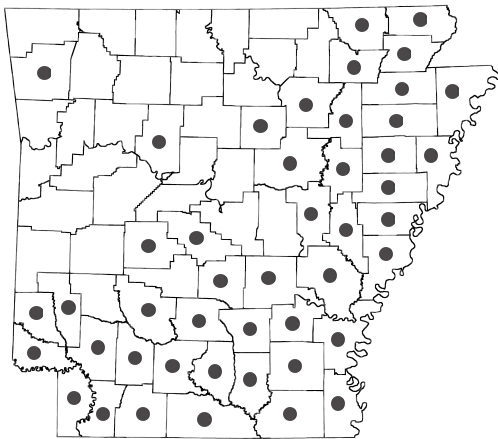


FAGACEAE
Quercus margaretta (Ashe) Ashe in Small
sand post oak, Margaretta's oak

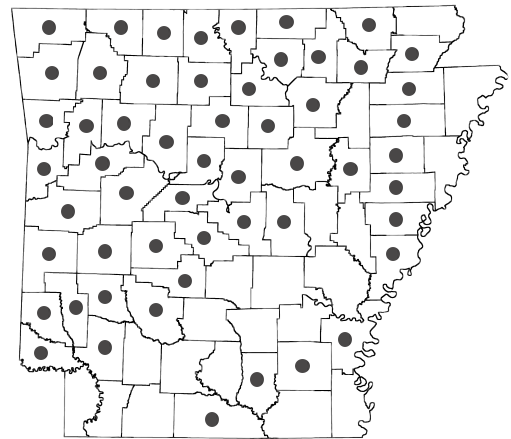


FAGACEAE
Quercus marilandica Münchh.
blackjack oak

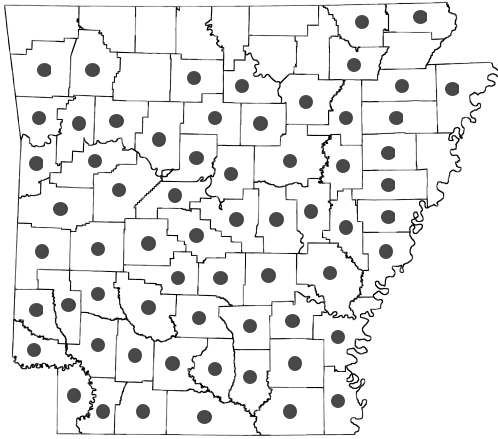
See Appendix I for infraspecific taxa and species status.



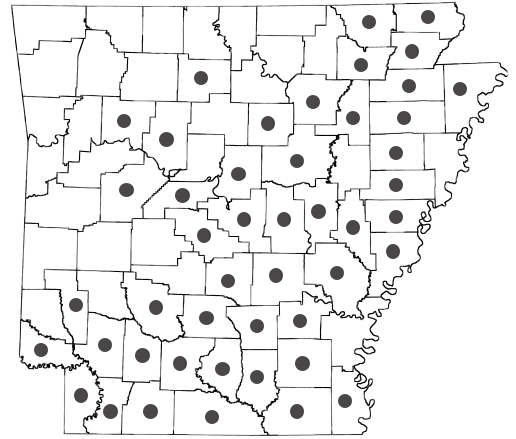
FAGACEAE
Quercus michauxii Nutt.
swamp chestnut oak, basket oak, cow oak



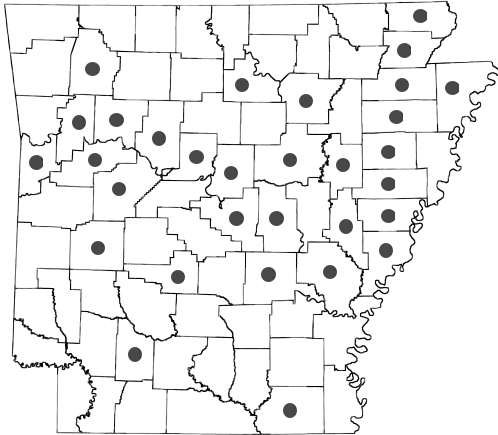
FAGACEAE
Quercus muehlenbergii Engelm.
chinquapin oak, chestnut oak



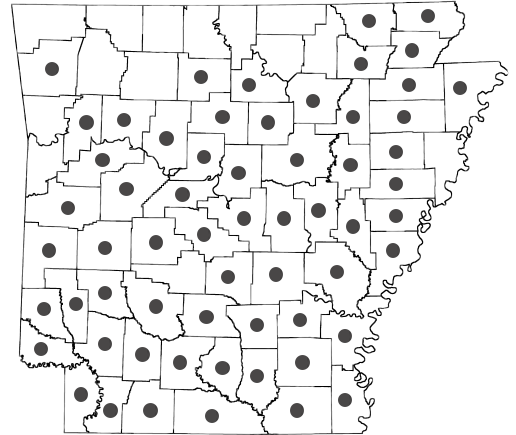
FAGACEAE
Quercus nigra L.
 water oak



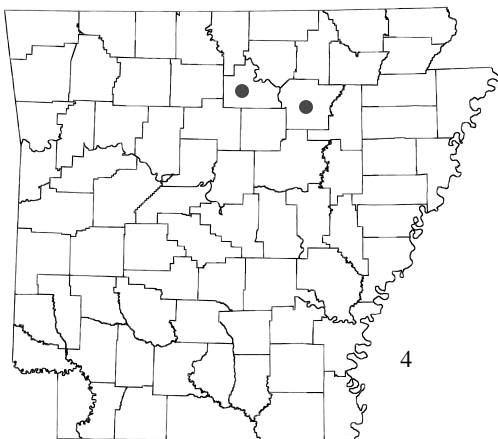
FAGACEAE
Quercus pagoda Raf.
 cherrybark oak



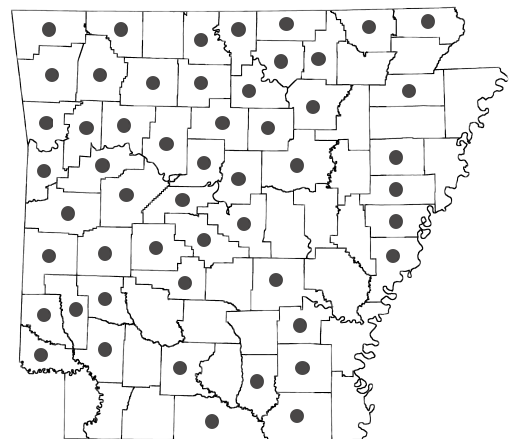
FAGACEAE
Quercus palustris Münchh.
 pin oak



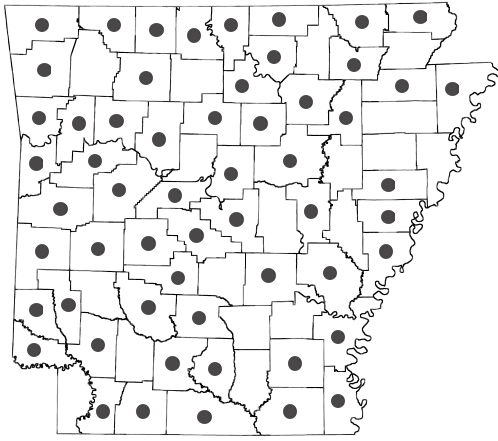
FAGACEAE
Quercus phellos L.
 willow oak



FAGACEAE
Quercus prinoides Willd.
 dwarf chinquapin oak, dwarf chestnut oak



FAGACEAE
Quercus rubra L.
 northern red oak

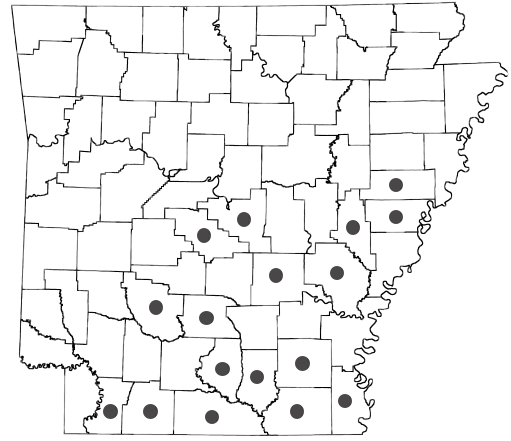


FAGACEAE

***Quercus shumardii* Buckley**

Shumard's oak, spotted oak

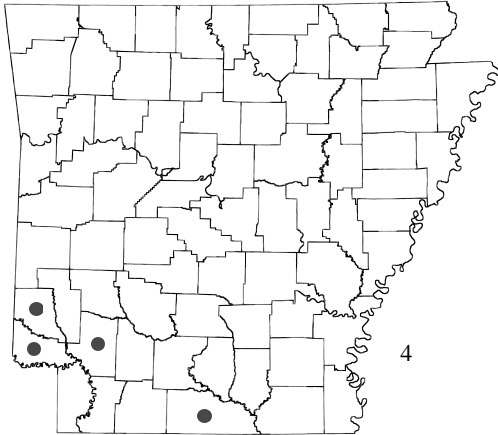
See *Appendix I* for infraspecific taxa and species status.



FAGACEAE

***Quercus similis* Ashe**

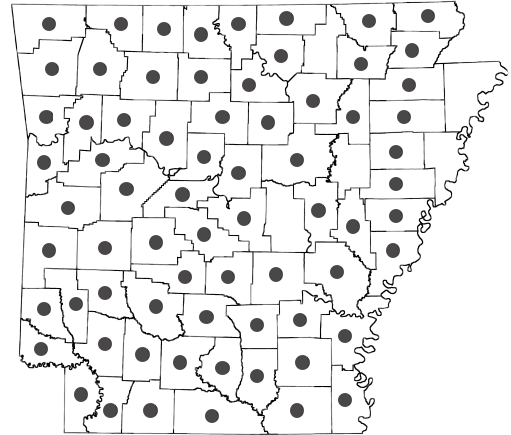
delta post oak, swamp post oak



FAGACEAE

***Quercus sinuata* Walter**

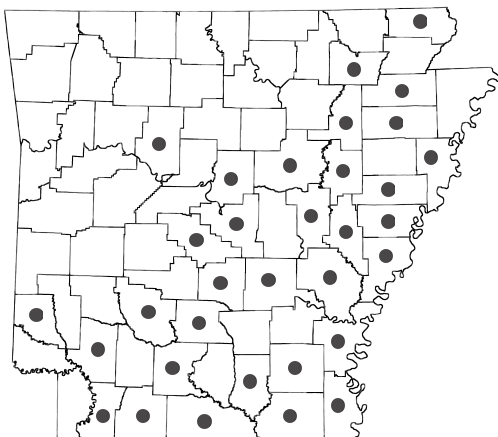
Durand's white oak, bastard oak



FAGACEAE

***Quercus stellata* Wangenh.**

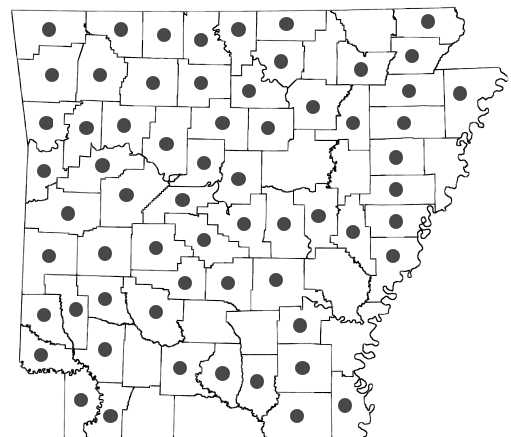
post oak



FAGACEAE

***Quercus texana* Buckley**

Nuttall's oak



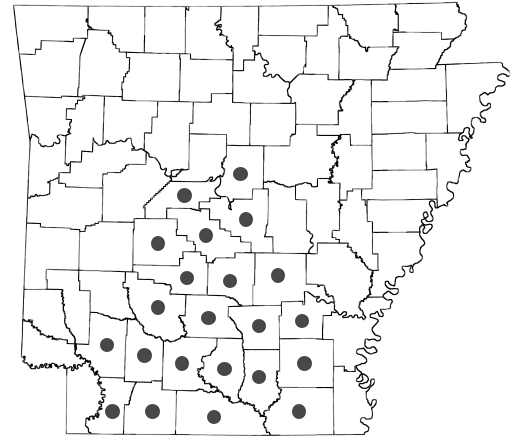
FAGACEAE

***Quercus velutina* Lam. in Lam. et al.**

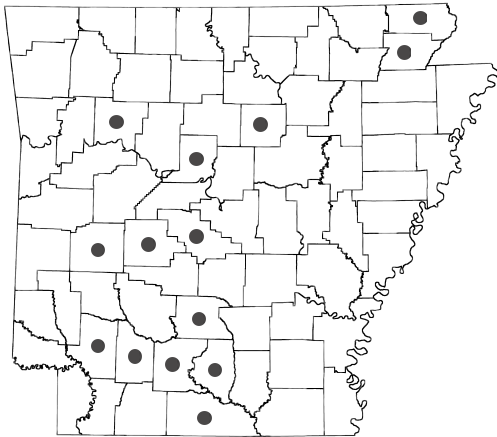
black oak



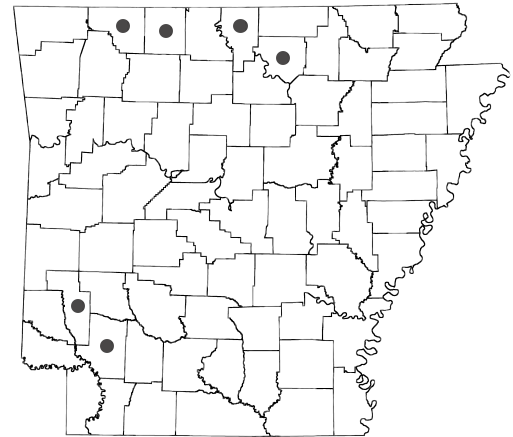
FAGACEAE
Quercus virginiana Mill.
 live oak



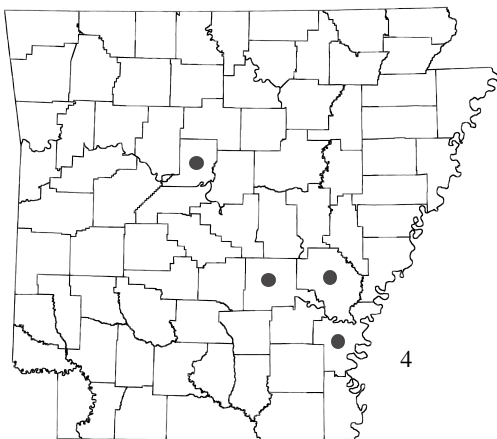
GELSEMIACEAE
Gelsemium sempervirens (L.) J.St.-Hil.
 Carolina jasmine, yellow jessamine



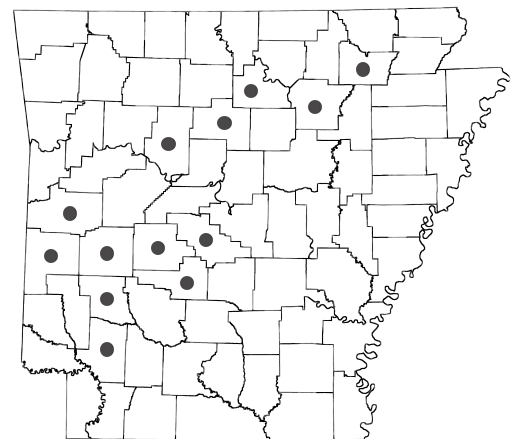
GENTIANACEAE
Bartonia paniculata (Michx.) Muhl.
 subsp. **paniculata**
 screw-stem



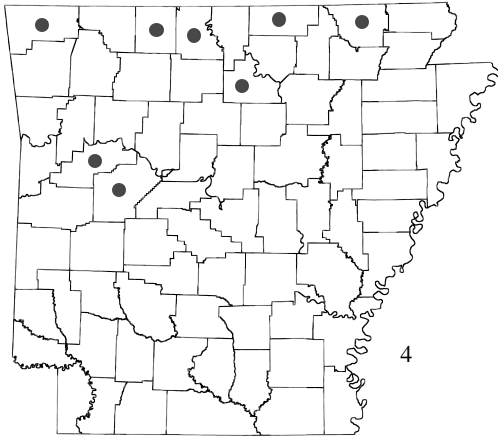
GENTIANACEAE
Centaureum texense (Griseb.) Fernald
 Lady Bird's centaury



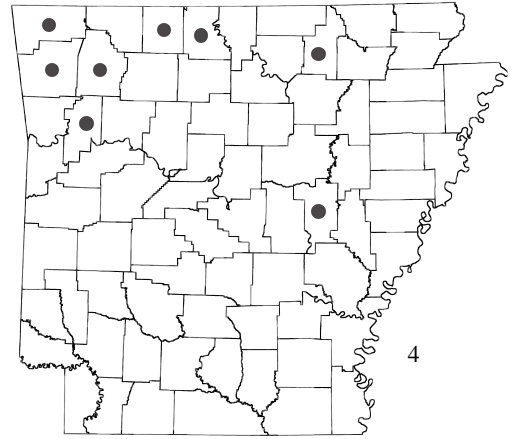
GENTIANACEAE
Eustoma exaltatum (L.) Salisb. ex G.Don
 catchfly prairie-gentian



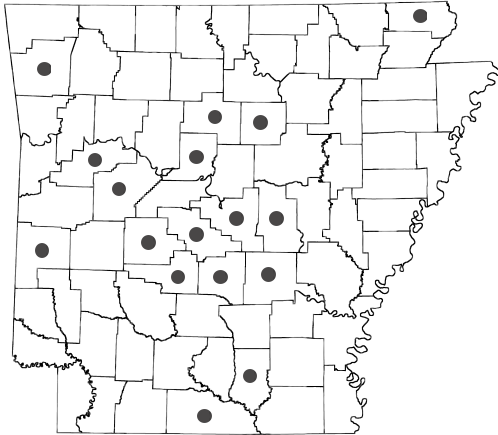
GENTIANACEAE
Frasera carolinensis Walter
 American columbo



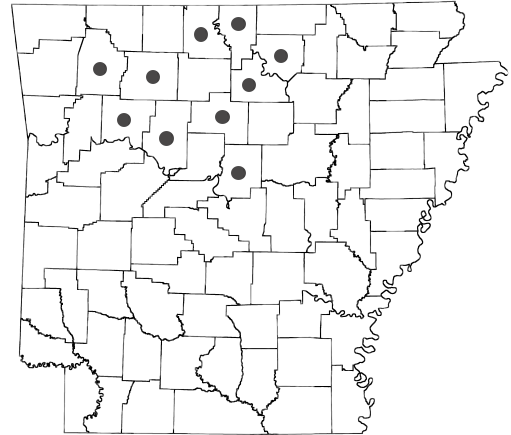
GENTIANACEAE
Gentiana alba Muhl. ex Nutt.
 pale gentian



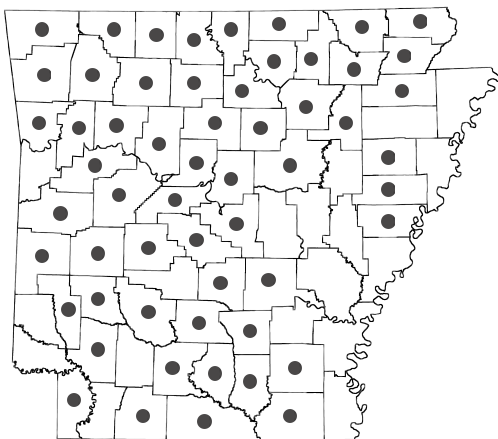
GENTIANACEAE
Gentiana puberulenta J.S.Pringle
 downy gentian



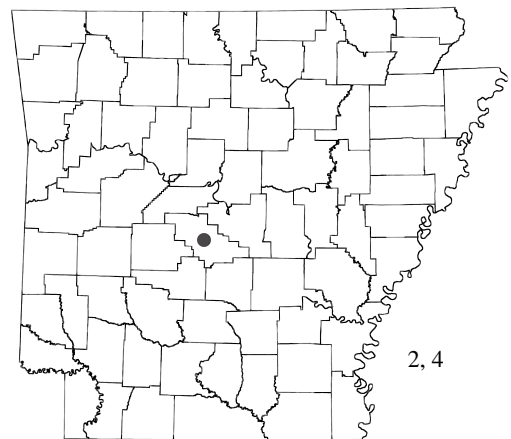
GENTIANACEAE
Gentiana saponaria L.
 bottle gentian, soapwort gentian



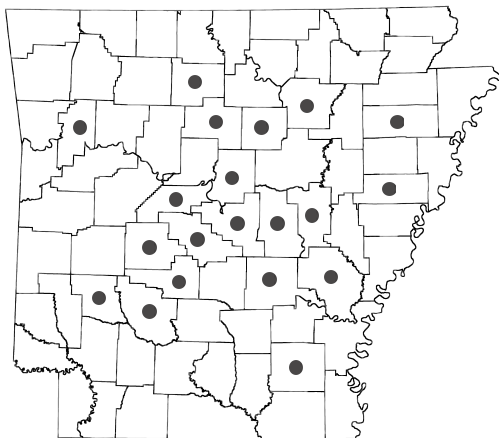
GENTIANACEAE
Gentianella quinquefolia (L.) Small
var. occidentalis (A.Gray) Small
 stiff gentian, agueweed



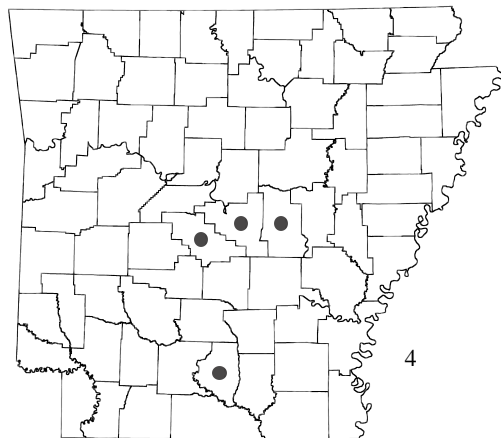
GENTIANACEAE
Sabatia angularis (L.) Pursh
 rose-gentian, rose-pink



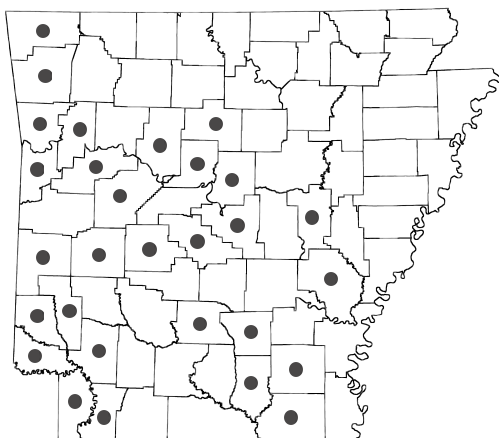
GENTIANACEAE
Sabatia arkansana J.S.Pringle & Witsell
 Pelton's rose-gentian



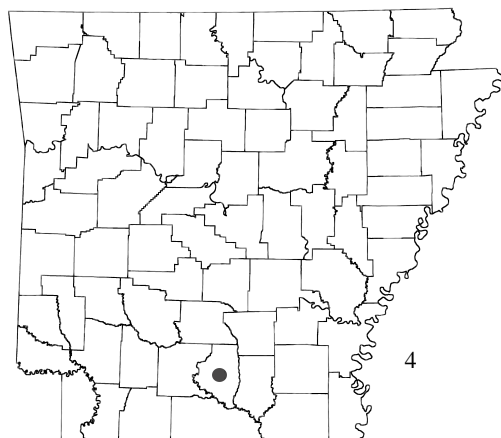
GENTIANACEAE
Sabatia brachiata Elliott
 narrow-leaf rose-gentian, rose-pink



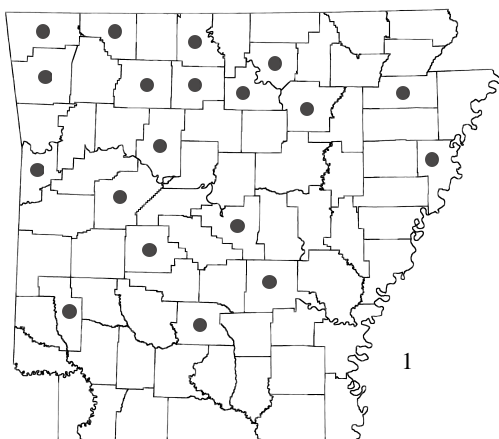
GENTIANACEAE
Sabatia campanulata (L.) Torr.
 slender rose-gentian, slender marsh-pink



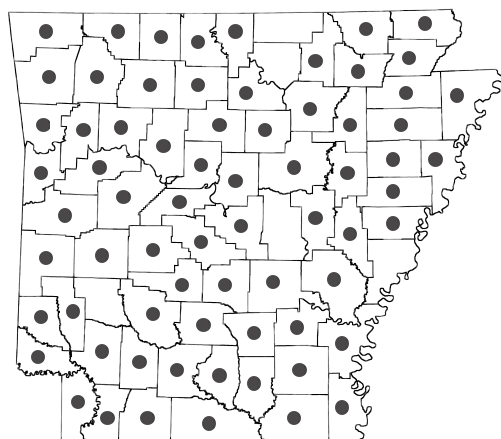
GENTIANACEAE
Sabatia campestris Nutt.
 rose-gentian, rose-pink



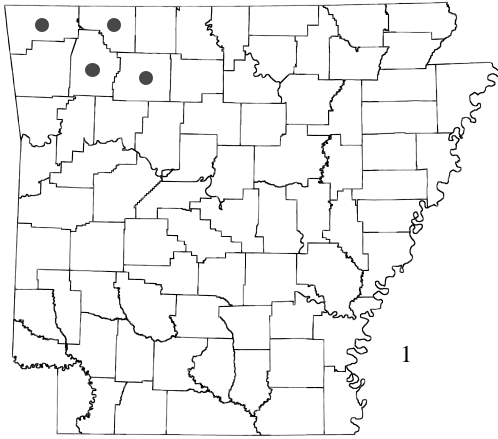
GENTIANACEAE
Sabatia gentianoides Elliott
 pinewoods rose-gentian



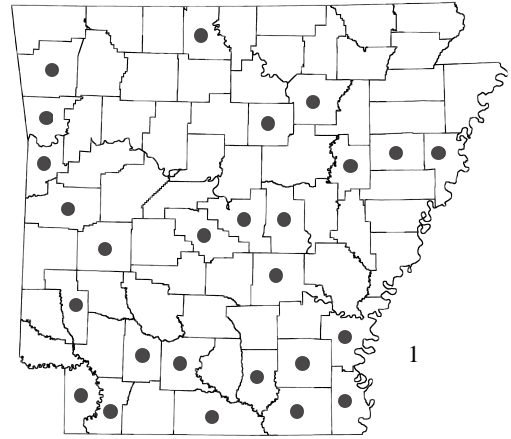
GERANIACEAE
Erodium cicutarium (L.) L' Hér. ex Aiton
 pink-needle, red-stem filaree, stork's-bill



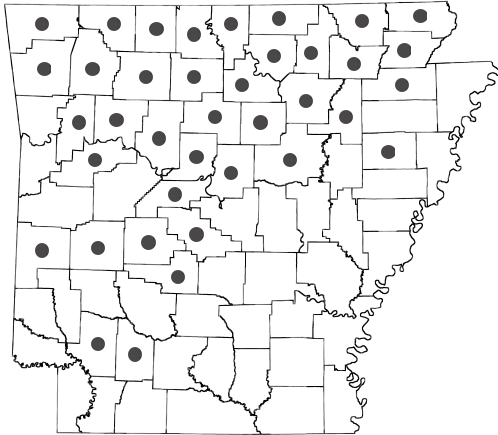
GERANIACEAE
Geranium carolinianum L.
var. carolinianum
 Carolina crane's-bill, Carolina geranium



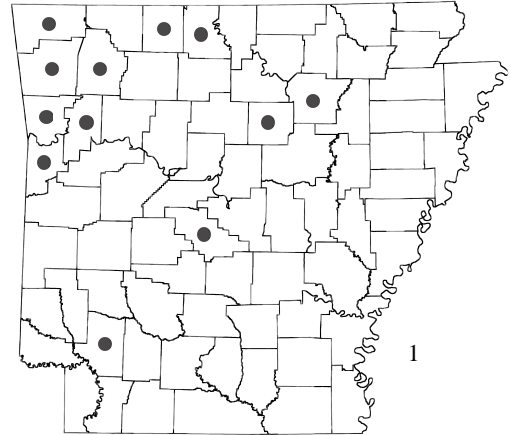
GERANIACEAE
Geranium columbinum L.
long-stalk crane's-bill



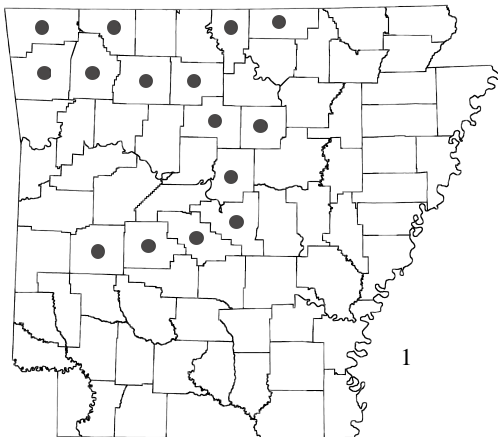
GERANIACEAE
Geranium dissectum L.
cut-leaf crane's-bill



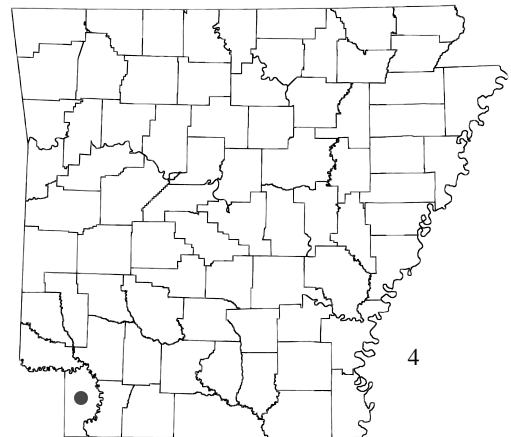
GERANIACEAE
Geranium maculatum L.
wild geranium, spotted crane's-bill



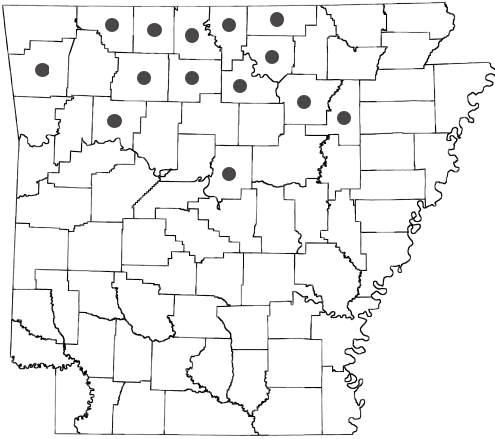
GERANIACEAE
Geranium molle L.
dove's-foot crane's-bill



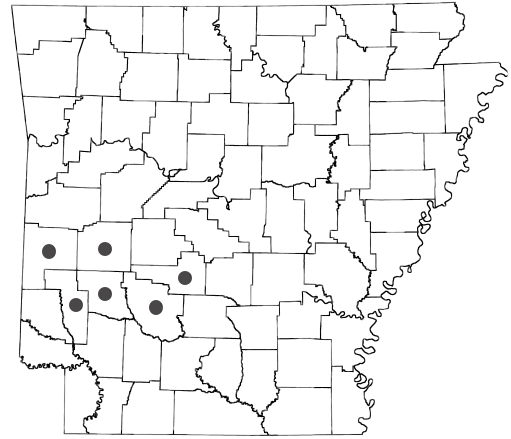
GERANIACEAE
Geranium pusillum L.
small-flower crane's-bill



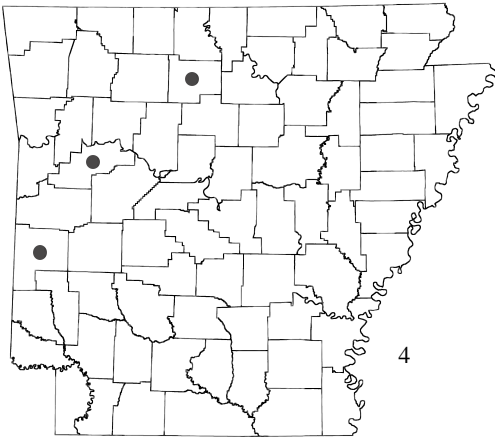
GERANIACEAE
Geranium texanum (Trel.) A.Heller
Texas crane's-bill, Texas geranium



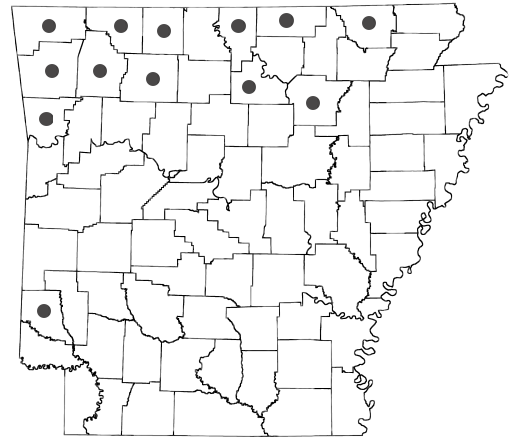
GROSSULARIACEAE
Ribes aureum Pursh
var. villosum DC. in DC. & A.D.C.
 golden currant, buffalo currant



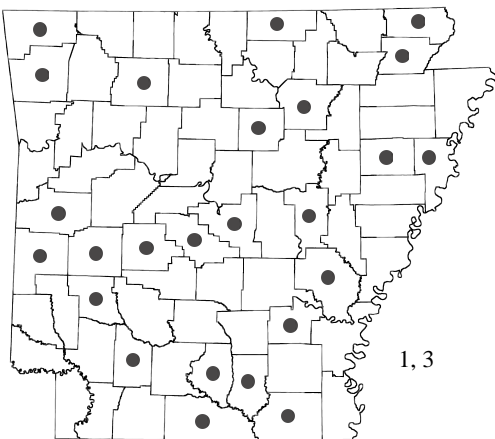
GROSSULARIACEAE
Ribes curvatum Small
 granite gooseberry



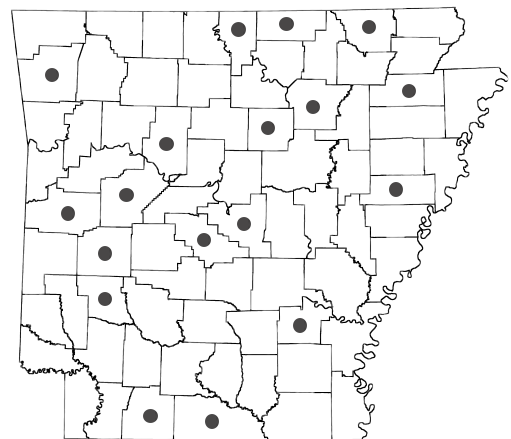
GROSSULARIACEAE
Ribes cynosbati L.
 prickly gooseberry



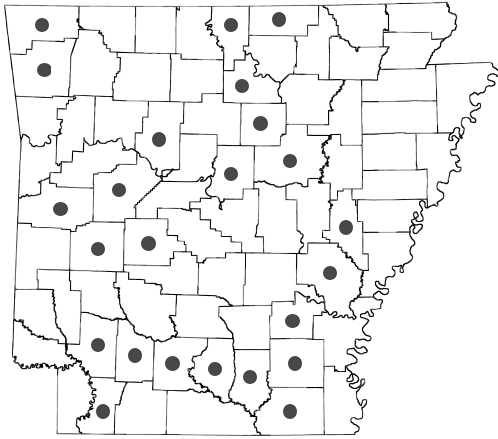
GROSSULARIACEAE
Ribes missouriense Nutt. in Torr. & A.Gray
 Missouri gooseberry



HALORAGACEAE
Myriophyllum aquaticum (Vell.) Verdc.
 parrot's-feather



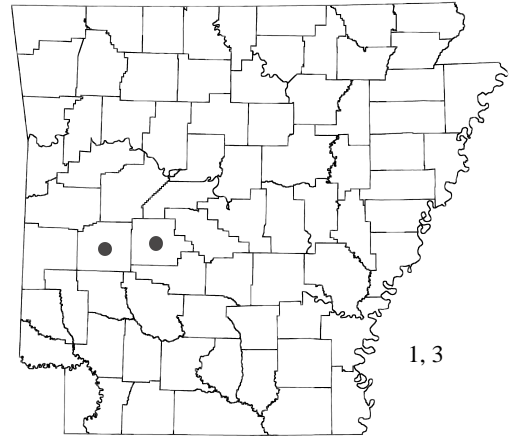
HALORAGACEAE
Myriophyllum heterophyllum Michx.
 water-milfoil



HALORAGACEAE

Myriophyllum pinnatum (Walter) Britton, Sterns & Poggenb.

cut-leaf water-milfoil, green parrot's-feather

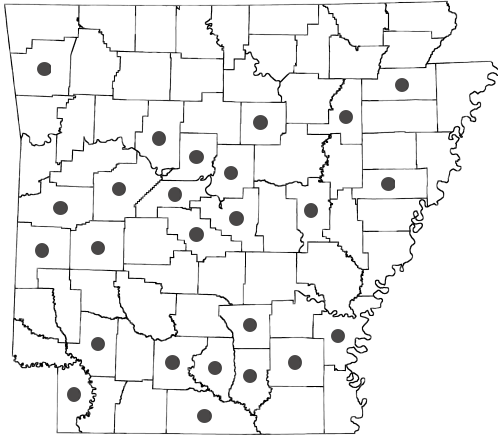


1, 3

HALORAGACEAE

Myriophyllum spicatum L.

Eurasian water-milfoil



HALORAGACEAE

Proserpinaca palustris L.

mermaid-weed

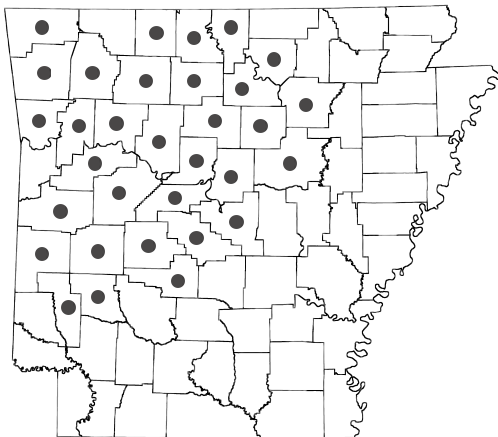


4

HAMAMELIDACEAE

Fothergilla major Lodd.

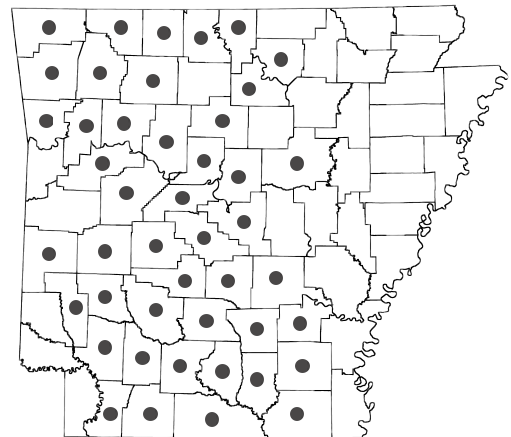
witch-alder



HAMAMELIDACEAE

Hamamelis vernalis Sarg.

vernal witch-hazel, Ozark witch-hazel



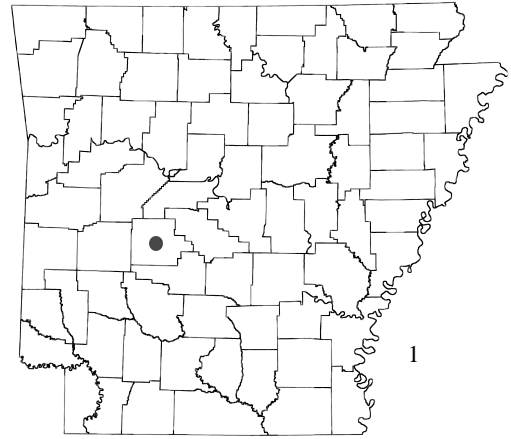
HAMAMELIDACEAE

Hamamelis virginiana L.

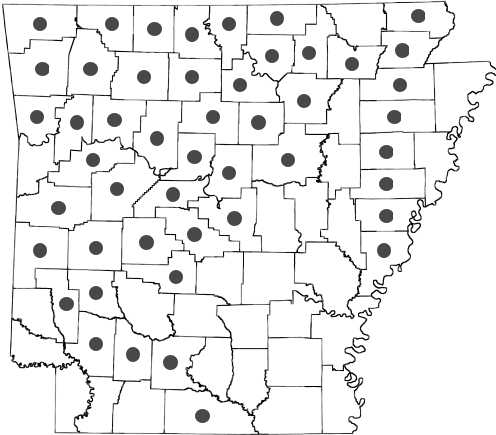
American witch-hazel



HYDRANGEACEAE
Decumaria barbara L.
 climbing-hydrangea, woodvamp



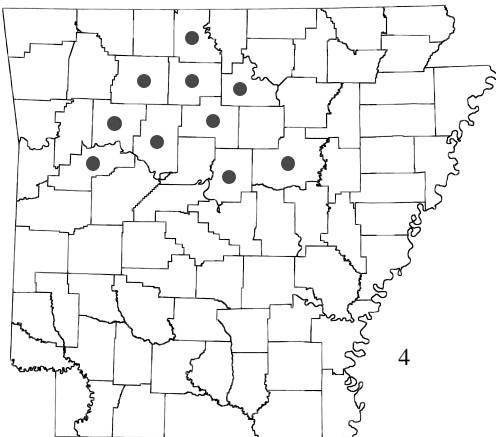
HYDRANGEACEAE
Deutzia scabra Thunb.
 deutzia, pride-of-Rochester



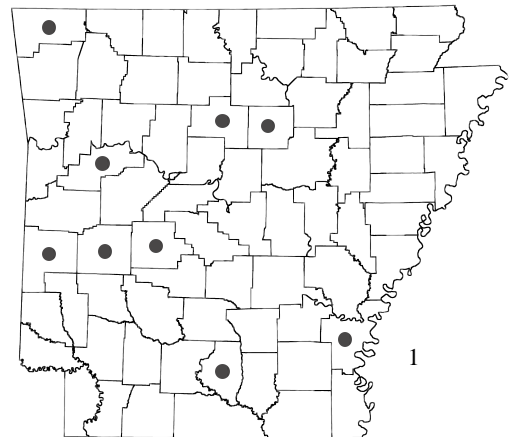
HYDRANGEACEAE
Hydrangea arborescens L.
 wild hydrangea



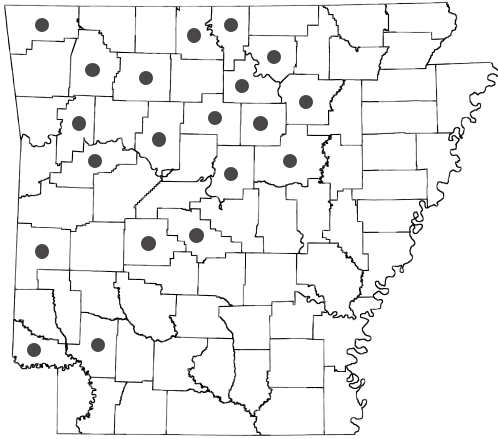
HYDRANGEACEAE
Hydrangea quercifolia W.Bartram
 oak-leaf hydrangea



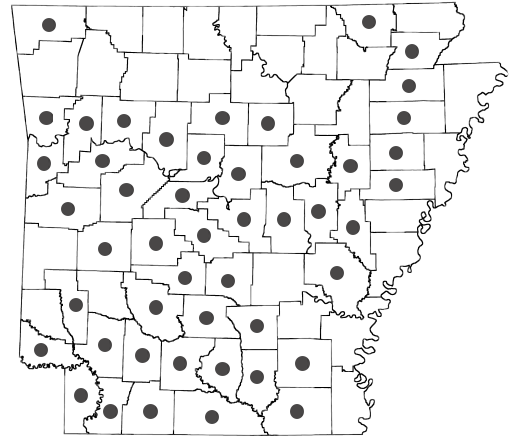
HYDRANGEACEAE
Philadelphus hirsutus Nutt.
 hairy mock orange



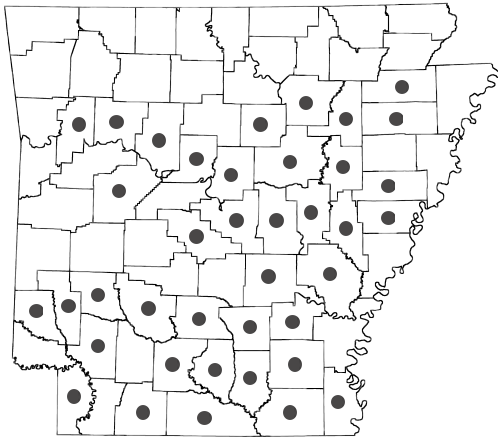
HYDRANGEACEAE
Philadelphus inodorus L.
 Appalachian mock orange



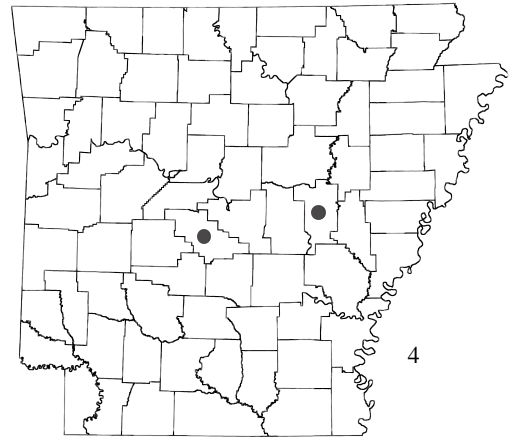
HYDRANGEACEAE
***Philadelphus pubescens* Loisel.**
 Ozark mock orange



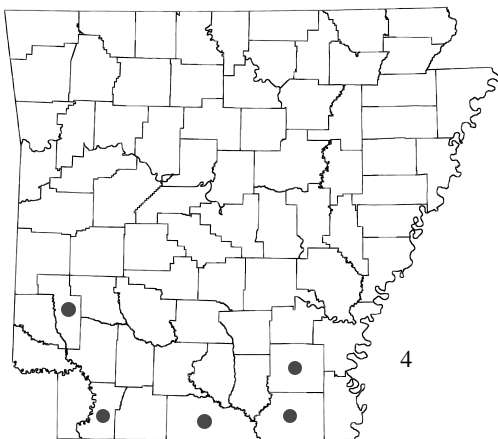
HYDROLEACEAE
***Hydrolea ovata* Nutt. ex Choisy**
 blue-waterleaf, false fiddleleaf



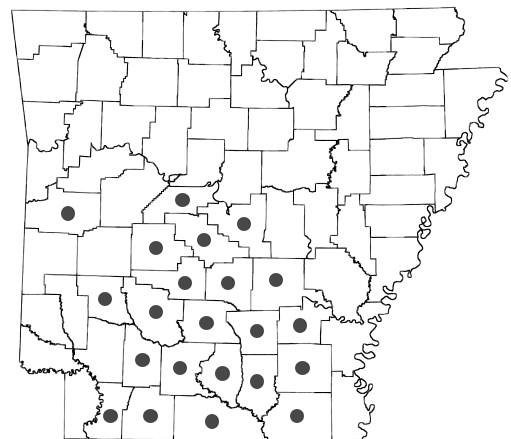
HYDROLEACEAE
***Hydrolea uniflora* Raf.**
 false fiddleleaf, blue-waterleaf



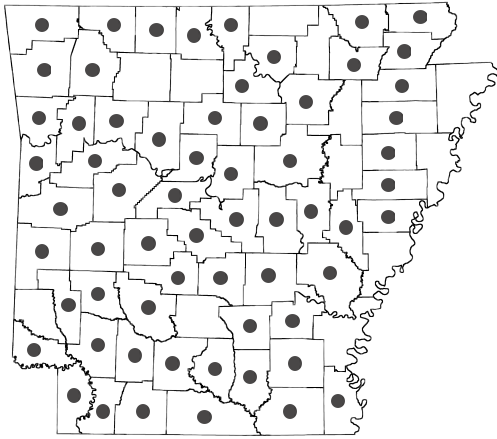
HYPERICACEAE
***Hypericum adpressum* Raf. ex W.P.C.Barton**
 creeping St. John's-wort



HYPERICACEAE
***Hypericum apocynifolium* Small**
 dogbane St. John's-wort



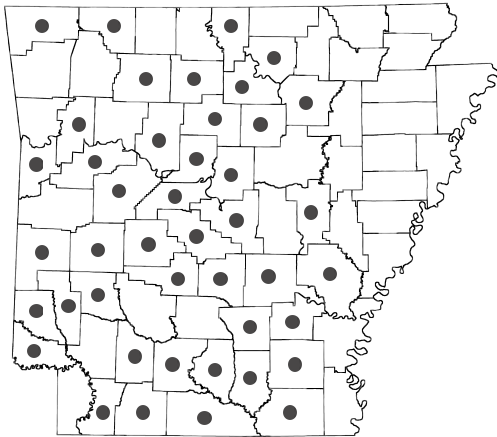
HYPERICACEAE
***Hypericum crux-andreae* (L.) Crantz**
 St. Peter's-wort



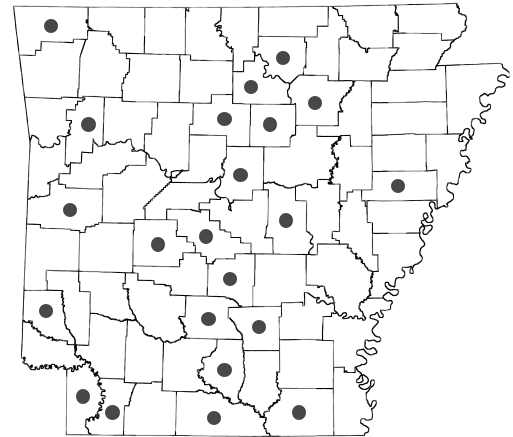
HYPERICACEAE
Hypericum drummondii (Grev. & Hook.) Torr. & A.Gray
 nits-and-lice



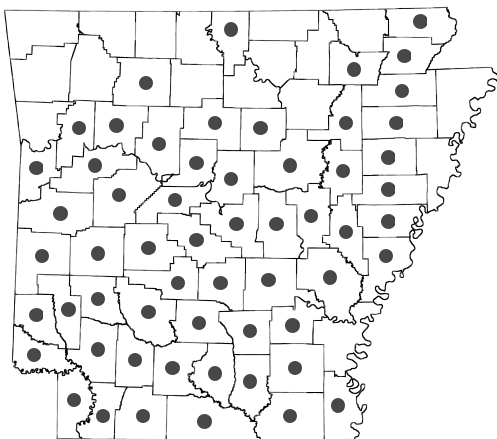
HYPERICACEAE
Hypericum fasciculatum Lam.
 peel-bark St. John's-wort



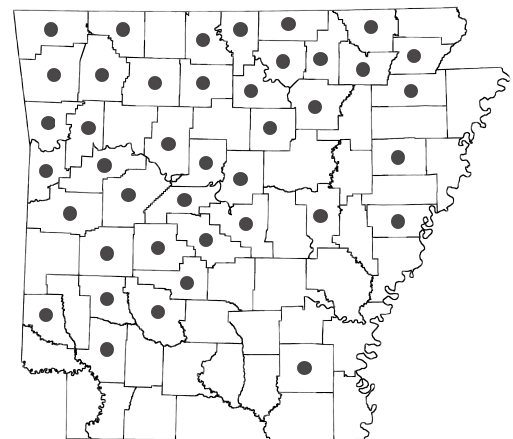
HYPERICACEAE
Hypericum gentianoides (L.) Britton, Sterns & Poggenb.
 pine-weed, orange-grass



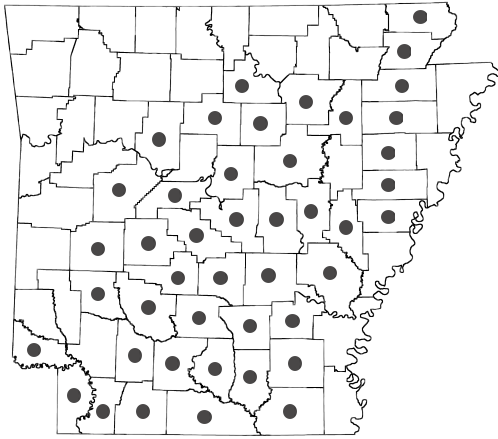
HYPERICACEAE
Hypericum gymnanthum Engelm. & A.Gray
 clasping-leaf St. John's-wort



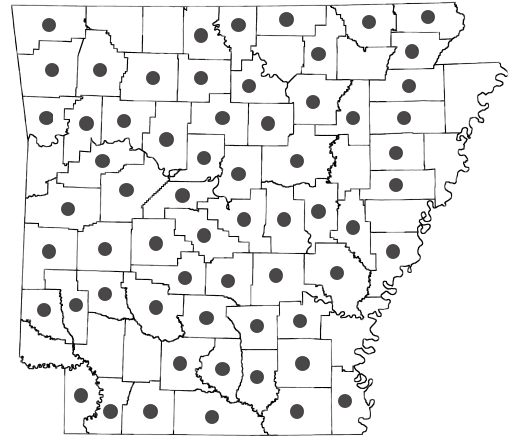
HYPERICACEAE
Hypericum hypericoides (L.) Crantz
 subsp. **hypericoides**
 St. Andrew's-cross



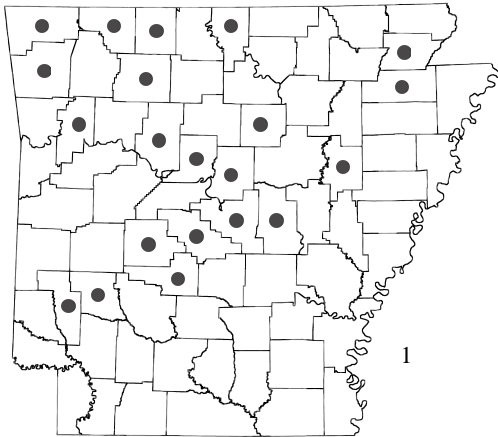
HYPERICACEAE
Hypericum hypericoides (L.) Crantz
 subsp. **multicaule (Michx. ex Willd.) N.Robson**
 St. Andrew's-cross



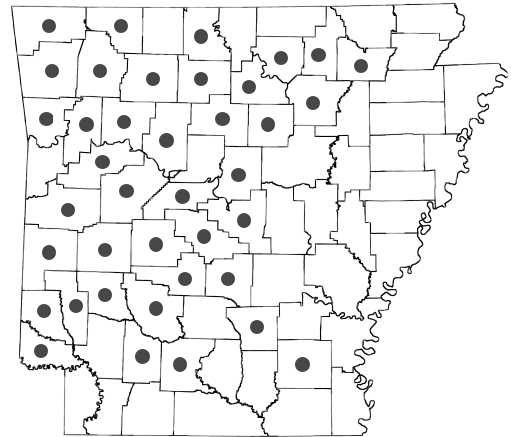
HYPERICACEAE
Hypericum lobocarpum Gatt.
five-lobed St. John's-wort



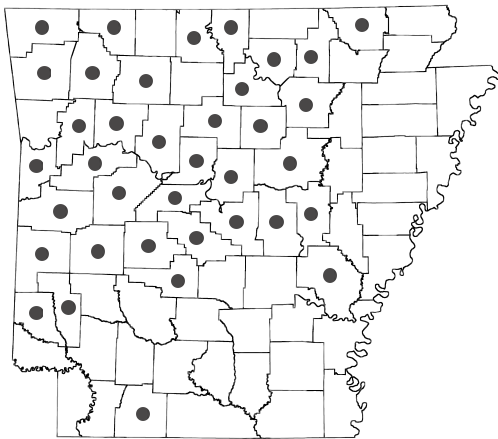
HYPERICACEAE
Hypericum mutilum L.
dwarf St. John's-wort



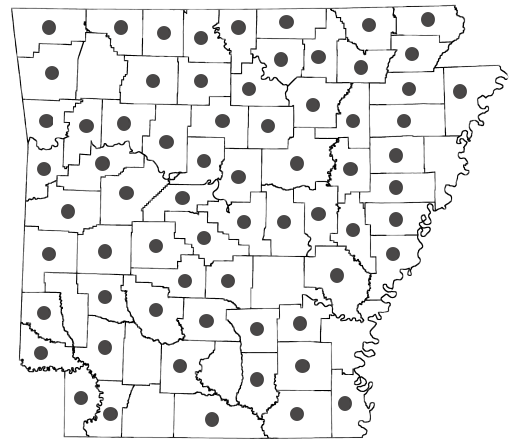
HYPERICACEAE
Hypericum perforatum L.
European St. John's-wort



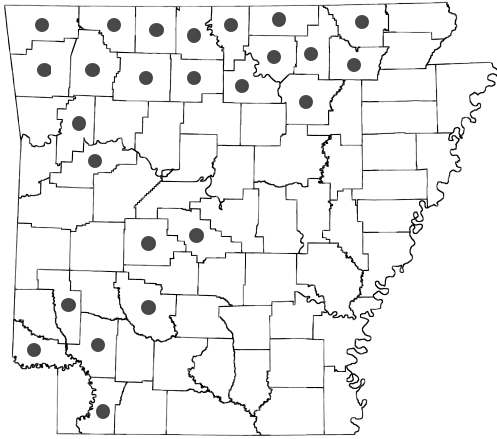
HYPERICACEAE
Hypericum prolificum L.
shrubby St. John's-wort



HYPERICACEAE
Hypericum pseudomaculatum Bush ex Britton
false spotted St. John's-wort



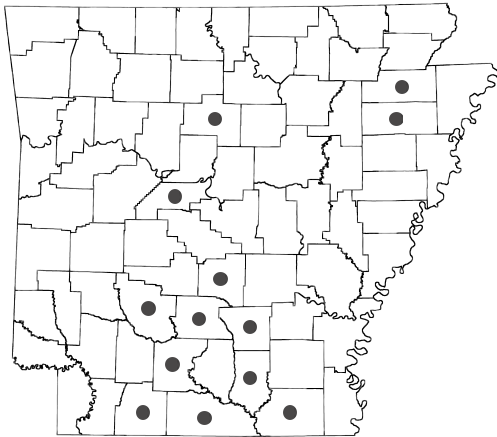
HYPERICACEAE
Hypericum punctatum Lam.
spotted St. John's-wort



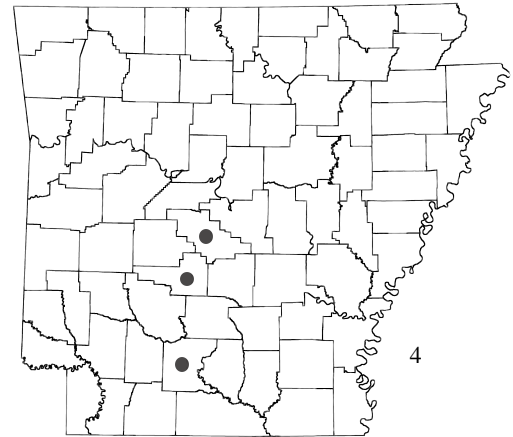
HYPERICACEAE
Hypericum sphaerocarpum Michx.
 round-fruit St. John's-wort



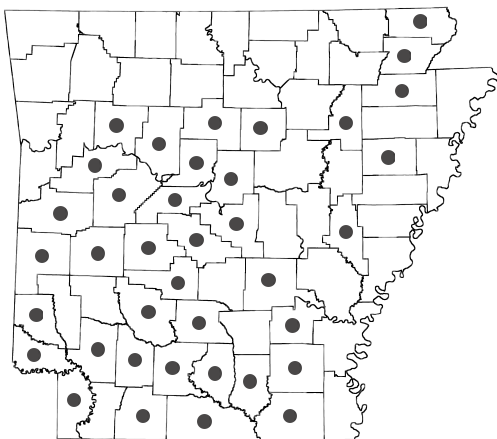
HYPERICACEAE
Hypericum virgatum Lam.
 sharp-leaf St. John's-wort



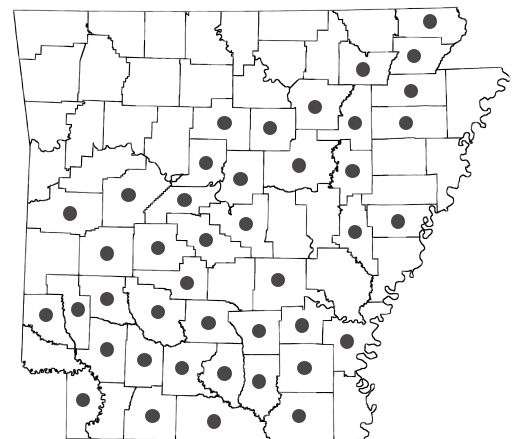
HYPERICACEAE
Triadenum tubulosum (Walter) Gleason
 marsh-St. John's-wort



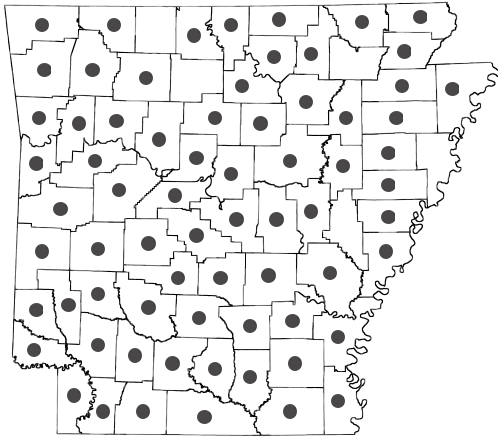
HYPERICACEAE
Triadenum virginicum (L.) Raf.
 Virginia marsh-St. John's-wort



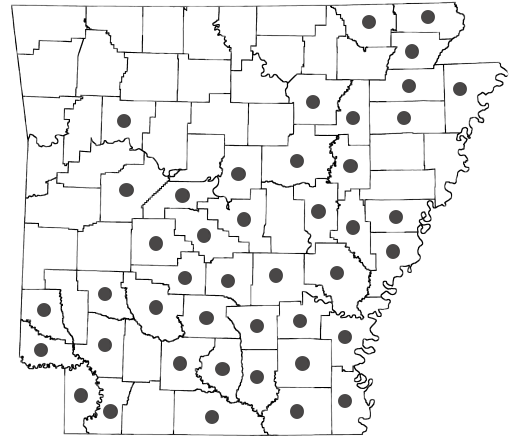
HYPERICACEAE
Triadenum walteri (J.F.Gmel.) Gleason
 Walter's marsh-St. John's-wort



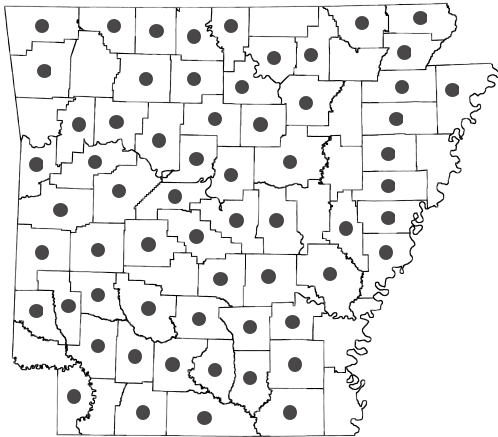
ITEACEAE
Itea virginica L.
 Virginia sweetspire, Virginia-willow



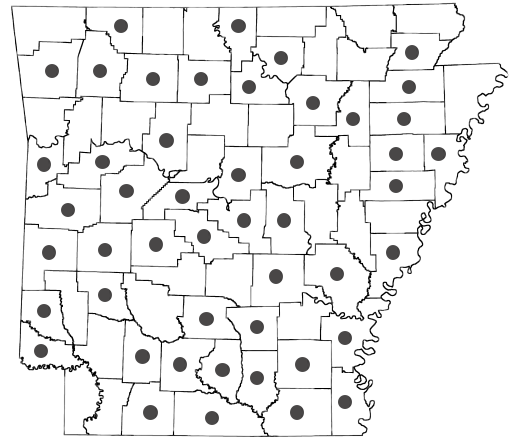
JUGLANDACEAE
Carya alba (L.) Nutt. ex Elliott
mockernut hickory



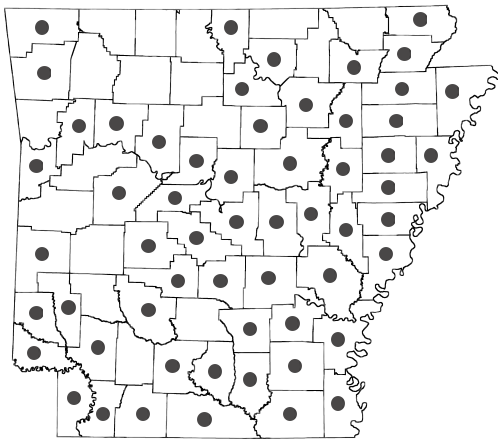
JUGLANDACEAE
Carya aquatica (F.Michx.) Nutt.
water hickory, bitter-pecan



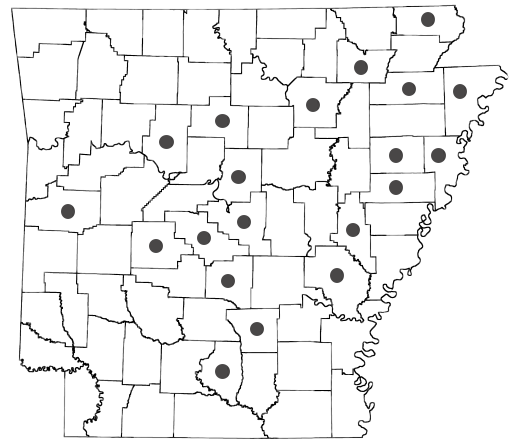
JUGLANDACEAE
Carya cordiformis (Wangenh.) K.Koch
bitternut hickory



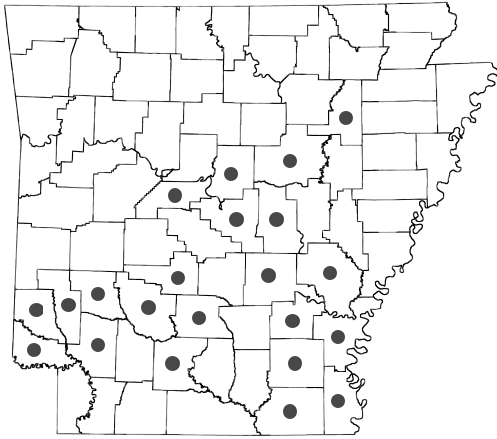
JUGLANDACEAE
Carya glabra (Mill.) Sweet
pignut hickory, red hickory



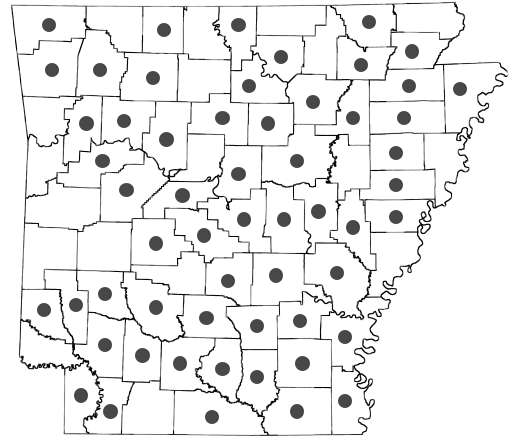
JUGLANDACEAE
Carya illinoensis (Wangenh.) K.Koch
pecan



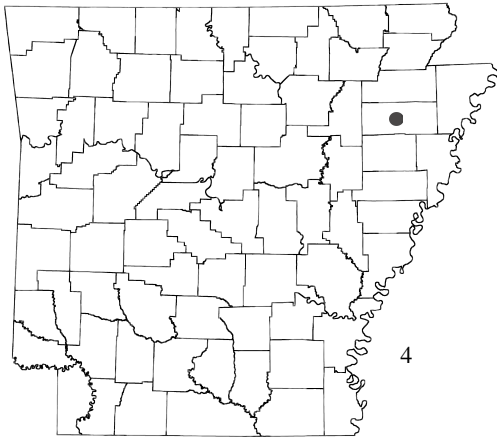
JUGLANDACEAE
Carya laciniosa (F.Michx.) Loudon
shellbark hickory, kingnut hickory



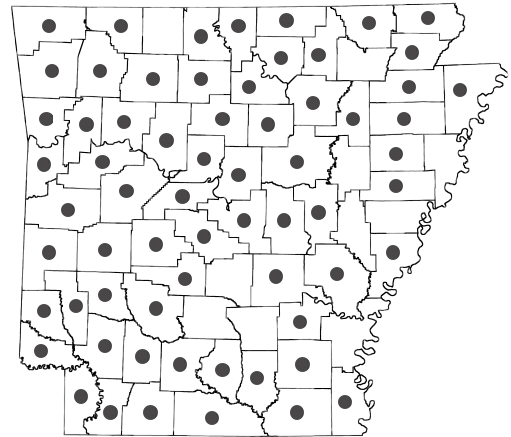
JUGLANDACEAE
Carya myristiciformis (F.Michx.) Nutt.
 nutmeg hickory



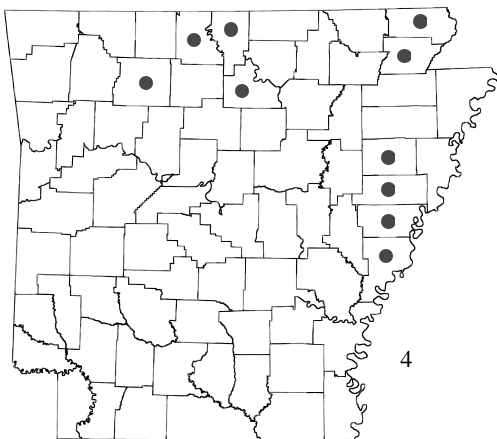
JUGLANDACEAE
Carya ovata (Mill.) K.Koch
 var. **ovata**
 shagbark hickory



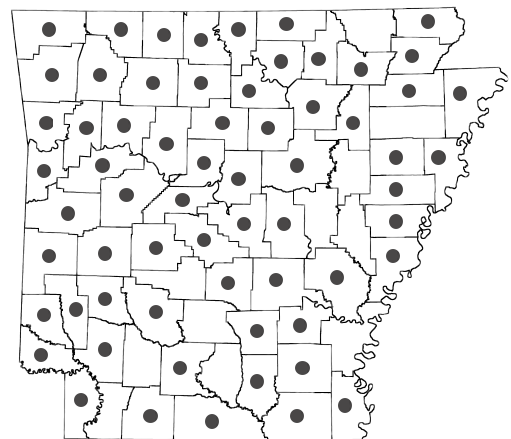
JUGLANDACEAE
Carya pallida (Ashe) Engl. & Graebn.
 pale hickory, sand hickory



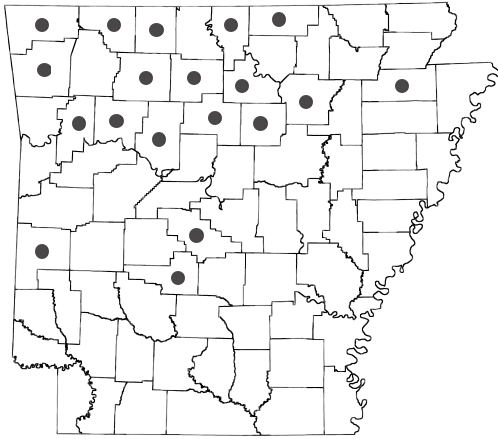
JUGLANDACEAE
Carya texana Buckley
 black hickory



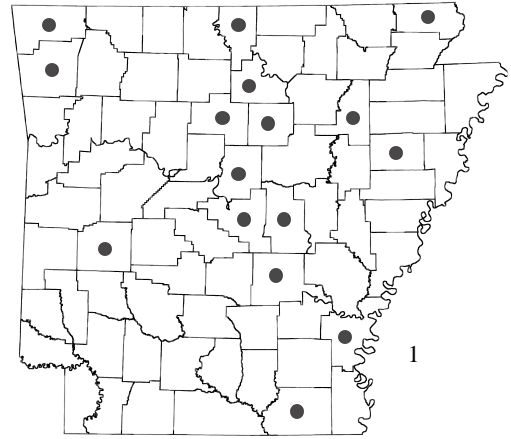
JUGLANDACEAE
Juglans cinerea L.
 butternut, white walnut



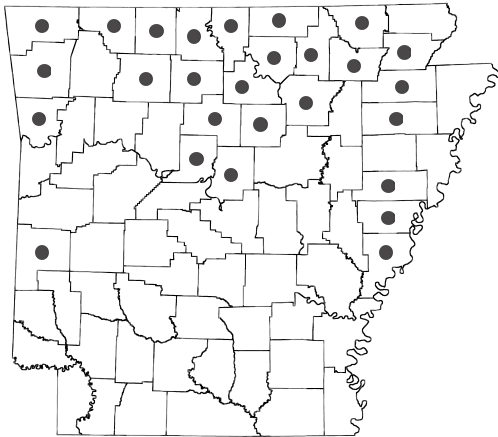
JUGLANDACEAE
Juglans nigra L.
 black walnut



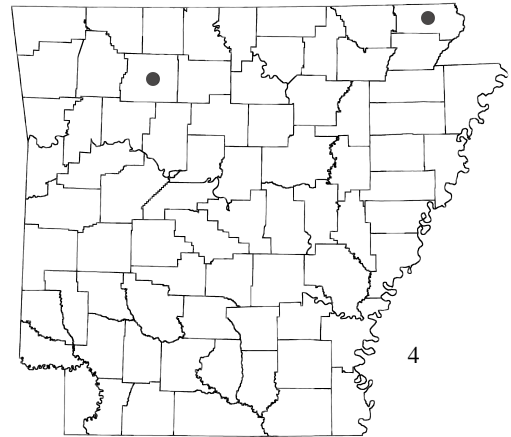
LAMIACEAE
Agastache nepetoides (L.) Kuntze
yellow giant-hyssop



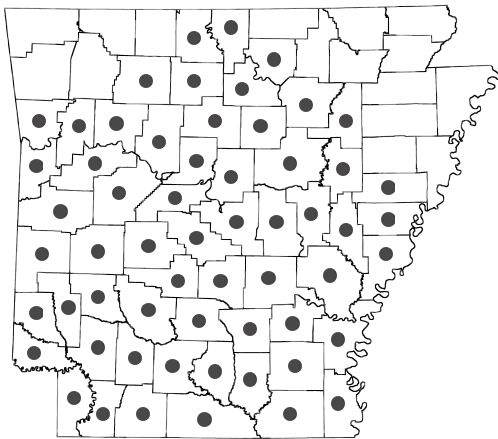
LAMIACEAE
Ajuga reptans L.
carpet bugle



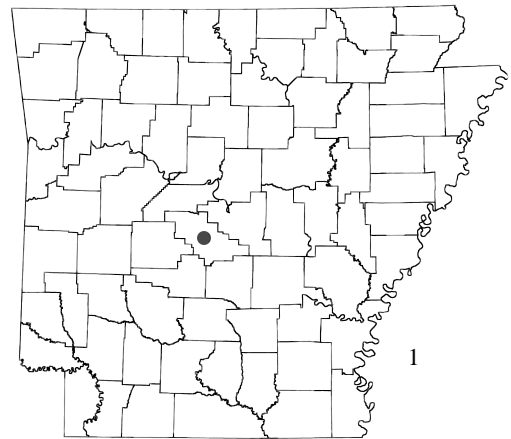
LAMIACEAE
Blephilia ciliata (L.) Benth.
downy wood mint, Ohio horsemint



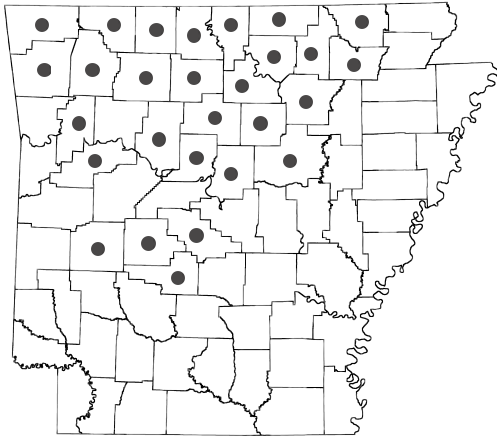
LAMIACEAE
Blephilia hirsuta (Pursh) Benth.
hairy wood mint



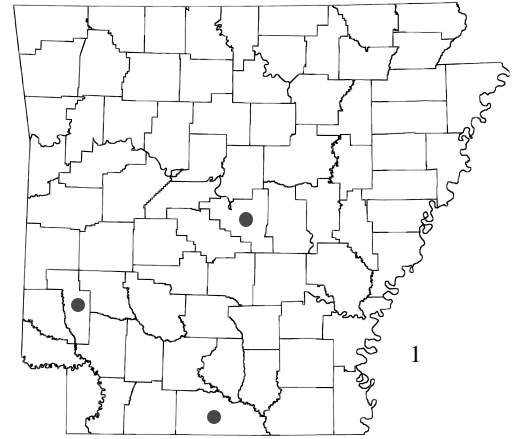
LAMIACEAE
Callicarpa americana L.
American beauty-berry, French-mulberry



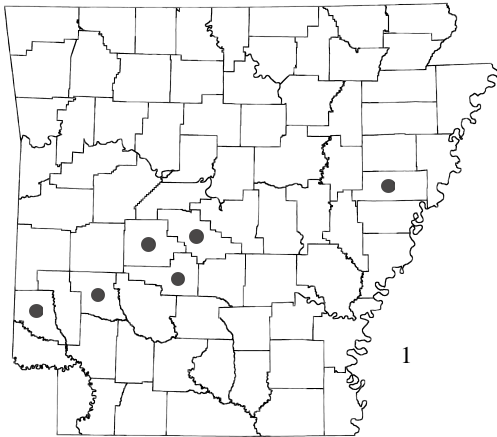
LAMIACEAE
Callicarpa dichotoma (Lour.) K.Koch
Chinese beauty-berry



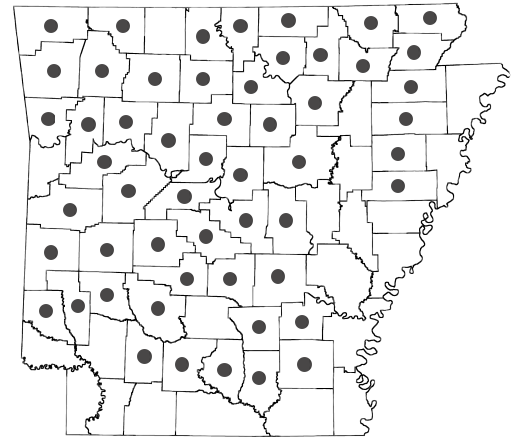
LAMIACEAE
Clinopodium arkansanum (Nutt.) House
 Arkansas calamint



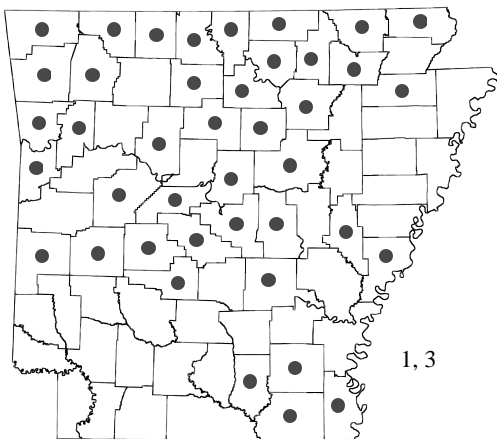
LAMIACEAE
Clinopodium gracile (Benth.) Kuntze
 wild basil



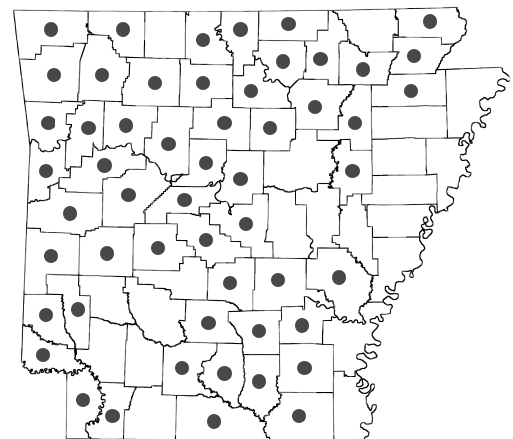
LAMIACEAE
Clinopodium nepeta (L.) Kuntze
 lesser calamint



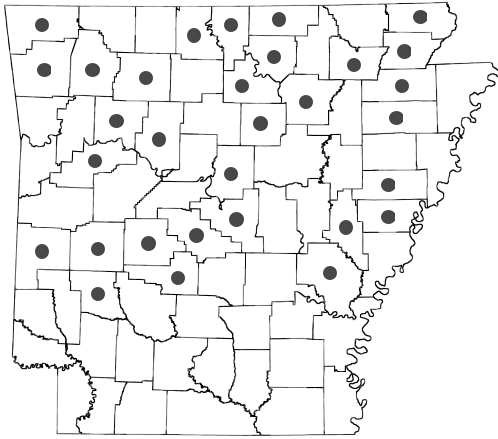
LAMIACEAE
Cunila organoides (L.) Britton
 dittany



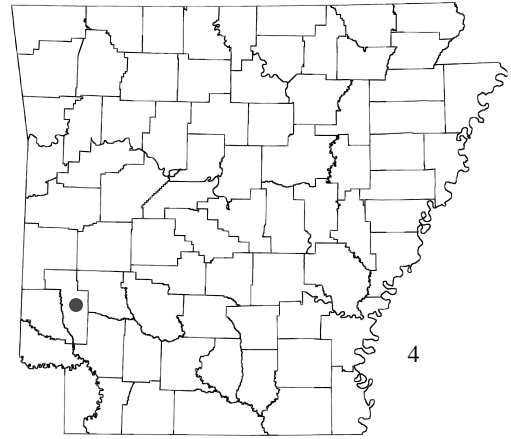
LAMIACEAE
Glechoma hederacea L.
 ground-ivy



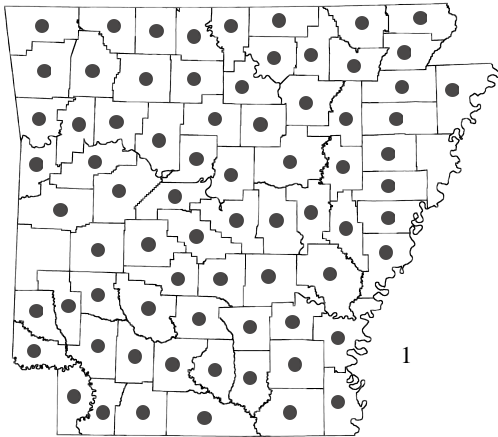
LAMIACEAE
Hedeoma hispida Pursh
 rough false pennyroyal



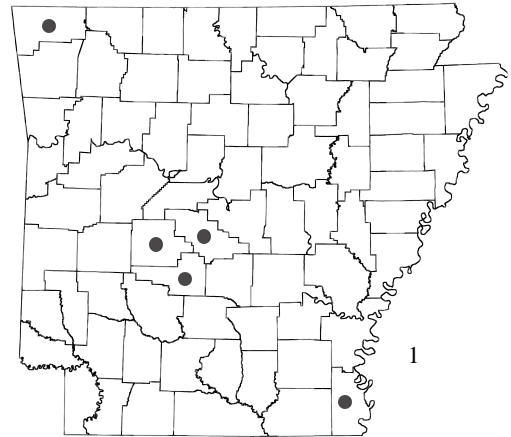
LAMIACEAE
***Hedeoma pulegioides* (L.) Pers.**
American false pennyroyal



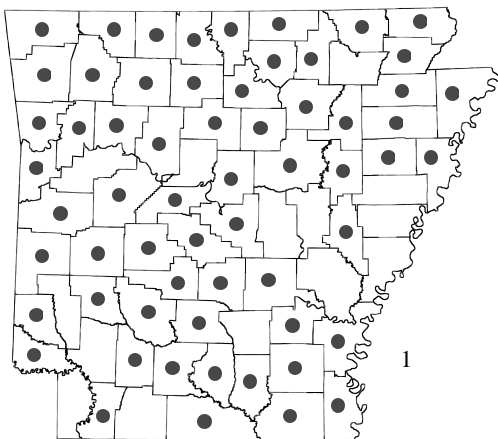
LAMIACEAE
***Hedeoma reverchonii* (A.Gray) A.Gray**
var. *reverchonii*
Reverchon's false pennyroyal



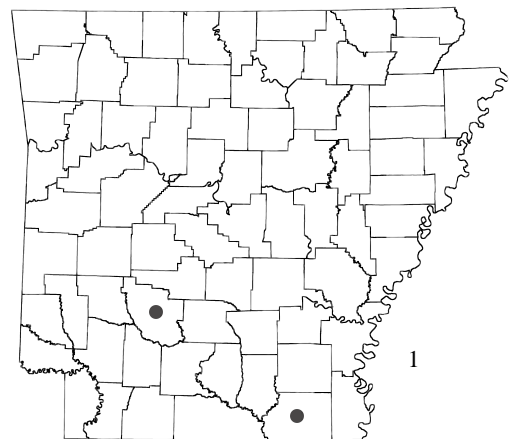
LAMIACEAE
***Lamium amplexicaule* L.**
henbit



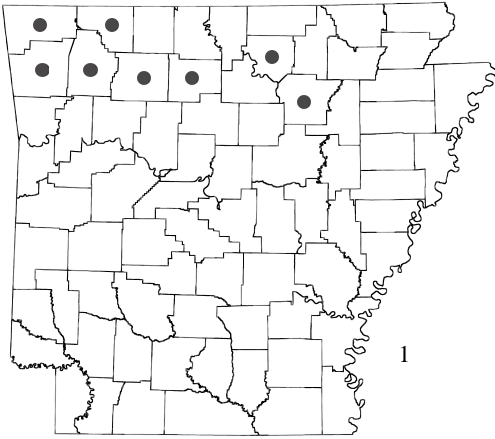
LAMIACEAE
***Lamium dissectum* With.**
cut-leaf dead-nettle



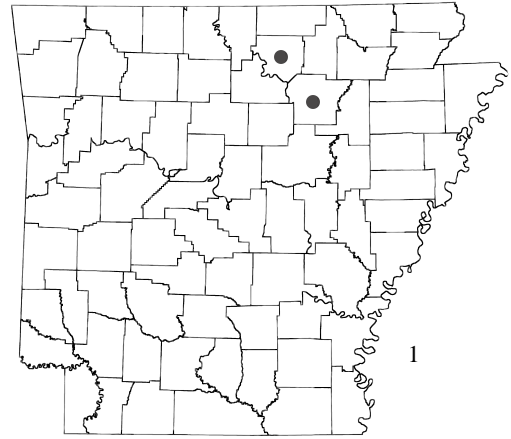
LAMIACEAE
***Lamium purpureum* L.**
purple dead-nettle



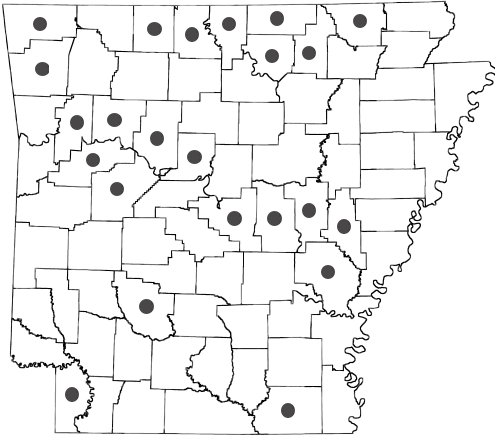
LAMIACEAE
***Leonotis nepetifolia* (L.) R.Br. ex W.T.Aiton**
Christmas candlestick, lion's-ear



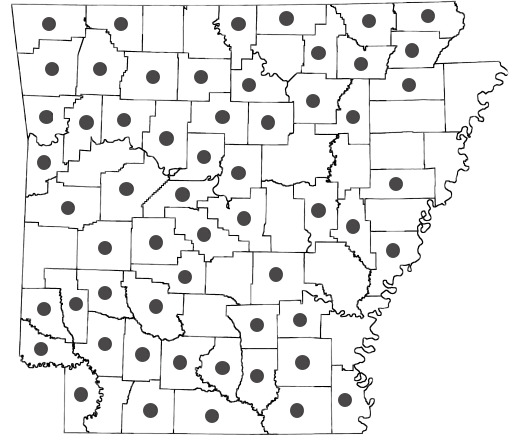
LAMIACEAE
Leonurus cardiaca L.
 motherwort



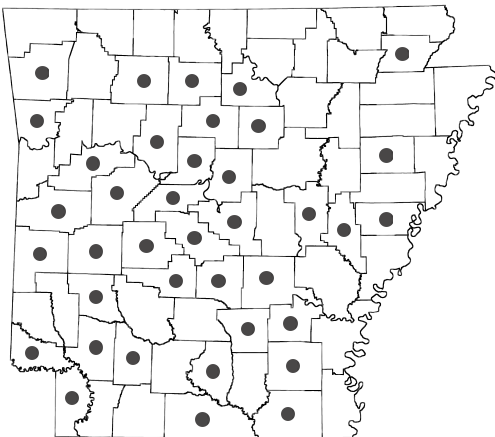
LAMIACEAE
Leonurus sibiricus L.
 Siberian motherwort



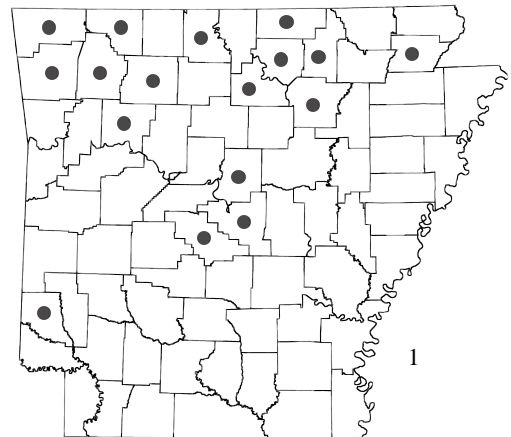
LAMIACEAE
Lycopos americanus Muhl. ex W.P.C.Barton
 American bugleweed, American water-horehound



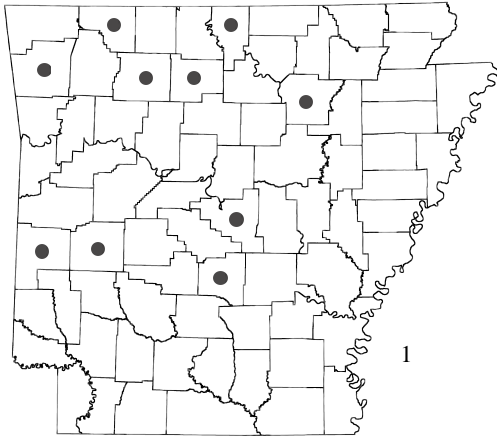
LAMIACEAE
Lycopos rubellus Moench
 bugleweed, water-horehound



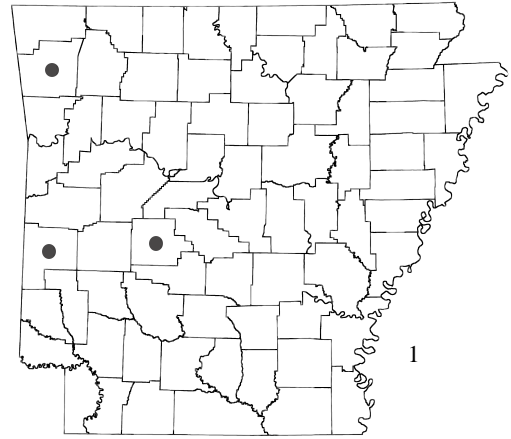
LAMIACEAE
Lycopos virginicus L.
 Virginia bugleweed, Virginia water-horehound



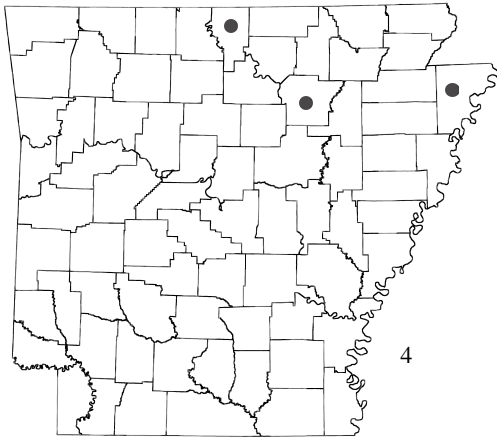
LAMIACEAE
Marrubium vulgare L.
 horehound



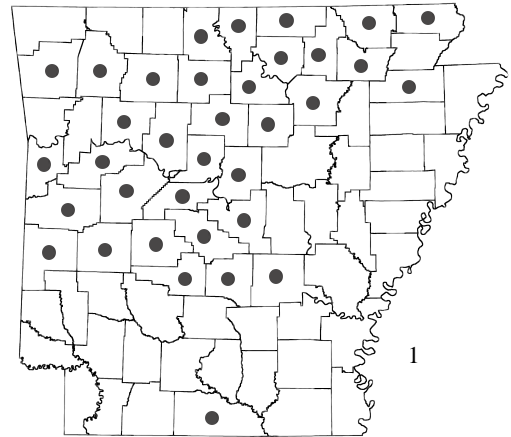
LAMIACEAE
Melissa officinalis L.
lemon balm



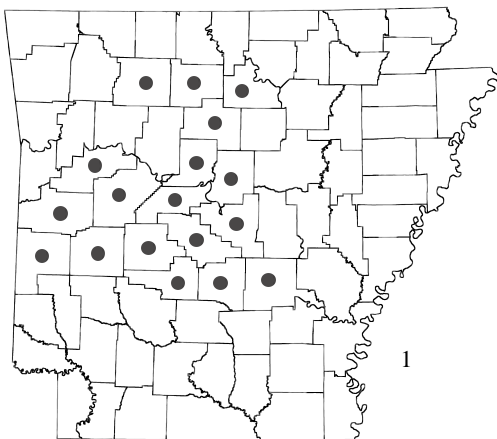
LAMIACEAE
Mentha aquatica L.
var. citrata (Ehrh.) Fresen.
lemon mint



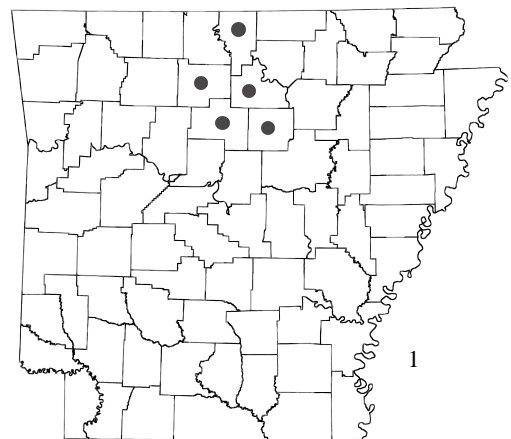
LAMIACEAE
Mentha arvensis L.
wild mint, field mint



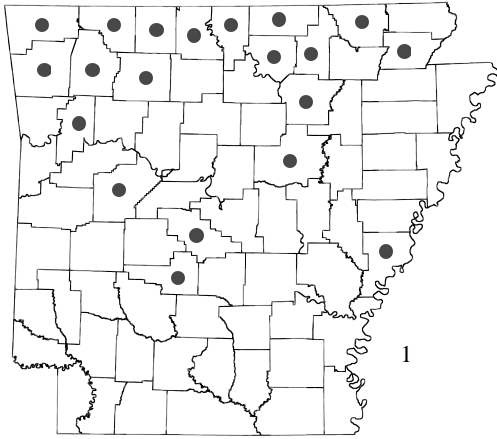
LAMIACEAE
Mentha spicata L.
spearmint



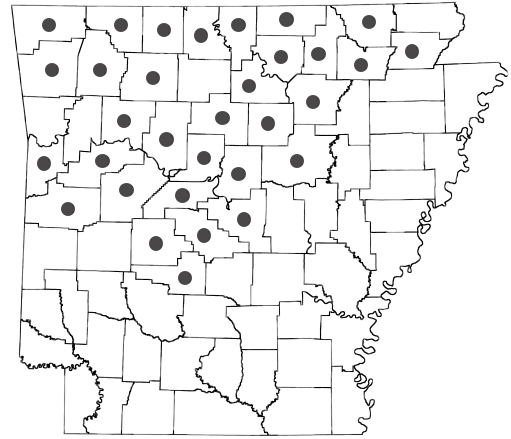
LAMIACEAE
Mentha suaveolens Ehrh.
apple mint



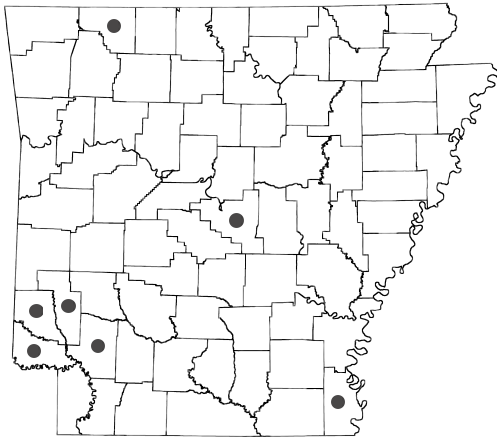
LAMIACEAE
Mentha x gracilis Sole
ginger mint



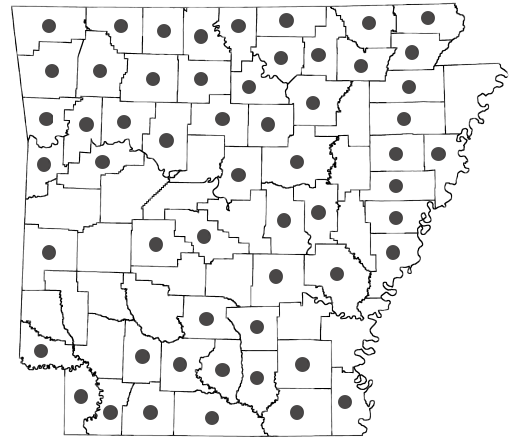
LAMIACEAE
Mentha × piperita L.
 peppermint



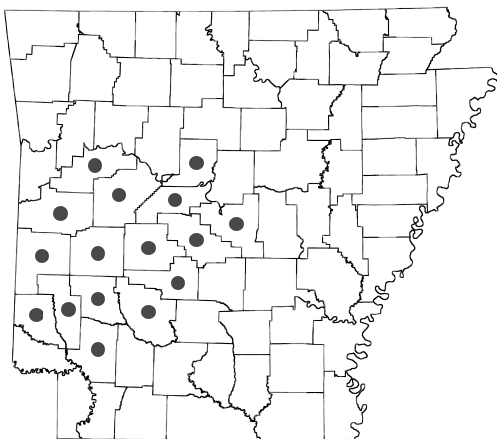
LAMIACEAE
Monarda bradburiiana L.C.Beck
 Bradbury's beebalm



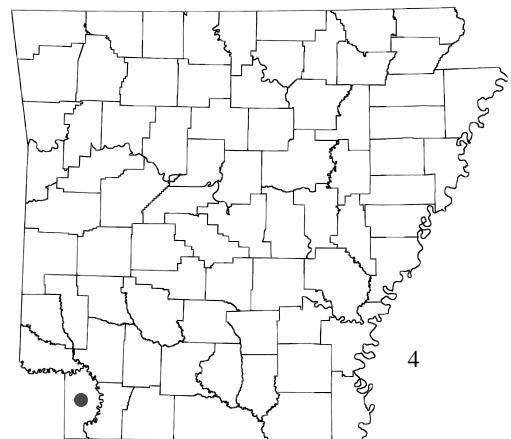
LAMIACEAE
Monarda citriodora Cerv. ex Lag.
var. citriodora
 lemon beebalm



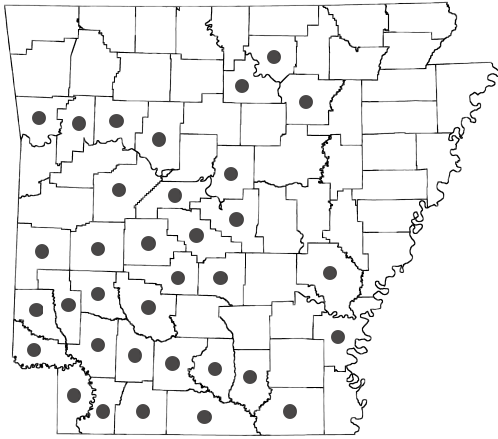
LAMIACEAE
Monarda fistulosa L.
var. mollis (L.) Benth.
 beebalm, wild bergamot



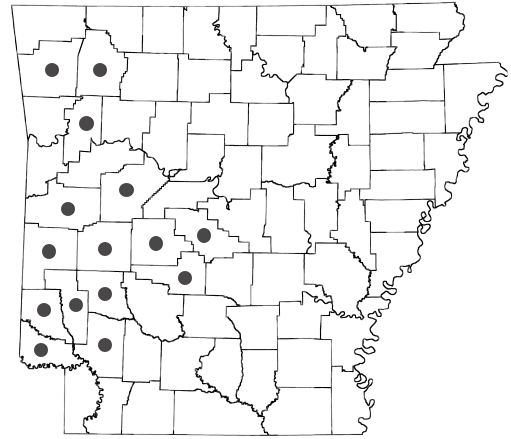
LAMIACEAE
Monarda fistulosa L.
var. stipitatoglandulosa (Waterf.) Scora
 Ouachita beebalm, wild bergamot



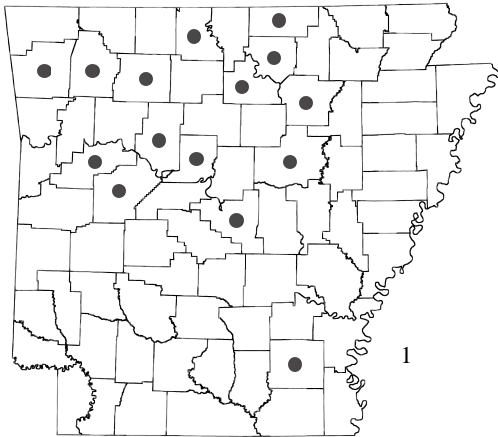
LAMIACEAE
Monarda luteola Singhurst & W.C.Holmes
 yellow-flower beebalm



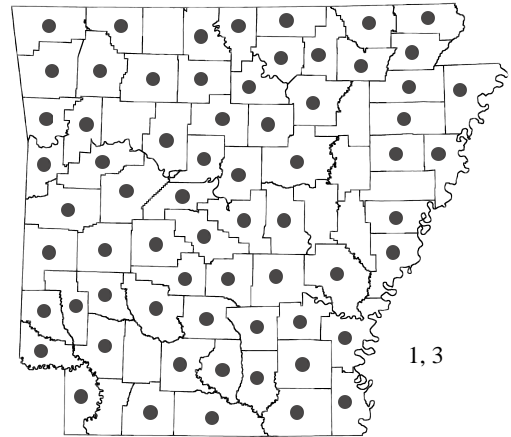
LAMIACEAE
Monarda punctata L.
 spotted beebalm



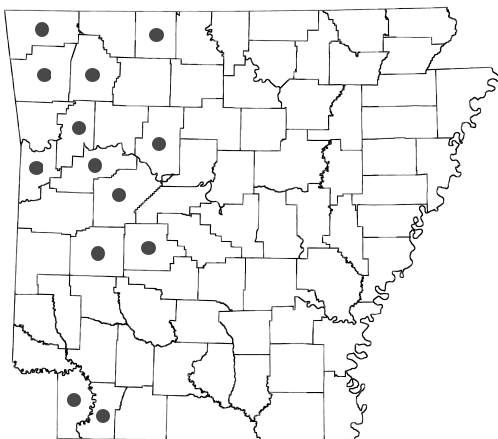
LAMIACEAE
Monarda russeliana Nutt. ex Sims
 Russell's beebalm



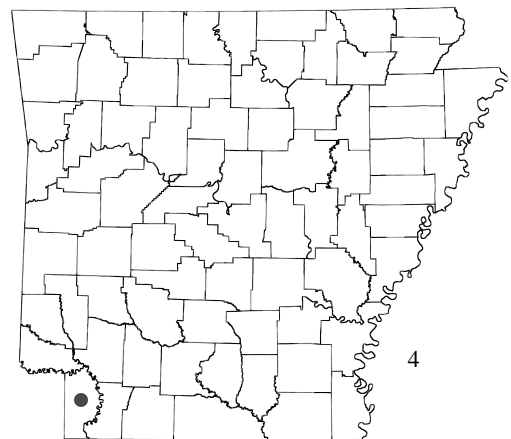
LAMIACEAE
Nepeta cataria L.
 catnip



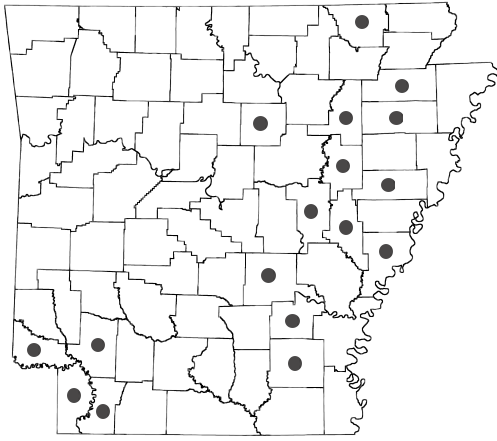
LAMIACEAE
Perilla frutescens (L.) Britton
 beefsteak-plant



LAMIACEAE
Physostegia angustifolia Fernald
 narrow-leaf false dragonhead, narrow-leaf obedient-plant



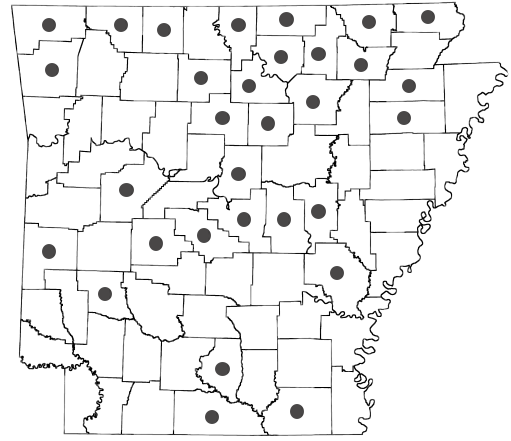
LAMIACEAE
Physostegia digitalis Small
 foxglove false dragonhead, foxglove obedient-plant



LAMIACEAE

Physostegia intermedia (Nutt.) Engelm. & A.Gray

slender false dragonhead, slender obedient-plant

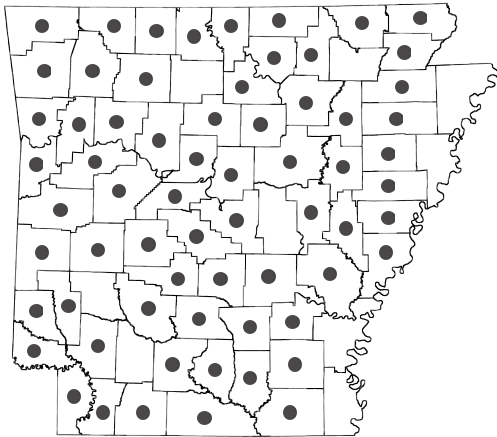


LAMIACEAE

Physostegia virginiana (L.) Benth.

subsp. praemorsa (Shinners) P.D.Cantino

obedient-plant, false dragonhead

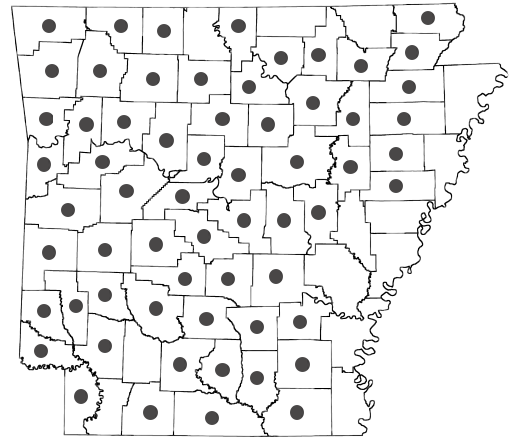


LAMIACEAE

Prunella vulgaris L.

subsp. lanceolata (W.P.C.Barton) Hultén

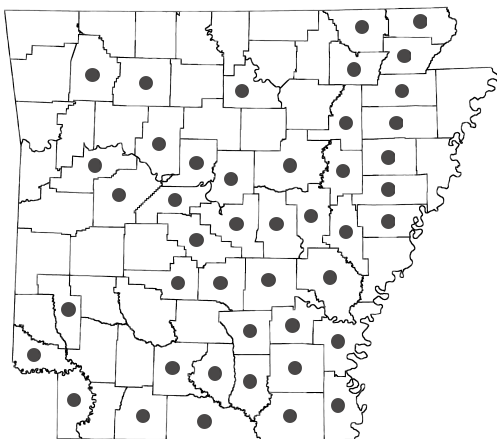
heal-all, self-heal



LAMIACEAE

Pycnanthemum albescens Torr. & A.Gray

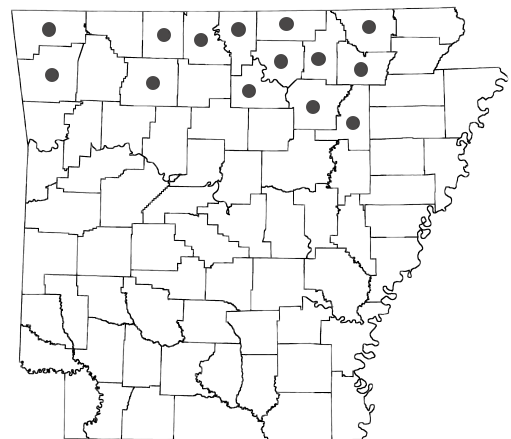
white-leaf mountain-mint



LAMIACEAE

Pycnanthemum muticum (Michx.) Pers.

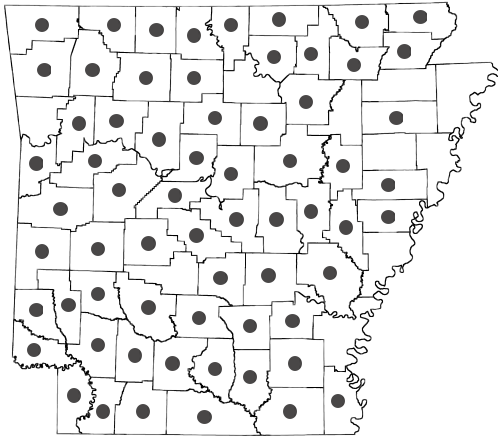
short-tooth mountain-mint, clustered mountain-mint



LAMIACEAE

Pycnanthemum pilosum Nutt.

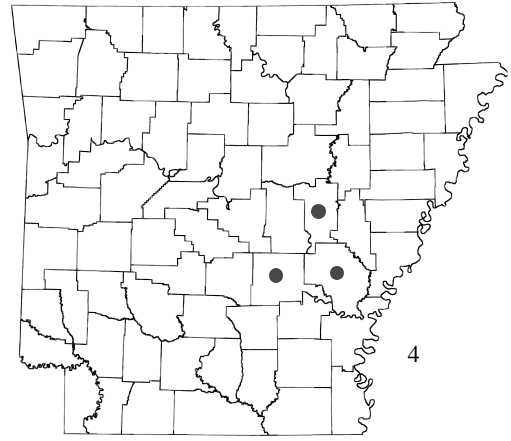
hairy mountain-mint



LAMIACEAE

***Pycnanthemum tenuifolium* Schrad.**

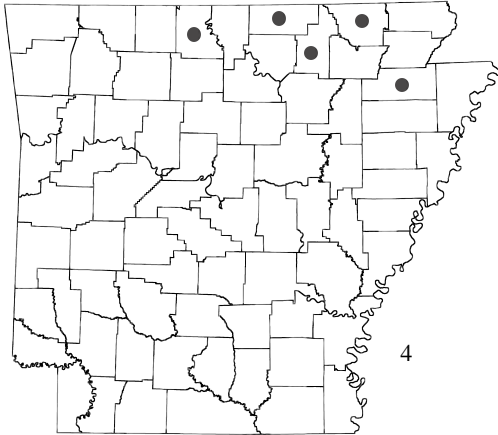
slender mountain-mint, narrow-leaf mountain-mint



LAMIACEAE

***Pycnanthemum verticillatum* (Michx.) Pers.**

whorled mountain-mint

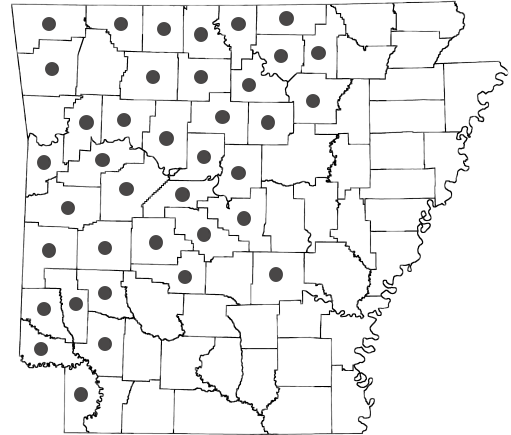


LAMIACEAE

***Pycnanthemum virginianum* (L.) T.Durand & B.D.Jacks. ex B.L.**

Rob. & Fernald

Virginia mountain-mint



LAMIACEAE

***Salvia azurea* Michx. ex Lam.**

var. *grandiflora* Benth.

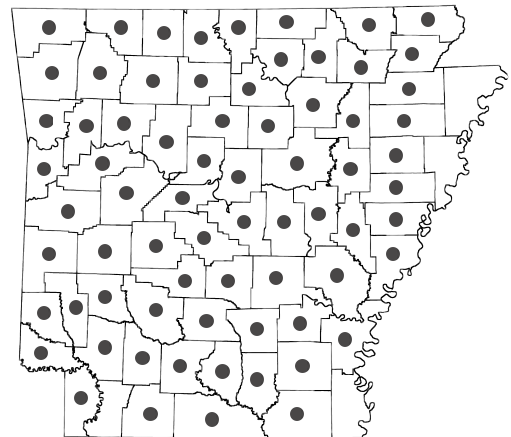
blue sage



LAMIACEAE

***Salvia coccinea* Buc'hoz ex Etl.**

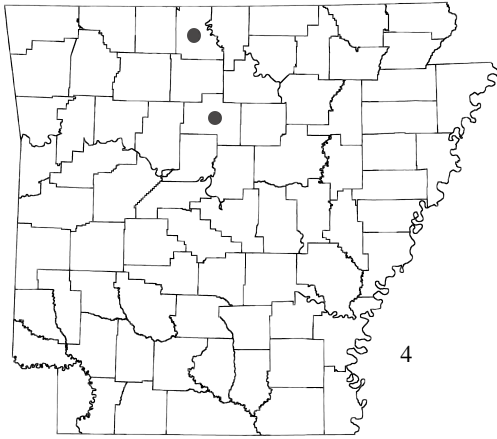
blood sage, scarlet sage



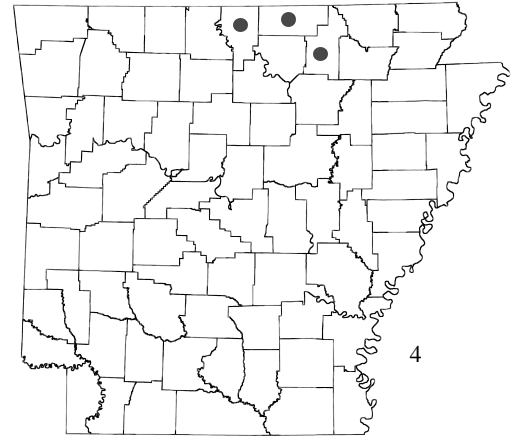
LAMIACEAE

***Salvia lyrata* L.**

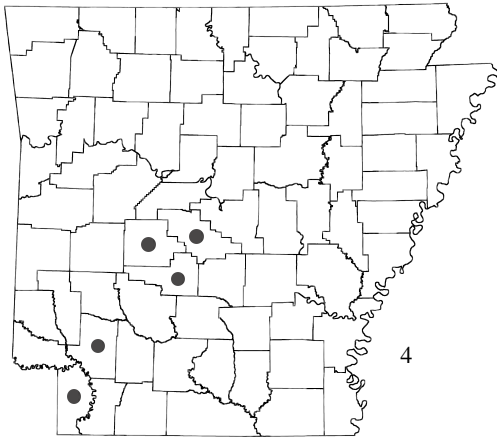
lyre-leaf sage, cancer-weed



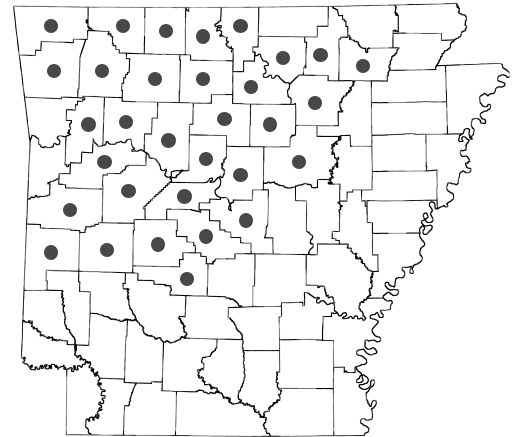
LAMIACEAE
Salvia reflexa Hornem.
 Rocky Mountain sage, lance-leaf sage



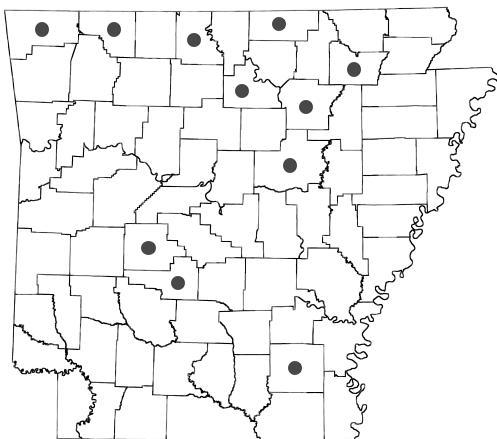
LAMIACEAE
Scutellaria bushii Britton
 Bush's skullcap



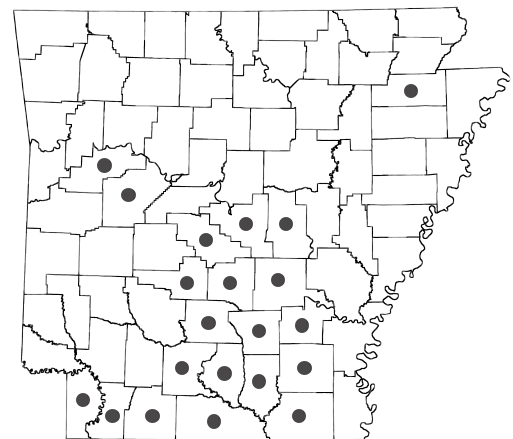
LAMIACEAE
Scutellaria cardiophylla Engelm. & A.Gray
 Gulf skullcap, heart-leaf skullcap



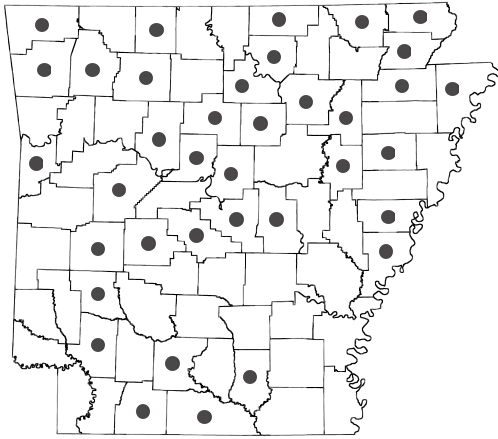
LAMIACEAE
Scutellaria elliptica Muhl. ex Spreng.
var. elliptica
 hairy skullcap



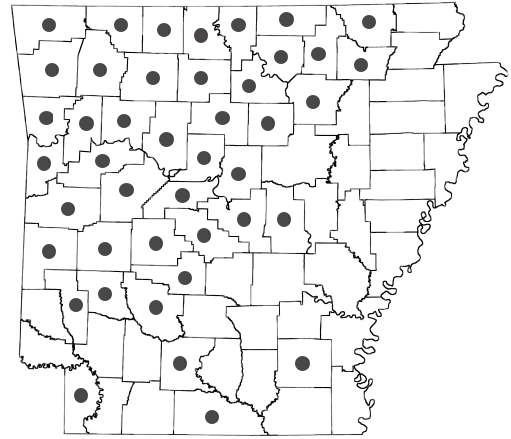
LAMIACEAE
Scutellaria incana Biehler
var. incana
 hoary skullcap



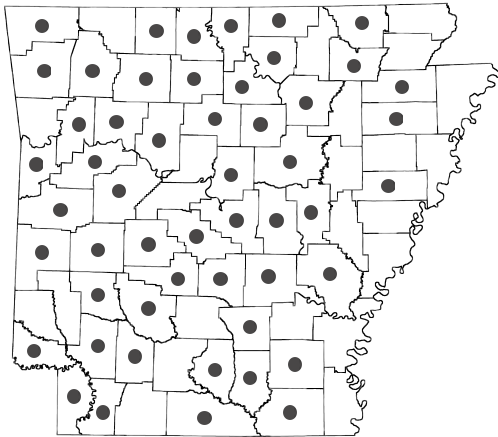
LAMIACEAE
Scutellaria integrifolia L.
 rough skullcap



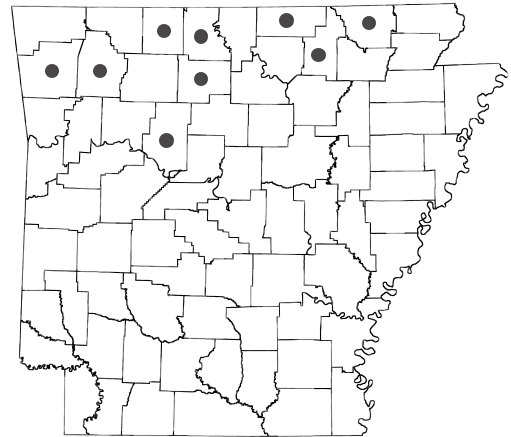
LAMIACEAE
Scutellaria lateriflora L.
 mad-dog skullcap



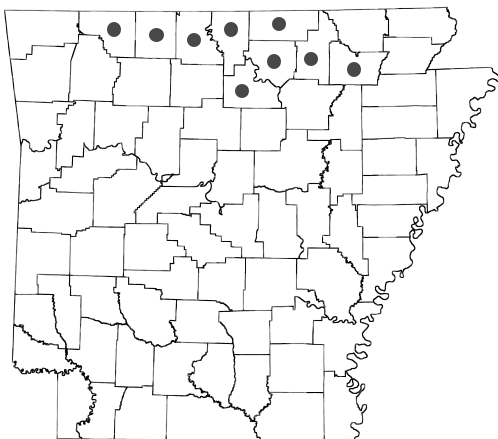
LAMIACEAE
Scutellaria ovata Hill
 heart-leaf skullcap



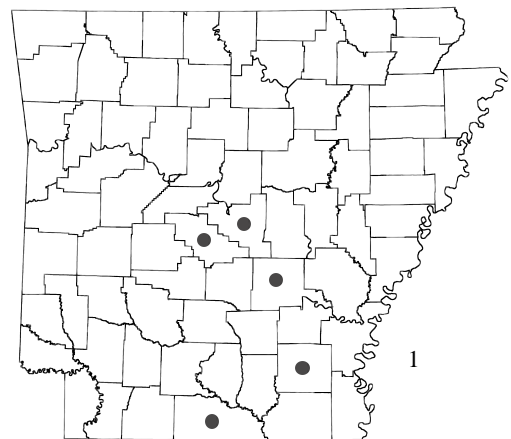
LAMIACEAE
Scutellaria parvula Michx.
var. australis Fassett
 southern skullcap



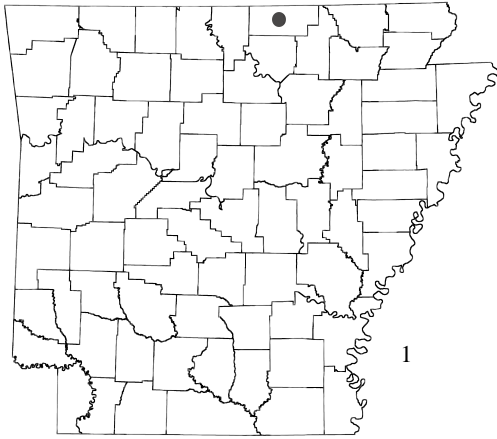
LAMIACEAE
Scutellaria parvula Michx.
var. missouriensis (Torr.) Goodman & C.A.Lawson
 glade skullcap



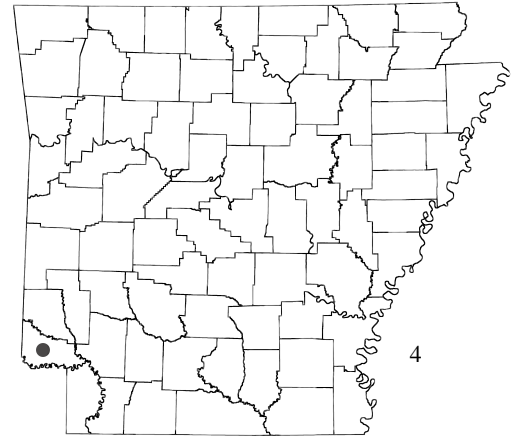
LAMIACEAE
Scutellaria parvula Michx.
var. parvula
 small skullcap



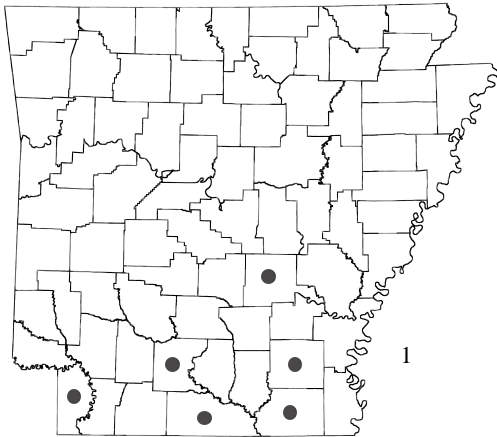
LAMIACEAE
Scutellaria racemosa Pers.
 South American skullcap



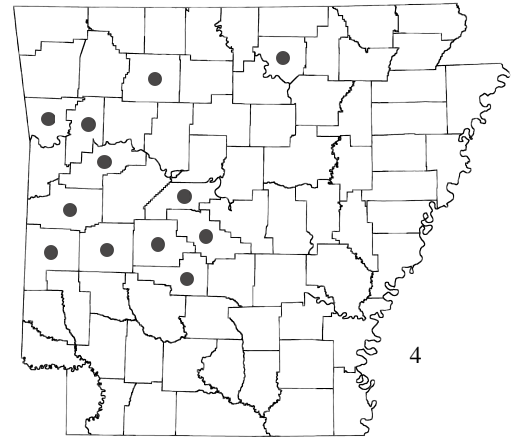
LAMIACEAE
Sideritis montana L.
 ironwort



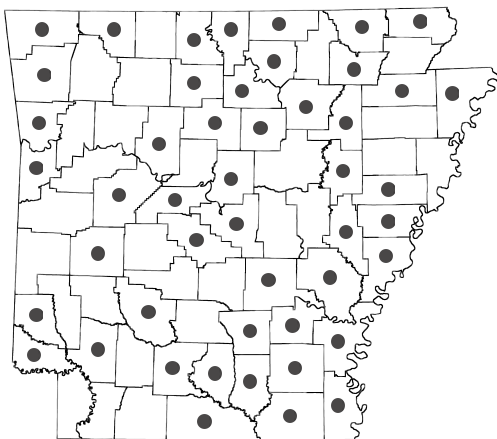
LAMIACEAE
Stachys crenata Raf.
 shade betony, mouse's-ear



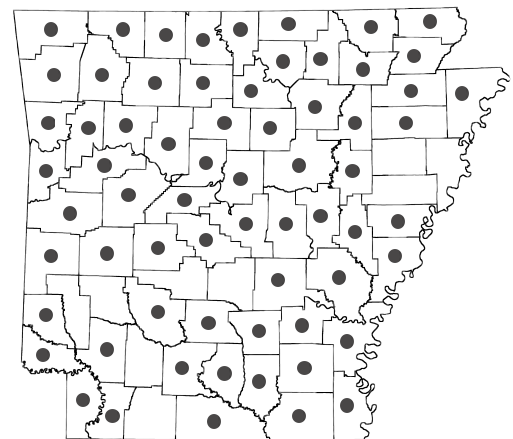
LAMIACEAE
Stachys floridana Shuttlew. ex Benth.
 Florida betony



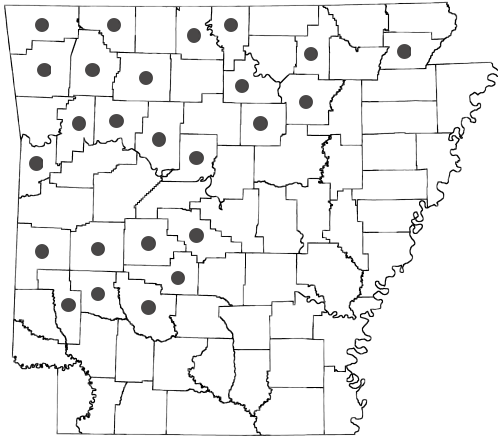
LAMIACEAE
Stachys iltisii J.Nelson
 Ouachita hedge-nettle



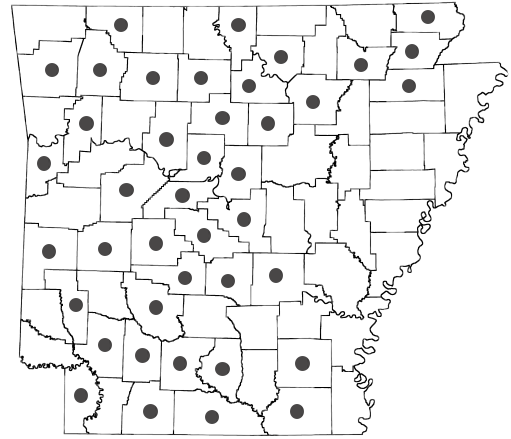
LAMIACEAE
Stachys tenuifolia Willd.
 smooth hedge-nettle



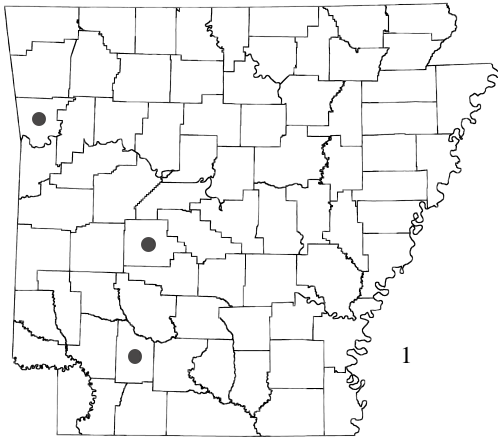
LAMIACEAE
Teucrium canadense L.
var. canadense
 American germander, wood sage



LAMIACEAE
Trichostema brachiatum L.
 false pennyroyal, flux-weed



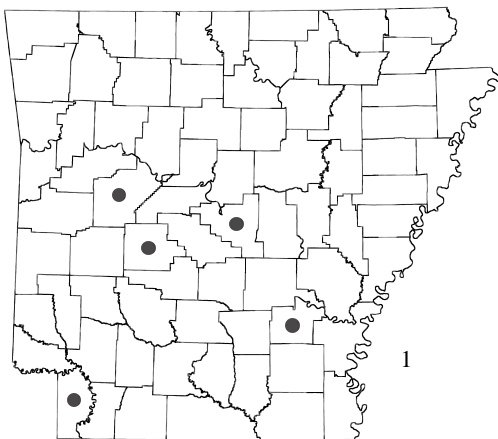
LAMIACEAE
Trichostema dichotomum L.
 forked blue-curly



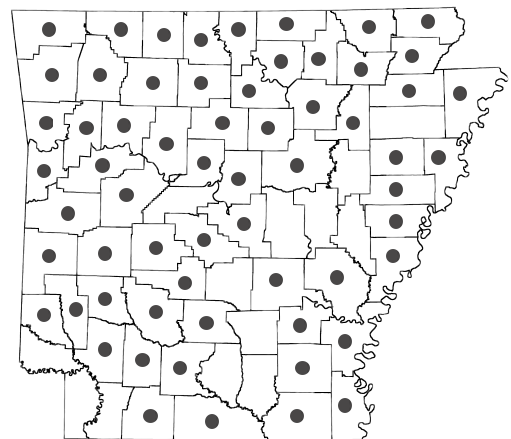
LAMIACEAE
Vitex agnus-castus L.
 chaste-tree



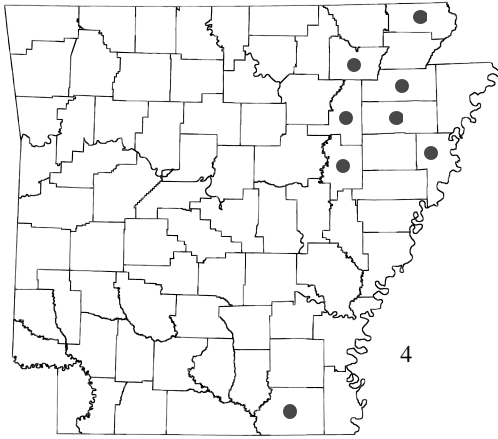
LAMIACEAE
Vitex negundo L.
var. cannabifolia (Sieb. & Zucc.) Hand.-Maz.
 negundo chaste-tree, hemp-tree



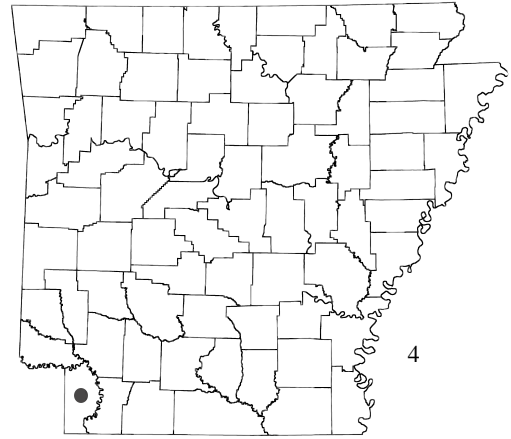
LAMIACEAE
Vitex negundo L.
var. negundo
 negundo chaste-tree



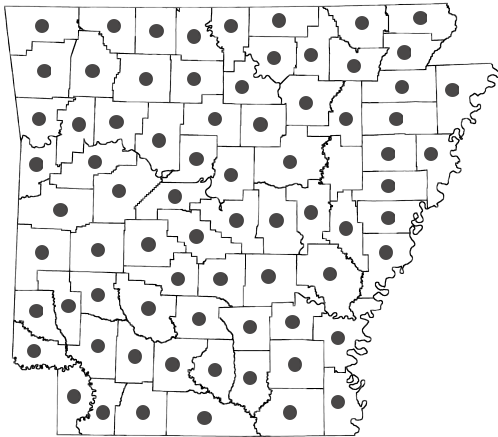
LAURACEAE
Lindera benzoin (L.) Blume
 spicebush



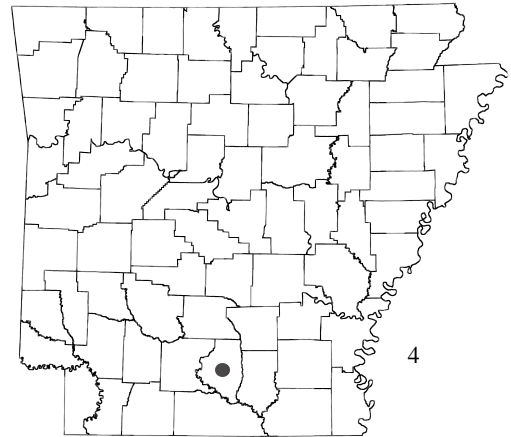
LAURACEAE
Lindera melissifolia (Walter) Blume
 pondberry



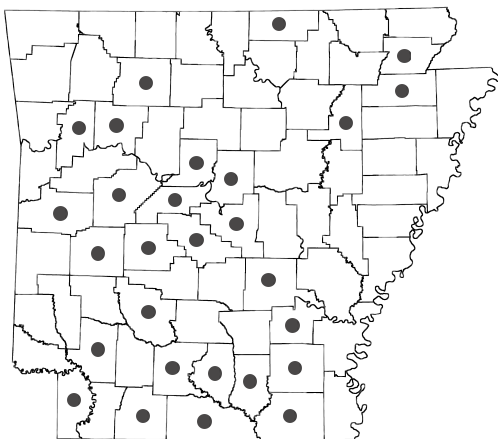
LAURACEAE
Persea borbonia (L.) Spreng.
 red bay



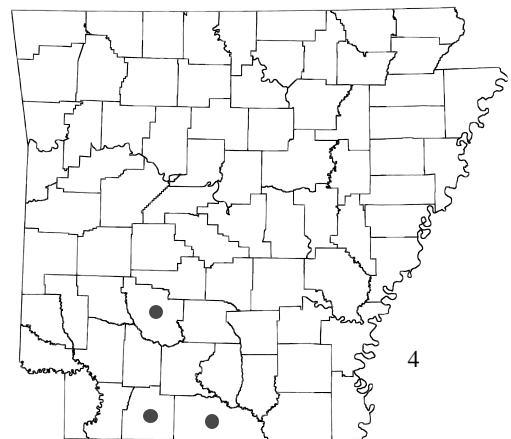
LAURACEAE
Sassafras albidum (Nutt.) Nees
 sassafras



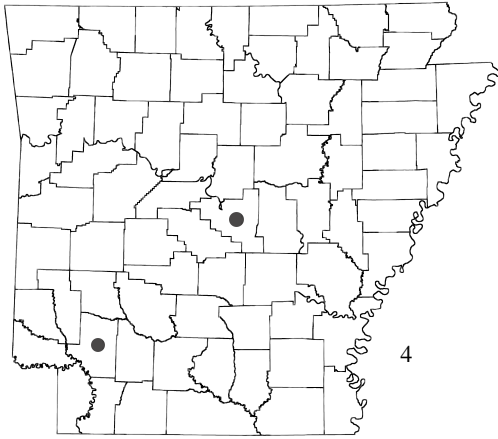
LENTIBULARIACEAE
Utricularia cornuta Michx.
 horned bladderwort



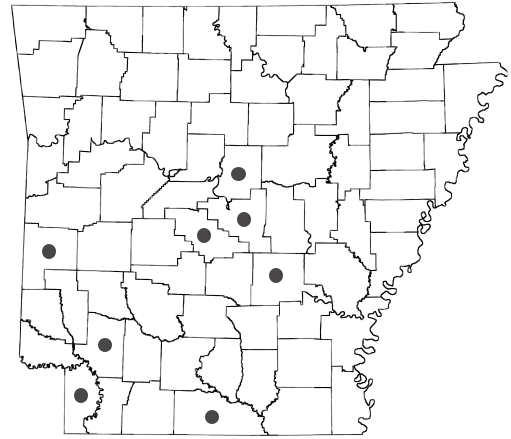
LENTIBULARIACEAE
Utricularia gibba L.
 cone-spur bladderwort



LENTIBULARIACEAE
Utricularia inflata Walter
 swollen bladderwort, floating bladderwort



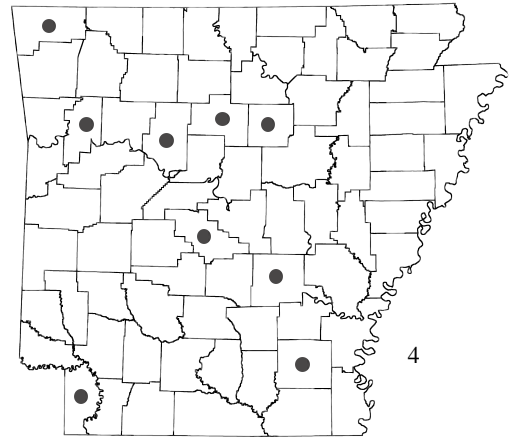
LENTIBULARIACEAE
***Utricularia macrorhiza* Leconte**
 greater bladderwort, common bladderwort



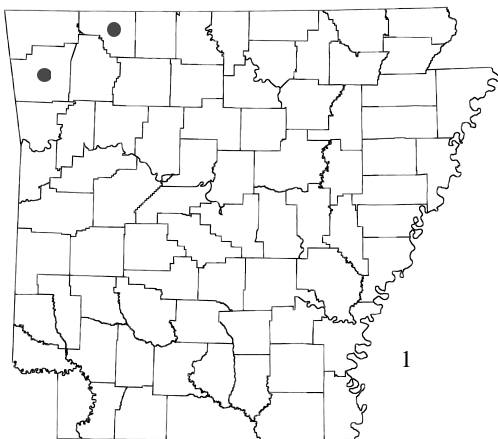
LENTIBULARIACEAE
***Utricularia radiata* Small**
 small swollen bladderwort, small floating bladderwort



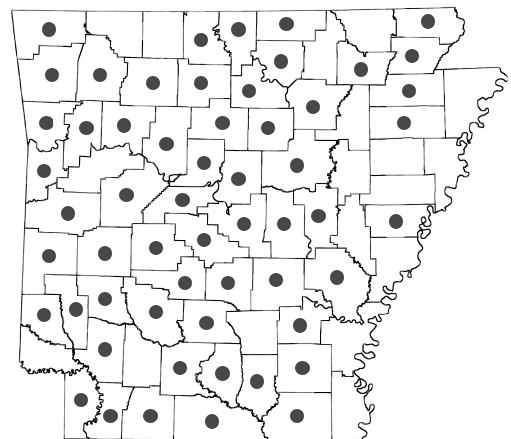
LENTIBULARIACEAE
***Utricularia striata* Leconte ex Torr.**
 striped bladderwort



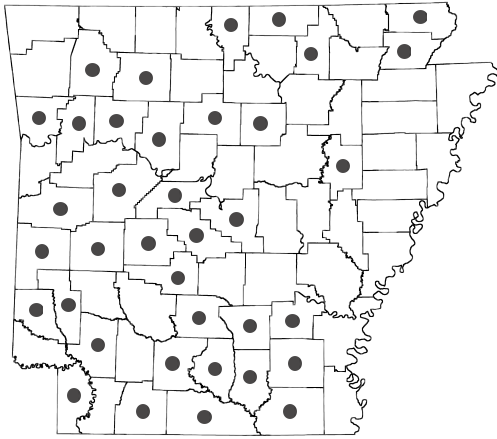
LENTIBULARIACEAE
***Utricularia subulata* L.**
 zigzag bladderwort, slender bladderwort



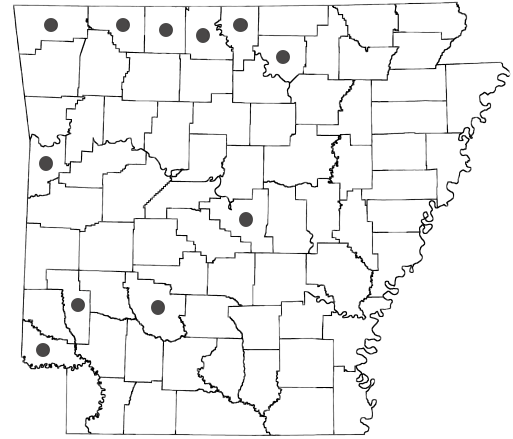
LINACEAE
***Linum lewisii* Pursh**
 var. **lewisii**
 prairie flax



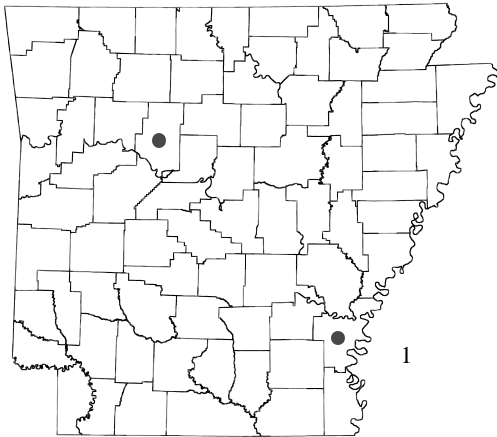
LINACEAE
***Linum medium* (Planch.) Britton**
 var. **texanum** (Planch.) Fernald
 common yellow flax



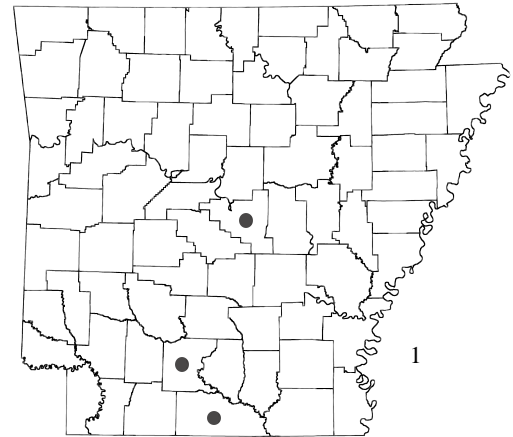
LINACEAE
Linum striatum Walter
 ridge-stem yellow flax



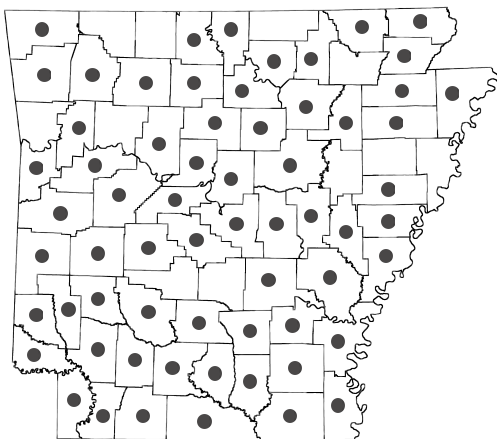
LINACEAE
Linum sulcatum Riddell
 grooved yellow flax



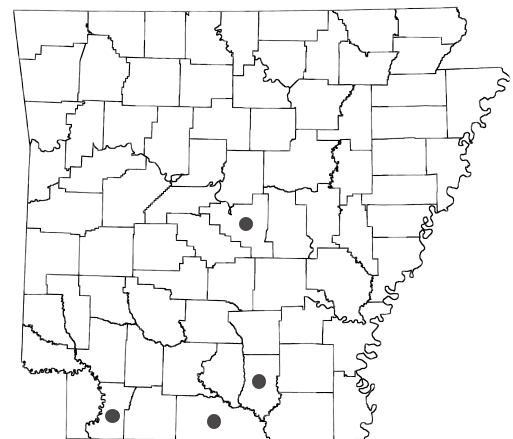
LINACEAE
Linum usitatissimum L.
 flax, linseed



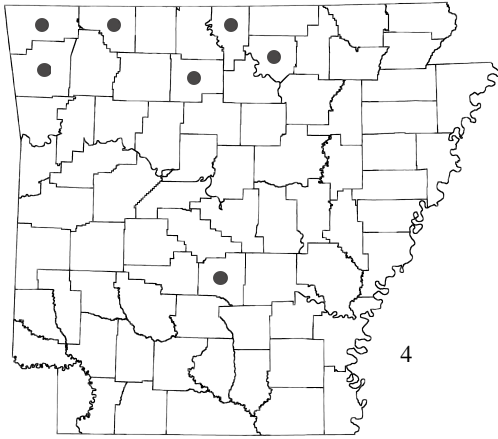
LINDERNIACEAE
Lindernia crustacea (L.) F.Muell.
 Malaysian false pimpernel



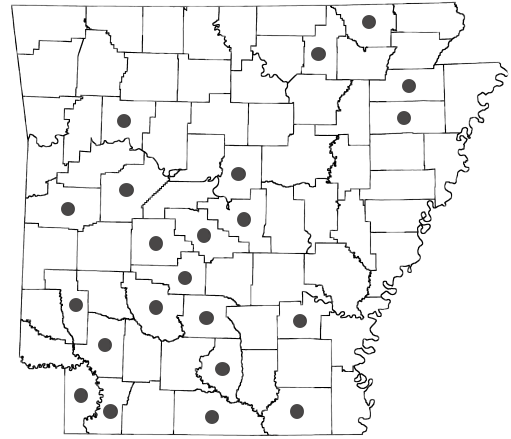
LINDERNIACEAE
Lindernia dubia (L.) Pennell
 false pimpernel



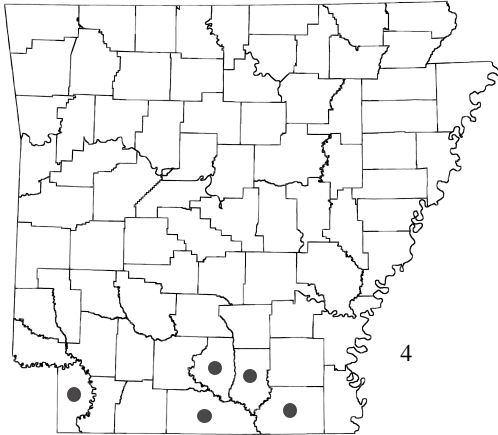
LINDERNIACEAE
Micranthemum umbrosum (J.F.Gmel) S.F.Blake
 shade mudflower



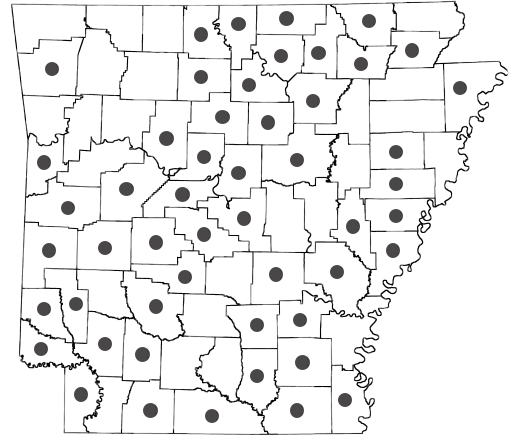
LOASACEAE
***Mentzelia oligosperma* Nutt. ex Sims**
stick-leaf, chicken-thief



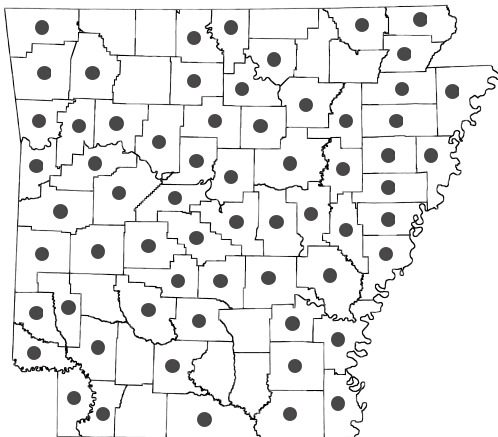
LOGANIACEAE
***Mitreola petiolata* (J.F.Gmel.) Torr. & A.Gray**
lax hornpod



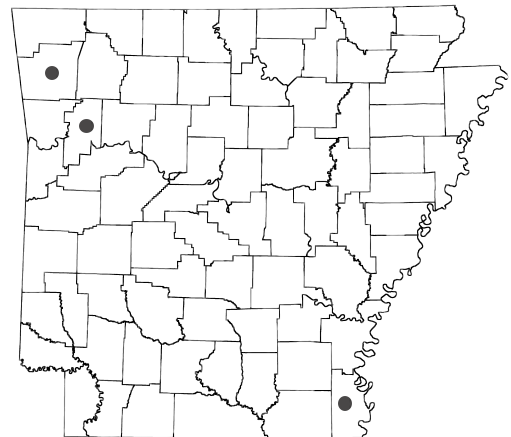
LOGANIACEAE
***Mitreola sessilifolia* (J.F.Gmel.) G.Don**
swamp hornpod



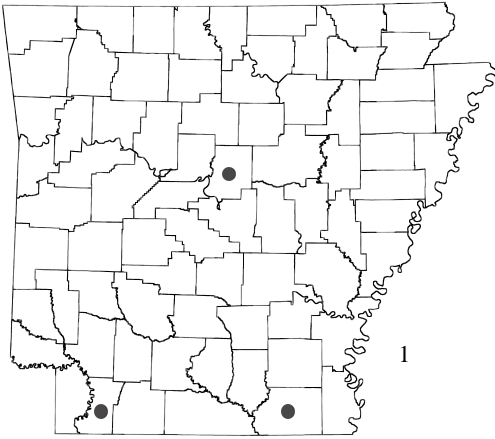
LOGANIACEAE
***Spigelia marilandica* L.**
Indian-pink, pinkroot



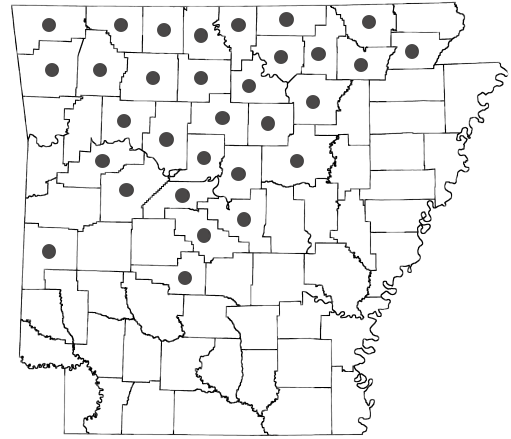
LYTHRACEAE
***Ammannia coccinea* Rottb.**
toothcup



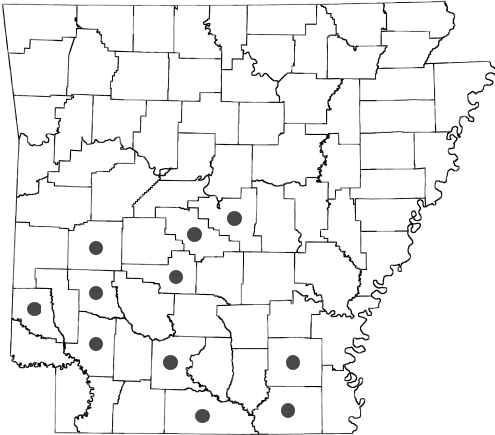
LYTHRACEAE
***Ammannia robusta* Heer & Regel**
toothcup



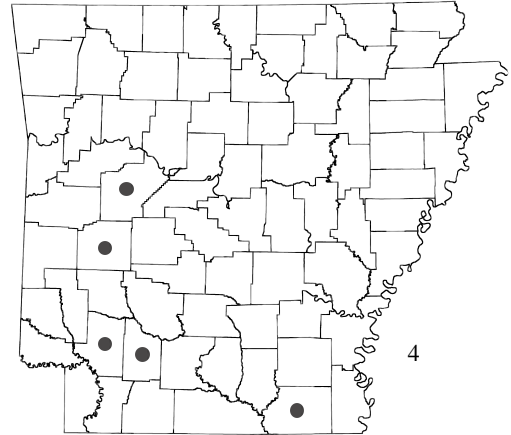
LYTHRACEAE
Cuphea carthagenensis (Jacq.) J.F.Macbr.
 Colombian waxweed



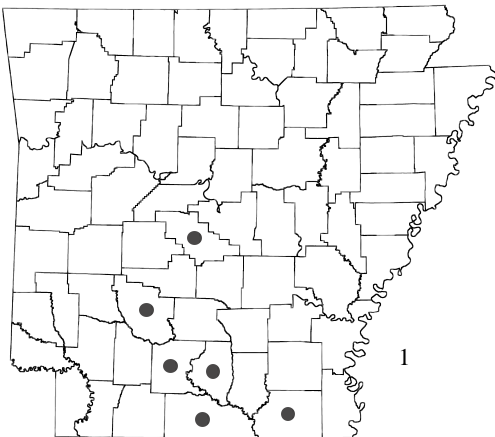
LYTHRACEAE
Cuphea viscosissima Jacq.
 blue waxweed



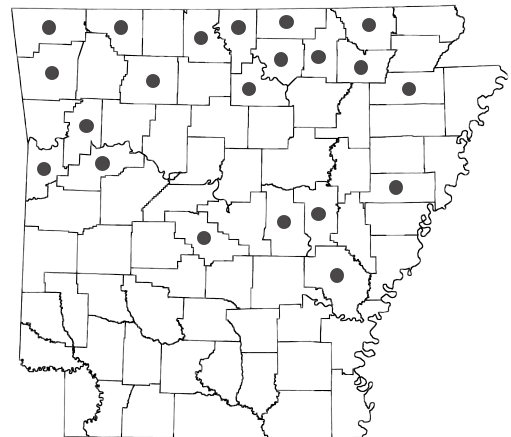
LYTHRACEAE
Decodon verticillatus (L.) Elliott
 swamp-loosestrife



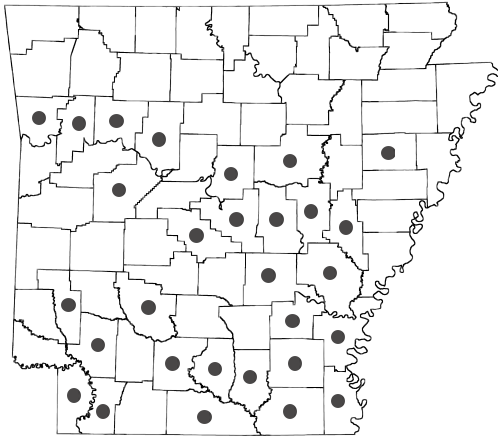
LYTHRACEAE
Didiplis diandra (Nutt. ex DC.) A.W.Wood
 water-purslane



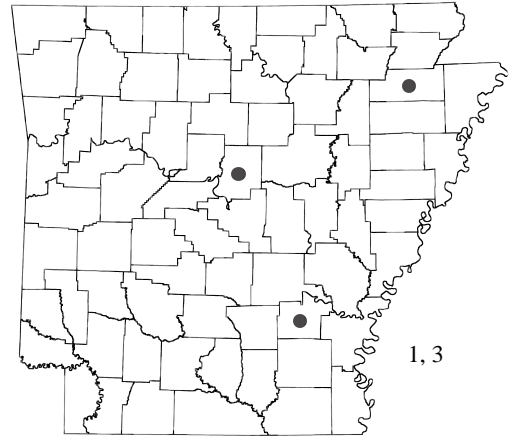
LYTHRACEAE
Lagerstroemia indica L.
 crape-myrtle



LYTHRACEAE
Lythrum alatum Pursh
var. alatum
 winged loosestrife



LYTHRACEAE
Lythrum alatum Pursh
var. lanceolatum (Elliott) Rothr.
winged loosestrife



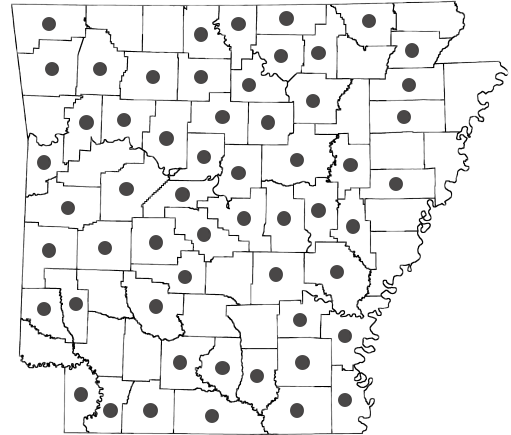
LYTHRACEAE
Lythrum salicaria L.
purple loosestrife

1, 3

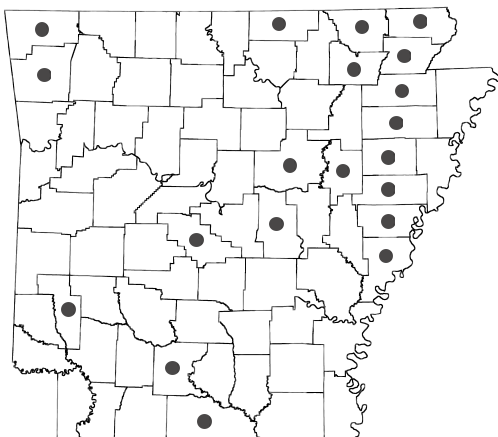


LYTHRACEAE
Rotala indica (Willd.) Koehne
Indian toothcup

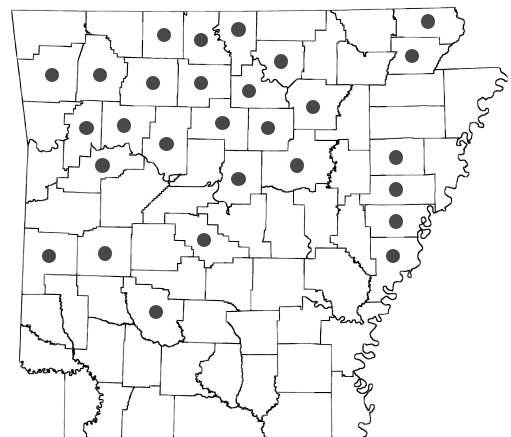
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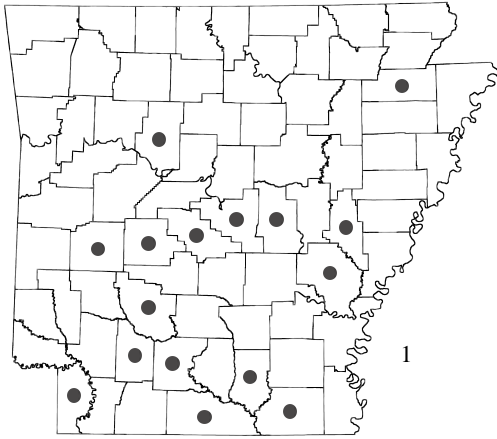
LYTHRACEAE
Rotala ramosior (L.) Koehne
toothcup



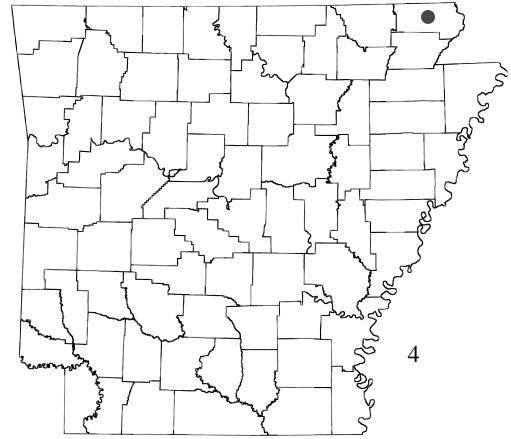
MAGNOLIACEAE
Liriodendron tulipifera L.
tulip-tree, tulip-poplar, yellow-poplar



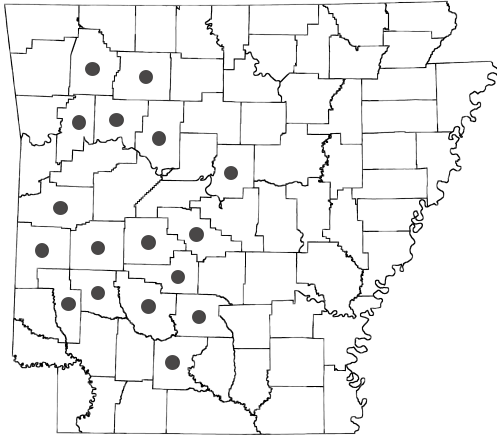
MAGNOLIACEAE
Magnolia acuminata (L.) L.
cucumber magnolia, cucumber-tree



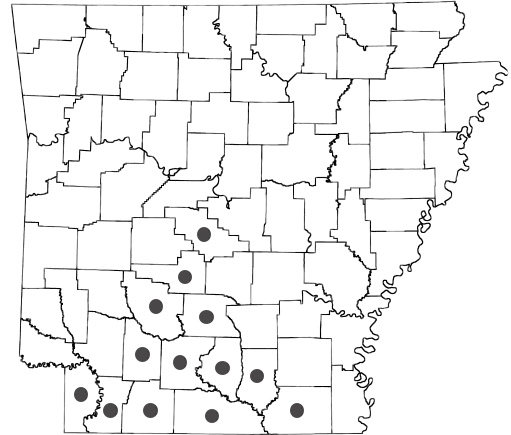
MAGNOLIACEAE
Magnolia grandiflora L.
 southern magnolia



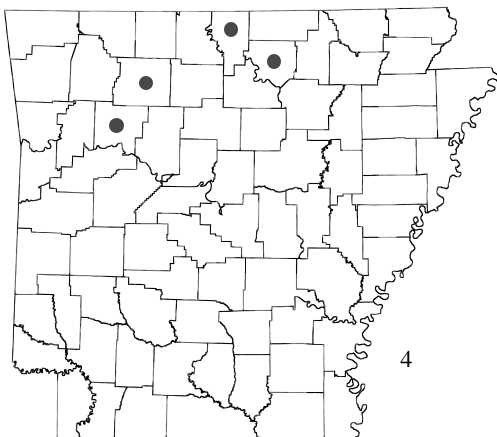
MAGNOLIACEAE
Magnolia macrophylla Michx.
 big-leaf magnolia



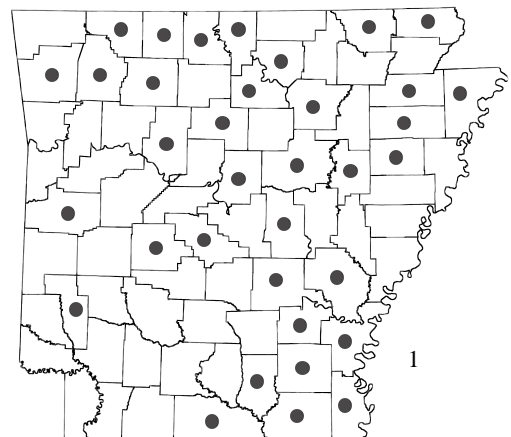
MAGNOLIACEAE
Magnolia tripetala (L.) L.
 umbrella magnolia, umbrella-tree



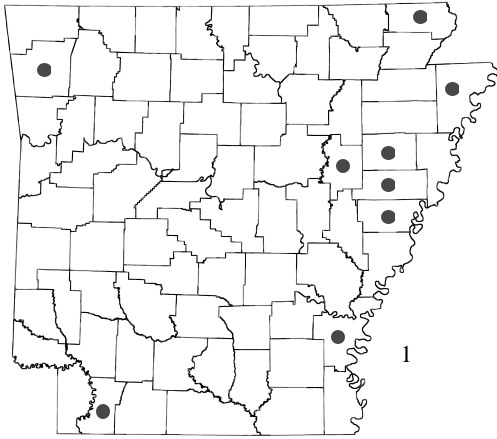
MAGNOLIACEAE
Magnolia virginiana L.
 sweet-bay magnolia



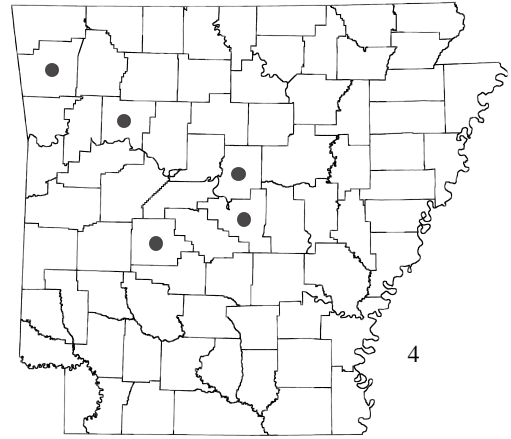
MALVACEAE
Abutilon fruticosum Guill. & Perr.
 Texas Indian-mallow



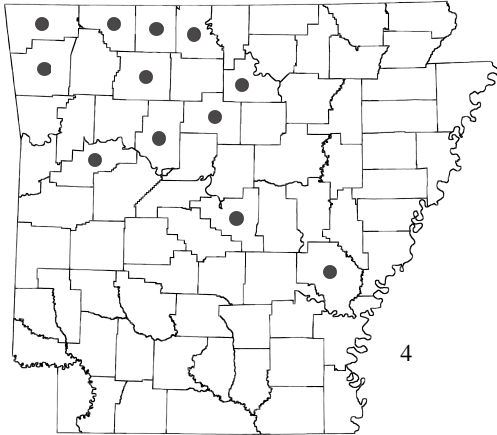
MALVACEAE
Abutilon theophrasti Medik.
 velvetleaf, Indian-mallow



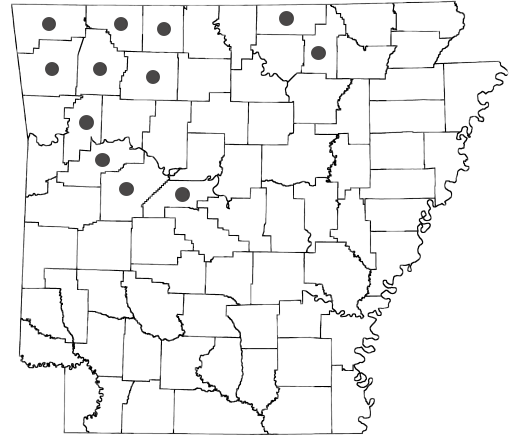
MALVACEAE
Anoda cristata (L.) Schtdl.
 spurred anoda



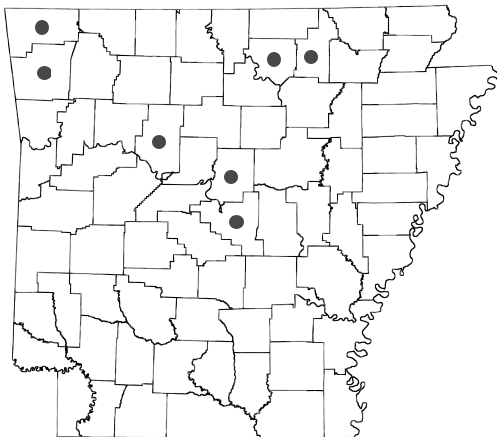
MALVACEAE
Callirhoe alcaeoides (Michx.) A.Gray
 plains poppy-mallow



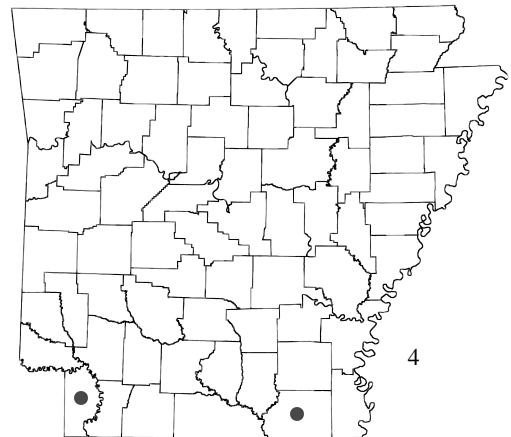
MALVACEAE
Callirhoe bushii Fernald
 Bush's poppy-mallow



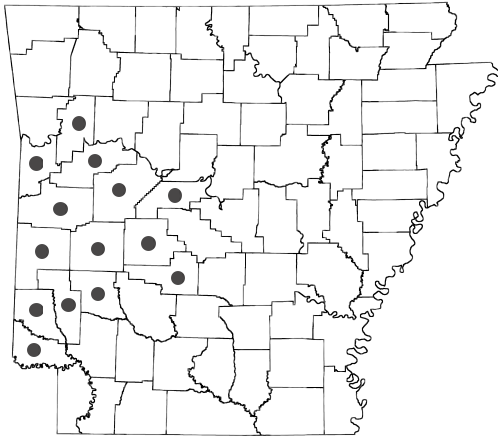
MALVACEAE
Callirhoe digitata Nutt.
 winecup, fringed poppy-mallow



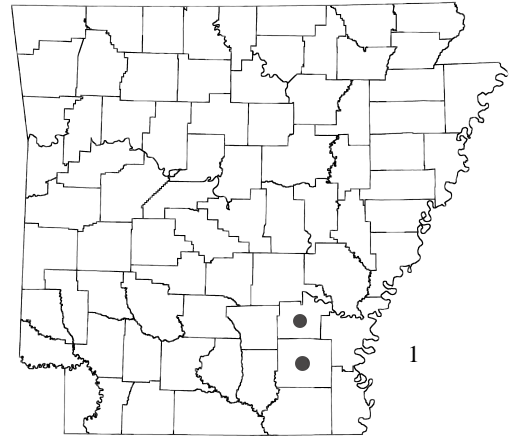
MALVACEAE
Callirhoe involucrata (Torr. & A.Gray) A.Gray
var. involucrata
 purple poppy-mallow



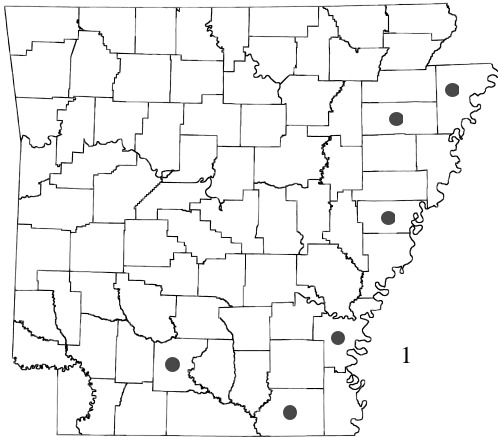
MALVACEAE
Callirhoe papaver (Cav.) A.Gray
 woodland poppy-mallow



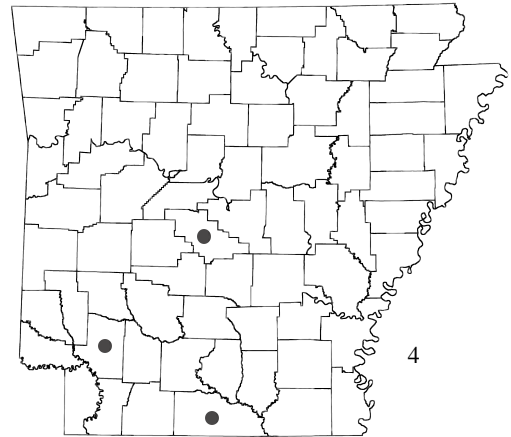
MALVACEAE
Callirhoe pedata (Nutt. ex Hook.) A.Gray
 winecup



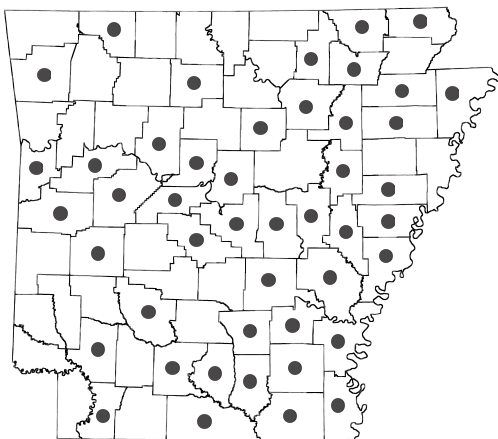
MALVACEAE
Firmiana simplex (L.) W.Wight
 Chinese parasol-tree



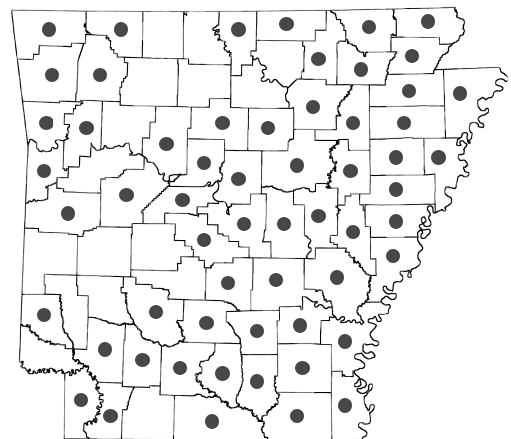
MALVACEAE
Gossypium hirsutum L.
 cotton



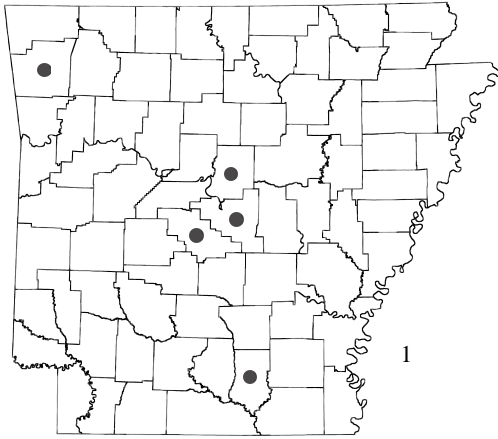
MALVACEAE
Hibiscus coccineus Walter
 scarlet rose-mallow



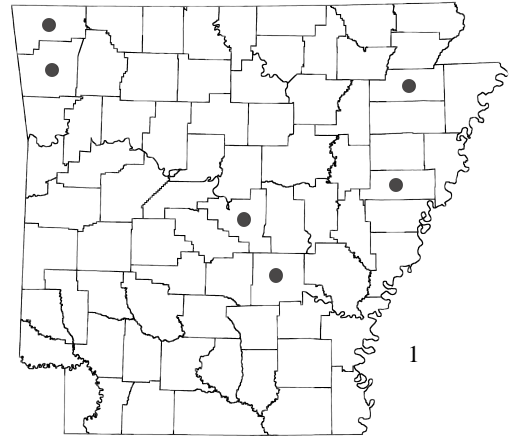
MALVACEAE
Hibiscus laevis All.
 halberd-leaf rose-mallow



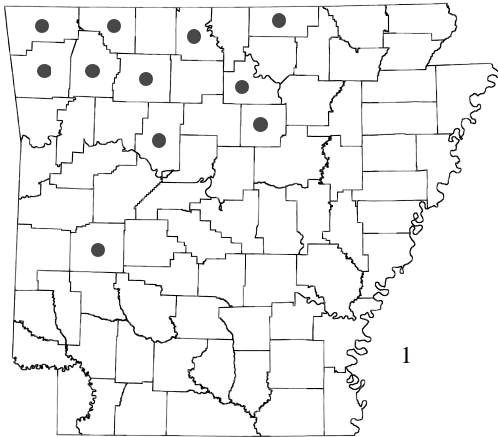
MALVACEAE
Hibiscus lasiocarpus Cav.
 rose-mallow



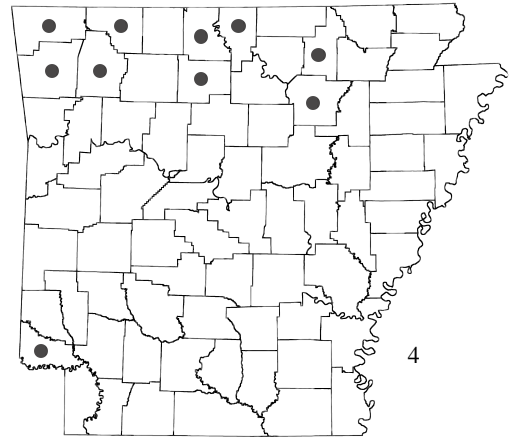
MALVACEAE
Hibiscus syriacus L.
 rose-of-Sharon



MALVACEAE
Hibiscus trionum L.
 flower-of-an-hour



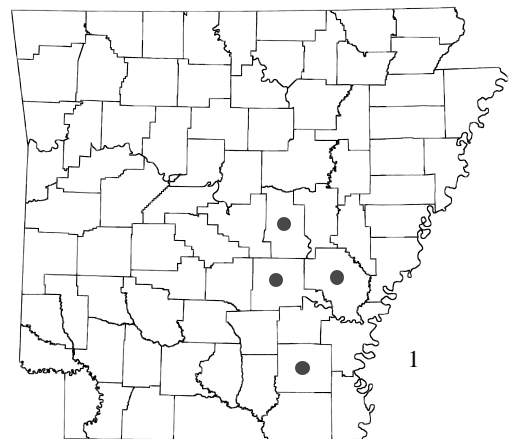
MALVACEAE
Malva neglecta Wallr.
 common mallow, cheeses



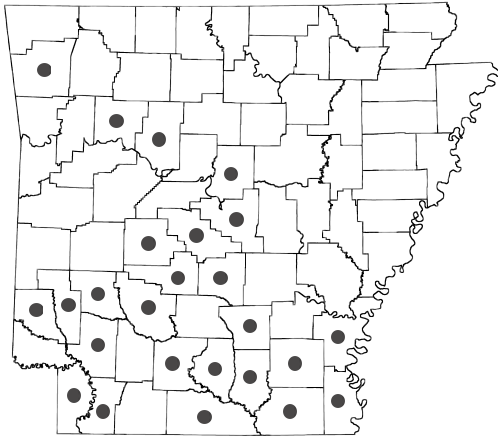
MALVACEAE
Malvastrum hispidum (Pursh) Hochr.
 yellow false mallow



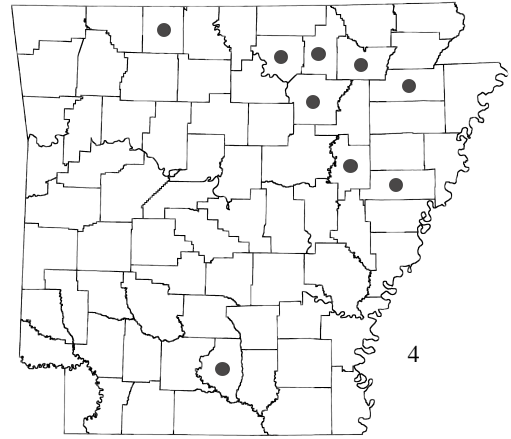
MALVACEAE
Malva viscosa L.
var. drummondii (Torr. & A.Gray) Schery
 wax-mallow



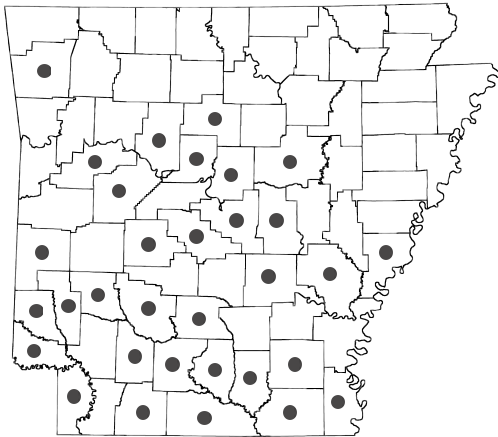
MALVACEAE
Melochia corchorifolia L.
 chocolate-weed



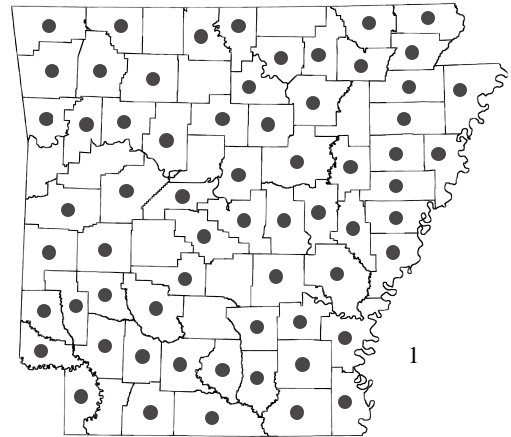
MALVACEAE
Modiola caroliniana (L.) G. Don.
 bristly-mallow



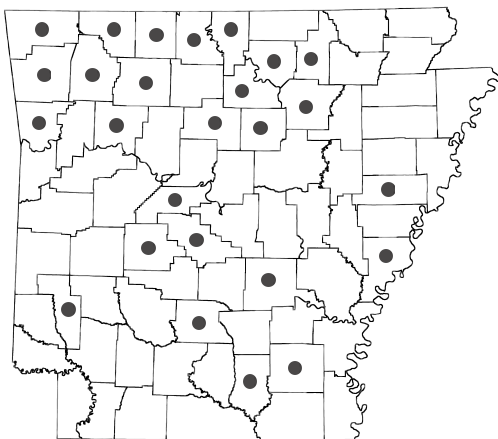
MALVACEAE
Sida elliotii Torr. & A. Gray
 Elliott's sida



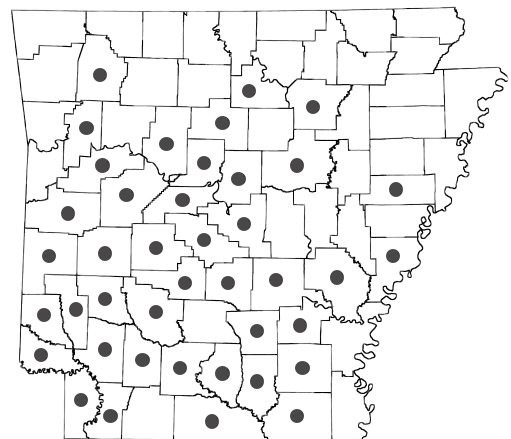
MALVACEAE
Sida rhombifolia L.
 arrow-leaf sida



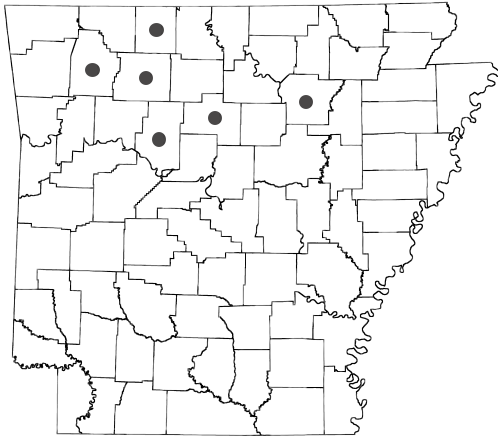
MALVACEAE
Sida spinosa L.
 prickly sida, prickly-mallow



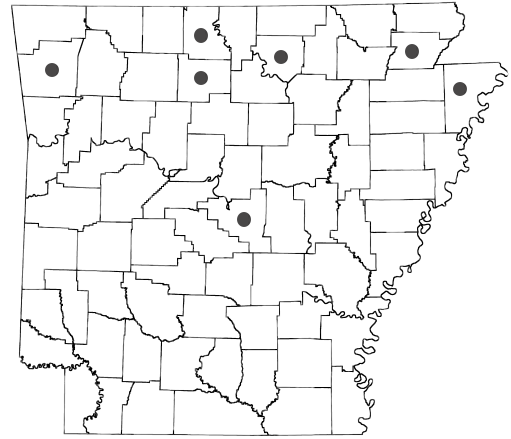
MALVACEAE
Tilia americana L.
var. americana
 American basswood, linden



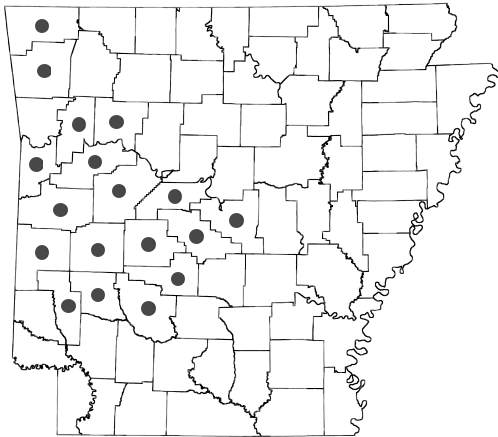
MALVACEAE
Tilia americana L.
var. caroliniana (Mill.) Castigl.
 basswood, linden



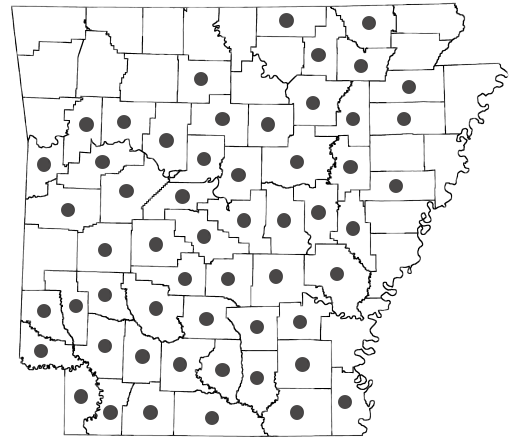
MALVACEAE
Tilia americana L.
var. heterophylla (Vent.) Loudon
 white basswood, linden



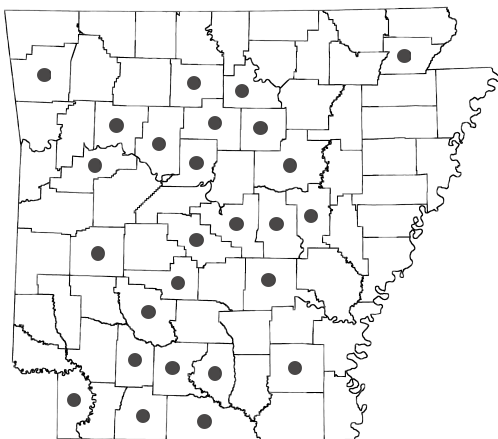
MARTYNIACEAE
Proboscidea louisianica (Mill.) Thell.
 unicorn-plant, devil's-claw



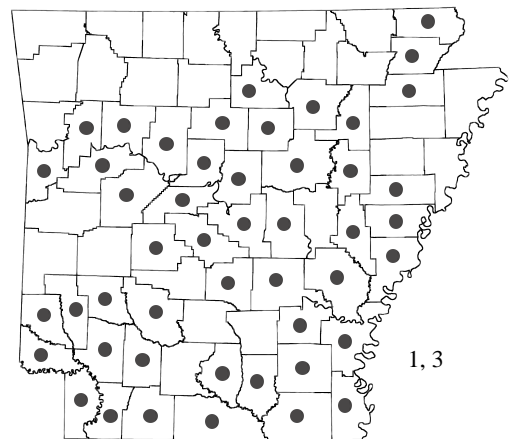
MELASTOMATACEAE
Rhexia mariana L.
var. interior (Pennell) Kral & Bostick
 meadow-beauty



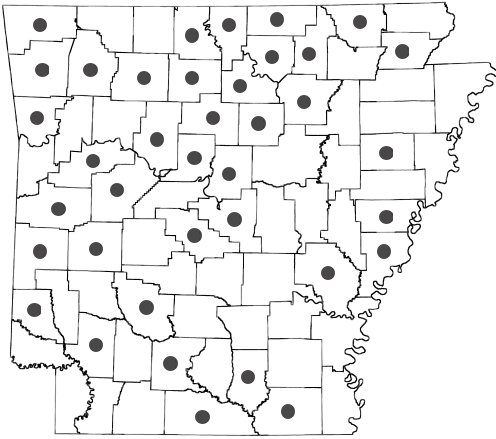
MELASTOMATACEAE
Rhexia mariana L.
var. mariana
 meadow-beauty



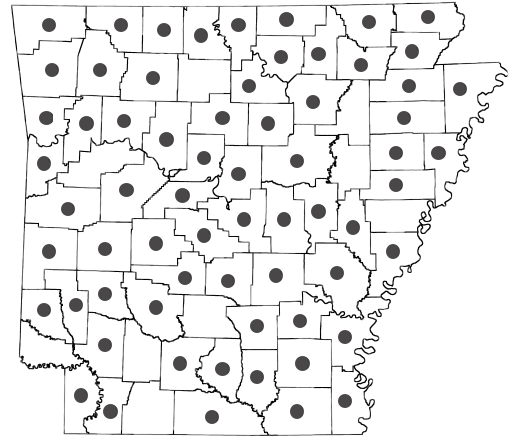
MELASTOMATACEAE
Rhexia virginica L.
 wing-stem meadow-beauty



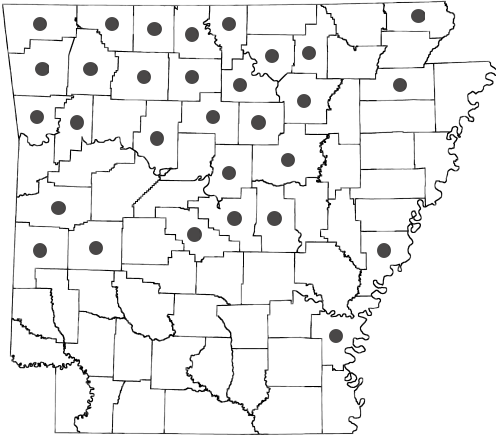
MELIACEAE
Melia azedarach L.
 Chinaberry



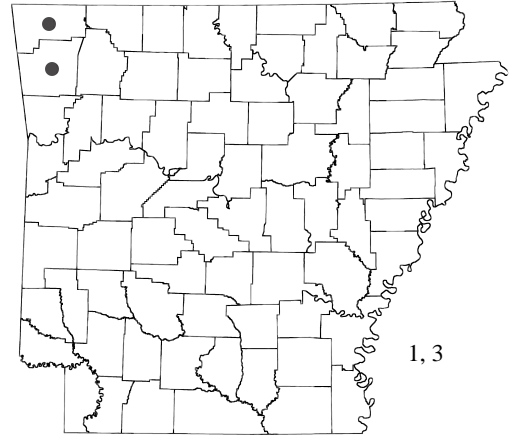
MENISPERMACEAE
Calycocarpum lyonii (Pursh) A.Gray
 cupseed



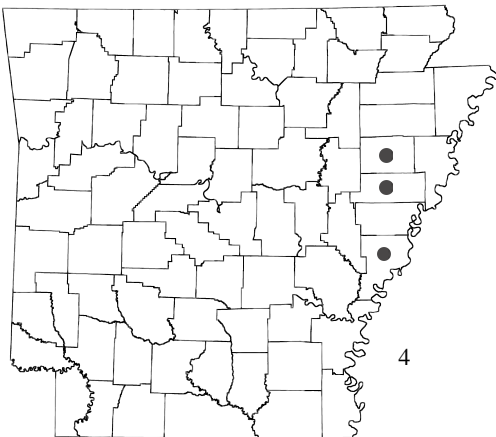
MENISPERMACEAE
Cocculus carolinus (L.) DC.
 Carolina snailseed, Carolina-moonseed



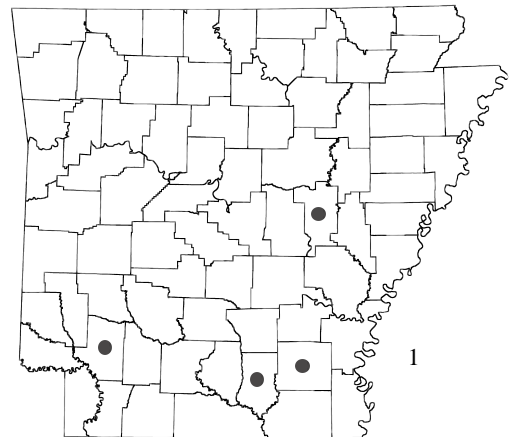
MENISPERMACEAE
Menispermum canadense L.
 moonseed



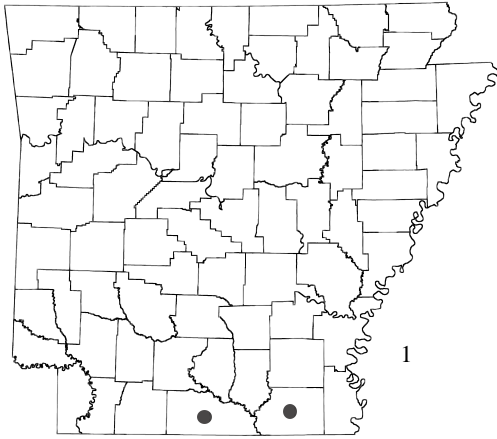
MENYANTHACEAE
Nymphoides peltata (S.G.Gmel.) Kuntze
 yellow floating-heart



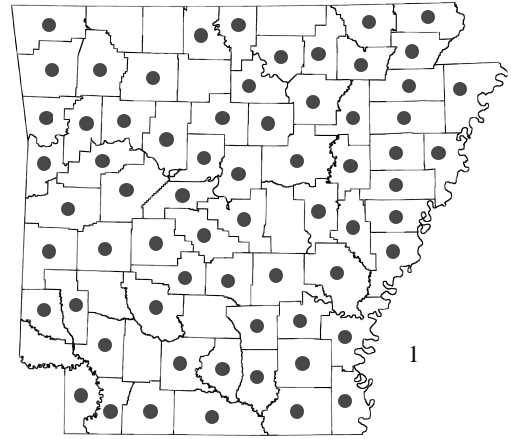
MENYANTHACEAE
Obolaria virginica L.
 Virginia pennywort



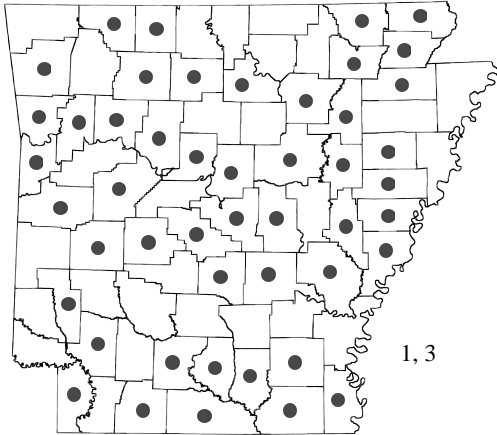
MOLLUGINACEAE
Glinus lotoides L.
 damascisa, sweetjuice



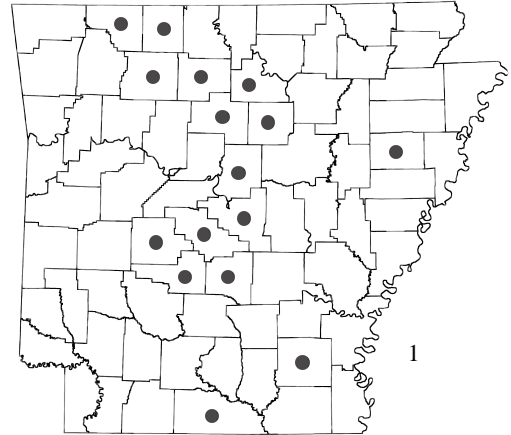
MOLLUGINACEAE
***Glinus radiatus* (Ruiz & Pav.) Rohrb.**
 damascisa, sweetjuice



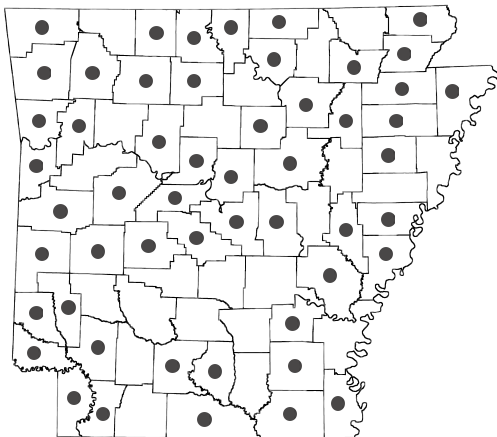
MOLLUGINACEAE
***Mollugo verticillata* L.**
 carpetweed, Indian-chickweed



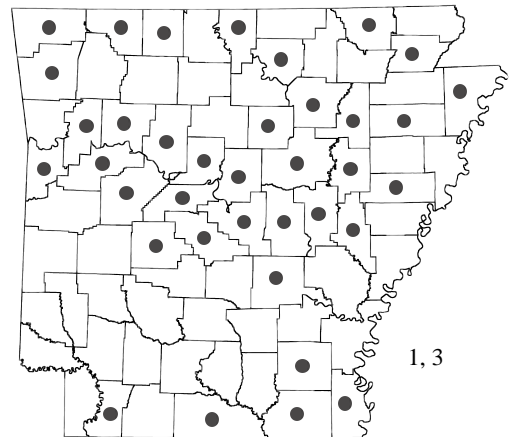
MORACEAE
***Broussonetia papyrifera* (L.) L'Hér. ex Vent.**
 paper-mulberry



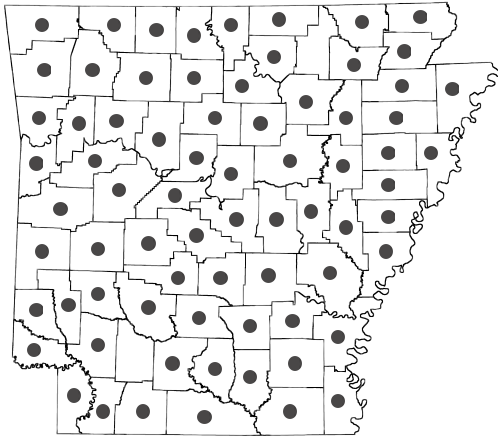
MORACEAE
***Fatoua villosa* (Thunb.) Nakai**
 hairy crabweed, mulberry-weed



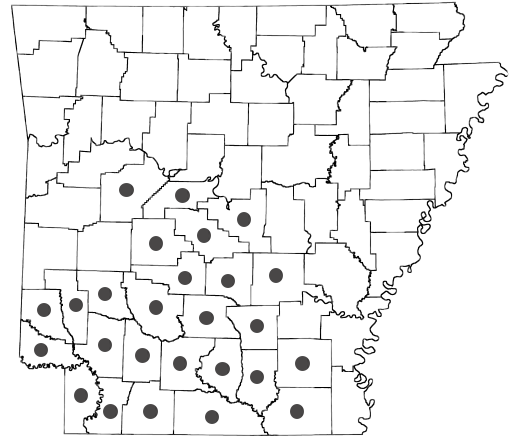
MORACEAE
***Maclura pomifera* (Raf.) C.K.Schneid.**
 Osage-orange, hedge-apple, bois d'arc



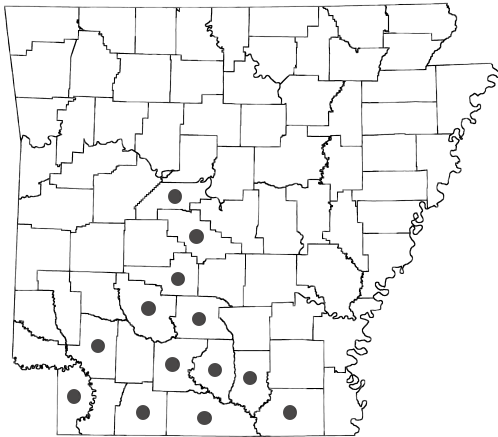
MORACEAE
***Morus alba* L.**
 white mulberry



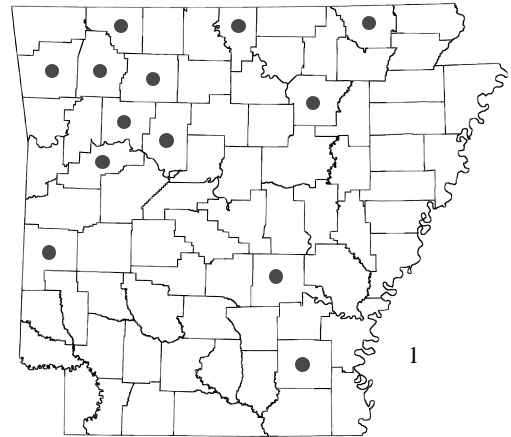
MORACEAE
Morus rubra L.
 red mulberry



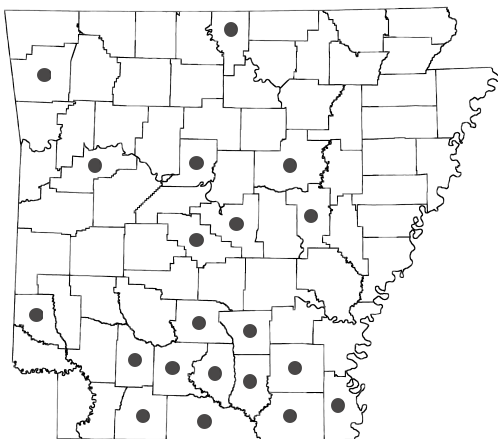
MYRICACEAE
Myrica cerifera L.
 wax-myrtle



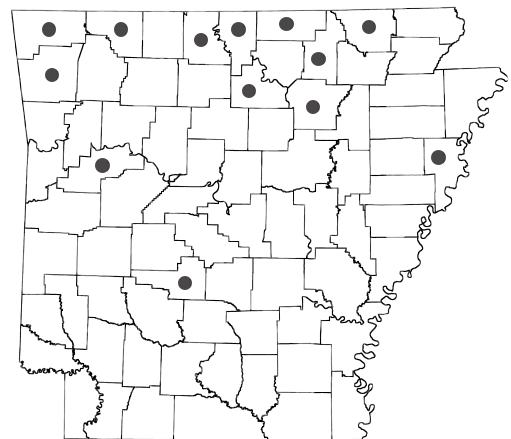
MYRICACEAE
Myrica heterophylla Raf.
 bayberry



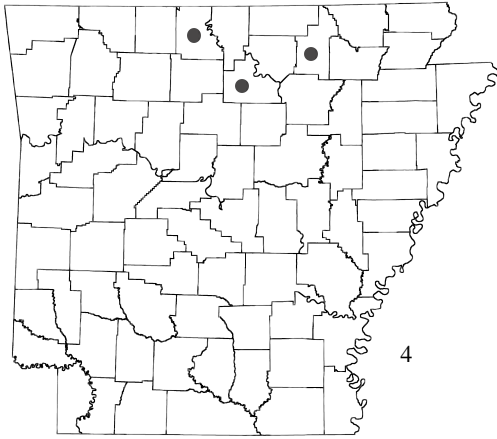
MYRSINACEAE
Anagallis arvensis L.
 scarlet pimpernel



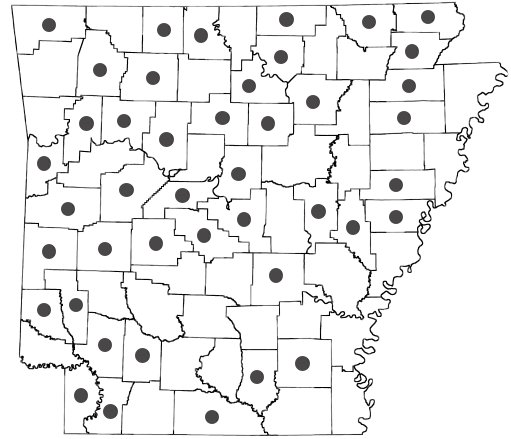
MYRSINACEAE
Anagallis minima (L.) E.H.L.Krause
 chaffweed



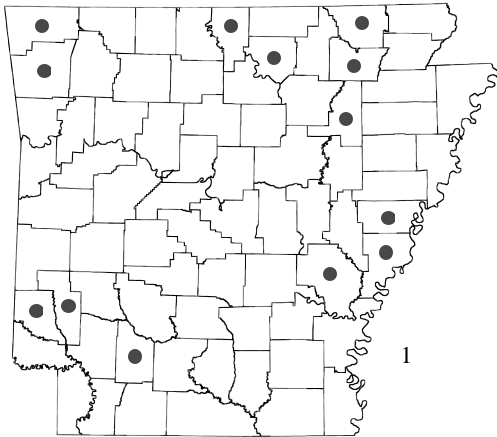
MYRSINACEAE
Lysimachia ciliata L.
 fringed yellow-loosestrife



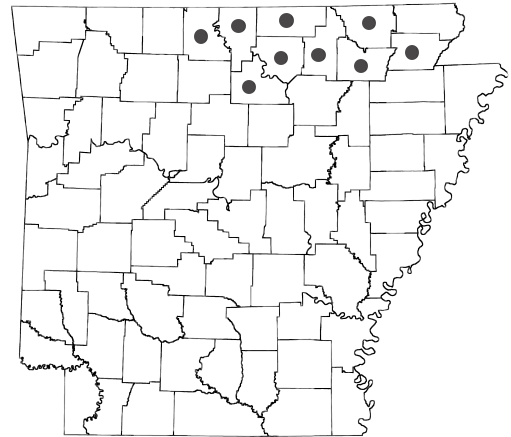
MYRSINACEAE
***Lysimachia hybrida* Michx.**
lowland yellow-loosestrife



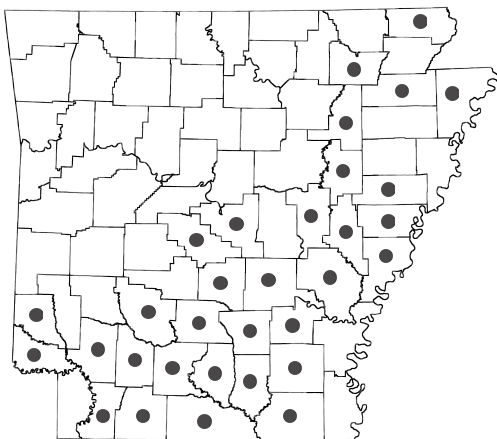
MYRSINACEAE
***Lysimachia lanceolata* Walter**
yellow-loosestrife



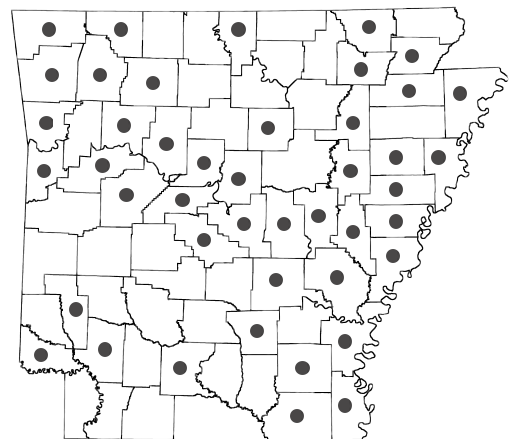
MYRSINACEAE
***Lysimachia nummularia* L.**
moneywort, creeping-Jenny



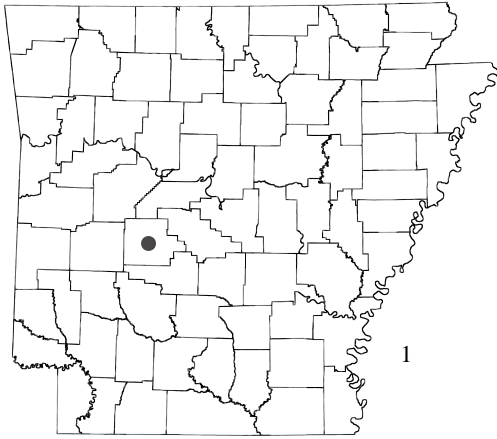
MYRSINACEAE
***Lysimachia quadriflora* Sims**
linear-leaf yellow-loosestrife



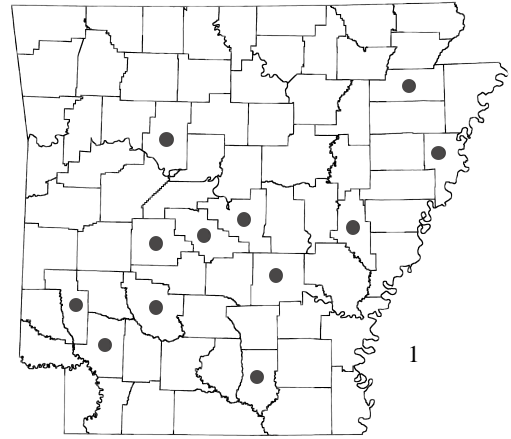
MYRSINACEAE
***Lysimachia radicans* Hook.**
trailing yellow-loosestrife



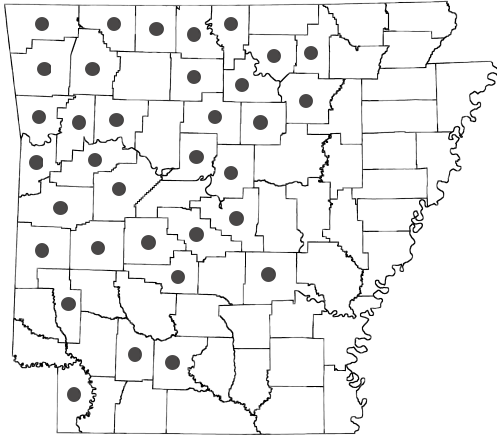
NELUMBONACEAE
***Nelumbo lutea* Willd.**
American lotus, yellow lotus



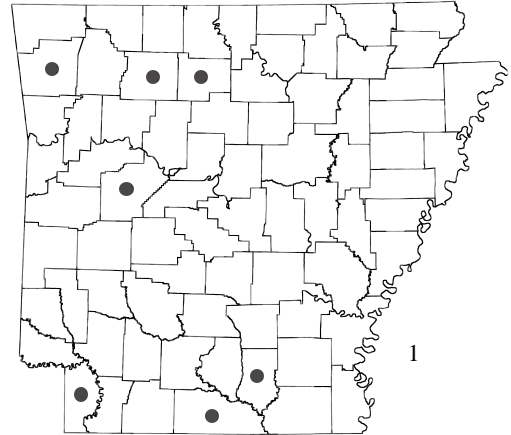
NELUMBONACEAE
Nelumbo nucifera Gaertn.
 sacred lotus



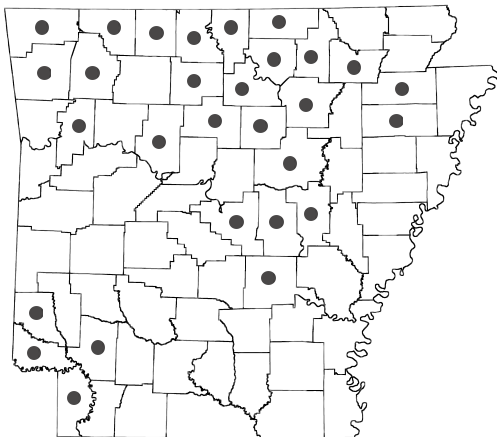
NYCTAGINACEAE
Boerhavia erecta L.
 erect spiderling



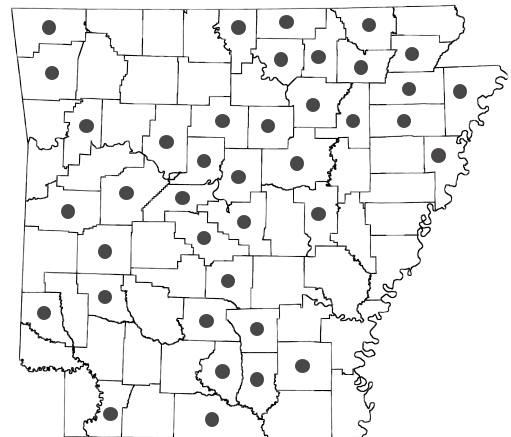
NYCTAGINACEAE
Mirabilis albida (Walter) Heimerl
 white four-o'clock



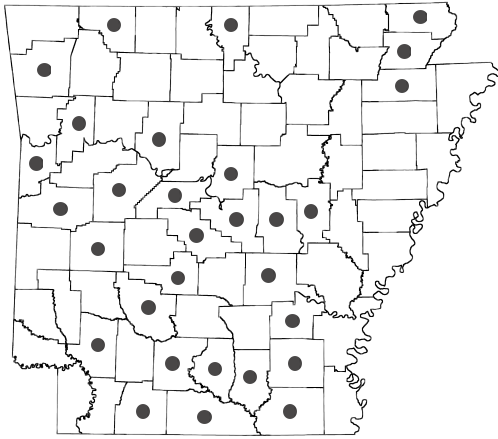
NYCTAGINACEAE
Mirabilis jalapa L.
var. jalapa
 garden four-o'clock, marvel-of-Peru



NYCTAGINACEAE
Mirabilis nyctaginea (Michx.) MacMill.
 wild four-o'clock

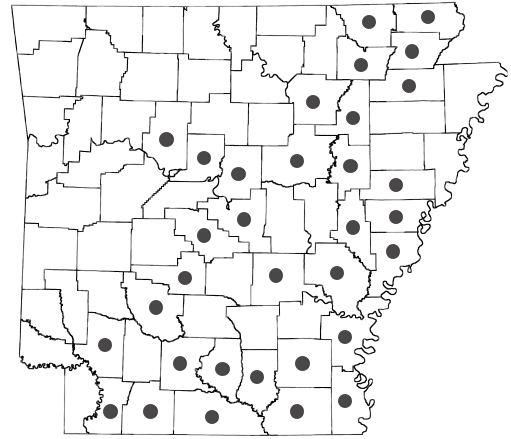


NYMPHAEACEAE
Nuphar advena (Aiton) W.T.Aiton in Aiton & W.T.Aiton
 yellow pond-lily, spatter-dock



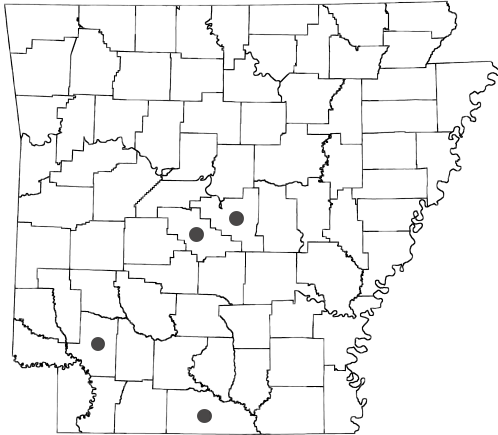
NYMPHAEACEAE
Nymphaea odorata Aiton
 subsp. *odorata*

fragrant water-lily, white water-lily



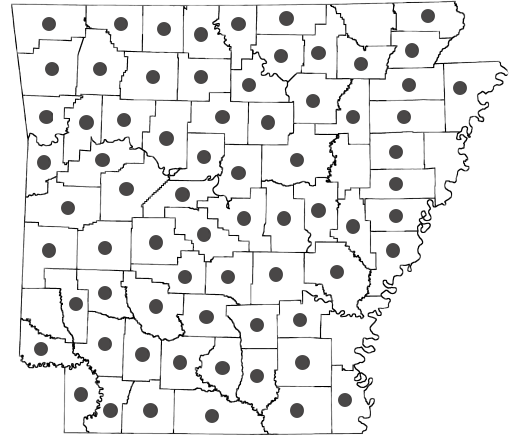
NYSSACEAE
Nyssa aquatica L.

tupelo, water tupelo



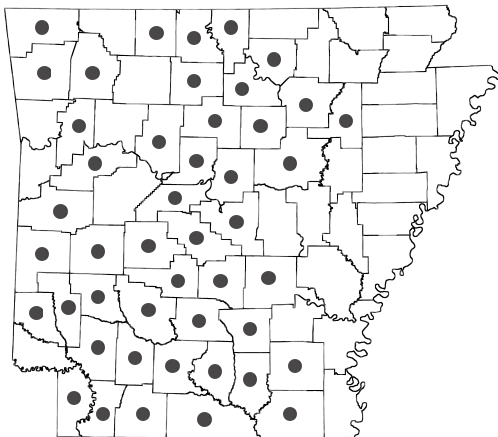
NYSSACEAE
Nyssa biflora Walter

swamp black-gum, swamp tupelo



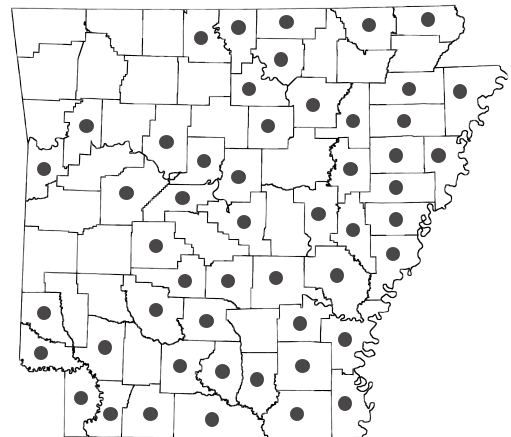
NYSSACEAE
Nyssa sylvatica Marshall

black-gum



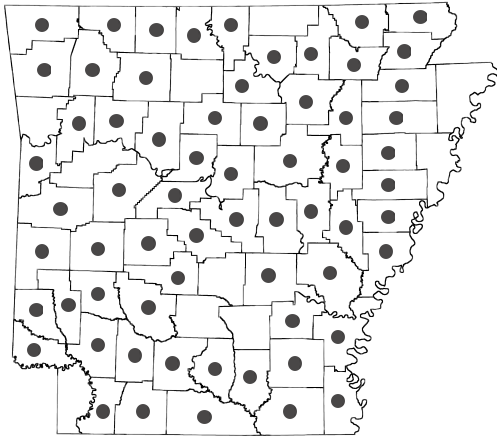
OLEACEAE
Chionanthus virginicus L.

fringe-tree, old-man's-beard, Grancy gray-beard

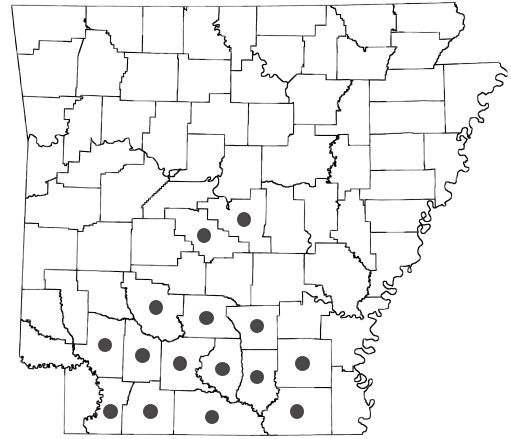


OLEACEAE
Forestiera acuminata (Michx.) Poir.

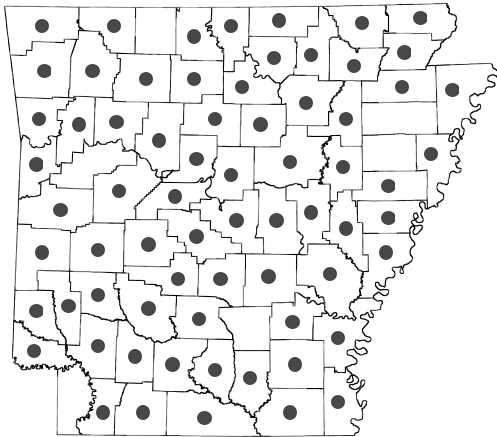
swamp-privet



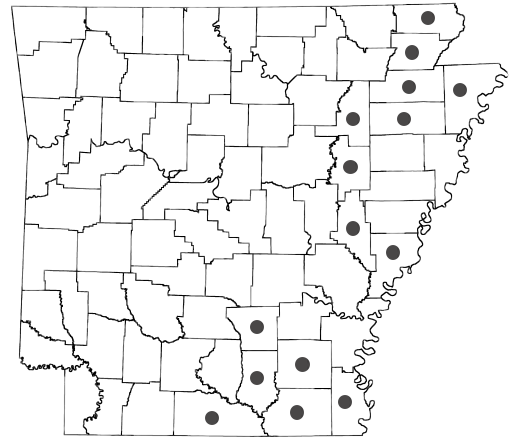
OLEACEAE
Fraxinus americana L.
 white ash



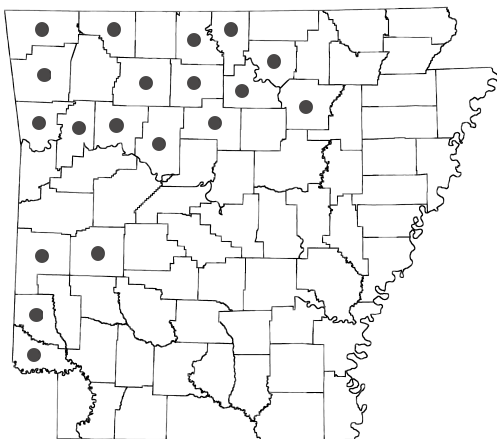
OLEACEAE
Fraxinus caroliniana Mill.
 Carolina ash, water ash



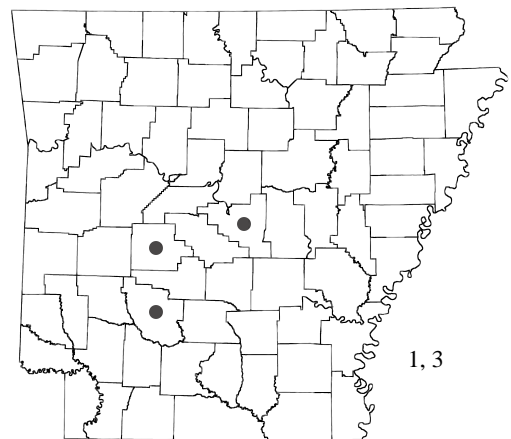
OLEACEAE
Fraxinus pennsylvanica Marshall
 green ash



OLEACEAE
Fraxinus profunda (Bush) Bush ex Britt.
 pumpkin ash

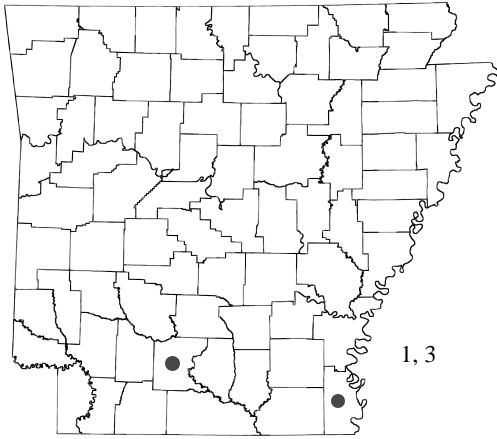


OLEACEAE
Fraxinus quadrangulata Michx.
 blue ash

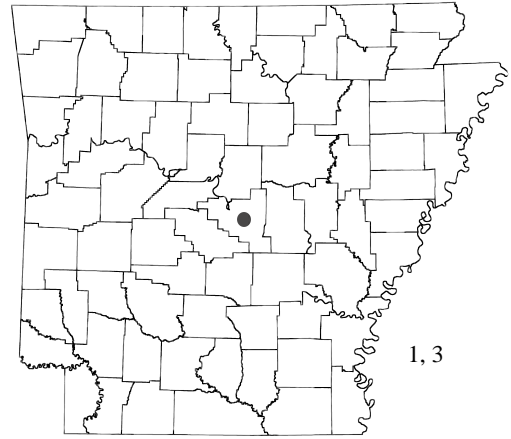


OLEACEAE
Ligustrum japonicum Thunb.
 Japanese privet

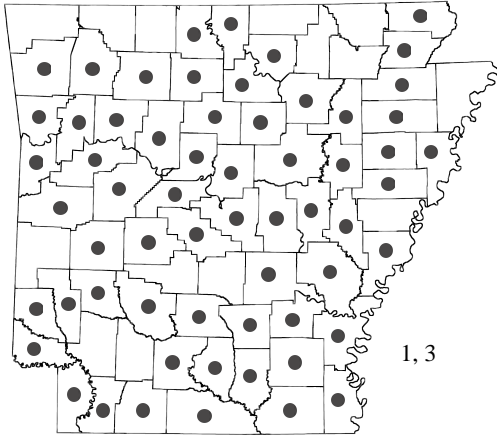
1, 3



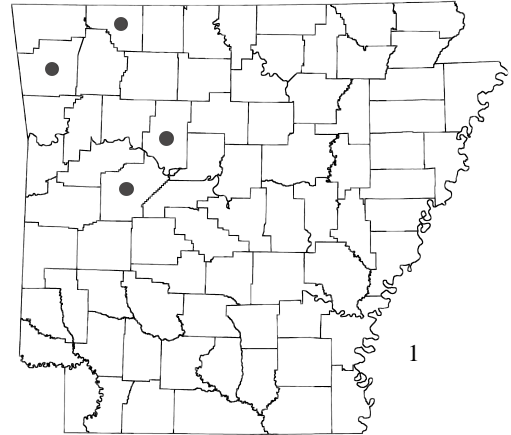
OLEACEAE
Ligustrum lucidum W.T.Aiton
 glossy privet



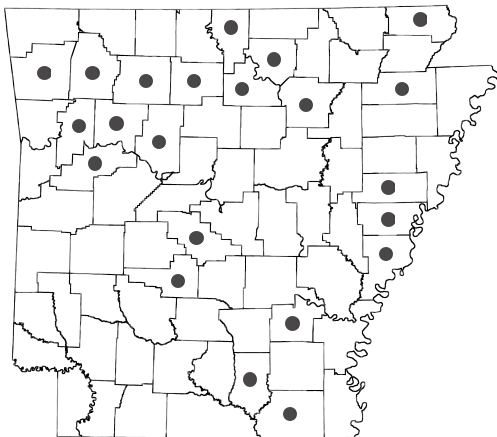
OLEACEAE
Ligustrum quihoui Carrière
 waxy-leaf privet



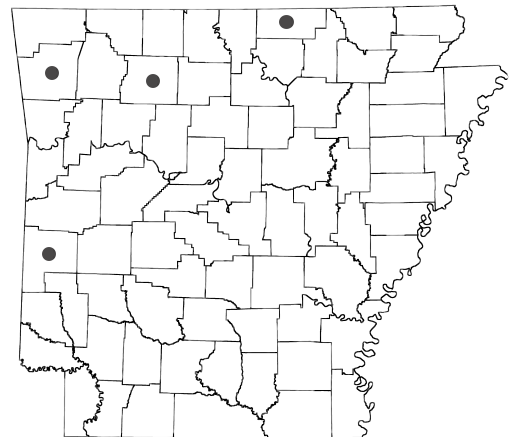
OLEACEAE
Ligustrum sinense Lour.
 Chinese privet



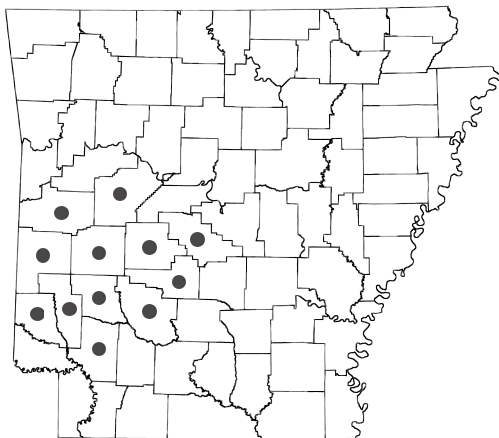
OLEACEAE
Ligustrum vulgare L.
 European privet



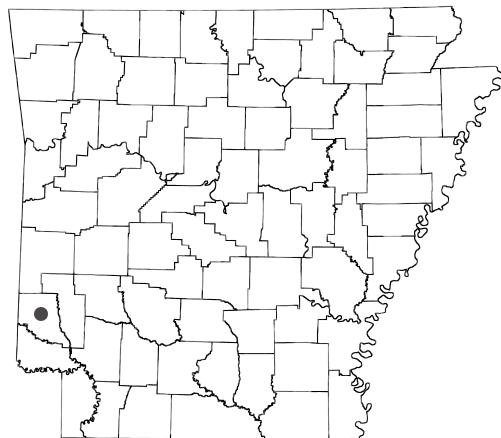
ONAGRACEAE
Circaea canadensis (L.) Hill
 subsp. canadensis
 enchanter's-nightshade



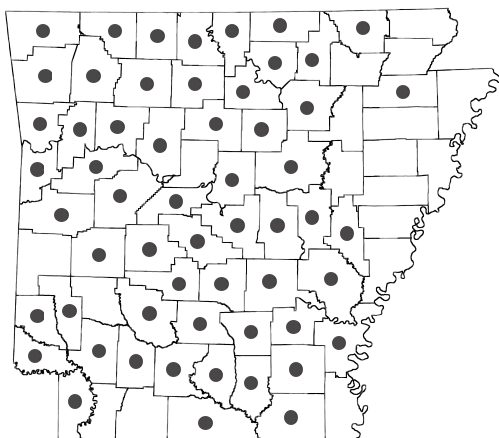
ONAGRACEAE
Epilobium coloratum Biehler
 willow-herb



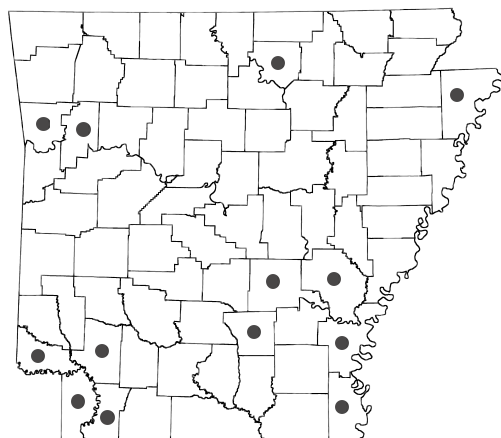
ONAGRACEAE
Gaura demareei P.H.Raven & D.P.Greg.
Demaree's gaura



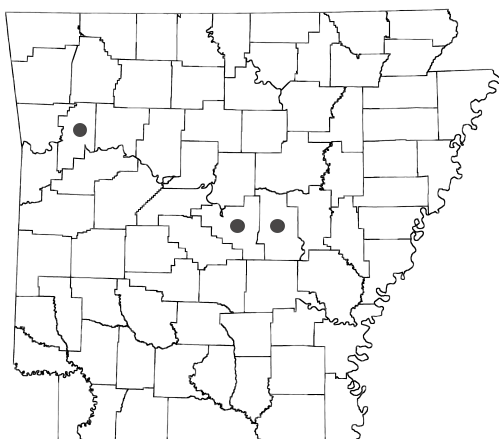
ONAGRACEAE
Gaura drummondii (Spach) Torr. & A.Gray
Drummond's gaura



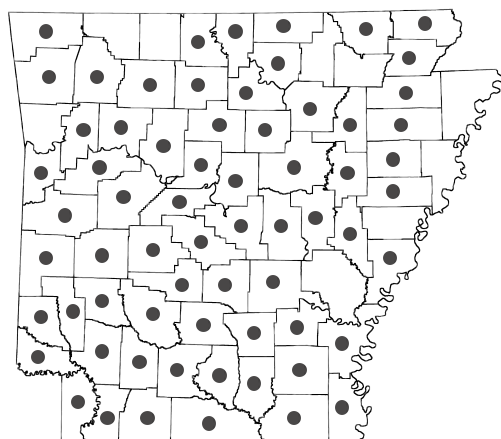
ONAGRACEAE
Gaura longiflora Spach
biennial gaura



ONAGRACEAE
Gaura parviflora Douglas ex Lehm.
velvety gaura, small-flower gaura



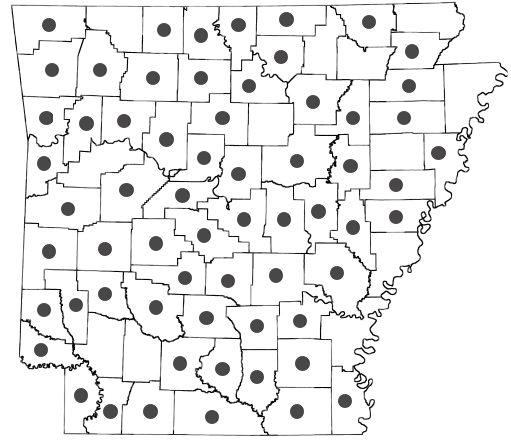
ONAGRACEAE
Gaura sinuata Nutt. ex Ser.
wavy-leaf gaura



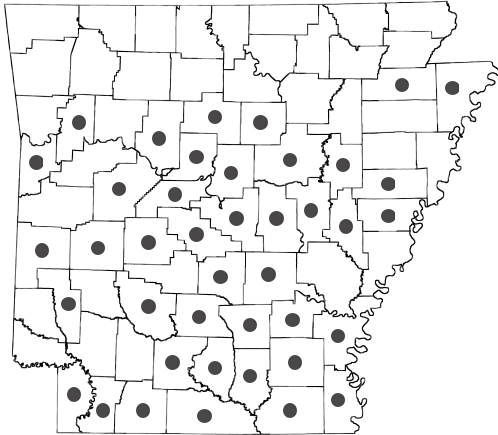
ONAGRACEAE
Ludwigia alternifolia L.
seedbox



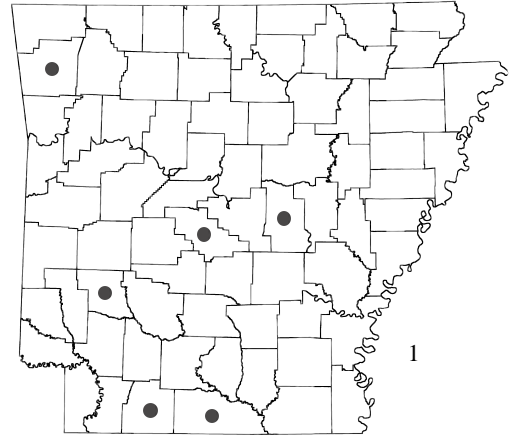
ONAGRACEAE
***Ludwigia brevipes* (B.H.Long ex Britton & A.Br.) Eames**
Long Beach primrose-willow



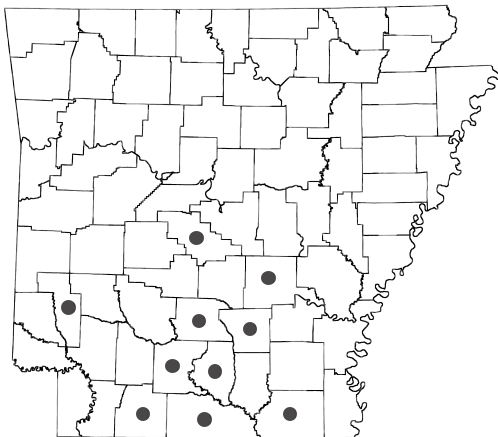
ONAGRACEAE
***Ludwigia decurrens* Walter**
wing-stem primrose-willow, wing-stem seedbox



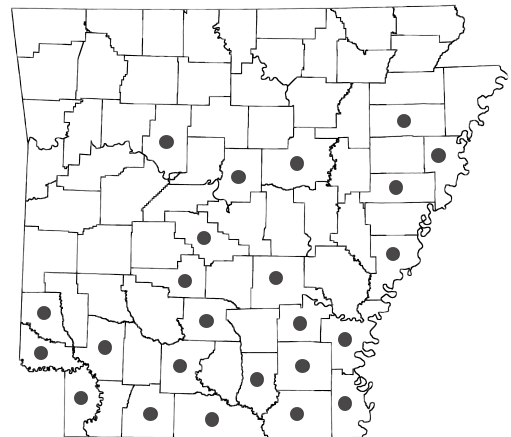
ONAGRACEAE
***Ludwigia glandulosa* Walter**
primrose-willow



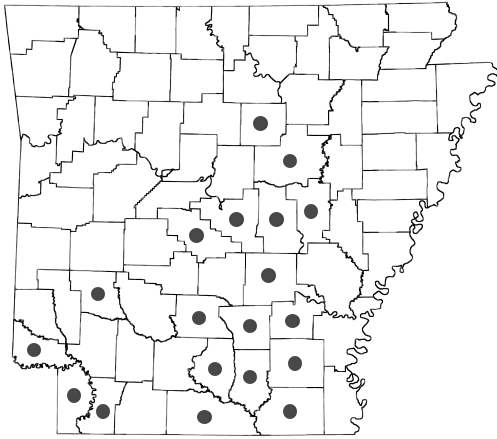
ONAGRACEAE
***Ludwigia grandiflora* (Michx.) Greuter & Burdet**
subsp. *hexapetala* (Hook. & Arn.) G.L.Nesom & Kartesz
primrose-willow



ONAGRACEAE
***Ludwigia hirtella* Raf.**
primrose-willow



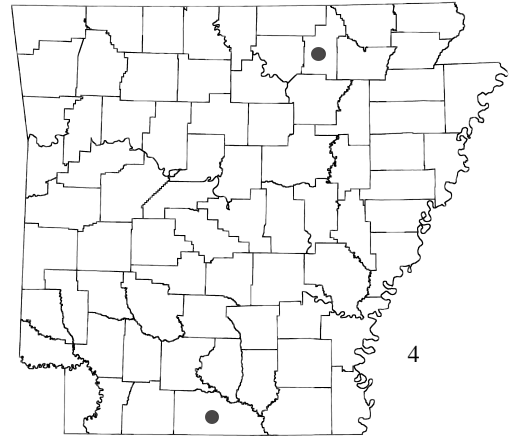
ONAGRACEAE
***Ludwigia leptocarpa* (Nutt.) H.Hara**
primrose-willow



ONAGRACEAE

Ludwigia linearis Walter

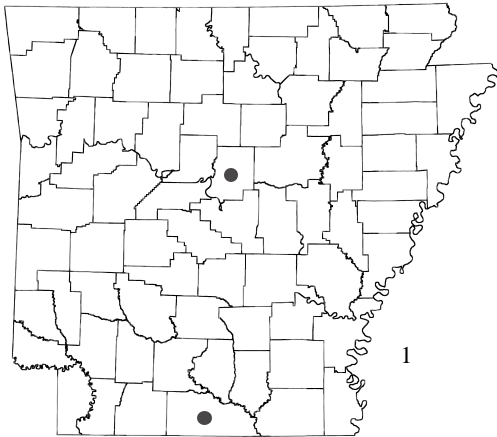
narrow-leaf primrose-willow, narrow-leaf seedbox



ONAGRACEAE

Ludwigia microcarpa Michx.

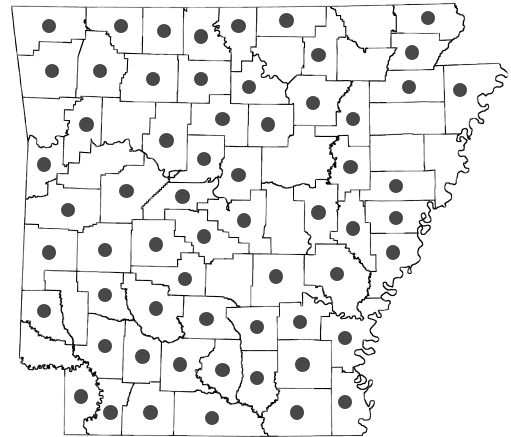
small-fruit primrose-willow



ONAGRACEAE

Ludwigia octovalvis (Jacq.) P.H.Raven

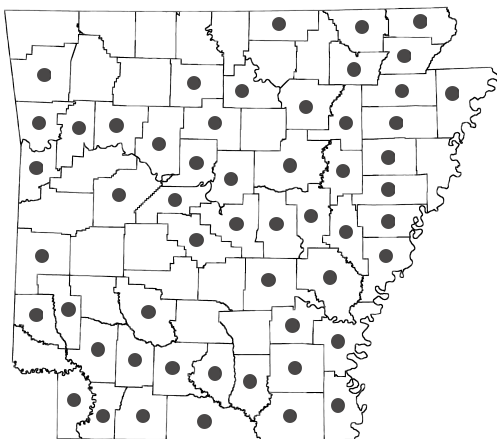
primrose-willow



ONAGRACEAE

Ludwigia palustris (L.) Elliott

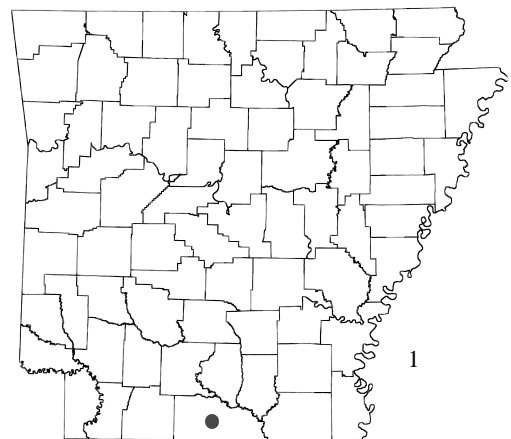
water-purslane



ONAGRACEAE

Ludwigia peploides (Kunth) P.H.Raven
subsp. glabrescens (Kuntze) P.H.Raven

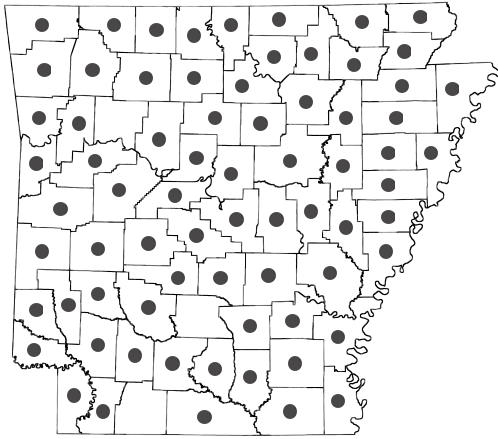
floating primrose-willow



ONAGRACEAE

Ludwigia pilosa Walter

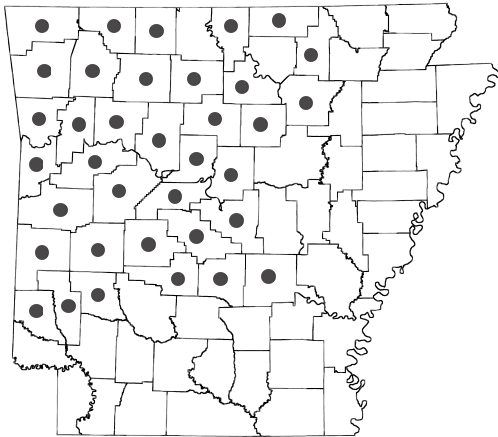
primrose-willow



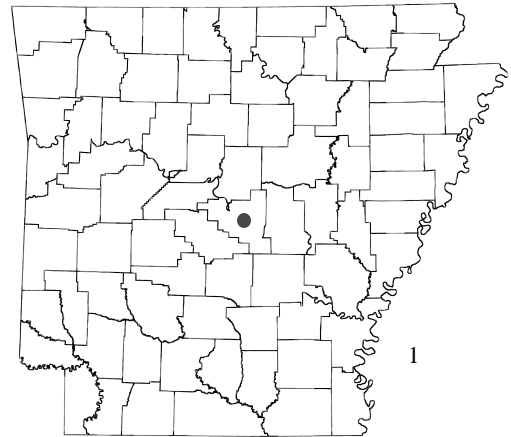
ONAGRACEAE
***Oenothera biennis* L.**
evening-primrose



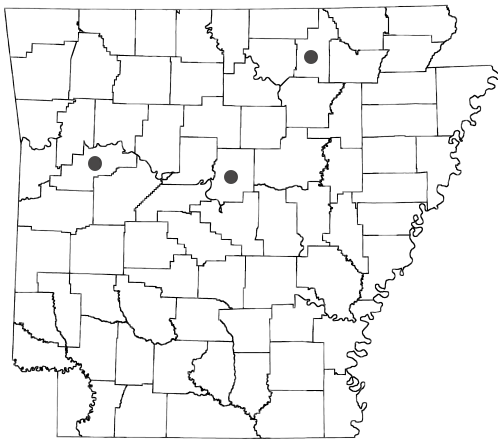
ONAGRACEAE
***Oenothera clelandii* W.Dietr., P.H.Raven & W.L.Wagner**
Cleland's evening-primrose



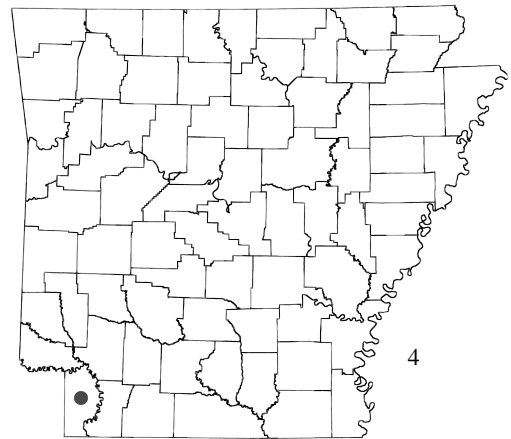
ONAGRACEAE
***Oenothera fruticosa* L.**
sundrops



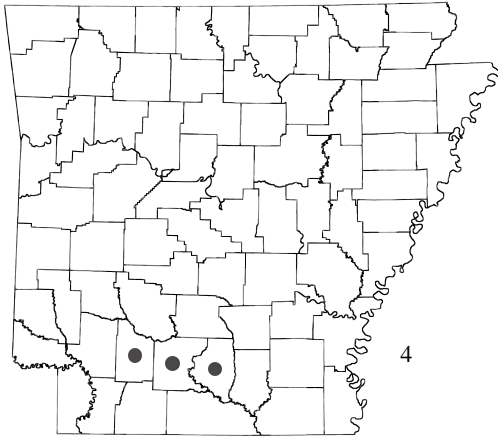
ONAGRACEAE
***Oenothera glazioviana* Micheli**
garden evening-primrose



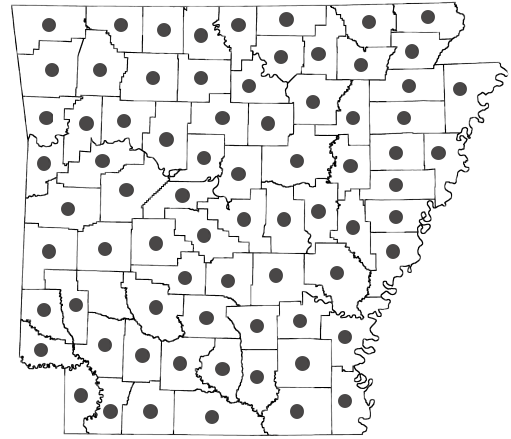
ONAGRACEAE
***Oenothera grandis* (Britton) Smyth**
evening-primrose



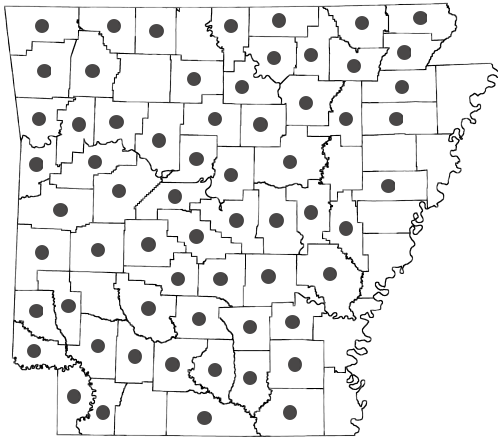
ONAGRACEAE
***Oenothera heterophylla* Spach
subsp. *heterophylla***
sandhill evening-primrose



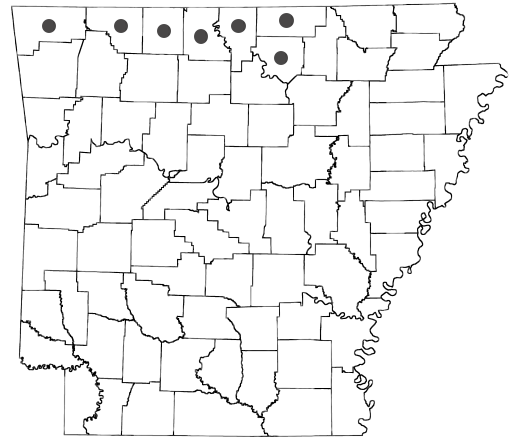
ONAGRACEAE
Oenothera heterophylla Spach
subsp. orientalis W.Dietr., P.H.Raven & W.L.Wagner
 eastern sandhill evening-primrose



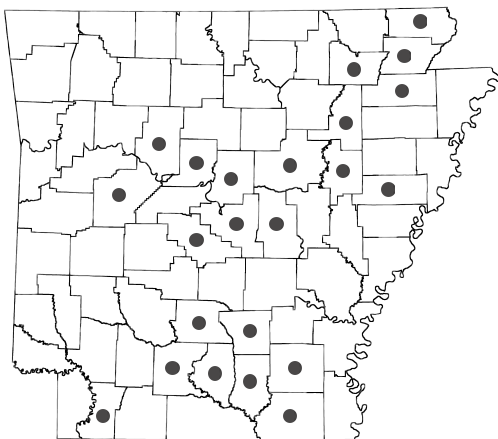
ONAGRACEAE
Oenothera laciniata Hill
 cut-leaf evening-primrose



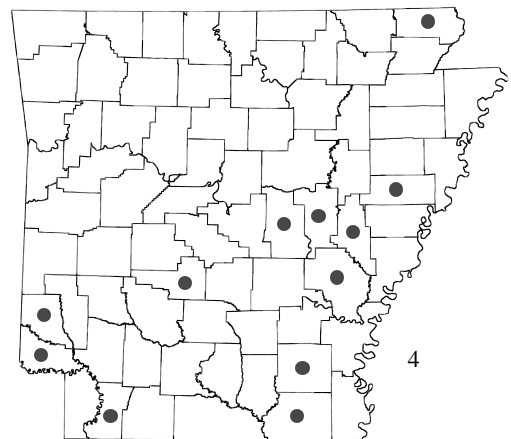
ONAGRACEAE
Oenothera linifolia Nutt.
 thread-leaf sundrops



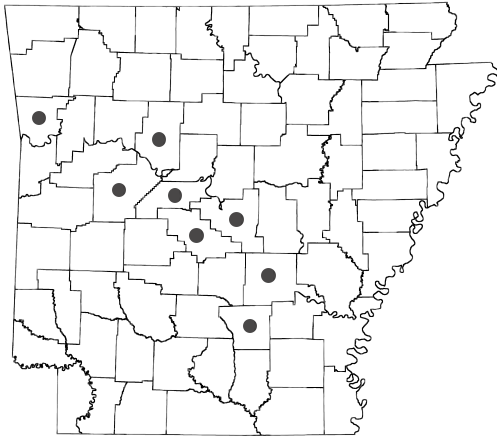
ONAGRACEAE
Oenothera macrocarpa Nutt.
subsp. macrocarpa
 Missouri-primrose, glade-lily



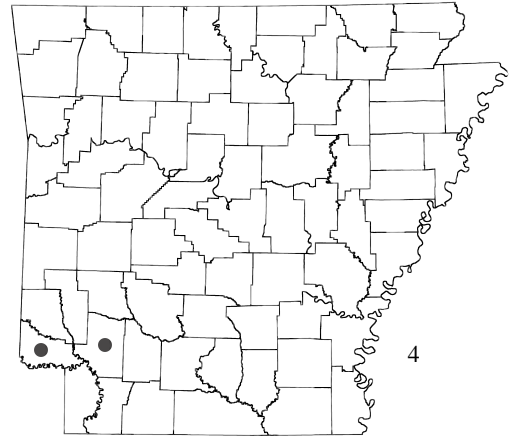
ONAGRACEAE
Oenothera pilosella Raf.
subsp. pilosella
 sundrops



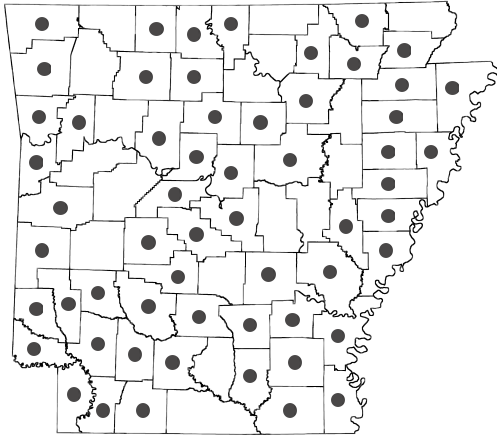
ONAGRACEAE
Oenothera pilosella Raf.
subsp. sessilis (Pennell) Straley
 prairie evening-primrose, prairie sundrops



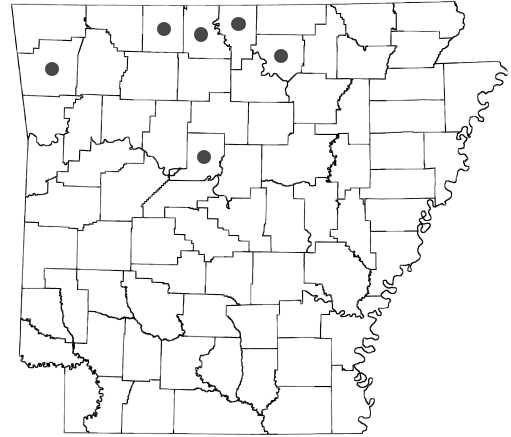
ONAGRACEAE
***Oenothera rhombipetala* Nutt. ex Torr. & A.Gray**
 four-point evening-primrose



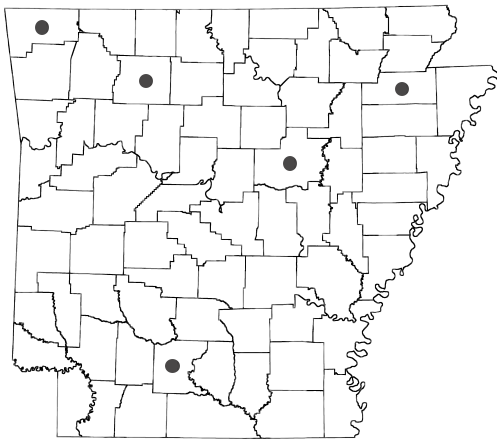
ONAGRACEAE
***Oenothera spachiana* Torr. & A.Gray**
 Spach's evening-primrose



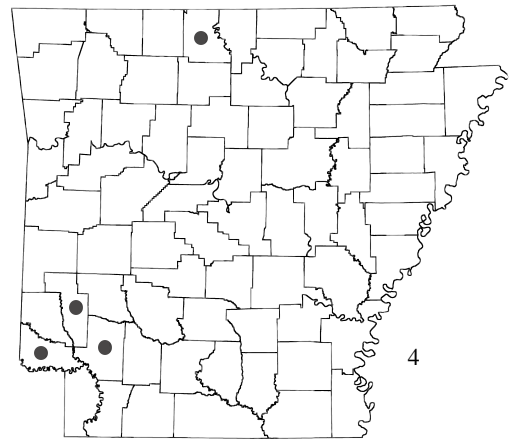
ONAGRACEAE
***Oenothera speciosa* Nutt.**
 showy evening-primrose, white evening-primrose



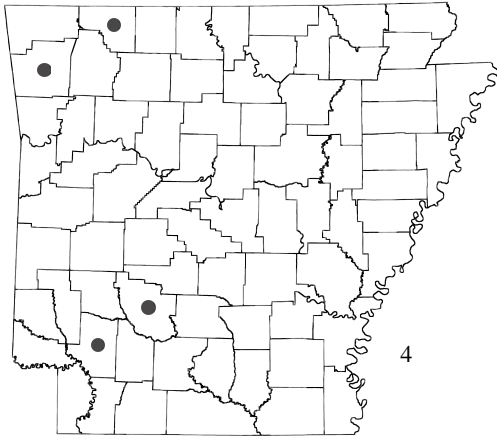
ONAGRACEAE
***Oenothera triloba* Nutt.**
 evening-primrose



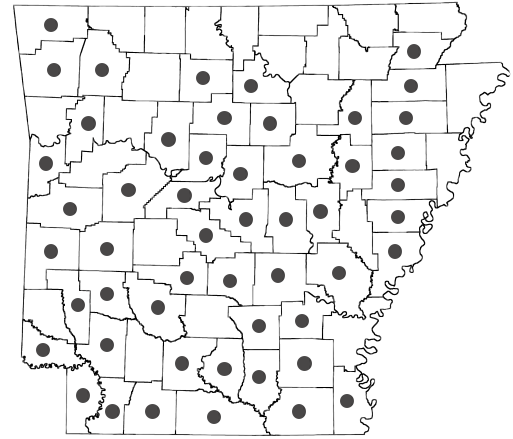
ONAGRACEAE
***Oenothera villosa* Thunb.**
subsp. villosa
 evening-primrose



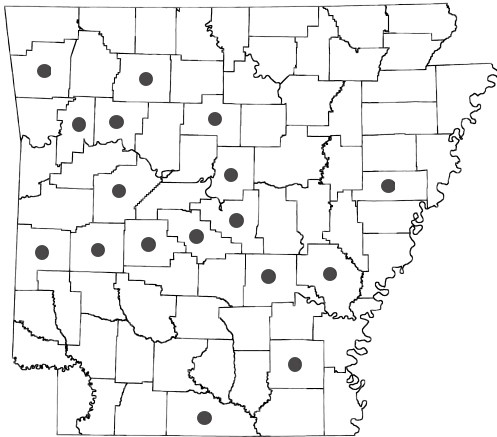
ONAGRACEAE
***Stenosiphon linifolius* (Nutt. ex E.James) Heynh.**
 false gaura



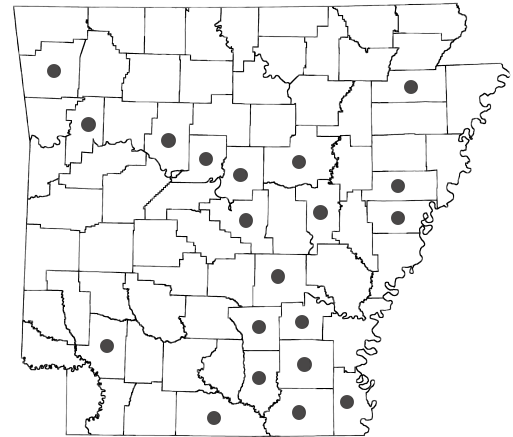
OROBANCHACEAE
Agalinis auriculata (Michx.) S.F.Blake
 ear-leaf false foxglove, ear-leaf gerardia



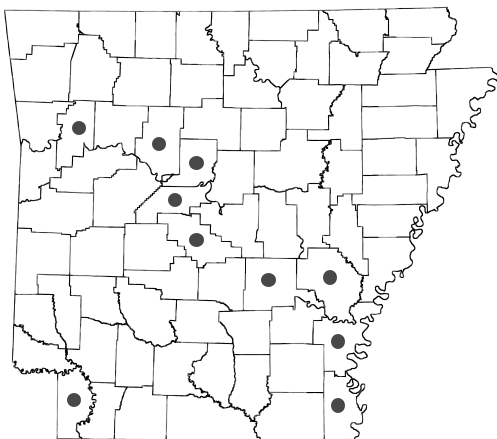
OROBANCHACEAE
Agalinis fasciculata (Elliott) Raf.
 false foxglove, gerardia



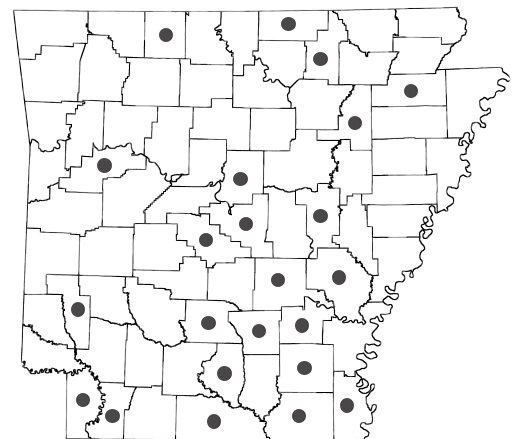
OROBANCHACEAE
Agalinis gattingeri (Small) Small ex Britton
 Gattinger's false foxglove, Gattinger's gerardia



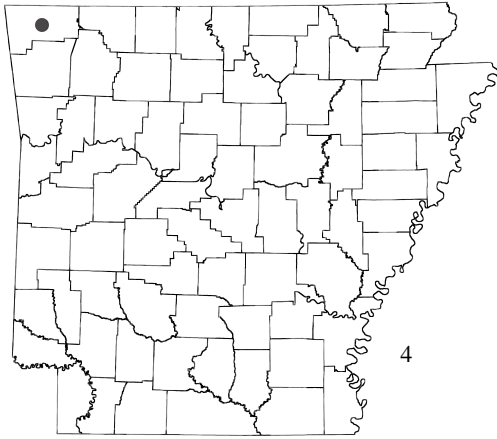
OROBANCHACEAE
Agalinis heterophylla (Nutt.) Small ex Britton
 prairie false foxglove, prairie gerardia



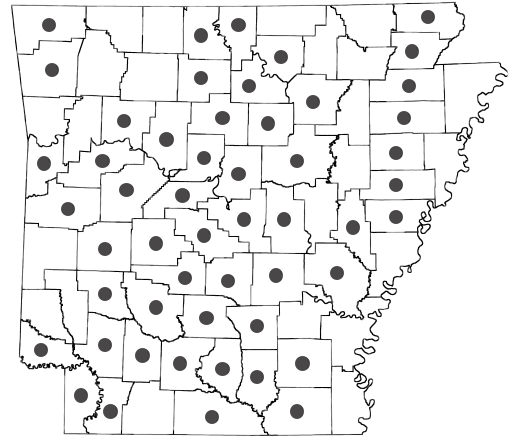
OROBANCHACEAE
Agalinis homalantha Pennell
 false foxglove, gerardia



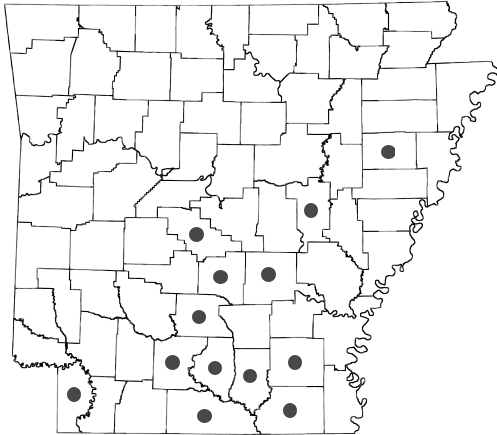
OROBANCHACEAE
Agalinis purpurea (L.) Pennell
 purple false foxglove, purple gerardia



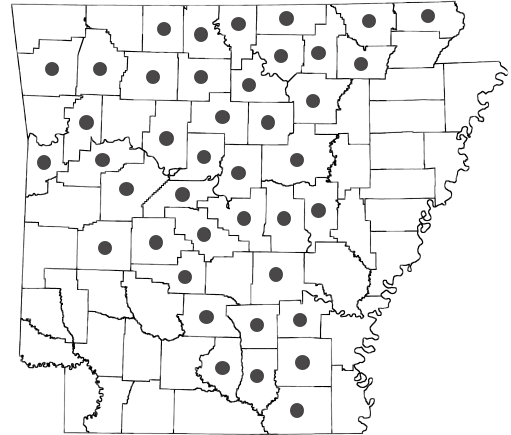
OROBANCHACEAE
Agalinis skinneriana (A.W.Wood) Britton
Skinner's false foxglove, gerardia



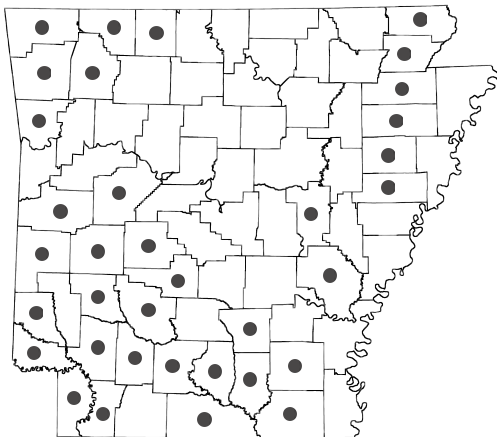
OROBANCHACEAE
Agalinis tenuifolia (Vahl) Raf.
slender-leaf false foxglove, slender-leaf gerardia



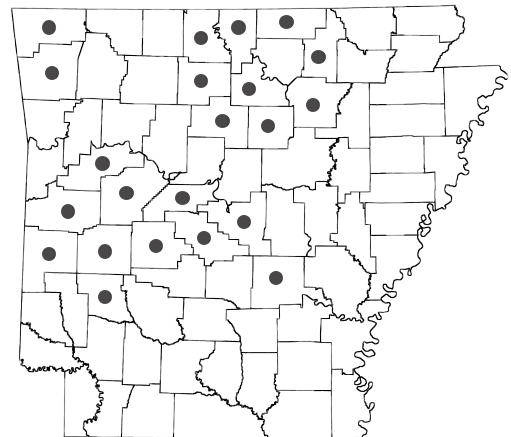
OROBANCHACEAE
Agalinis viridis (Small) Pennell
green false foxglove, green gerardia



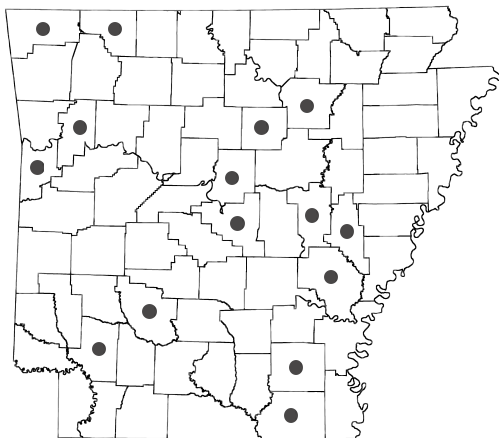
OROBANCHACEAE
Aureolaria flava (L.) Farw.
yellow false foxglove



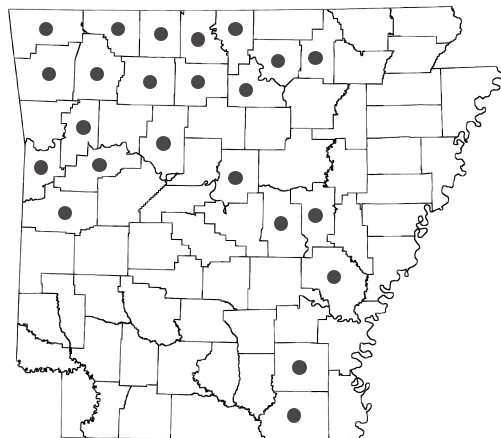
OROBANCHACEAE
Aureolaria grandiflora (Benth.) Pennell
yellow false foxglove



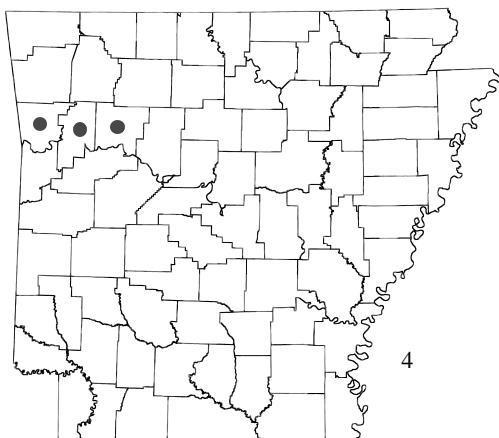
OROBANCHACEAE
Aureolaria pectinata (Nutt.) Pennell
yellow false foxglove



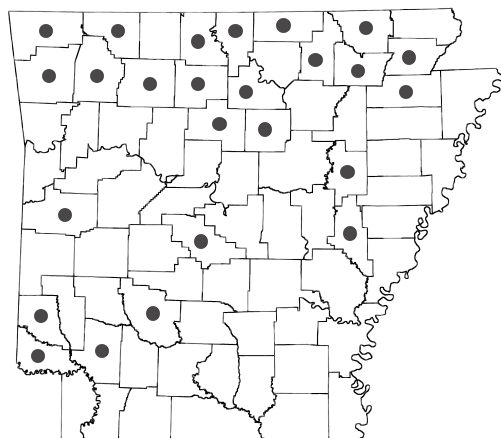
OROBANCHACEAE
Buchnera americana L.
 bluehearts



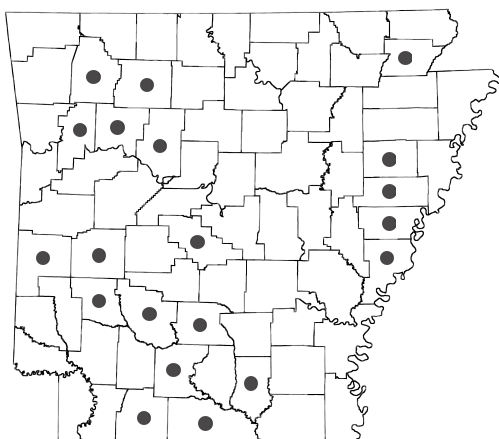
OROBANCHACEAE
Castilleja coccinea (L.) Spreng.
 Indian-paintbrush



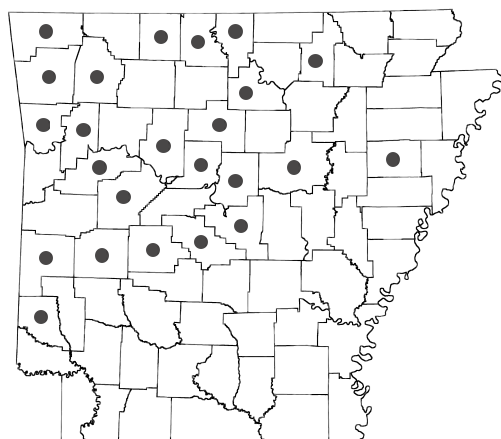
OROBANCHACEAE
Castilleja indivisa Engelm.
 entire-leaf Indian-paintbrush



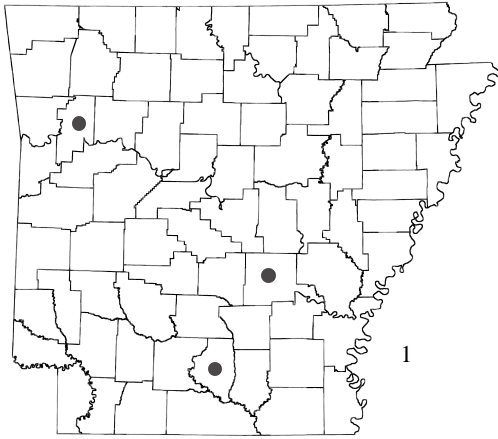
OROBANCHACEAE
Dasistoma macrophylla (Nutt.) Raf.
 mullein-foxglove



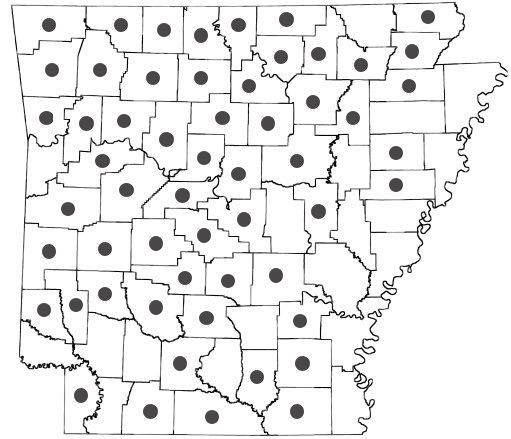
OROBANCHACEAE
Epifagus virginiana (L.) W.P.C.Barton
 beechdrops



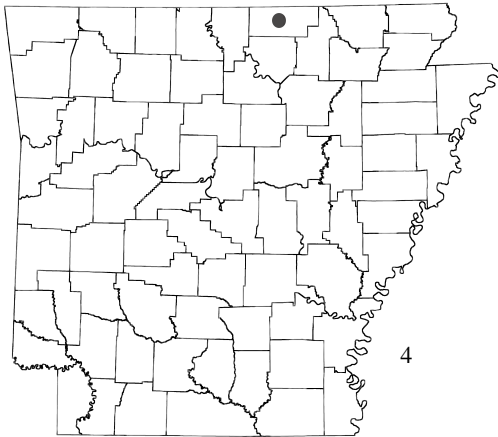
OROBANCHACEAE
Orobanche uniflora L.
 cancer-root, broomrape



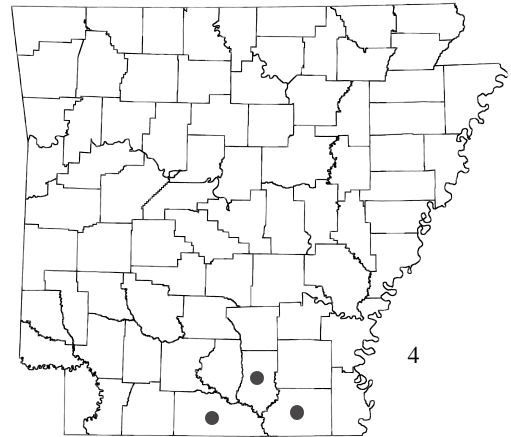
OROBANCHACEAE
Parentucellia viscosa (L.) Caruel
yellow glandweed



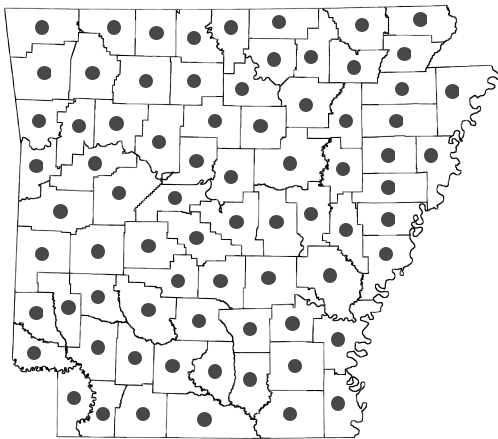
OROBANCHACEAE
Pedicularis canadensis L.
wood-betony, lousewort



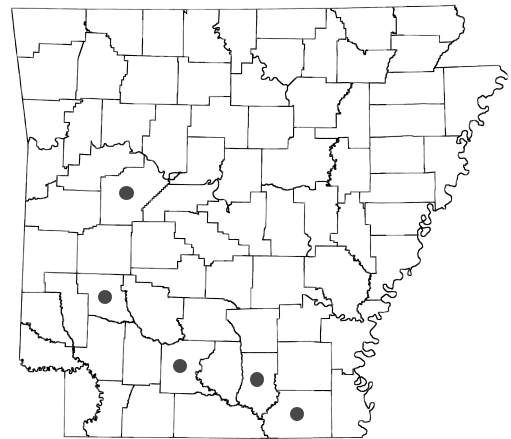
OROBANCHACEAE
Pedicularis lanceolata Michx.
swamp lousewort



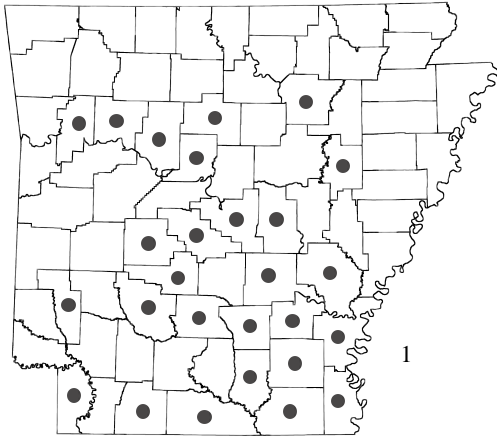
OROBANCHACEAE
Seymeria cassioides (J.F.Gmel.) S.F.Blake
yaupon black-senna, seymeria



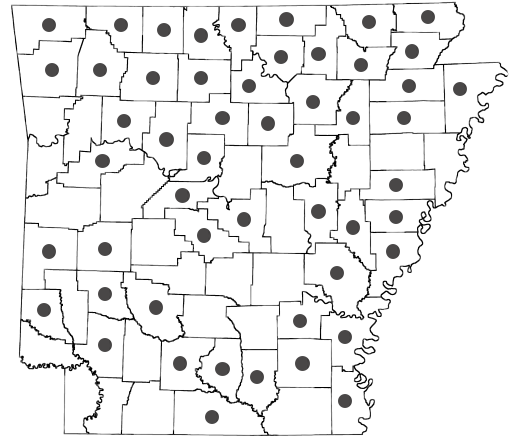
OXALIDACEAE
Oxalis dillenii Jacq.
yellow wood-sorrel



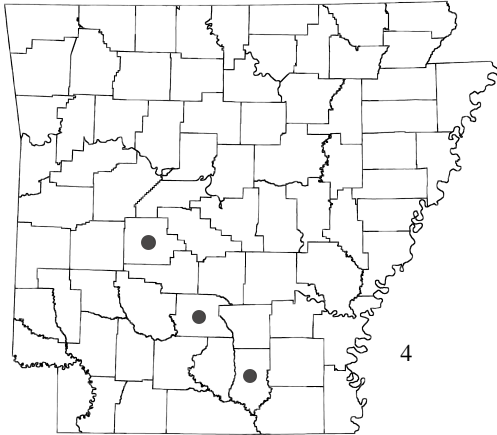
OXALIDACEAE
Oxalis florida Salisb.
yellow wood-sorrel



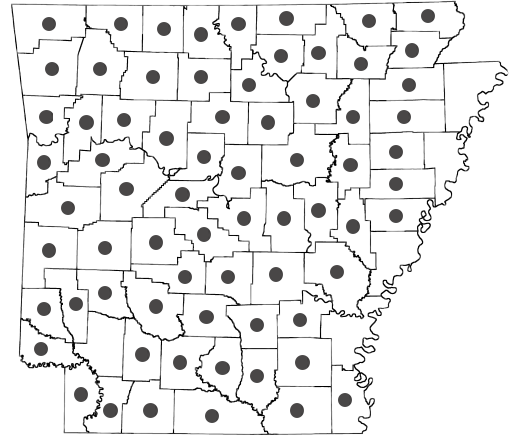
OXALIDACEAE
Oxalis rubra A.St.-Hil.
 rose wood-sorrel



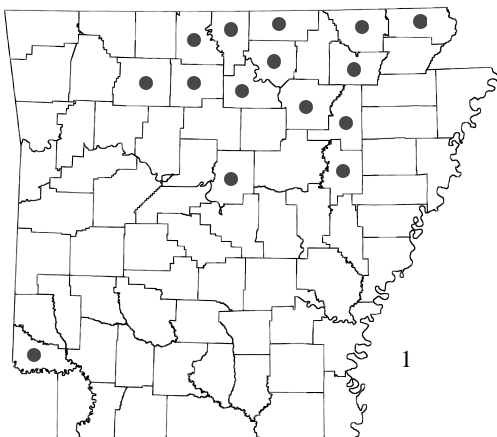
OXALIDACEAE
Oxalis stricta L.
 yellow wood-sorrel



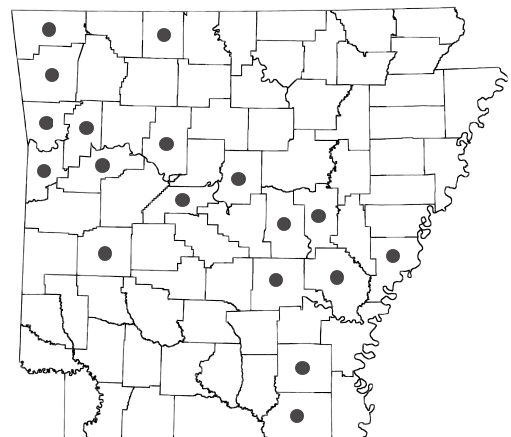
OXALIDACEAE
Oxalis texana (Small) Fedde
 Texas yellow wood-sorrel



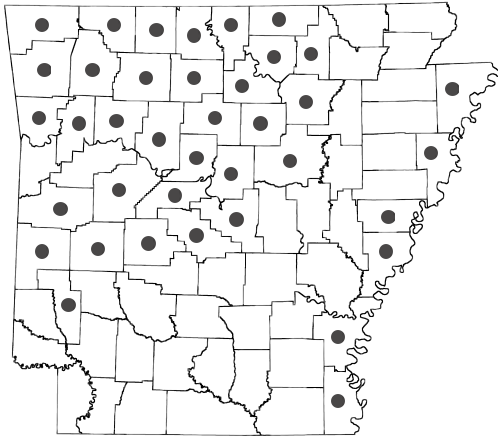
OXALIDACEAE
Oxalis violacea L.
 violet wood-sorrel



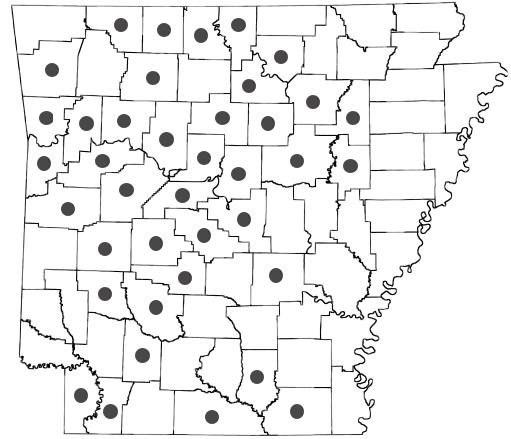
PAPAVERACEAE
Argemone albiflora Hornem.
subsp. texana G.B.Ownbey
 white prickly-poppy



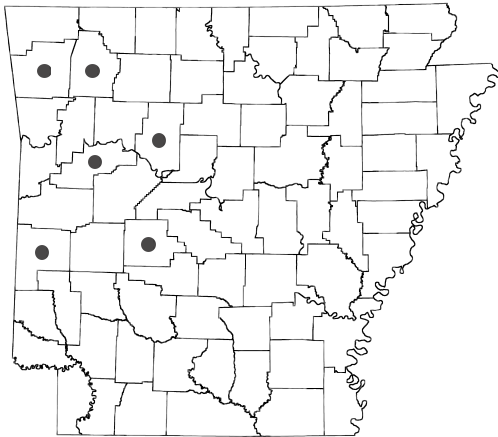
PAPAVERACEAE
Corydalis crystallina (Torr. & A.Gray) Engelm. ex A.Gray
 mealy corydalis



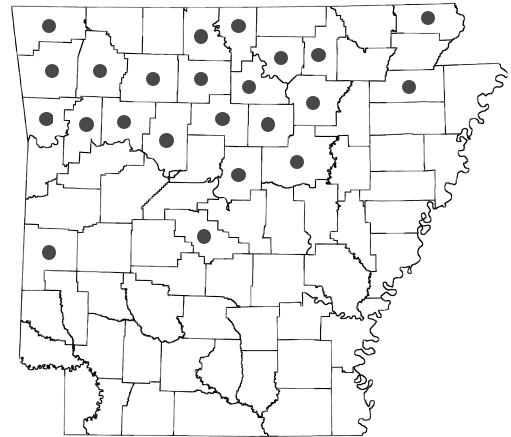
PAPAVERACEAE
***Corydalis flavula* (Raf.) DC. in DC. & A.DC.**
 pale corydalis, yellow corydalis



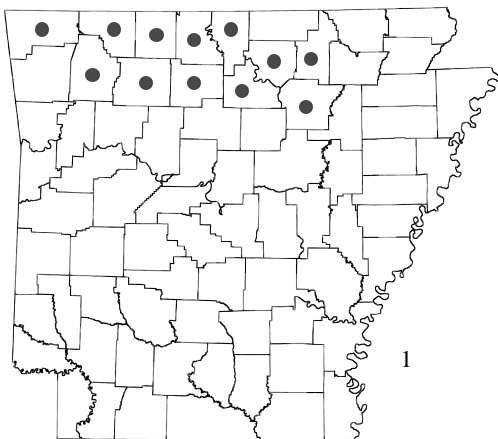
PAPAVERACEAE
***Corydalis micrantha* (Engelm. ex A.Gray) A.Gray**
subsp. australis (Chapm.) G.B.Ownbey
 southern corydalis



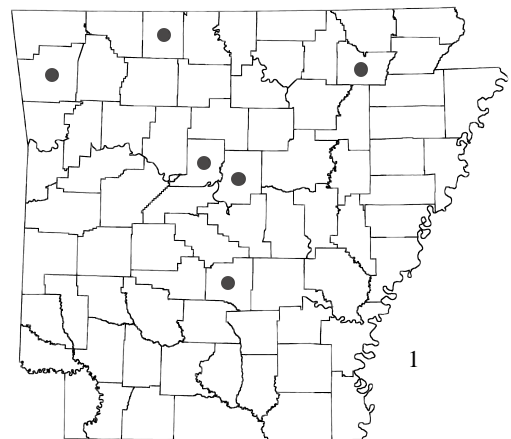
PAPAVERACEAE
***Corydalis micrantha* (Engelm. ex A.Gray) A.Gray**
subsp. micrantha
 small-flower corydalis



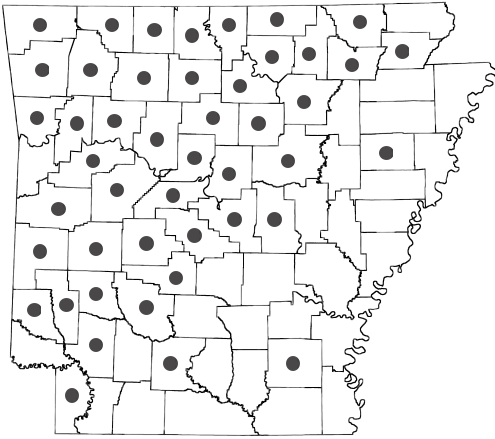
PAPAVERACEAE
***Dicentra cucullaria* (L.) Bernh.**
 Dutchman's-breeches



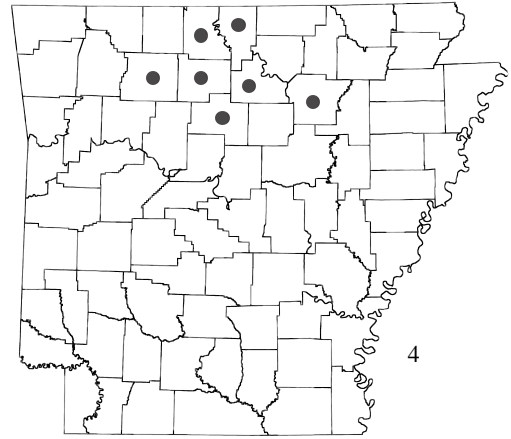
PAPAVERACEAE
***Papaver dubium* L.**
 blind-eyes, orange poppy



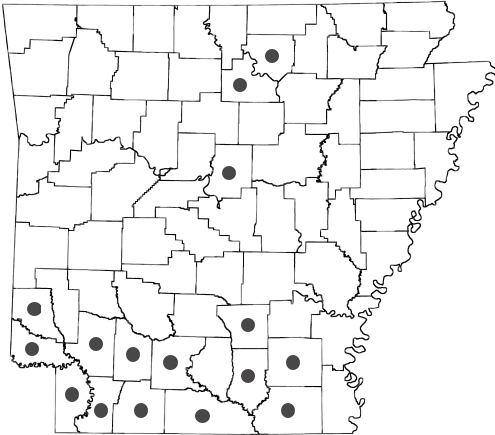
PAPAVERACEAE
***Papaver rhoeas* L.**
 corn poppy, field poppy



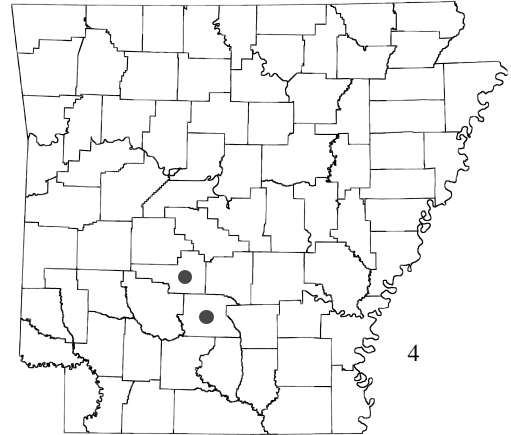
PAPAVERACEAE
Sanguinaria canadensis L.
 bloodroot



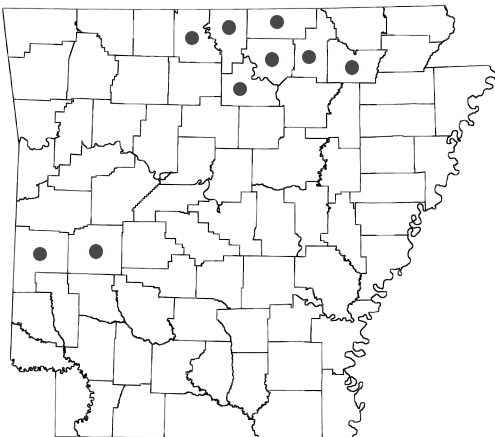
PAPAVERACEAE
Stylophorum diphyllum (Michx.) Nutt.
 celandine-poppy, wood-poppy



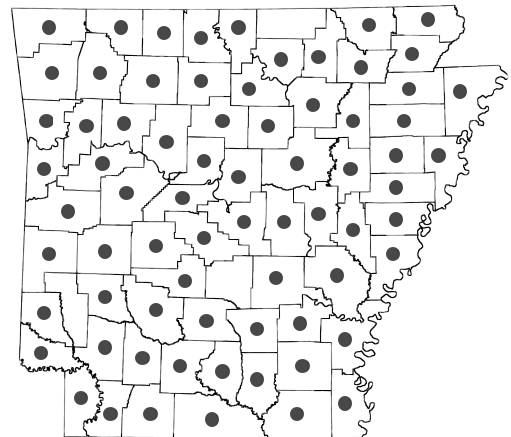
PARNASSIACEAE
Lepuropetalon spathulatum Elliott
 little-people, lepuropetalon



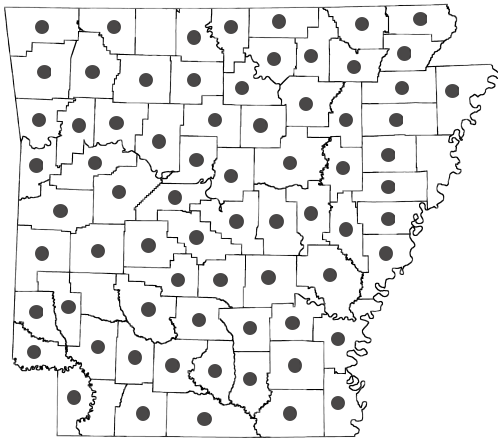
PARNASSIACEAE
Parnassia asarifolia Vent.
 kidney-leaf grass-of-Parnassus



PARNASSIACEAE
Parnassia grandifolia DC.
 large-leaf grass-of-Parnassus



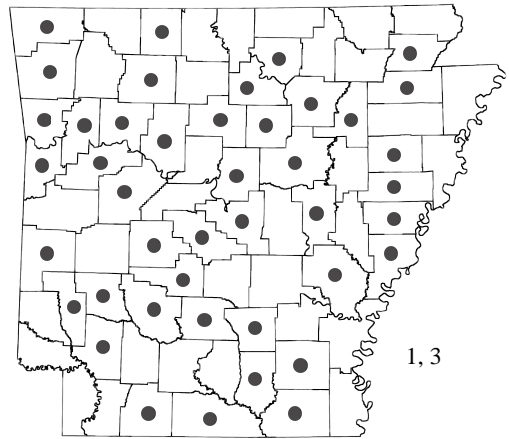
PASSIFLORACEAE
Passiflora incarnata L.
 purple passion-flower, maypops



PASSIFLORACEAE

Passiflora lutea L.

yellow passion-flower

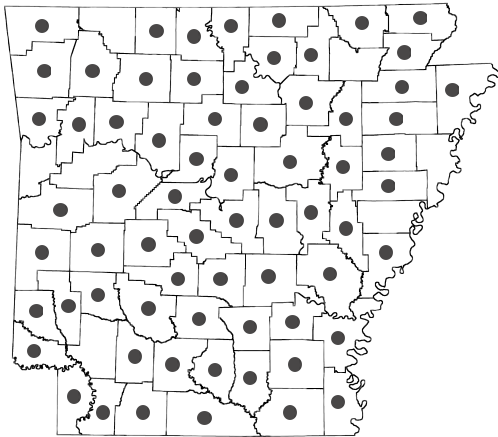


PAULOWNIACEAE

Paulownia tomentosa (Thunb.) Siebold & Zucc. ex Steud.

princess-tree, empress-tree

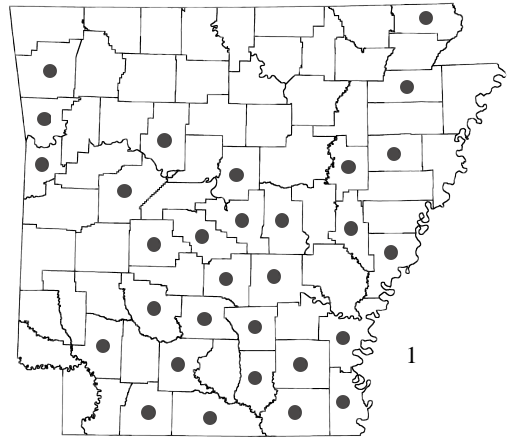
1, 3



PENTHORACEAE

Penthorum sedoides L.

ditch-stonecrop

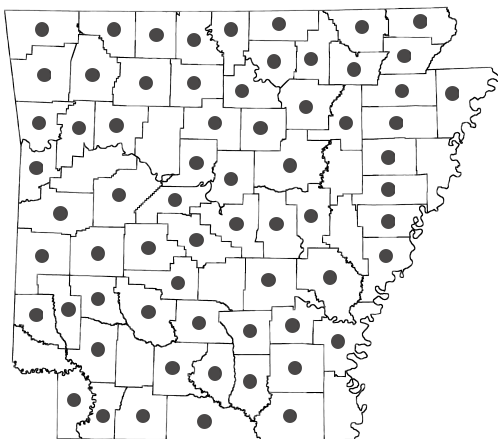


PHRYMACEAE

Mazus pumilus (Burm.f.) Steenis

mazus

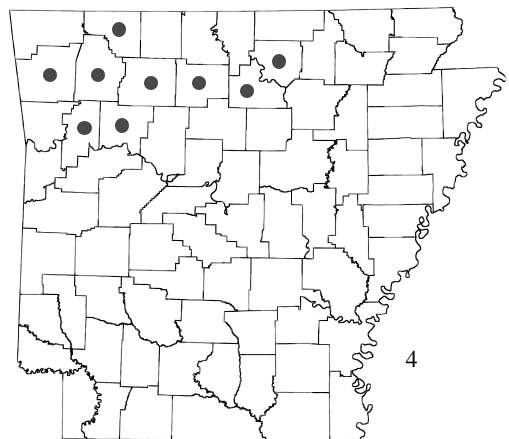
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PHRYMACEAE

Mimulus alatus Aiton

monkey-flower

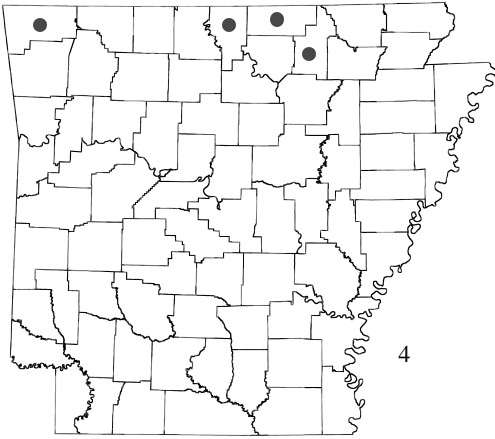


PHRYMACEAE

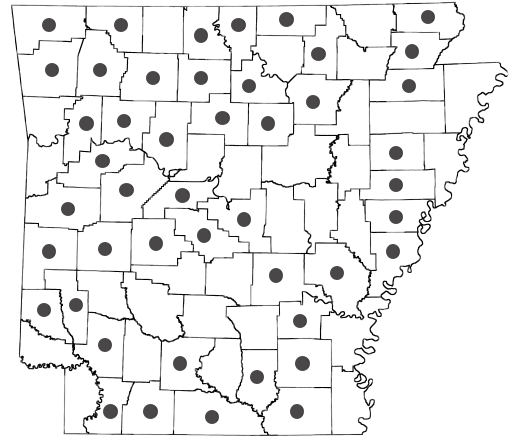
Mimulus floribundus Douglas ex Lindl.

yellow monkey-flower

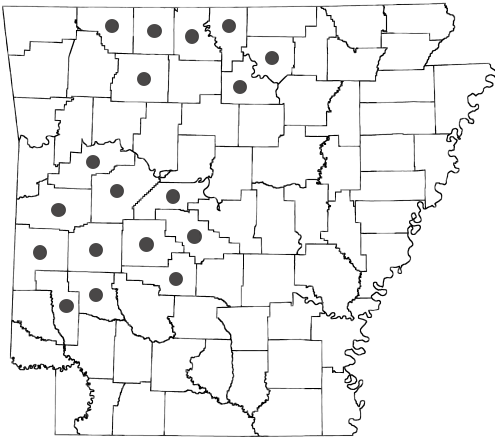
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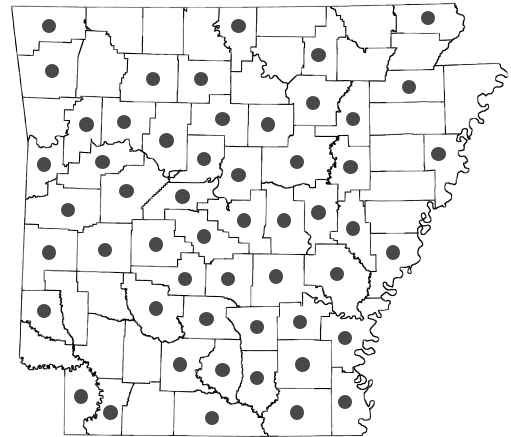
PHRYMACEAE
Mimulus ringens L.
 var. **ringens**
 Allegheny monkey-flower



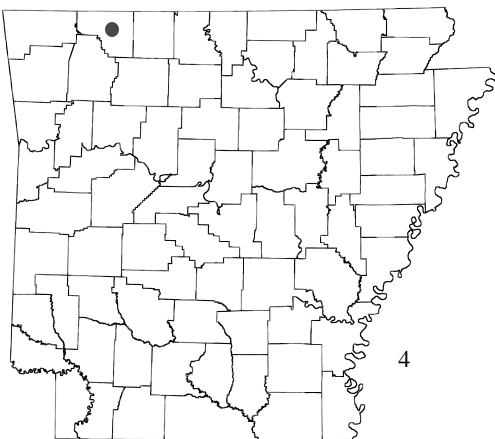
PHRYMACEAE
Phryma leptostachya L.
 lopseed



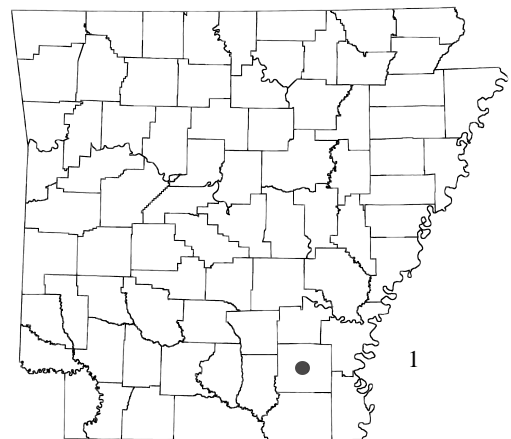
PHYLLANTHACEAE
Leptopus phyllanthoides (Nutt.) G.L. Webster
 maidenbush, buckbrush



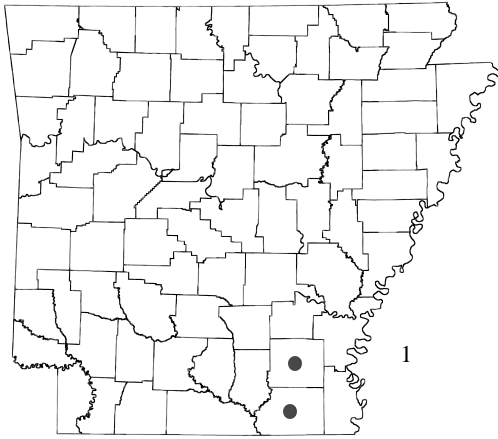
PHYLLANTHACEAE
Phyllanthus caroliniensis Walter
 subsp. **caroliniensis**
 Carolina leaf-flower



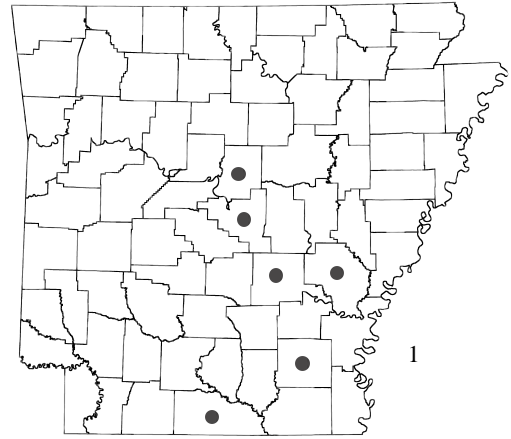
PHYLLANTHACEAE
Phyllanthus polygonoides Nutt. ex Spreng.
 knotweed leaf-flower



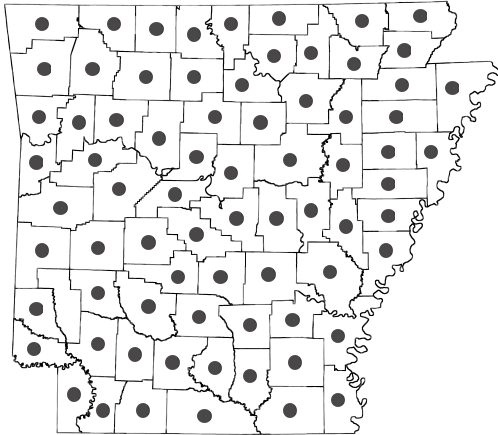
PHYLLANTHACEAE
Phyllanthus pudens L.C. Wheeler
 bird-seed leaf-flower



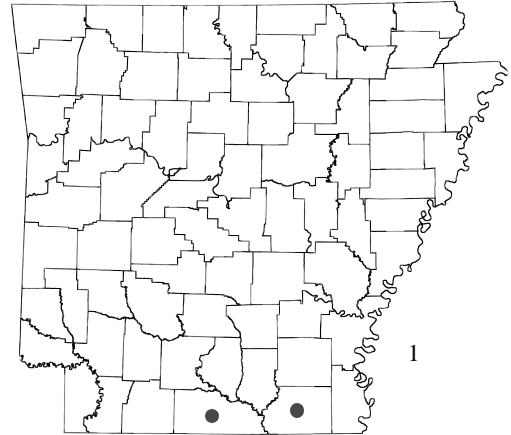
PHYLLANTHACEAE
Phyllanthus tenellus Roxb.
 Mascarene Island leaf-flower



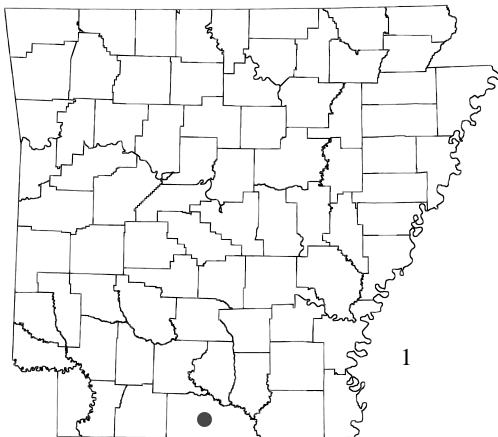
PHYLLANTHACEAE
Phyllanthus urinaria L.
subsp. urinaria
 leaf-flower, chamber-bitter



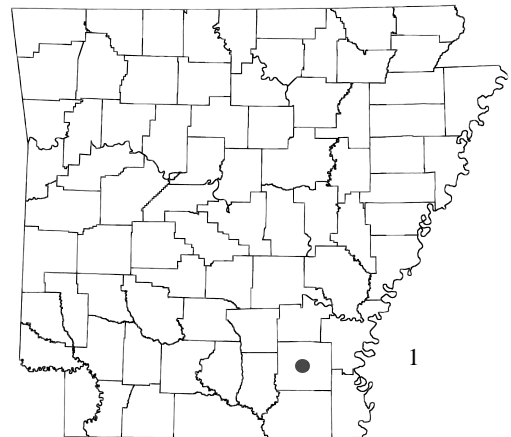
PHYTOLACCACEAE
Phytolacca americana L.
var. americana
 poke, pokeweed



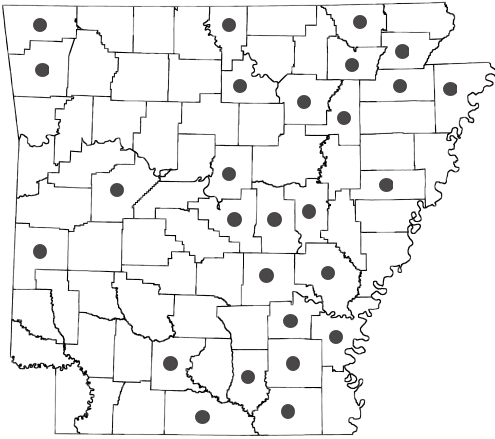
PLANTAGINACEAE
Bacopa egensis (Poepp.) Pennell
 Brazilian water-hyssop



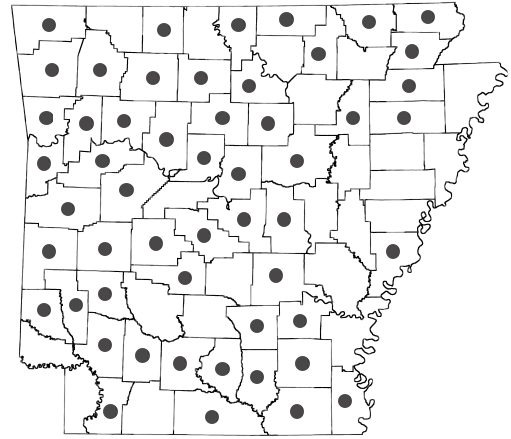
PLANTAGINACEAE
Bacopa monnieri (L.) Wettst.
 coastal water-hyssop



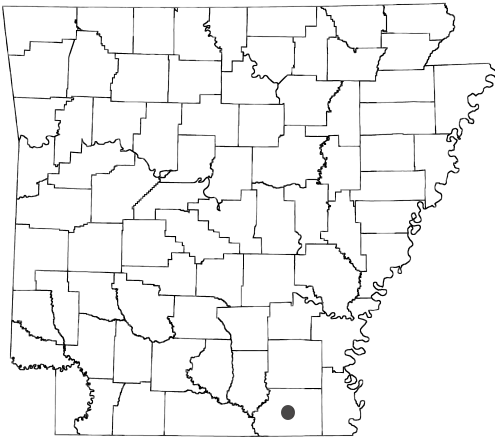
PLANTAGINACEAE
Bacopa repens (Sw.) Wettst.
 creeping water-hyssop



PLANTAGINACEAE
Bacopa rotundifolia (Michx.) Wettst.
 disc water-hyssop



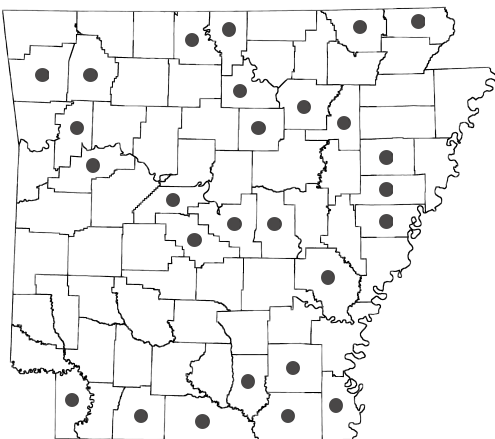
PLANTAGINACEAE
Callitriche heterophylla Pursh
 water-starwort



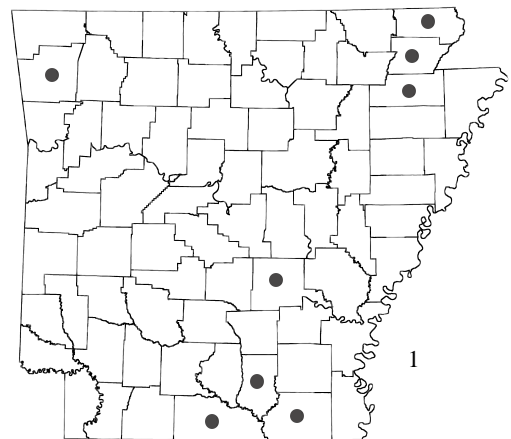
PLANTAGINACEAE
Callitriche nuttallii Torr.
 Nuttall's water-starwort



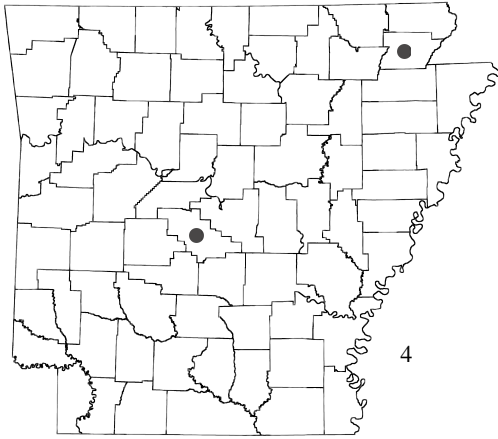
PLANTAGINACEAE
Callitriche peploides Nutt.
 water-starwort



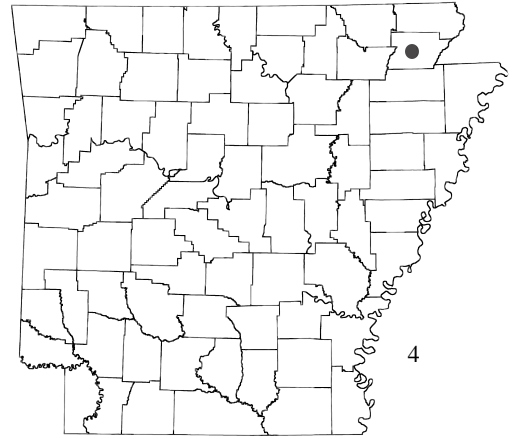
PLANTAGINACEAE
Callitriche terrestris Raf.
 terrestrial water-starwort



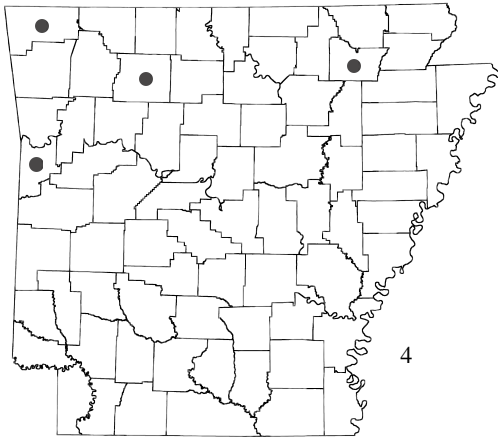
PLANTAGINACEAE
Chaenorhinum minus (L.) Lange
 dwarf-snapdragon



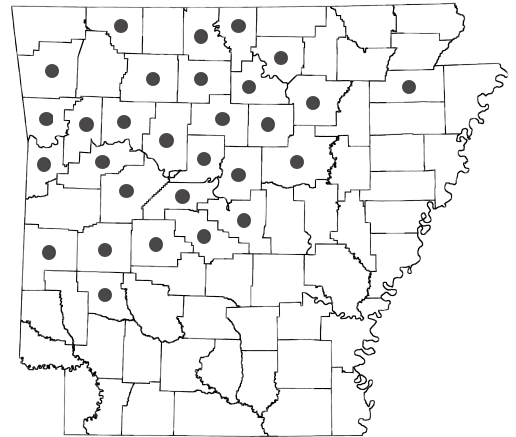
PLANTAGINACEAE
***Chelone glabra* L.**
white turtlehead



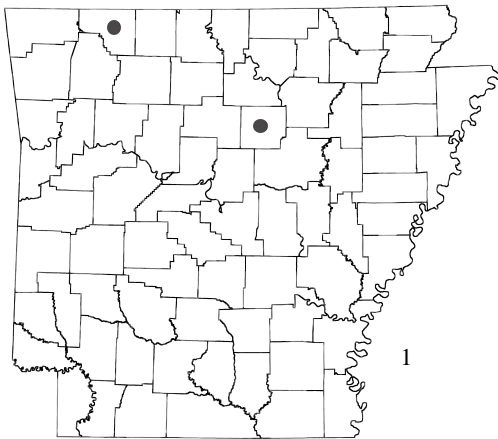
PLANTAGINACEAE
***Chelone obliqua* L.**
var. *speciosa* Pennell & Wherry
rose turtlehead



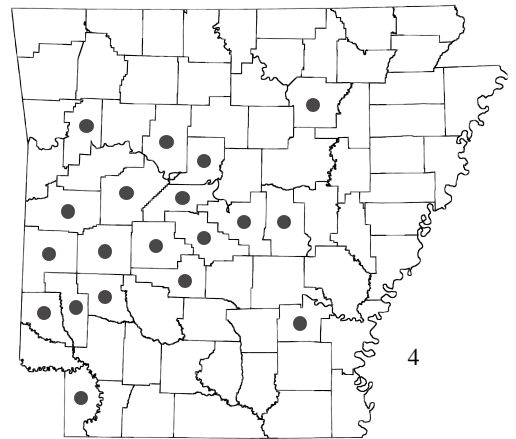
PLANTAGINACEAE
***Collinsia verna* Nutt.**
blue-eyed Mary



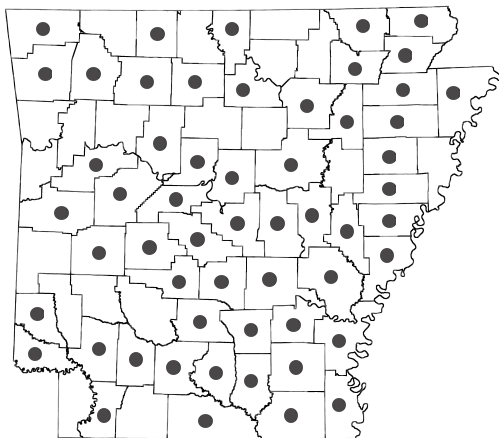
PLANTAGINACEAE
***Collinsia violacea* Nutt.**
violet blue-eyed Mary, violet collinsia



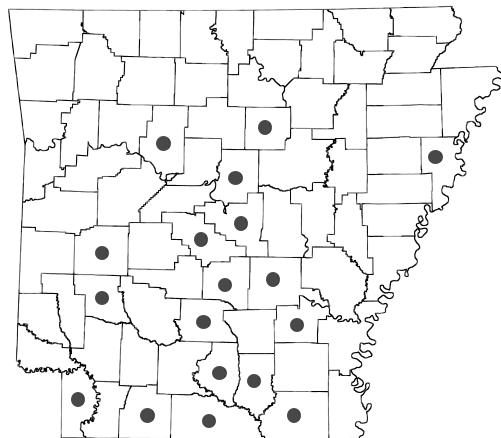
PLANTAGINACEAE
***Cymbalaria muralis* P.Gaertn., B.Mey. & Scherb.**
Kenilworth-ivy



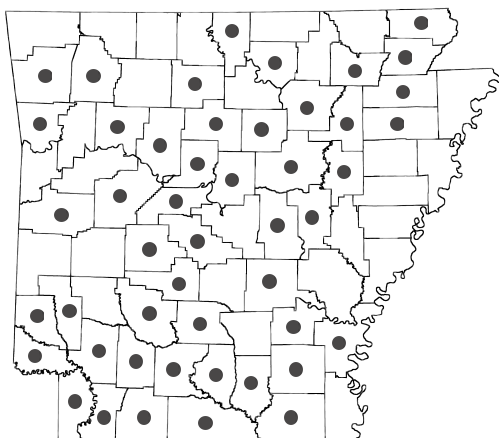
PLANTAGINACEAE
***Gratiola brevifolia* Raf.**
sticky hedge-hyssop



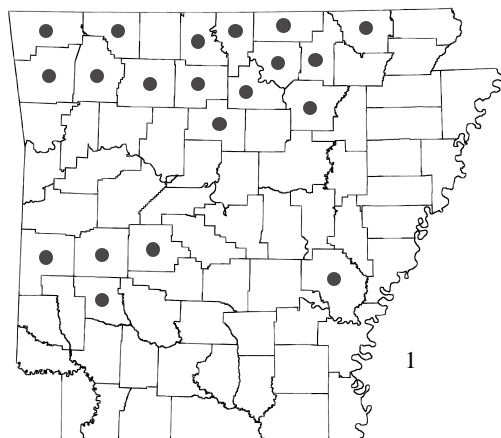
PLANTAGINACEAE
Gratiola neglecta Torr.
 clammy hedge-hyssop



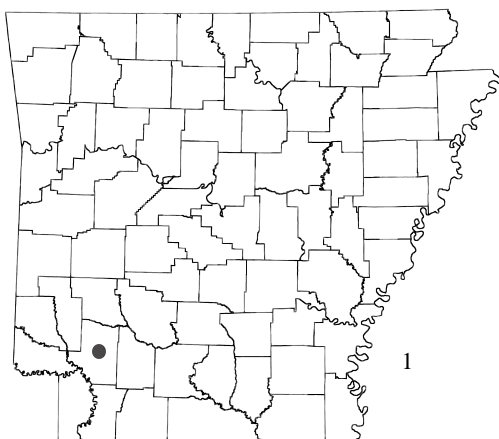
PLANTAGINACEAE
Gratiola pilosa Michx.
 hairy hedge-hyssop



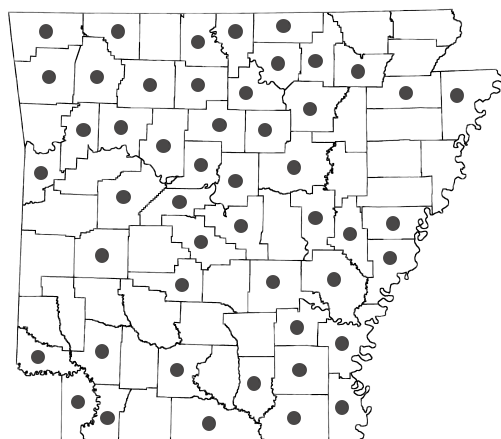
PLANTAGINACEAE
Gratiola virginiana L.
 hedge-hyssop



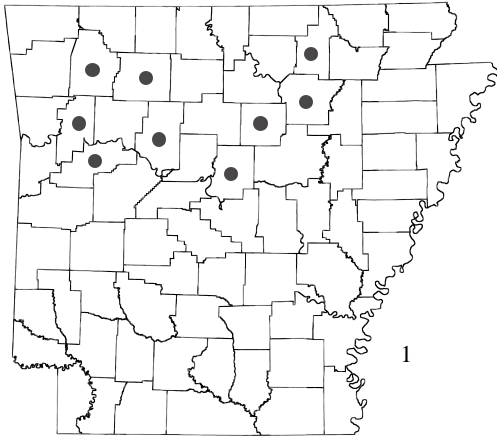
PLANTAGINACEAE
Kickxia elatine (L.) Dumort.
 cancerwort



PLANTAGINACEAE
Kickxia spuria (L.) Dumort.
 cancerwort

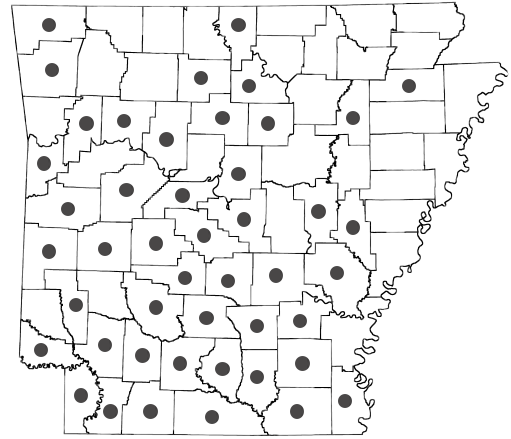


PLANTAGINACEAE
Leucospora multifida (Michx.) Nutt.
 narrow-leaf paleseed



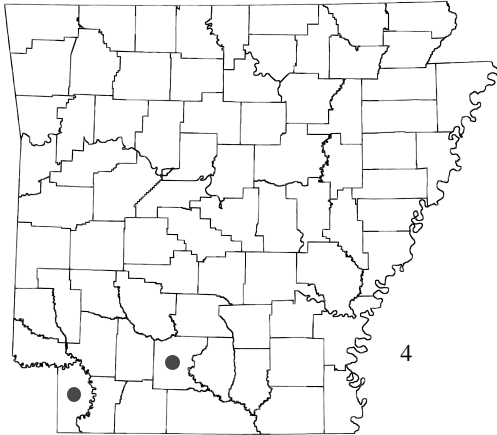
PLANTAGINACEAE
***Linaria vulgaris* Mill.**

butter-and-eggs, yellow toadflax



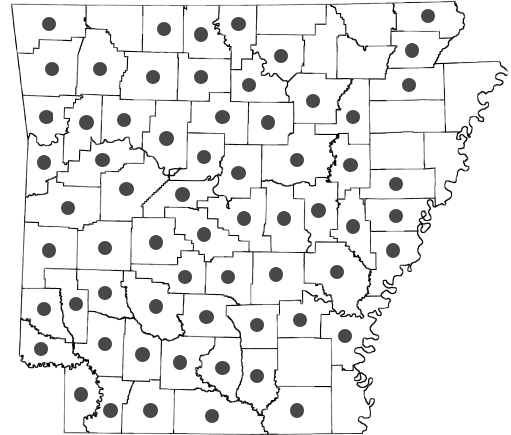
PLANTAGINACEAE
***Mecardonia acuminata* (Walter) Small**

purple axil-flower



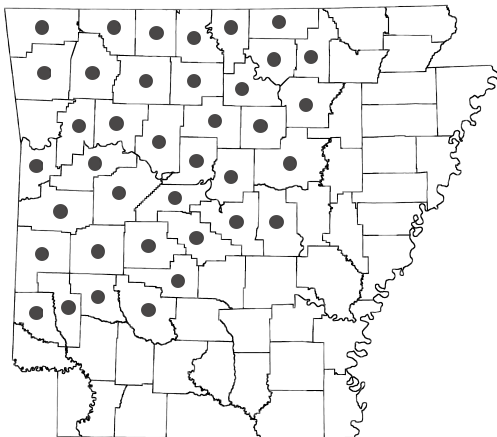
PLANTAGINACEAE
***Nuttallanthus canadensis* (L.) D.A.Sutton**

sand blue toadflax



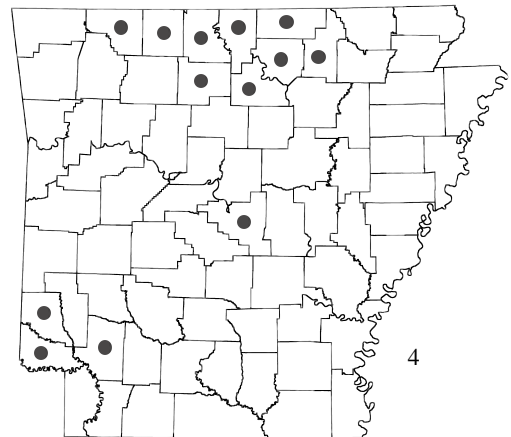
PLANTAGINACEAE
***Nuttallanthus texanus* (Scheele) D.A.Sutton**

blue toadflax, oldfield toadflax



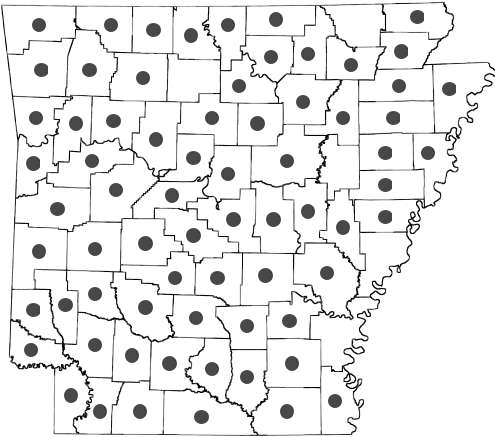
PLANTAGINACEAE
***Penstemon arkansanus* Pennell**

Arkansas beardtongue

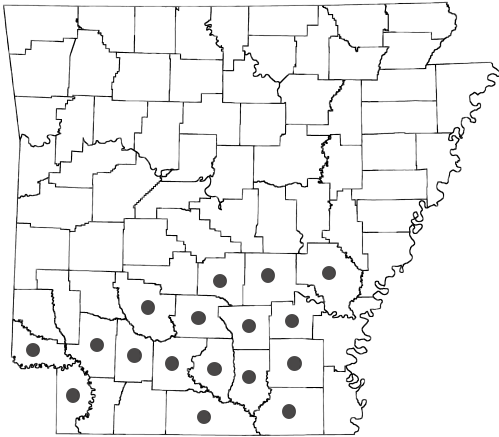


PLANTAGINACEAE
***Penstemon cobaea* Nutt.**

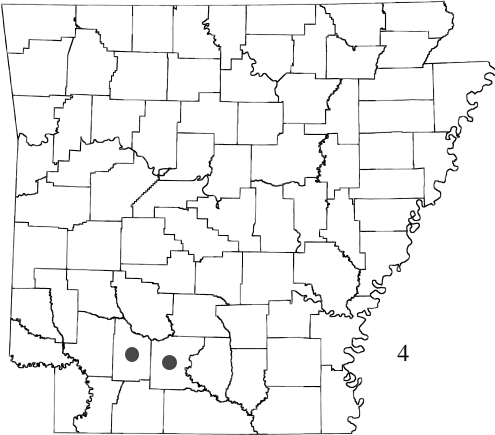
showy beardtongue, cobaea penstemon



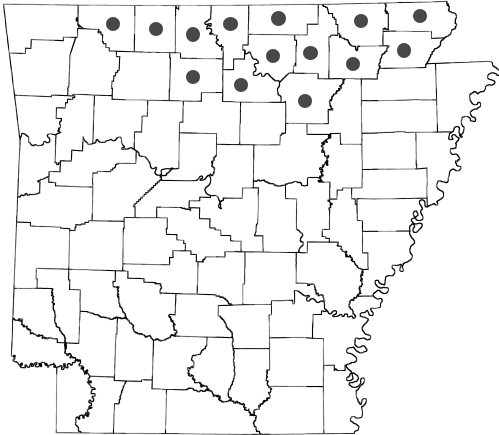
PLANTAGINACEAE
Penstemon digitalis Nutt. ex Sims
foxglove beardtongue



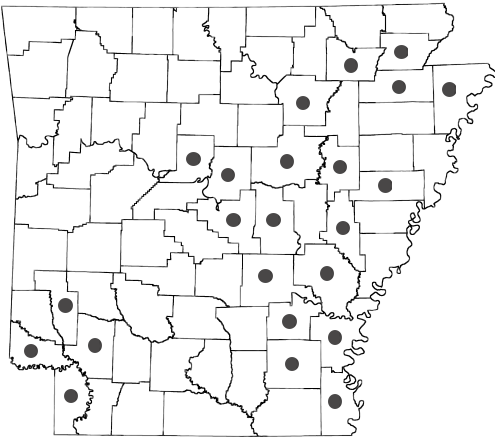
PLANTAGINACEAE
Penstemon laxiflorus Pennell
beardtongue



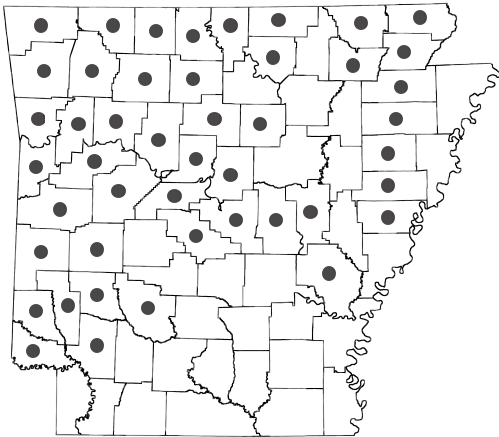
PLANTAGINACEAE
Penstemon murrayanus Hook.
scarlet beardtongue, red penstemon



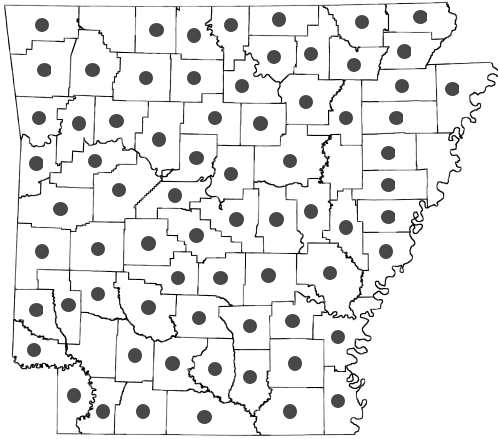
PLANTAGINACEAE
Penstemon pallidus Small
beardtongue



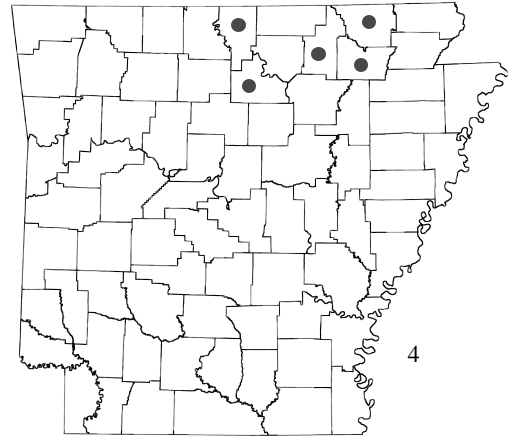
PLANTAGINACEAE
Penstemon tenuis Small
beardtongue



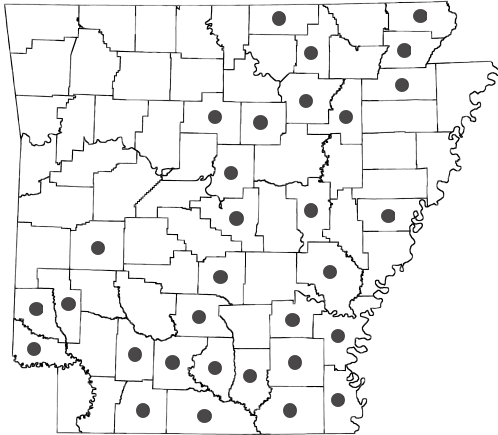
PLANTAGINACEAE
Penstemon tubiflorus Nutt.
beardtongue



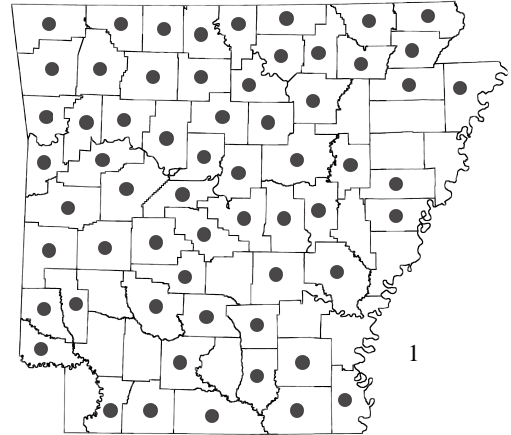
PLANTAGINACEAE
Plantago aristata Michx.
bracted plantain



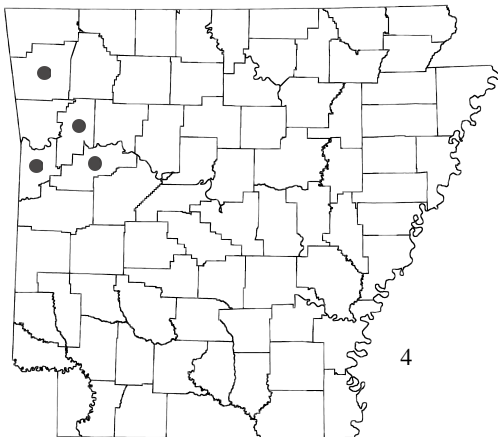
PLANTAGINACEAE
Plantago cordata Lam.
heart-leaf plantain



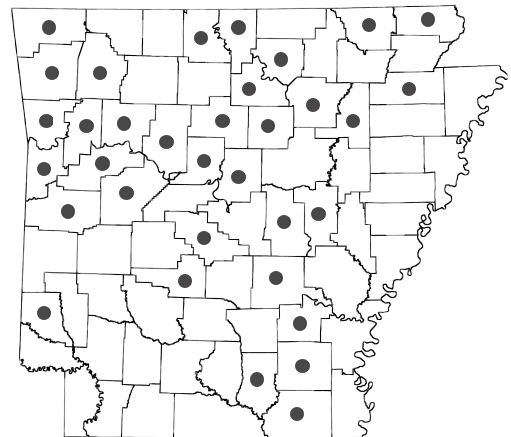
PLANTAGINACEAE
Plantago heterophylla Nutt.
slender plantain



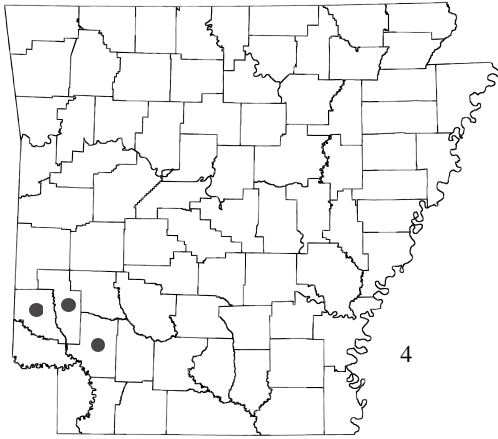
PLANTAGINACEAE
Plantago lanceolata L.
English plantain



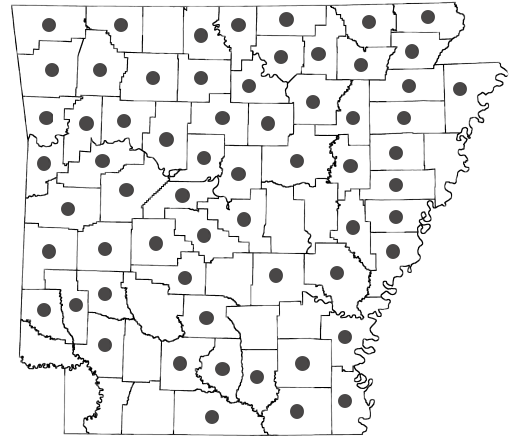
PLANTAGINACEAE
Plantago patagonica Jacq.
woolly plantain



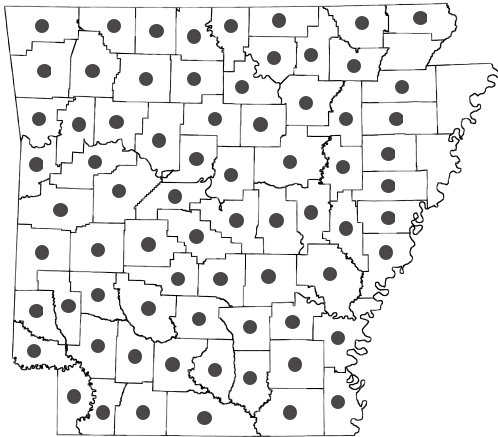
PLANTAGINACEAE
Plantago pusilla Nutt.
dwarf plantain



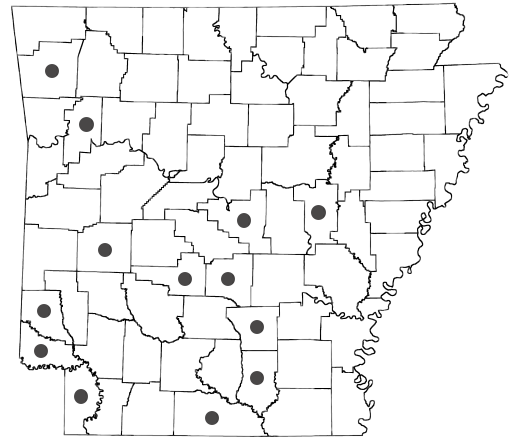
PLANTAGINACEAE
Plantago rhodosperma Decne.
 red-seed plantain



PLANTAGINACEAE
Plantago rugelii Decne.
 black-seed plantain, Rugel's plantain



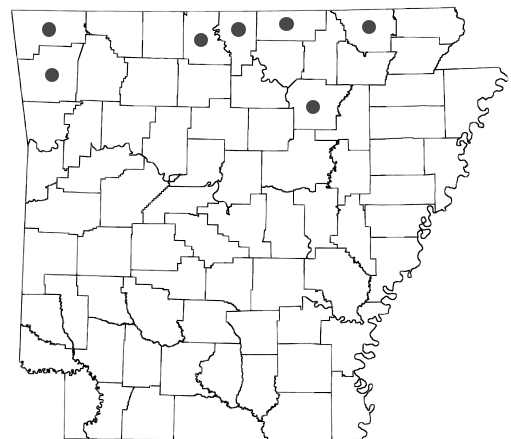
PLANTAGINACEAE
Plantago virginica L.
 hoary plantain, pale-seed plantain



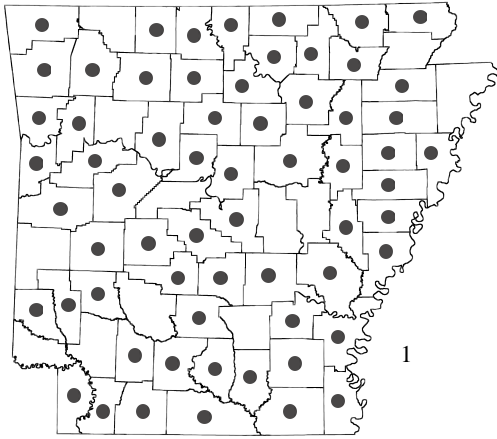
PLANTAGINACEAE
Plantago wrightiana Decne. ex A.DC.
 Wright's plantain



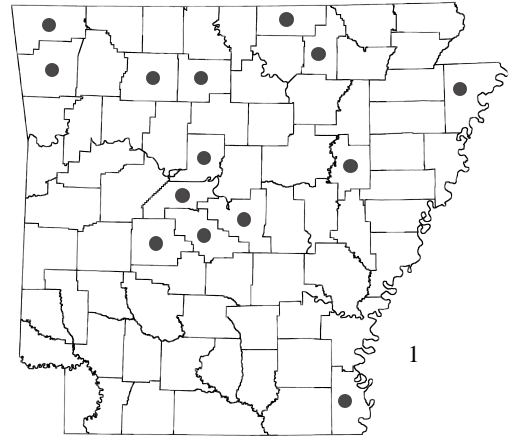
PLANTAGINACEAE
Scoparia dulcis L.
 licorice-weed, sweet-broom



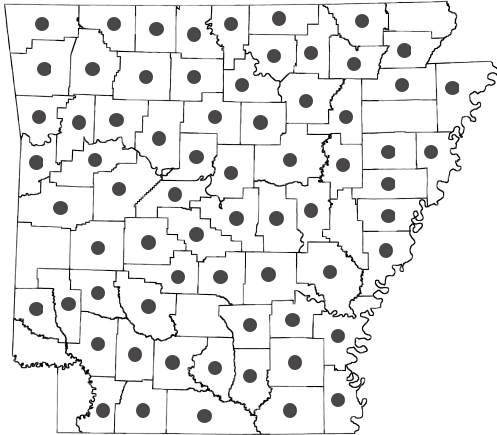
PLANTAGINACEAE
Veronica anagallis-aquatica L.
 water speedwell



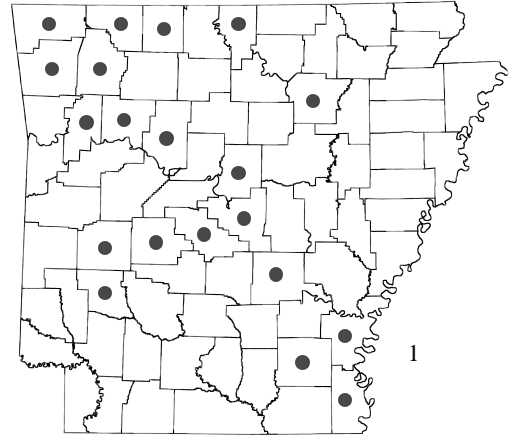
PLANTAGINACEAE
Veronica arvensis L.
corn speedwell



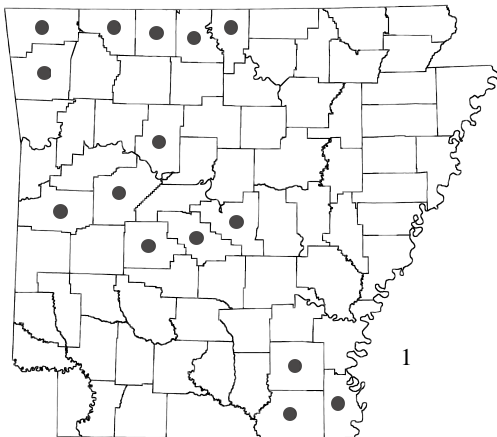
PLANTAGINACEAE
Veronica hederifolia L.
ivy-leaf speedwell



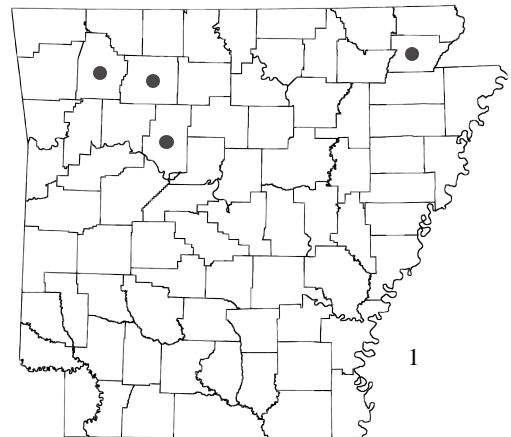
PLANTAGINACEAE
Veronica peregrina L.
neckweed, necklace-weed



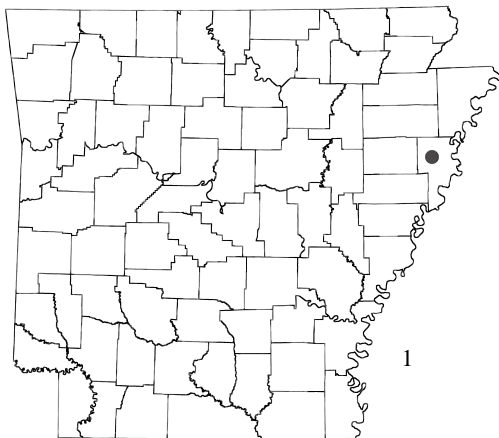
PLANTAGINACEAE
Veronica persica Poir.
Persian speedwell



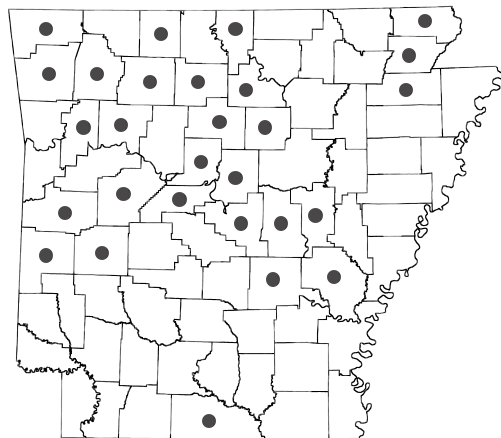
PLANTAGINACEAE
Veronica polita Fr.
field speedwell



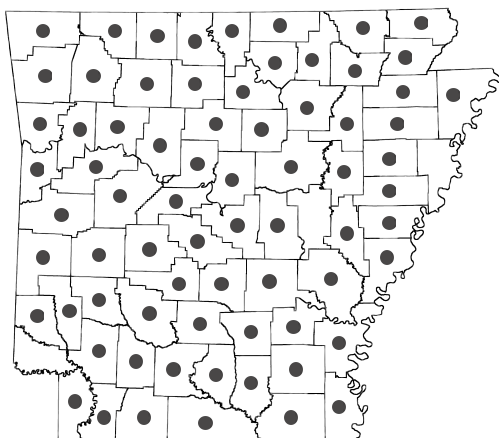
PLANTAGINACEAE
Veronica serpyllifolia L.
var. serpyllifolia
thyme-leaf speedwell



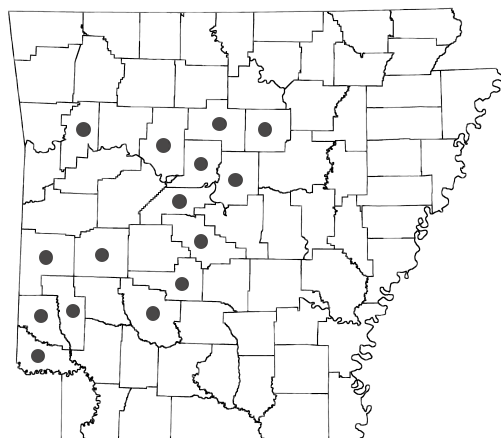
PLANTAGINACEAE
Veronica triphyllos L.
 speedwell



PLANTAGINACEAE
Veronicastrum virginicum (L.) Farw.
 Culver's-root



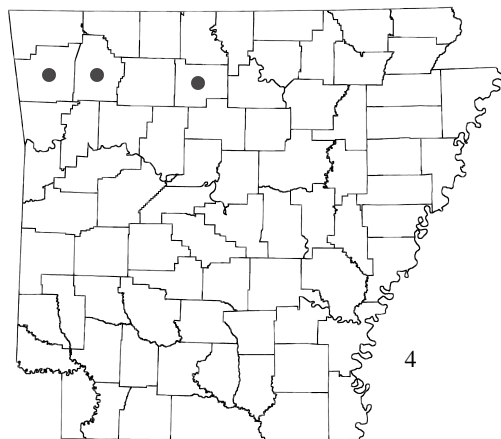
PLATANACEAE
Platanus occidentalis L.
 sycamore, plane-tree



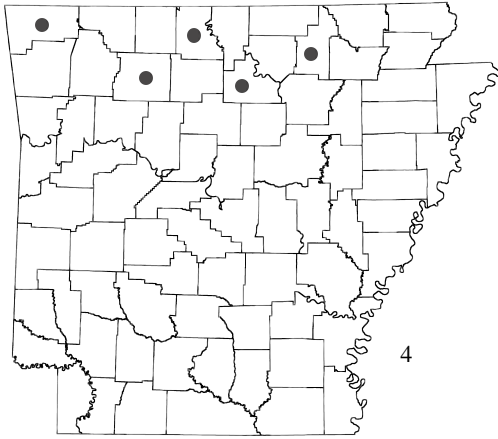
PODOSTEMACEAE
Podostemum ceratophyllum Michx.
 riverweed



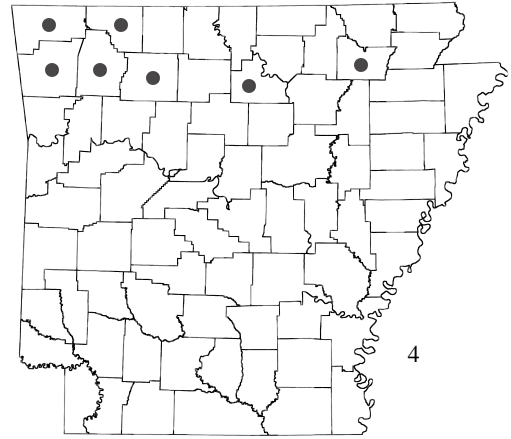
POLEMONIACEAE
Ipomopsis rubra (L.) Wherry
 standing-cypress, Texas plume



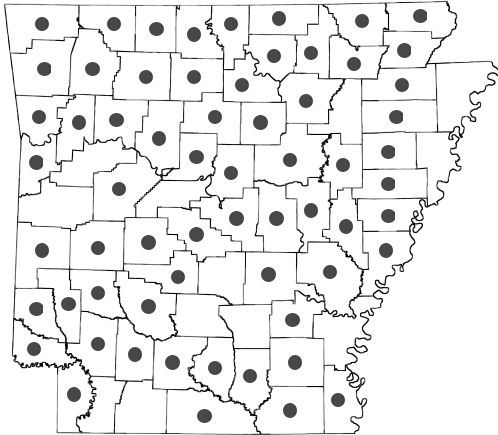
POLEMONIACEAE
Phlox amplifolia Britton
 broad-leaf phlox



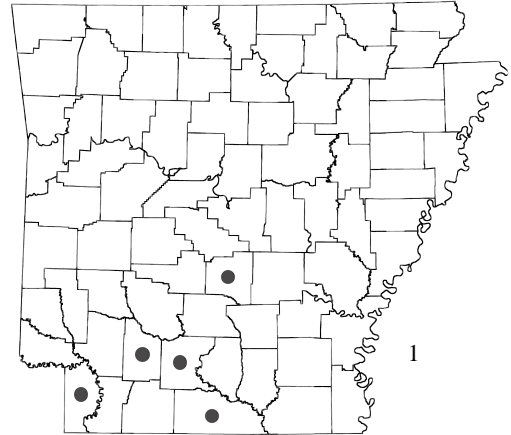
POLEMONIACEAE
Phlox bifida L.C.Beck
 subsp. *bifida*
 sand phlox, cleft phlox



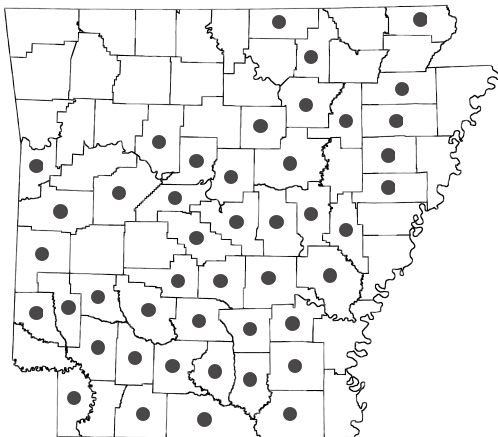
POLEMONIACEAE
Phlox bifida L.C.Beck
 subsp. *stellaria* (A.Gray) Wherry
 starry sand phlox, starry cleft phlox



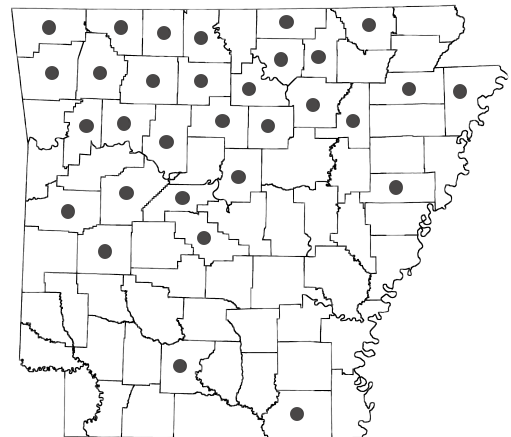
POLEMONIACEAE
Phlox divaricata L.
 subsp. *laphamii* (A.W.Wood) Wherry
 wild blue phlox, wild sweet-William



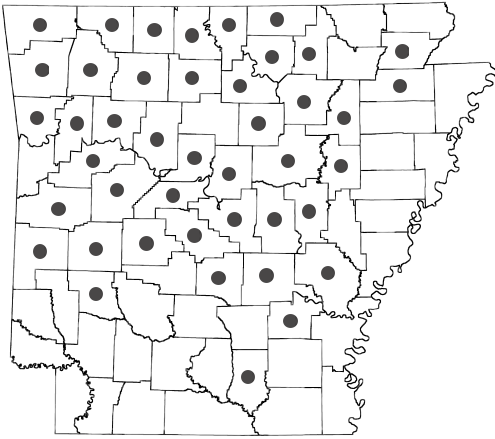
POLEMONIACEAE
Phlox drummondii Hook.
 annual phlox



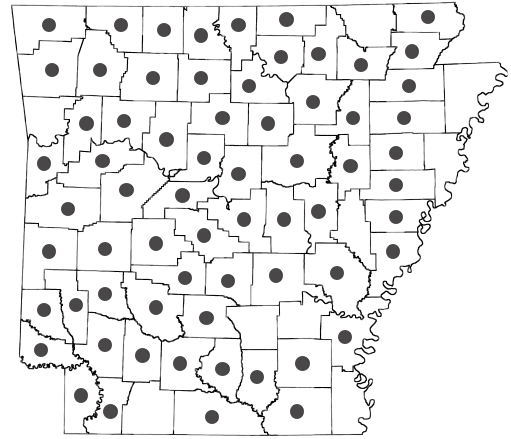
POLEMONIACEAE
Phlox glaberrima L.
 smooth phlox



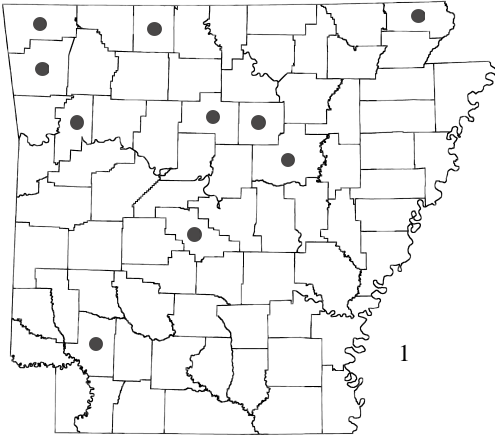
POLEMONIACEAE
Phlox paniculata L.
 perennial phlox, garden phlox



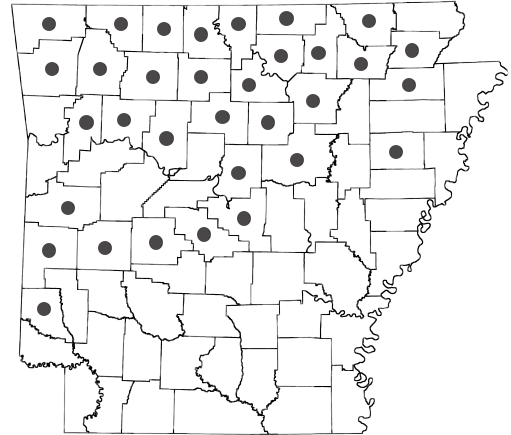
POLEMONIACEAE
Phlox pilosa L.
subsp. ozarkana (Wherry) Wherry
 Ozark downy phlox



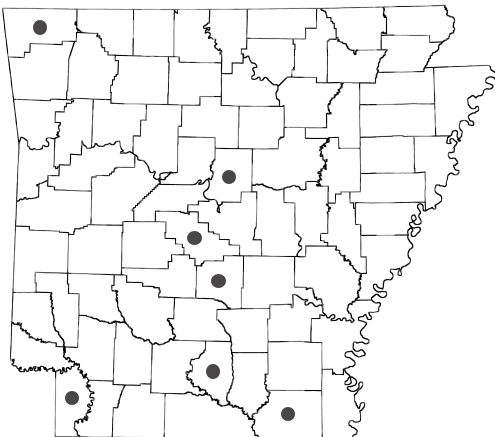
POLEMONIACEAE
Phlox pilosa L.
subsp. pilosa
 downy phlox



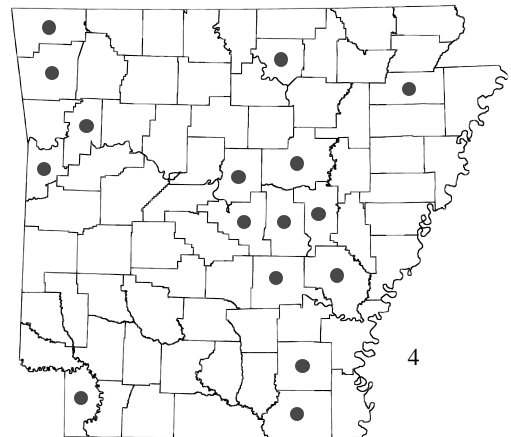
POLEMONIACEAE
Phlox subulata L.
 moss phlox



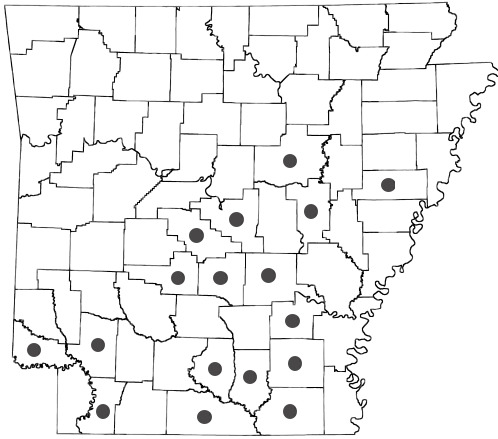
POLEMONIACEAE
Polemonium reptans L.
var. reptans
 Jacob's-ladder



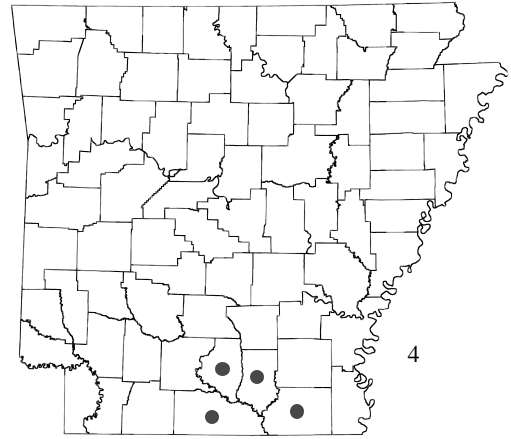
POLYGALACEAE
Polygala cruciata L.
 drumheads, cross-leaf milkwort



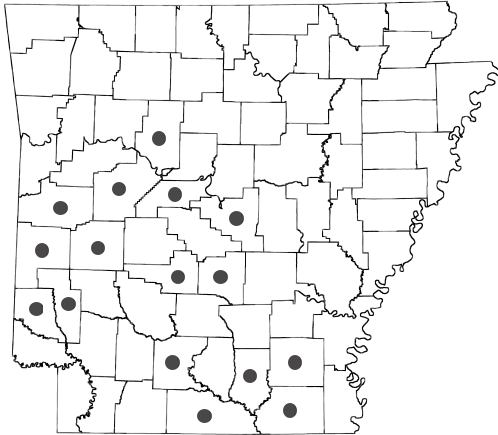
POLYGALACEAE
Polygala incarnata L.
 pink milkwort



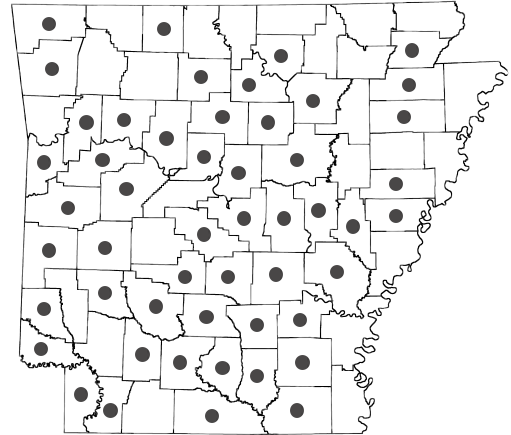
POLYGALACEAE
Polygala mariana Mill.
Maryland milkwort



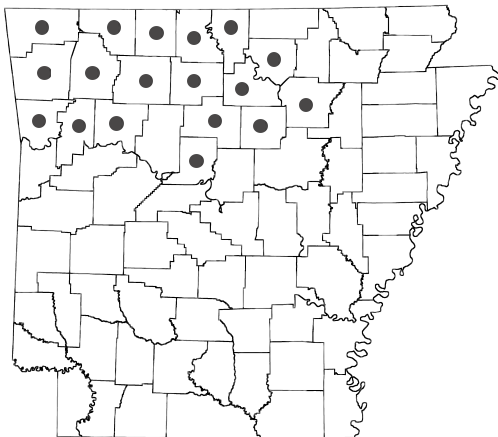
POLYGALACEAE
Polygala nana (Michx.) DC.
candyroot, dwarf milkwort



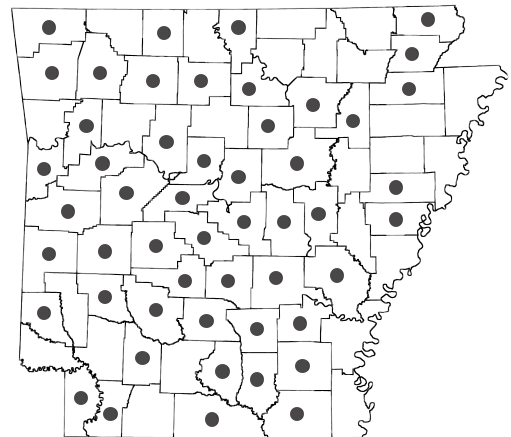
POLYGALACEAE
Polygala polygama Walter
racemed milkwort



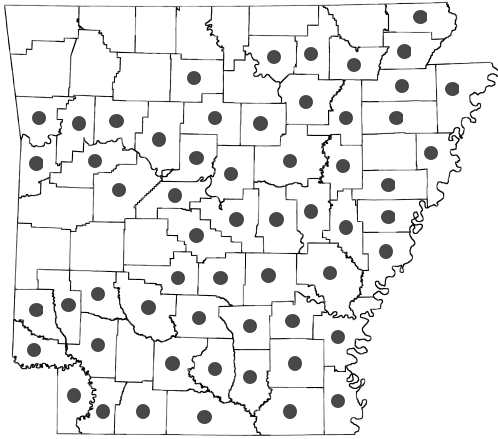
POLYGALACEAE
Polygala sanguinea L.
purple milkwort, blood milkwort



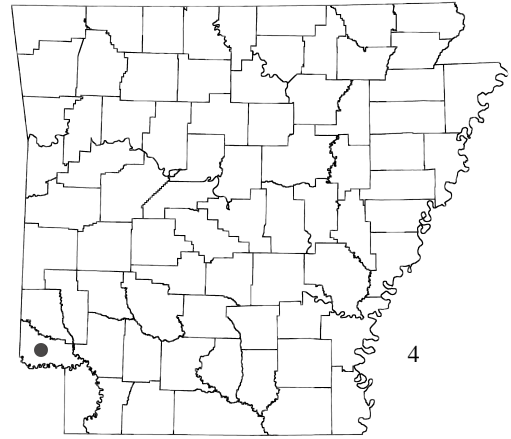
POLYGALACEAE
Polygala senega L.
Seneca snakeroot



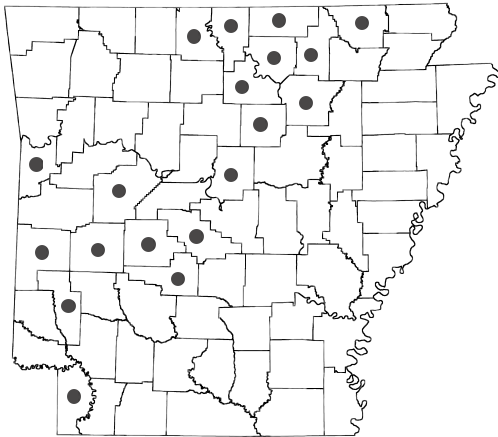
POLYGALACEAE
Polygala verticillata L.
whorled milkwort



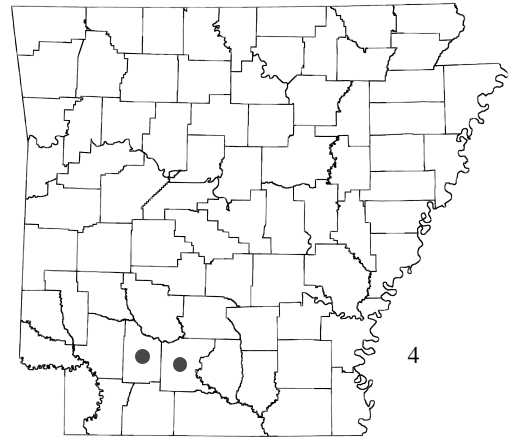
POLYGONACEAE
Brunnichia ovata (Walter) Shinnors
 ladies'-eardrops, buckwheat-vine



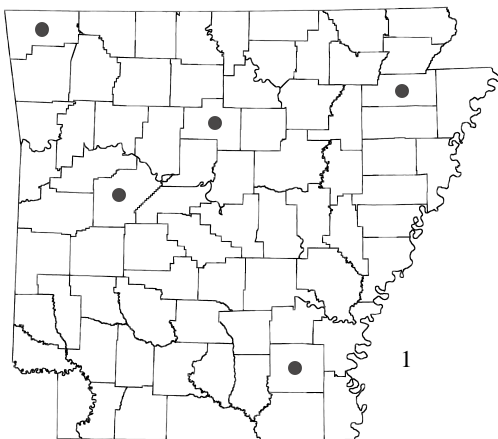
POLYGONACEAE
Eriogonum annuum Nutt.
 annual wild buckwheat



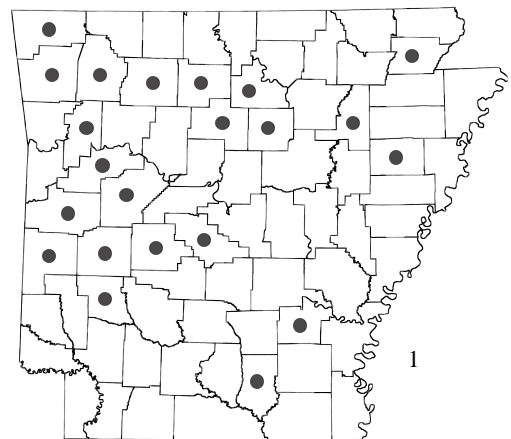
POLYGONACEAE
Eriogonum longifolium Nutt.
var. longifolium
 umbrella-plant, wild buckwheat



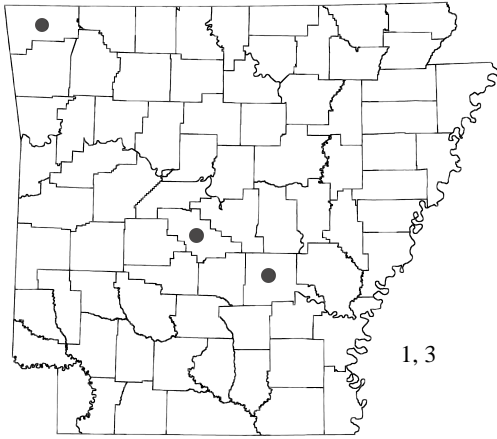
POLYGONACEAE
Eriogonum multiflorum Benth.
var. multiflorum
 many-flower wild buckwheat



POLYGONACEAE
Fagopyrum esculentum Moench
 buckwheat



POLYGONACEAE
Fallopia convolvulus (L.) Á.Löve
 black-bindweed, climbing false buckwheat



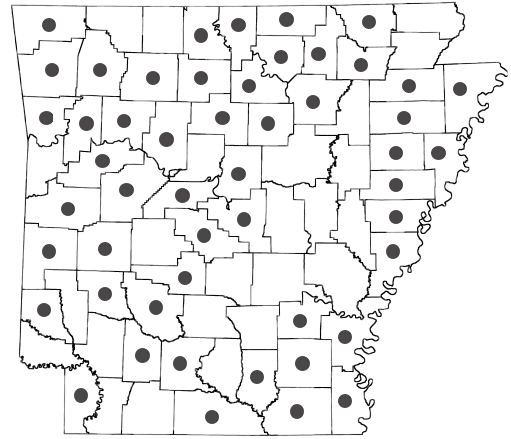
1, 3

POLYGONACEAE

Fallopia japonica (Houtt.) Ronse Decr.

var. japonica

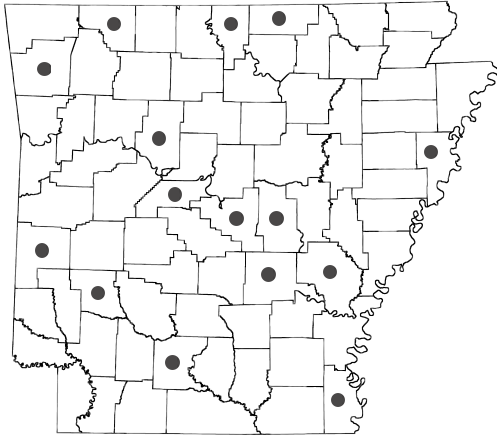
Japanese knotweed



POLYGONACEAE

Fallopia scandens (L.) Holub

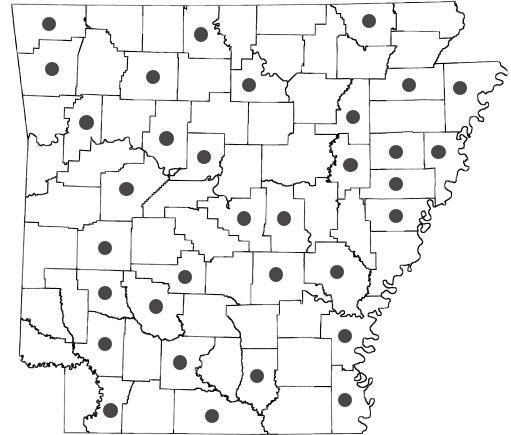
climbing false buckwheat, hedge-smartweed



POLYGONACEAE

Persicaria amphibia (L.) Gray

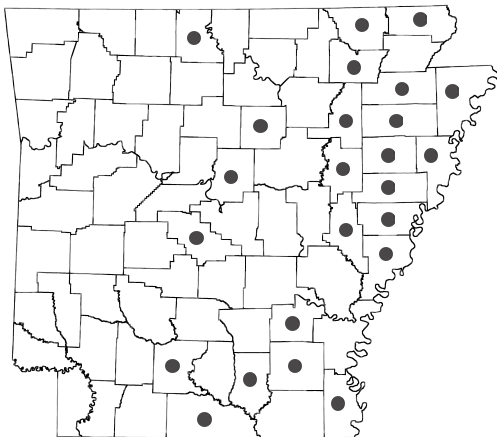
water smartweed



POLYGONACEAE

Persicaria bicornis (Raf.) Nieuwl.

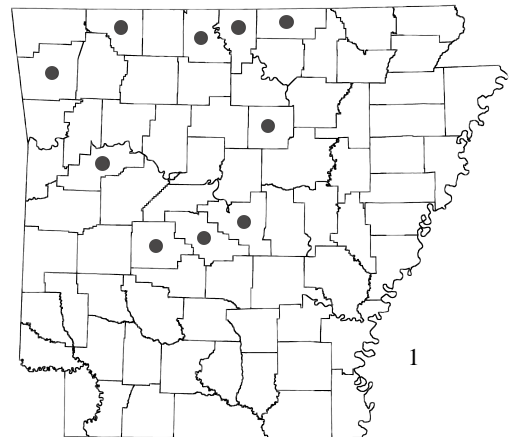
pink smartweed



POLYGONACEAE

Persicaria glabra (Willd.) M.Gómez

smartweed

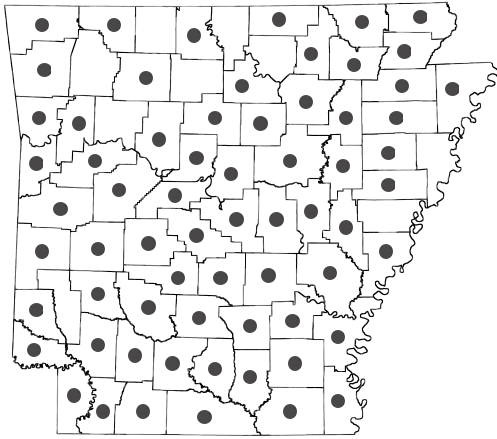


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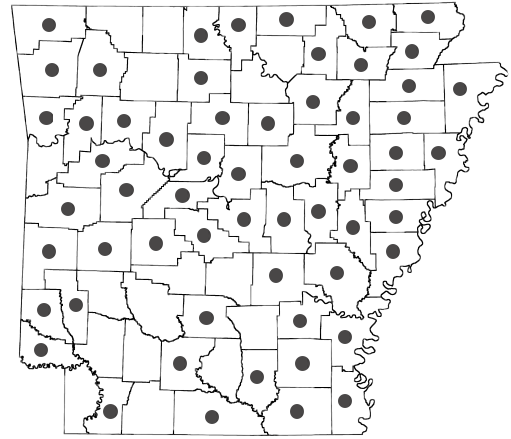
POLYGONACEAE

Persicaria hydropiper (L.) Spach

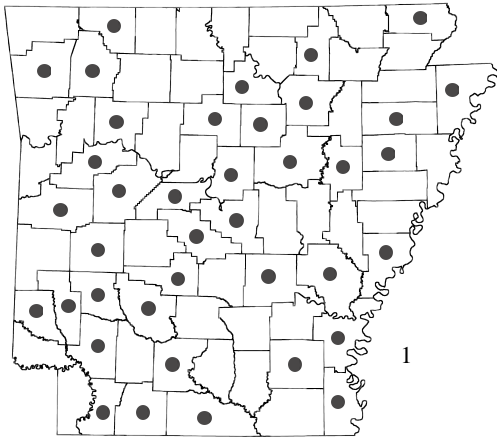
water-pepper, marsh-pepper smartweed



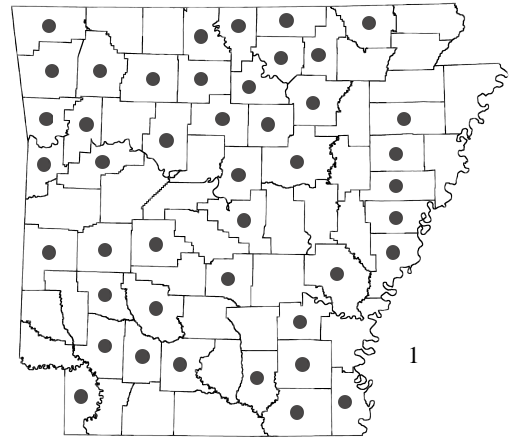
POLYGONACEAE
Persicaria hydropiperoides (Michx.) Small
 swamp smartweed, wild water-pepper



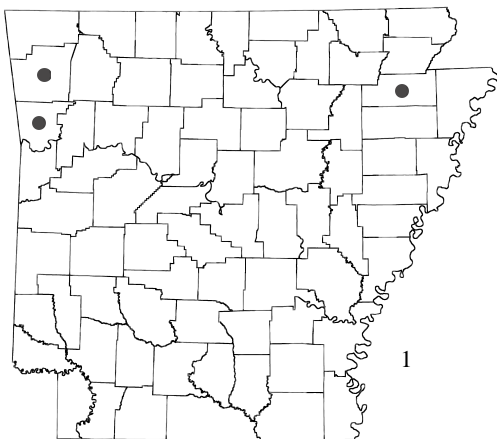
POLYGONACEAE
Persicaria lapathifolia (L.) Gray
 pale smartweed



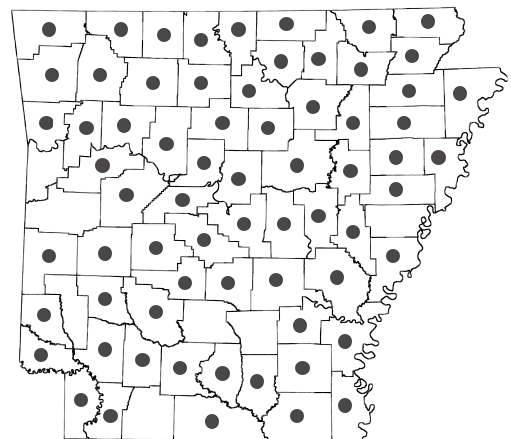
POLYGONACEAE
Persicaria longiseta (Bruijn) Kitag.
 bristly lady's-thumb



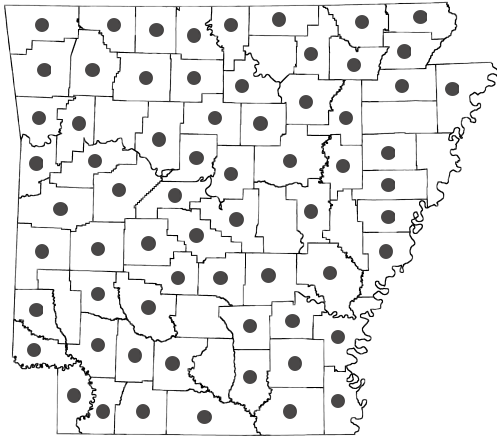
POLYGONACEAE
Persicaria maculosa Gray
 lady's-thumb



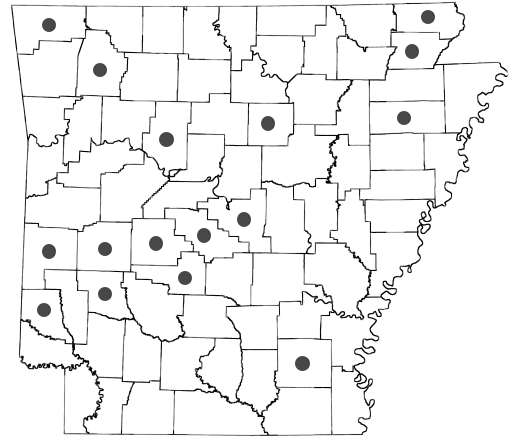
POLYGONACEAE
Persicaria orientalis (L.) Spach
 kiss-me-over-the-garden-gate, prince's feather



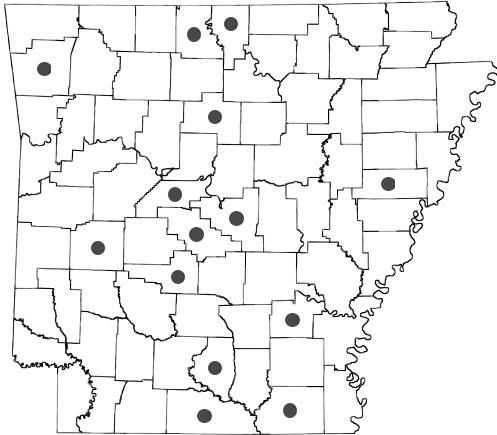
POLYGONACEAE
Persicaria pensylvanica (L.) M.Gómez
 pink smartweed, Pennsylvania smartweed



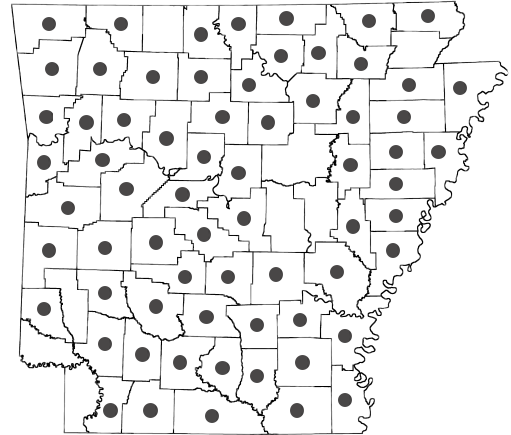
POLYGONACEAE
***Persicaria punctata* (Elliott) Small**
dotted smartweed, water smartweed



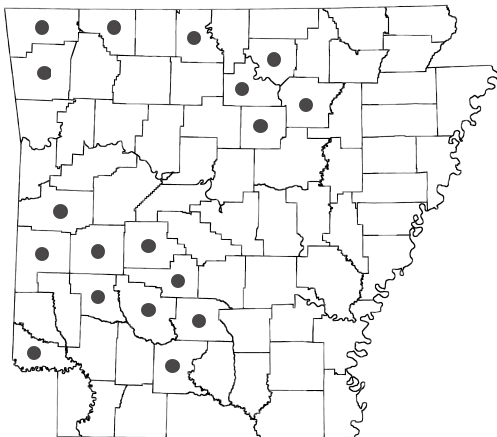
POLYGONACEAE
***Persicaria sagittata* (L.) H.Gross**
arrow-leaf tear-thumb



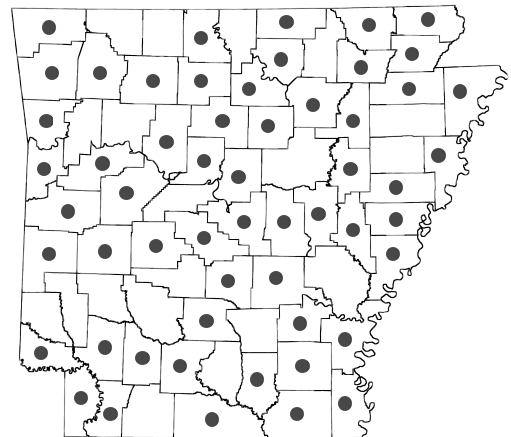
POLYGONACEAE
***Persicaria setacea* (Baldwin) Small**
bog smartweed



POLYGONACEAE
***Persicaria virginiana* (L.) Gaertn.**
jumpseed, Virginia knotweed

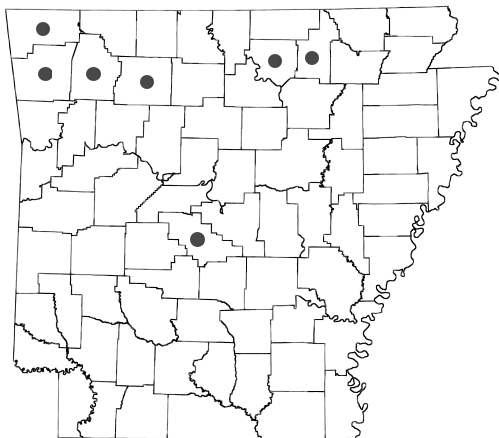


POLYGONACEAE
***Polygonella americana* (Fisch. & C.A.Mey.) Small**
jointweed



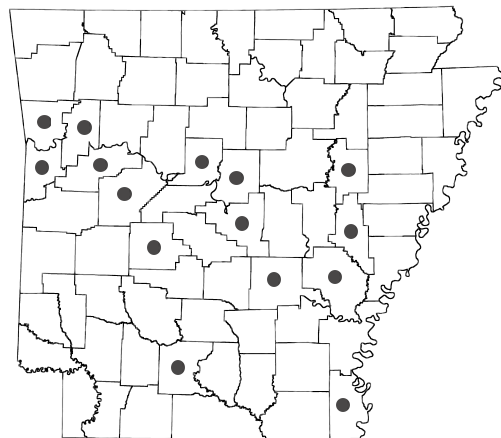
POLYGONACEAE
***Polygonum aviculare* L.**
knotweed, knotgrass

See *Appendix I* for infraspecific taxa and species status.



POLYGONACEAE
Polygonum erectum L.

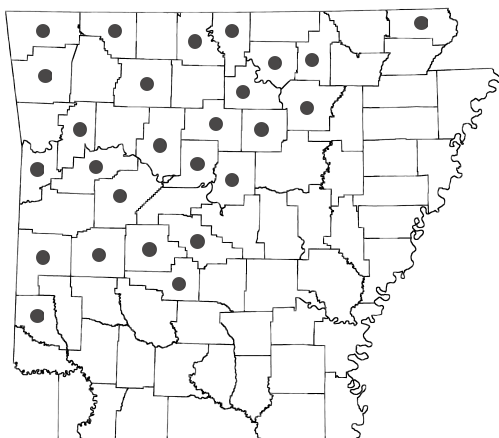
erect knotweed



POLYGONACEAE
Polygonum ramosissimum Michx.

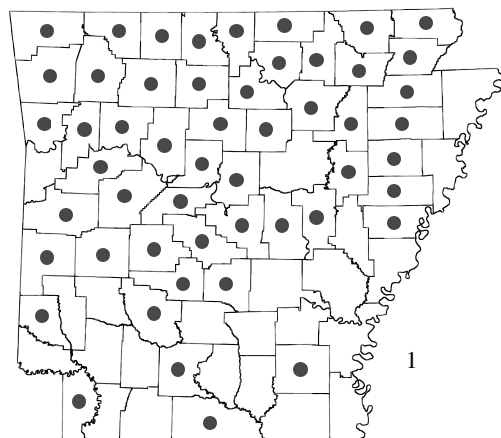
bushy knotweed

See *Appendix I* for infraspecific taxa and species status.



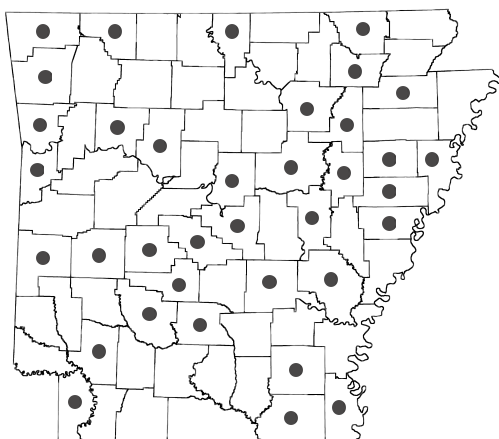
POLYGONACEAE
Polygonum tenue Michx.

pleat-leaf knotweed



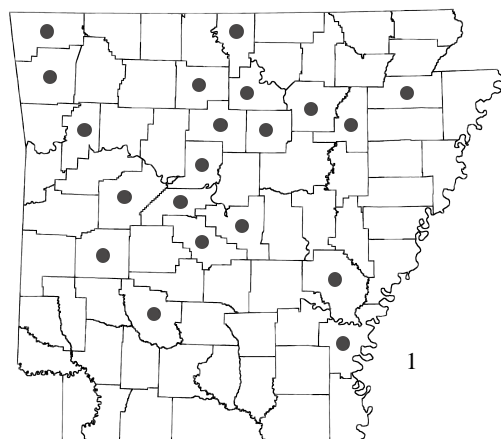
POLYGONACEAE
Rumex acetosella L.

sheep sorrel



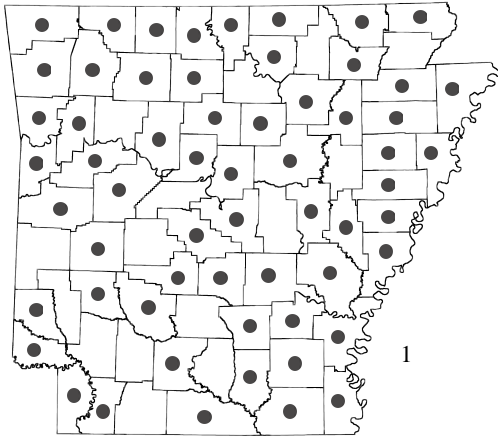
POLYGONACEAE
Rumex altissimus A.W.Wood

pale dock

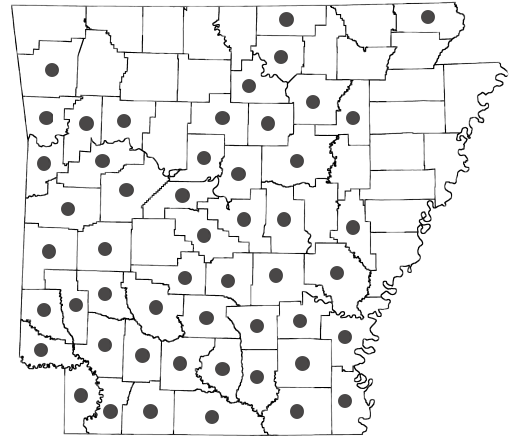


POLYGONACEAE
Rumex conglomeratus Murray

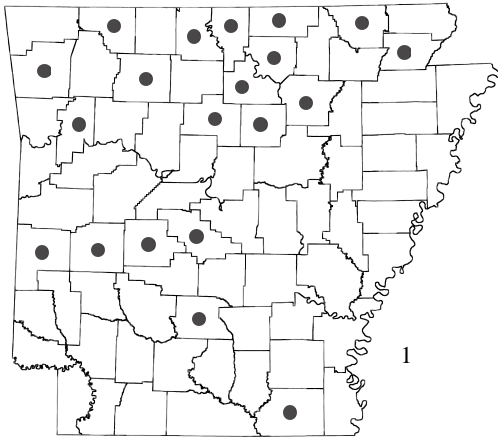
cluster dock



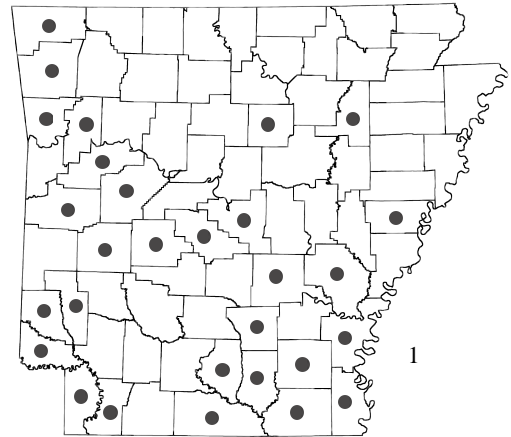
POLYGONACEAE
Rumex crispus L.
 curly dock, sour dock



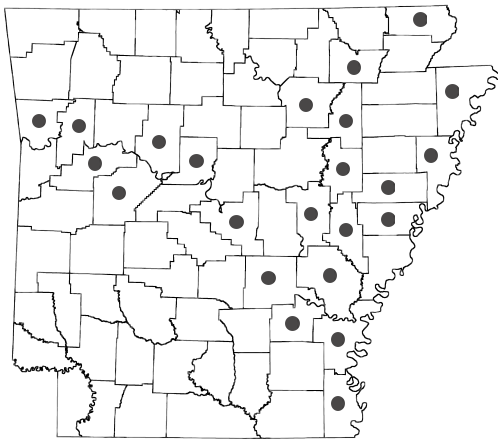
POLYGONACEAE
Rumex hastatulus Baldwin in Elliott
 heart-wing sorrel, wild sorrel



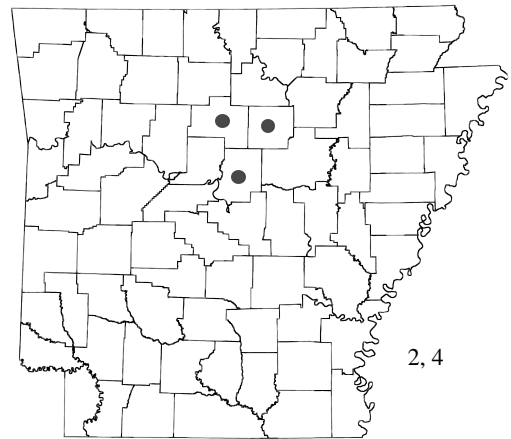
POLYGONACEAE
Rumex obtusifolius L.
 bitter dock, broad-leaf dock



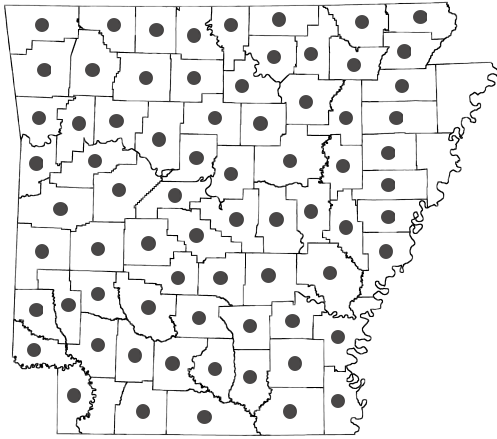
POLYGONACEAE
Rumex pulcher L.
 fiddle dock



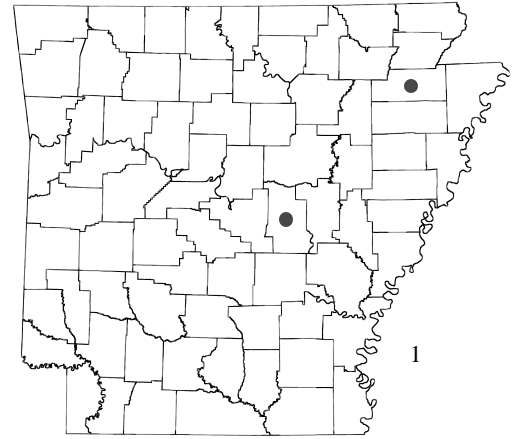
POLYGONACEAE
Rumex verticillatus L.
 swamp dock



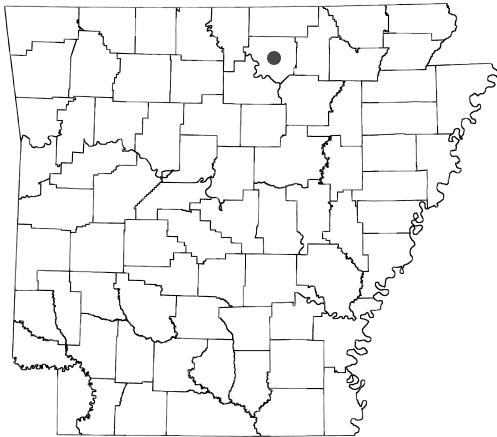
PORTULACACEAE
Claytonia ozarkensis J.M.Miller & K.L.Chambers
 Ozark spring-beauty



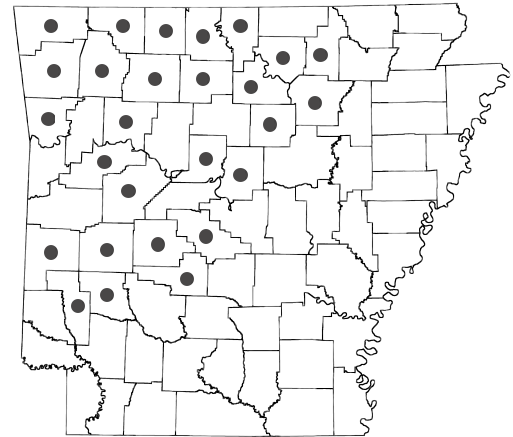
PORTULACACEAE
Claytonia virginica L.
 spring-beauty



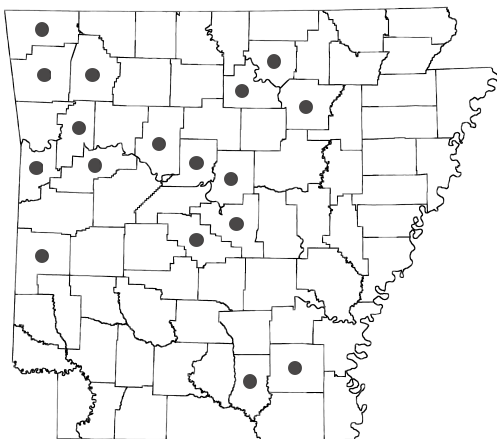
PORTULACACEAE
Montia linearis (Douglas ex Hook.) Greene
 narrow-leaf miner's-lettuce



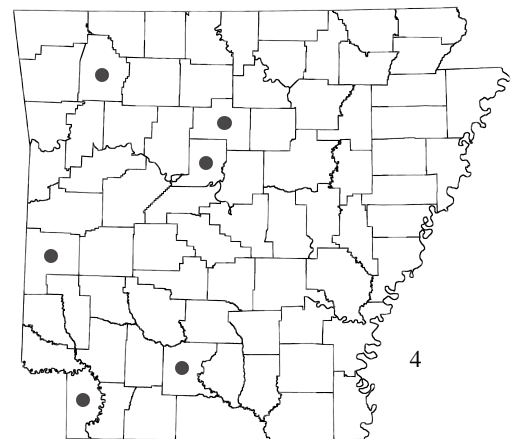
PORTULACACEAE
Phemeranthus calcaricus (S.Ware) Kiger
 fameflower, rock-pink



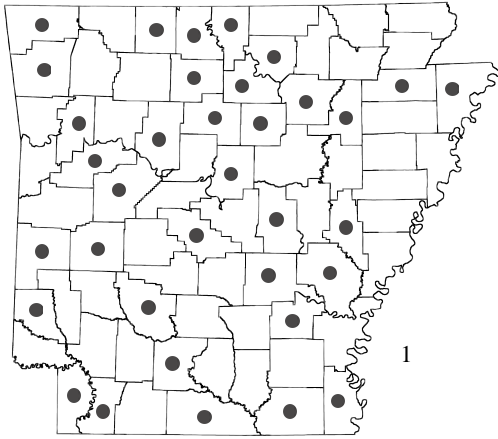
PORTULACACEAE
Phemeranthus calycinus (Engelm.) Kiger
 fameflower, rock-pink



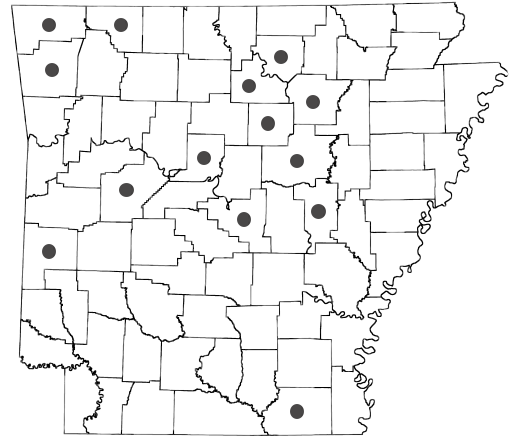
PORTULACACEAE
Phemeranthus parviflorus (Nutt.) Kiger
 fameflower, rock-pink



PORTULACACEAE
Phemeranthus rugospermus (Holz.) Kiger
 rough-seed fameflower



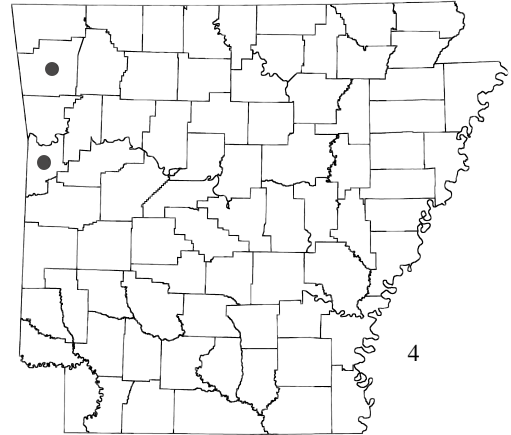
PORTULACACEAE
Portulaca oleracea L.
 purslane



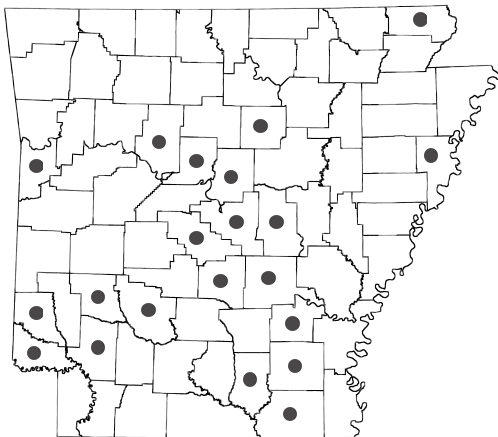
PORTULACACEAE
Portulaca pilosa L.
 hairy-purslane, kiss-me-quick



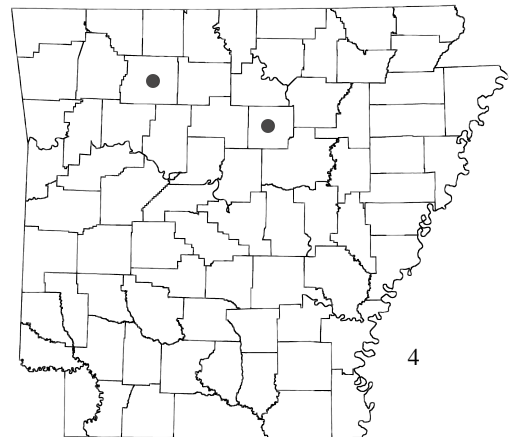
PORTULACACEAE
Portulaca umbraticola Kunth in Humb. et al.
subsp. lanceolata J.F.Matthews & Ketron
 wing-pod purslane



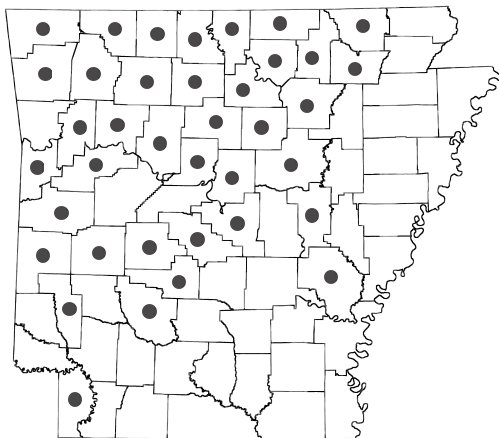
PRIMULACEAE
Androsace occidentalis Pursh
 rock-jasmine



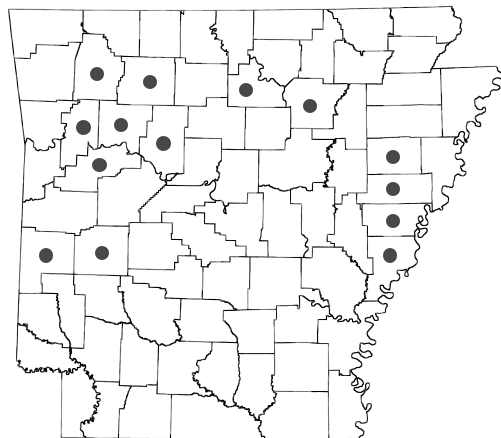
PRIMULACEAE
Hottonia inflata Elliott
 featherfoil, water-violet



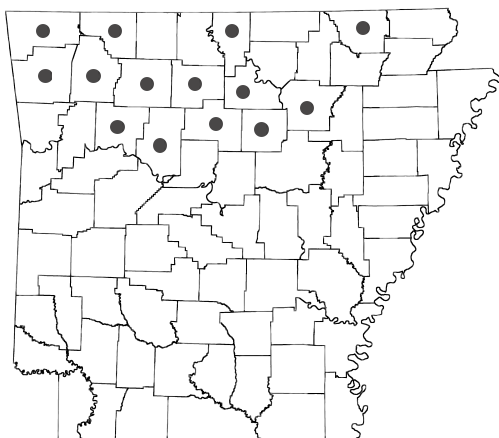
PRIMULACEAE
Primula frenchii (Vasey) Mast & Reveal
 French's shooting-star



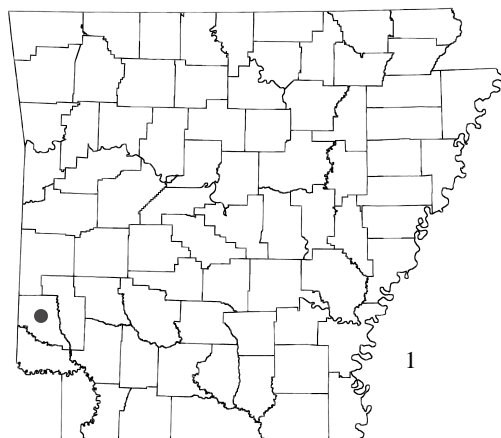
PRIMULACEAE
Primula meadia (L.) Mast & Reveal
 shooting-star



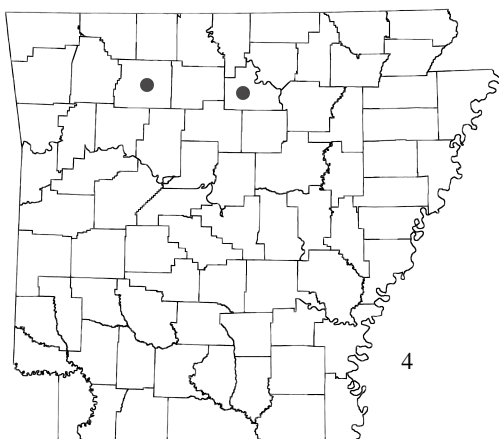
RANUNCULACEAE
Actaea pachypoda Elliott
 doll's-eyes, white baneberry



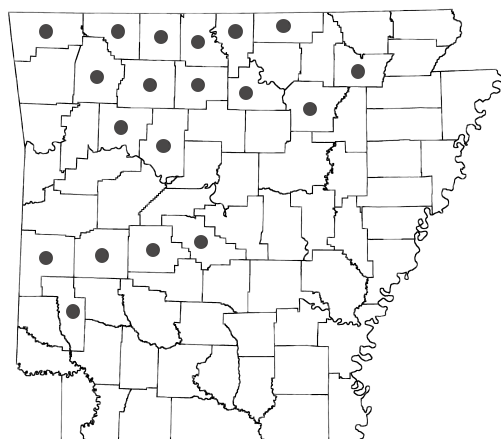
RANUNCULACEAE
Actaea racemosa (L.)
 black cohosh



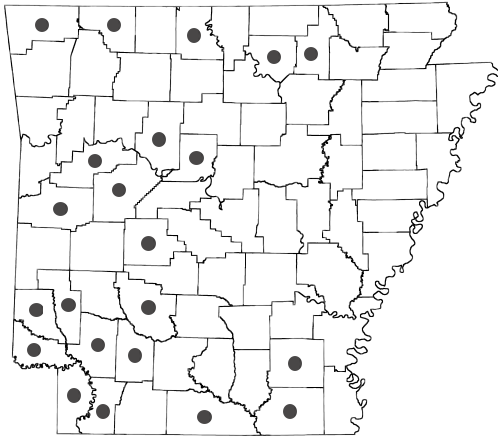
RANUNCULACEAE
Adonis annua L.
 pheasant's-eye, bird's-eye



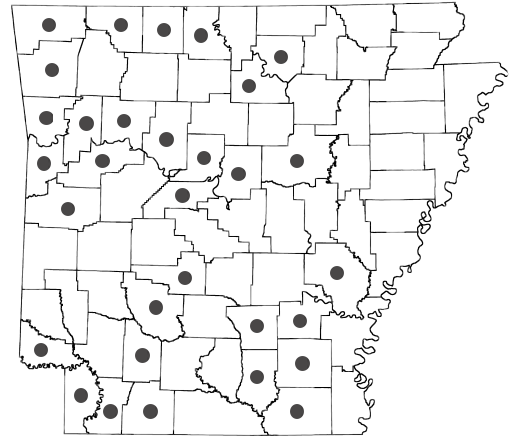
RANUNCULACEAE
Anemone acutiloba (DC.) G.Lawson
 sharp-lobe hepatica



RANUNCULACEAE
Anemone americana (DC.) H.Hara
 round-lobe hepatica



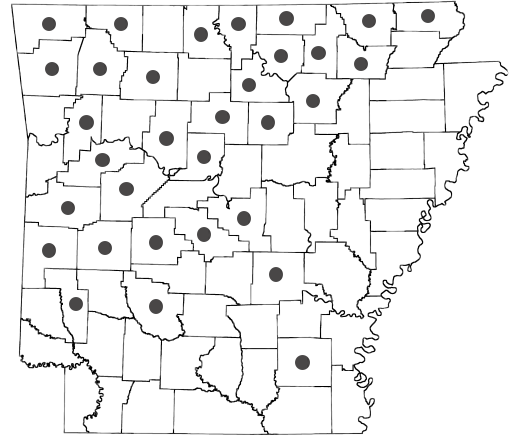
RANUNCULACEAE
Anemone berlandieri Pritz.
 ten-petal anemone



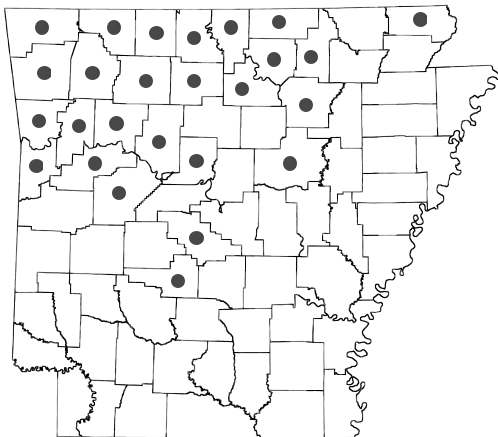
RANUNCULACEAE
Anemone caroliniana Walter
 Carolina anemone



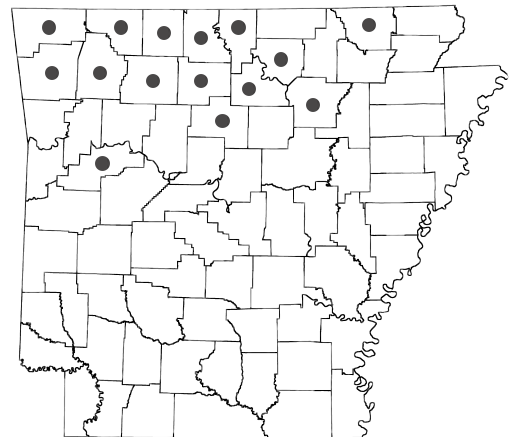
RANUNCULACEAE
Anemone quinquefolia L.
var. quinquefolia
 wood anemone



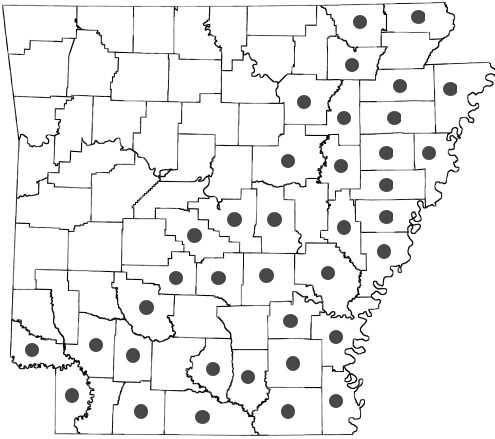
RANUNCULACEAE
Anemone virginiana L.
var. virginiana
 thimbleweed, tall anemone



RANUNCULACEAE
Aquilegia canadensis L.
 columbine



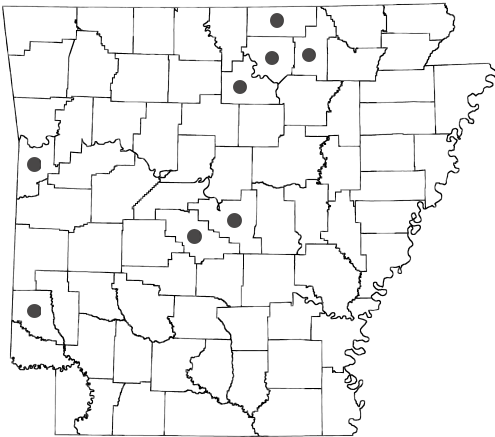
RANUNCULACEAE
Clematis catesbyana Pursh
 Catesby's virgin's-bower, satin-curles



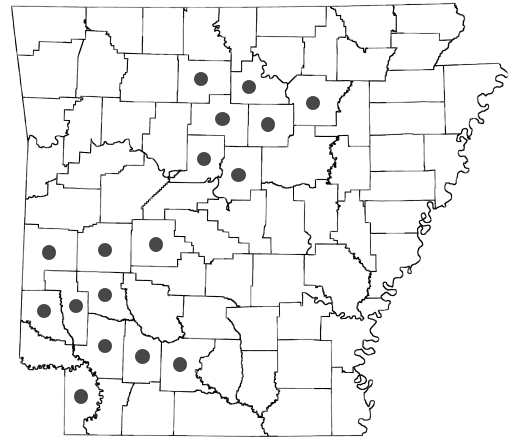
RANUNCULACEAE
Clematis crispa L.
 swamp leather-flower



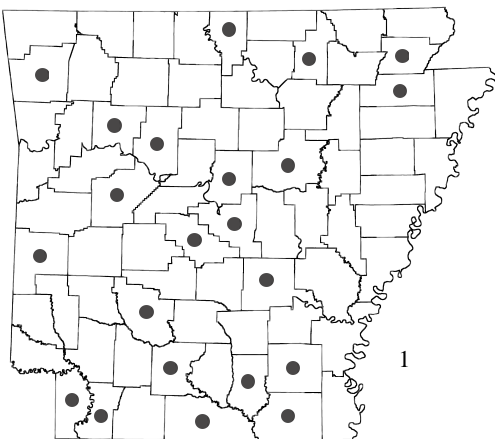
RANUNCULACEAE
Clematis glaucophylla Small
 white-leaf leather-flower



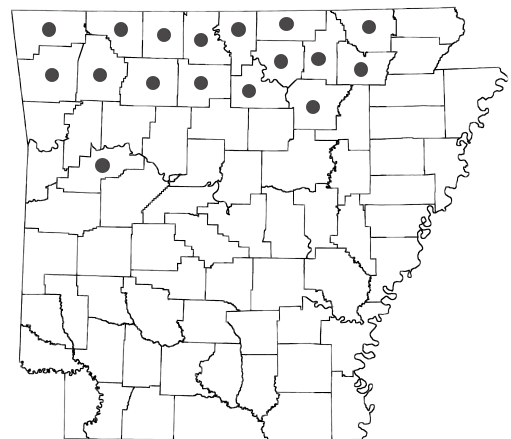
RANUNCULACEAE
Clematis pitcheri Torr. & A.Gray
var. pitcheri
 Pitcher's leather-flower



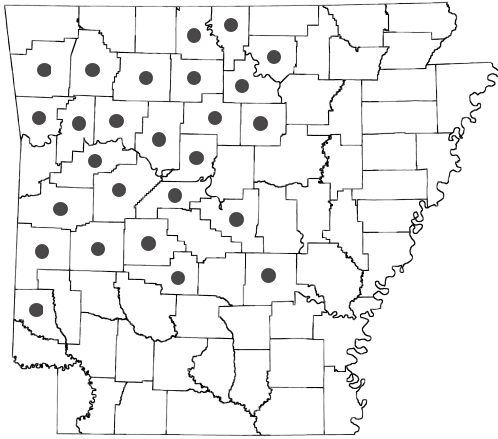
RANUNCULACEAE
Clematis reticulata Walter
 net-leaf leather-flower



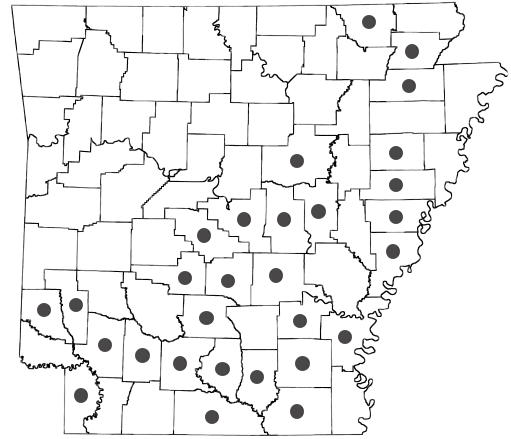
RANUNCULACEAE
Clematis terniflora DC.
 sweet autumn virgin's-bower



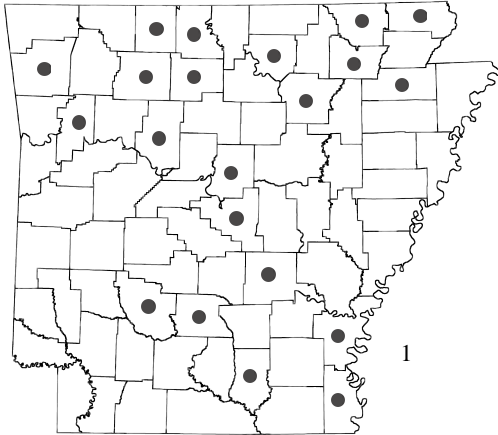
RANUNCULACEAE
Clematis versicolor Small ex Rydb. in Britton
 pale leather-flower



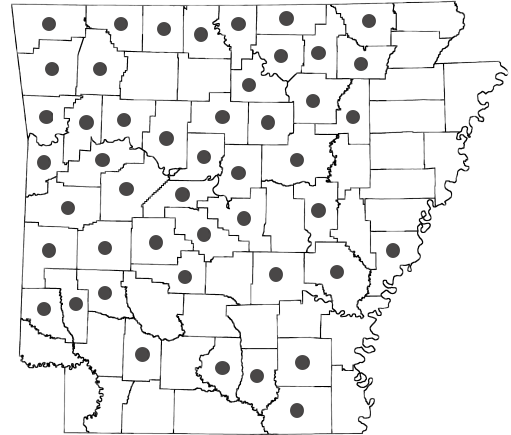
RANUNCULACEAE
Clematis viorna L.
 leather-flower



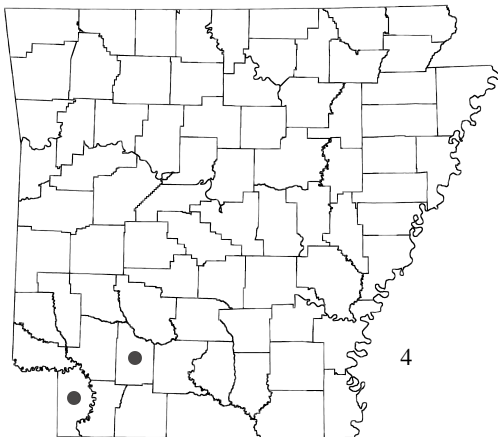
RANUNCULACEAE
Clematis virginiana L.
 virgin's-bower



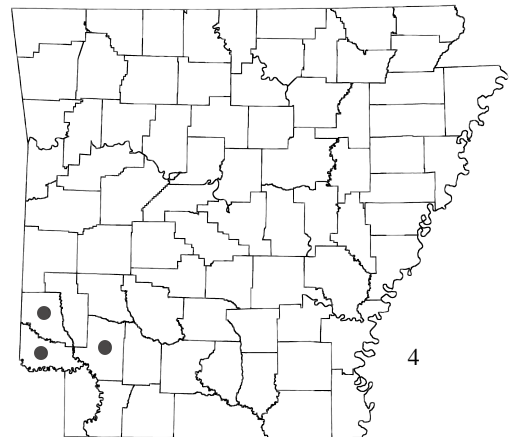
RANUNCULACEAE
Consolida ajacis (L.) Schur
 rocket-larkspur



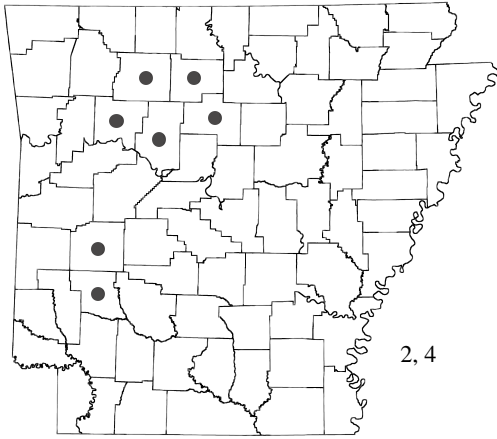
RANUNCULACEAE
Delphinium carolinianum Walter
subsp. carolinianum
 Carolina larkspur, blue larkspur



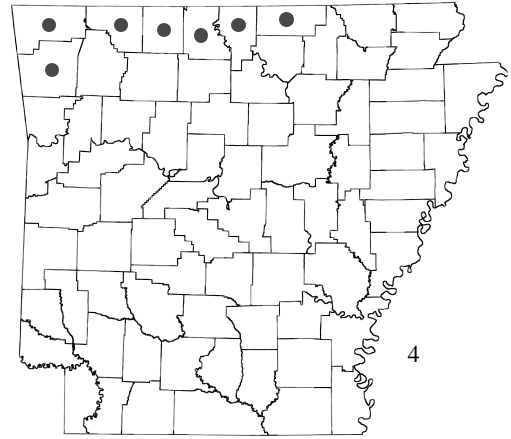
RANUNCULACEAE
Delphinium carolinianum Walter
subsp. vimineum (D. Don) M.J. Warnock
 pinewoods larkspur



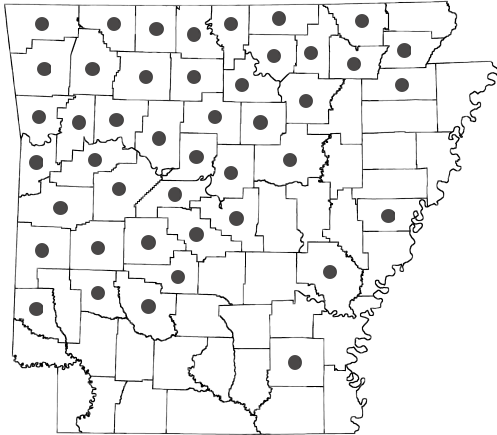
RANUNCULACEAE
Delphinium carolinianum Walter
subsp. virescens (Nutt.) R.E. Brooks
 plains larkspur



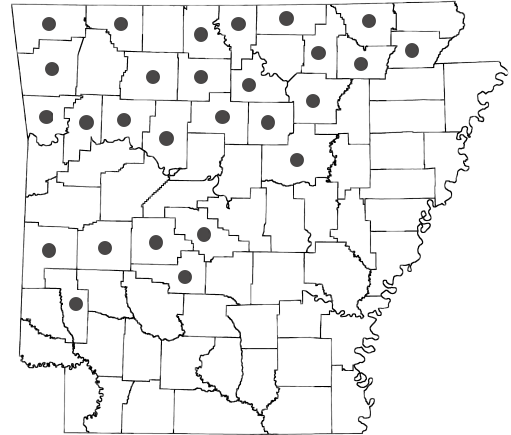
RANUNCULACEAE
Delphinium newtonianum Dw.Moore
Moore's delphinium



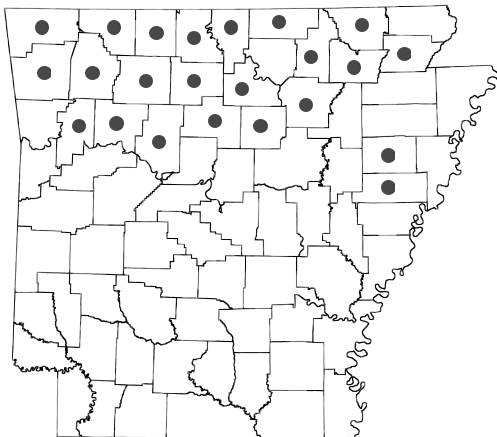
RANUNCULACEAE
Delphinium treleasei Bush ex K.C.Davis
Trelease's larkspur



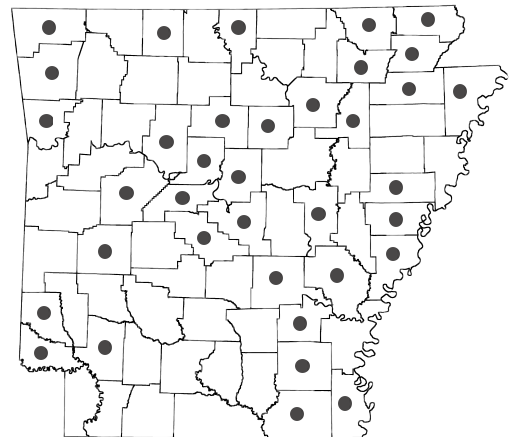
RANUNCULACEAE
Delphinium tricorne Michx.
dwarf larkspur



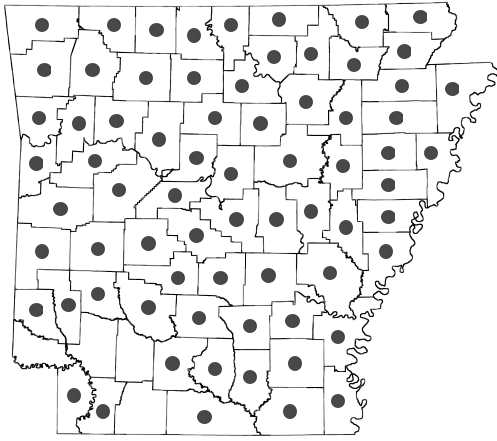
RANUNCULACEAE
Enemion biternatum Raf.
false rue-anemone



RANUNCULACEAE
Hydrastis canadensis L.
goldenseal

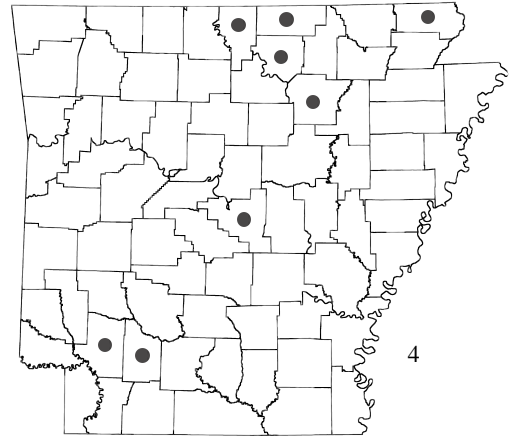


RANUNCULACEAE
Myosurus minimus L.
mousetail



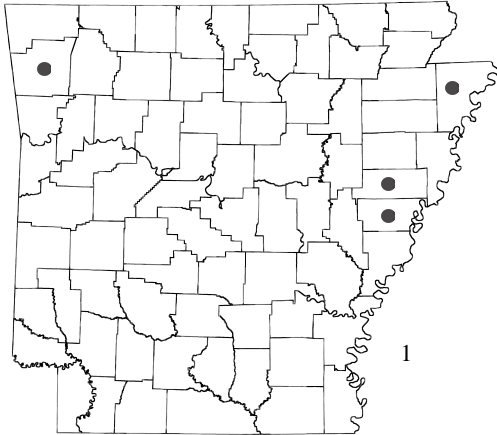
RANUNCULACEAE
Ranunculus abortivus L.

small-flower crowfoot, kidney-leaf buttercup



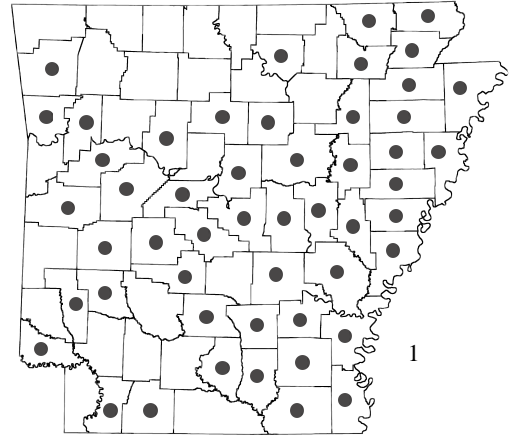
RANUNCULACEAE
Ranunculus aquatilis L.

var. diffusus With.
white water crowfoot



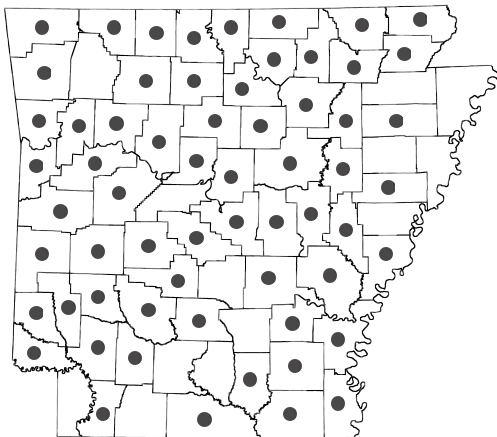
RANUNCULACEAE
Ranunculus arvensis L.

corn buttercup, corn crowfoot



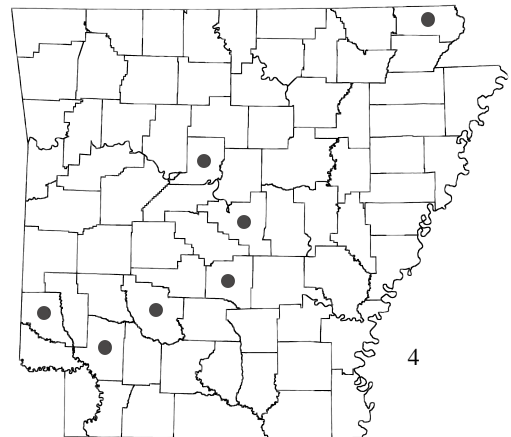
RANUNCULACEAE
Ranunculus bulbosus L.

bulbous buttercup



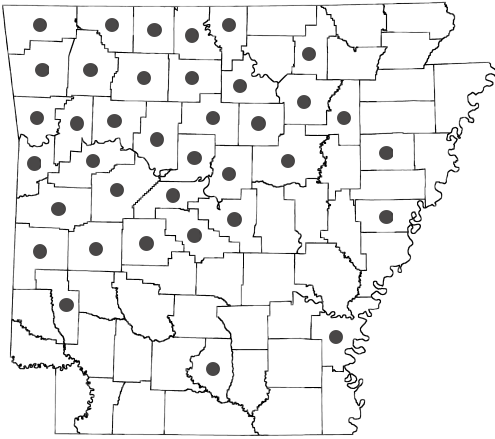
RANUNCULACEAE
Ranunculus fascicularis Muhl. ex J.M. Bigelow

early buttercup

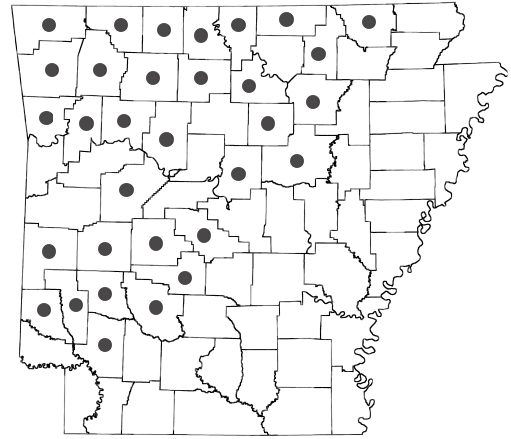


RANUNCULACEAE
Ranunculus flabellaris Raf.

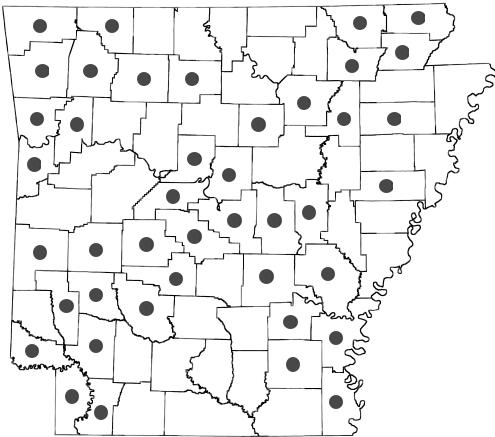
yellow water crowfoot



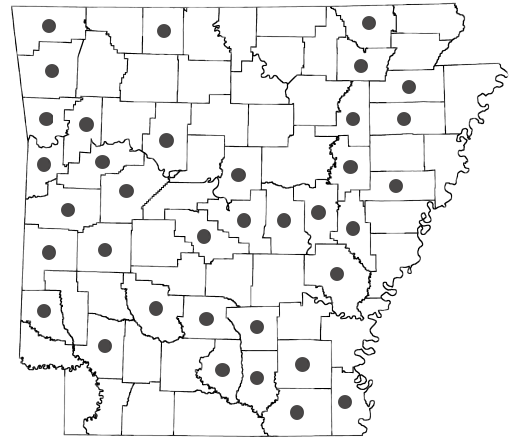
RANUNCULACEAE
Ranunculus harveyi (A.Gray) Britton
var. harveyi
 Harvey's buttercup



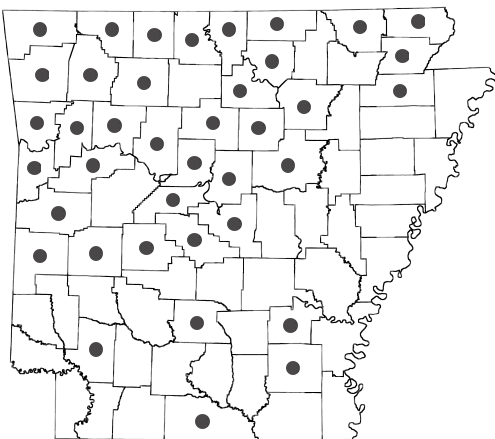
RANUNCULACEAE
Ranunculus hispidus Michx.
var. hispidus
 hispid buttercup



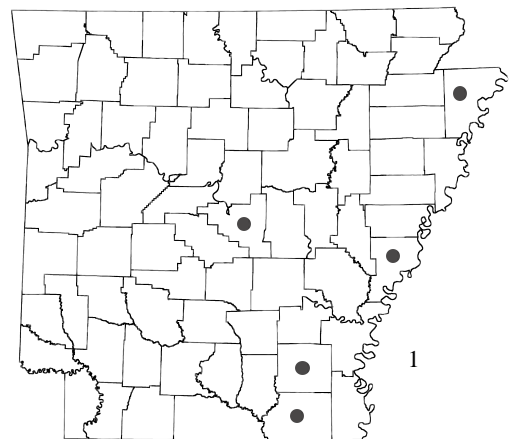
RANUNCULACEAE
Ranunculus hispidus Michx.
var. nitidus (Chapm.) T.Duncan
 swamp buttercup



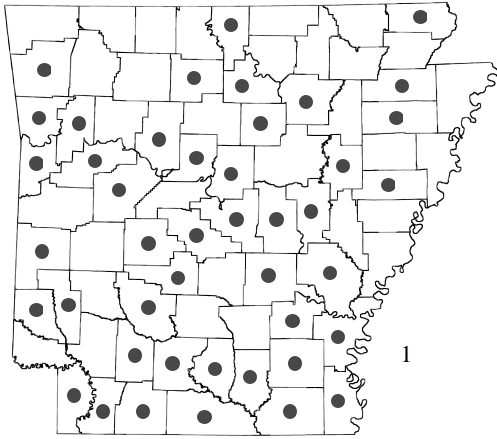
RANUNCULACEAE
Ranunculus laxicaulis Darby
 water-plantain spearwort



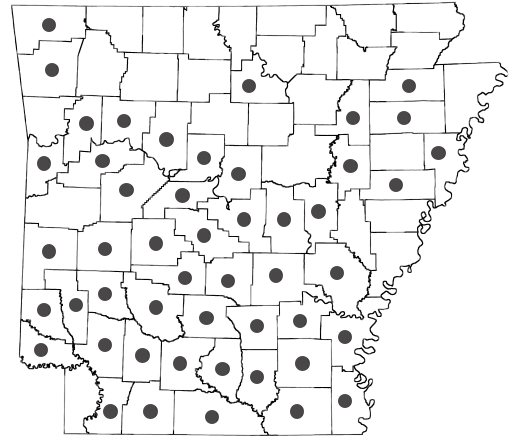
RANUNCULACEAE
Ranunculus micranthus Nutt. in Torr. & A.Gray
 rock buttercup, small-flower crowfoot



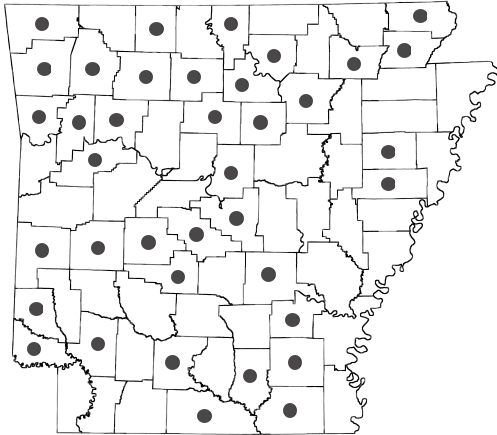
RANUNCULACEAE
Ranunculus muricatus L.
 rough-seed buttercup



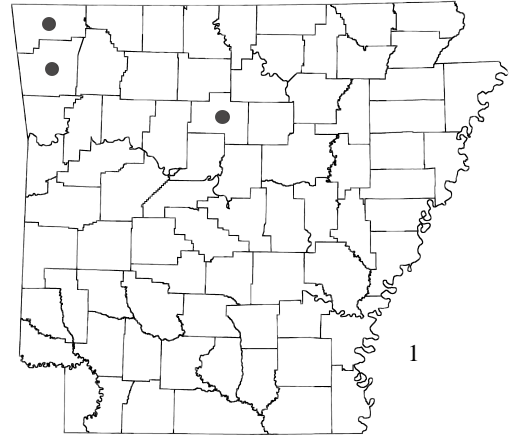
RANUNCULACEAE
Ranunculus parviflorus L.
small-flower buttercup



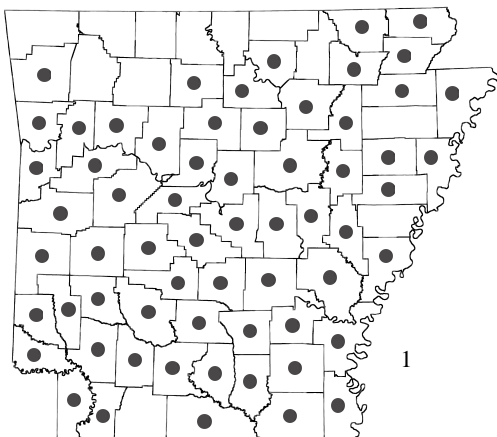
RANUNCULACEAE
Ranunculus pusillus Poir. in Lam. et al.
low spearwort



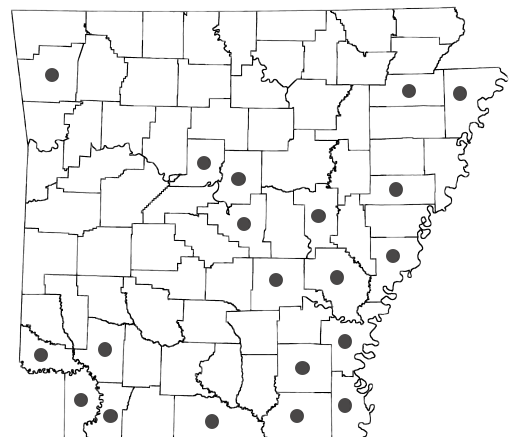
RANUNCULACEAE
Ranunculus recurvatus Poir. in Lam. et al.
var. recurvatus
hooked buttercup



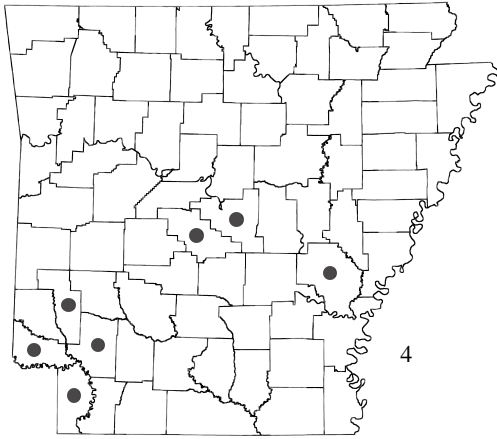
RANUNCULACEAE
Ranunculus repens L.
creeping buttercup



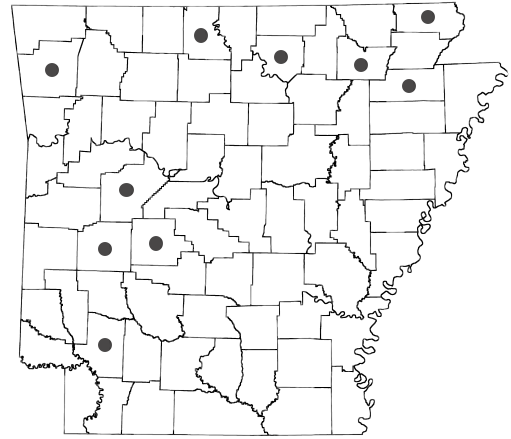
RANUNCULACEAE
Ranunculus sardous Crantz
hairy buttercup



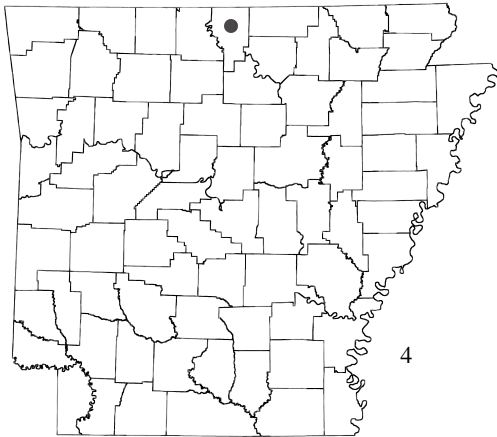
RANUNCULACEAE
Ranunculus sceleratus L.
var. sceleratus
cursed buttercup



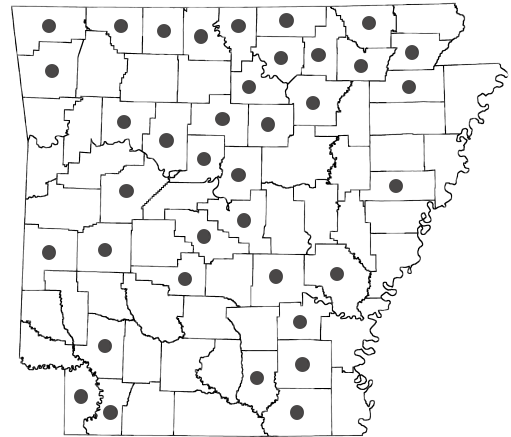
RANUNCULACEAE
Thalictrum arkansanum B.Boivin
 Arkansas meadow-rue



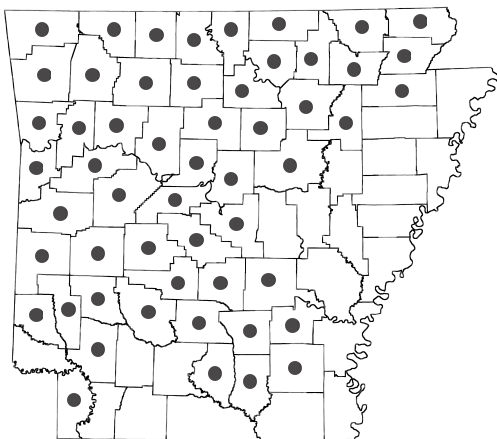
RANUNCULACEAE
Thalictrum dasycarpum Fisch. & Avé-Lall. in Fisch. et al.
 purple meadow-rue



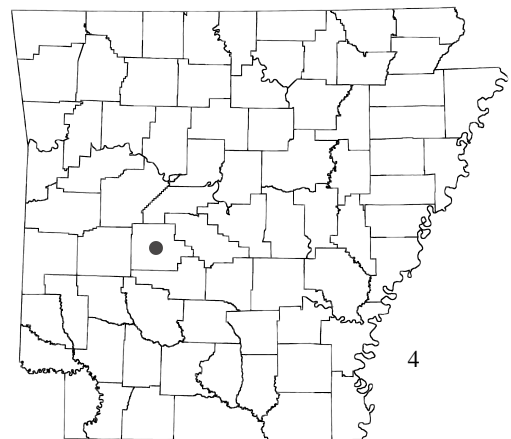
RANUNCULACEAE
Thalictrum dioicum L.
 early meadow-rue



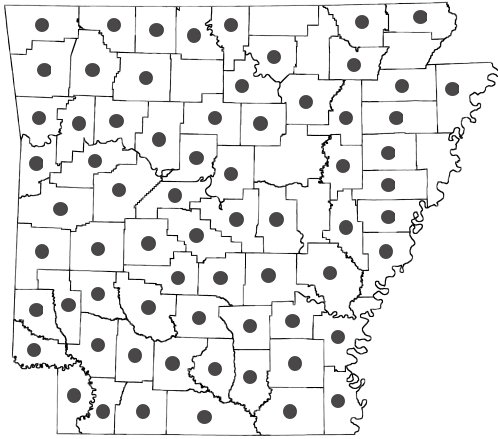
RANUNCULACEAE
Thalictrum revolutum DC.
 wax-leaf meadow-rue, purple meadow-rue



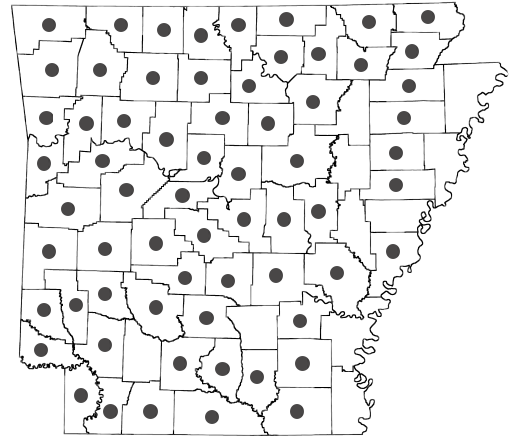
RANUNCULACEAE
Thalictrum thalictroides (L.) A.J.Eames & B.Boivin
 rue-anemone, windflower



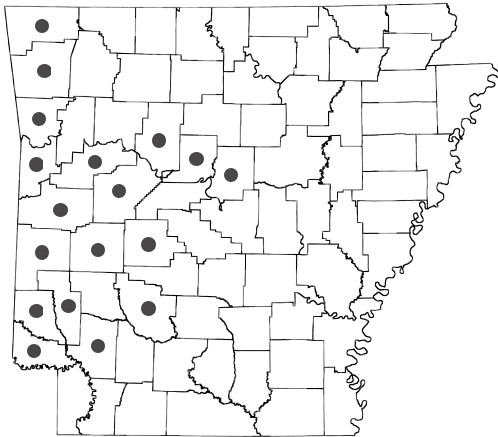
RANUNCULACEAE
Trautvetteria caroliniensis (Walter) Vail
 false bugbane, tassel-rue



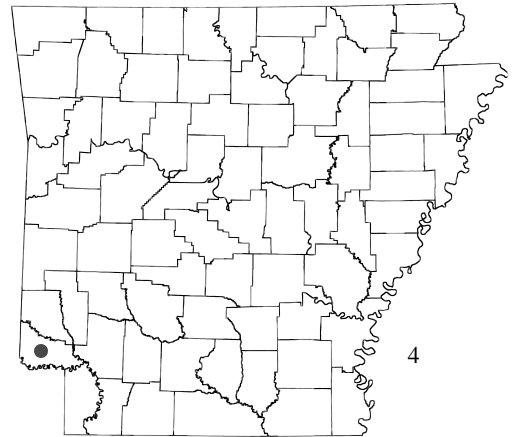
RHAMNACEAE
***Berchemia scandens* (Hill) K.Koch**
rattan-vine, supplejack



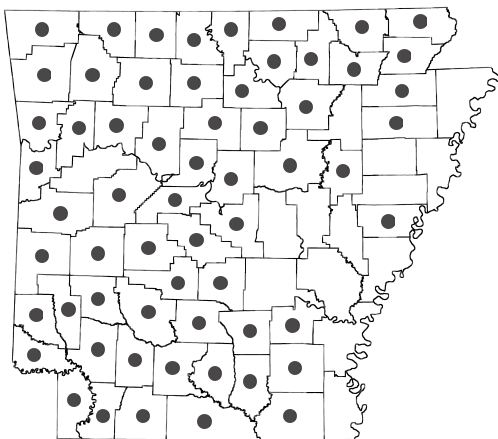
RHAMNACEAE
***Ceanothus americanus* L.**
New Jersey-tea



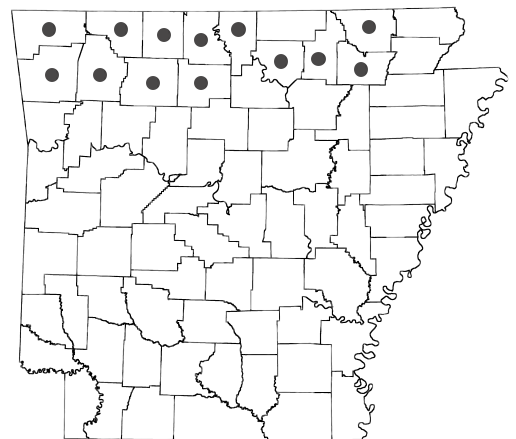
RHAMNACEAE
***Ceanothus herbaceus* Raf.**
inland New Jersey-tea, redroot



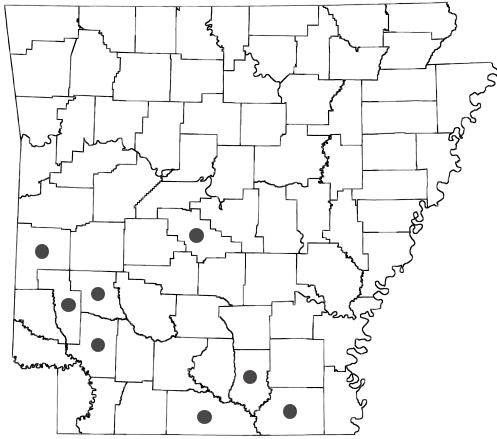
RHAMNACEAE
***Condalia hookeri* M.C.Johnst.**
bluewood



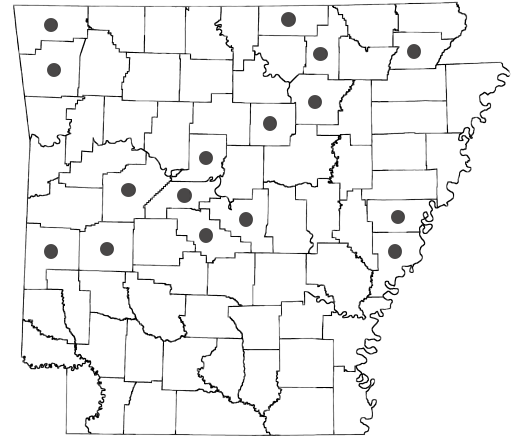
RHAMNACEAE
***Frangula caroliniana* (Walter) A.Gray**
Carolina buckthorn, Indian-cherry



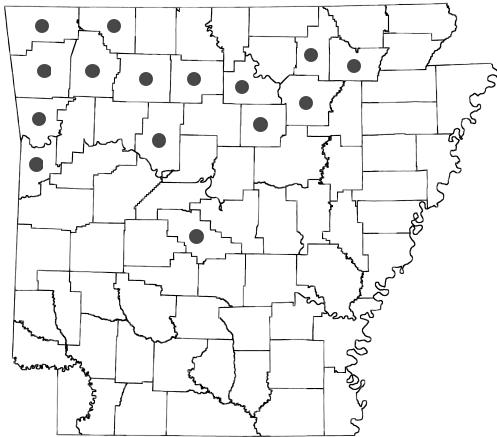
RHAMNACEAE
***Rhamnus lanceolata* Pursh**
lance-leaf buckthorn



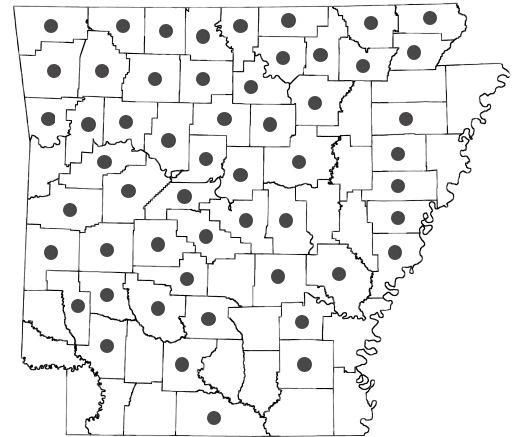
ROSACEAE
Agrimonia microcarpa Wallr.
 agrimony



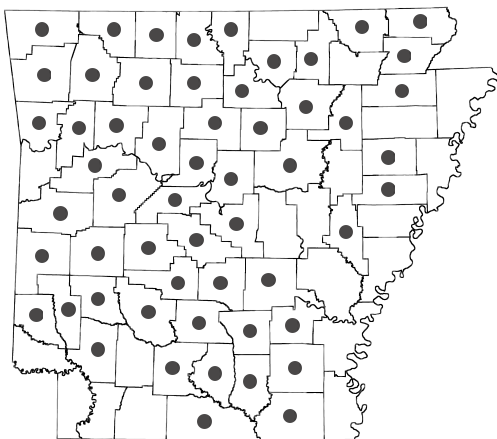
ROSACEAE
Agrimonia parviflora Aiton
 agrimony



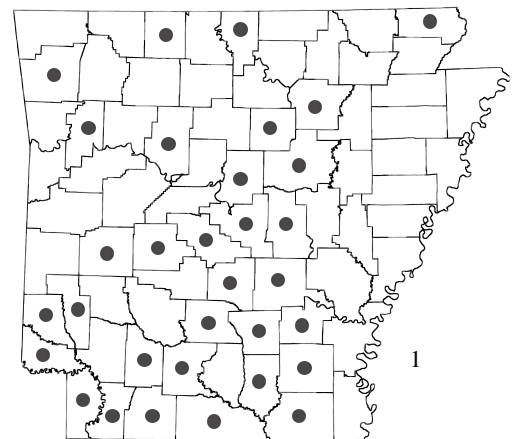
ROSACEAE
Agrimonia pubescens Wallr.
 agrimony



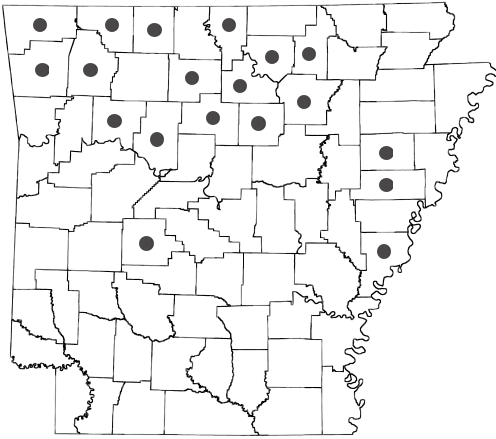
ROSACEAE
Agrimonia rostellata Wallr.
 agrimony



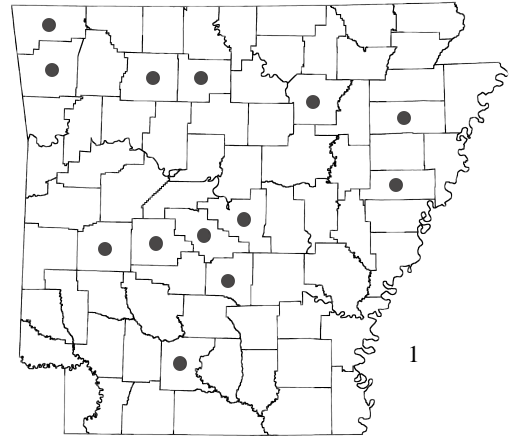
ROSACEAE
Amelanchier arborea (F.Michx.) Fernald
 downy service-berry, shadbush



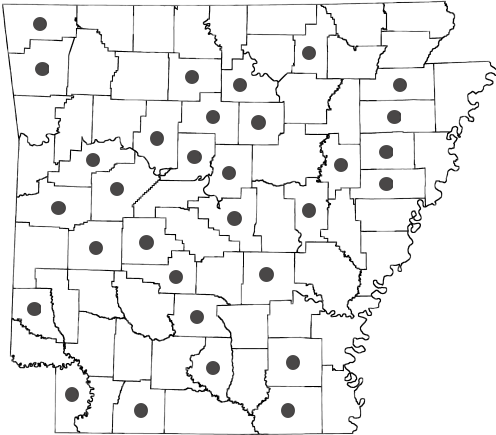
ROSACEAE
Aphanes microcarpa (Boiss. & Reut.) Rothm.
 parsley-piert



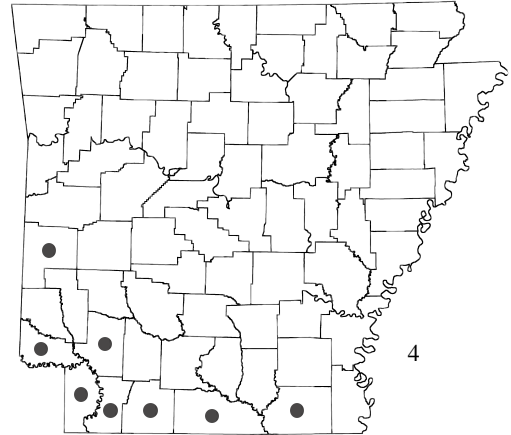
ROSACEAE
Aruncus dioicus (Walter) Fernald
var. pubescens (Rydb.) Fernald
 goat's-beard



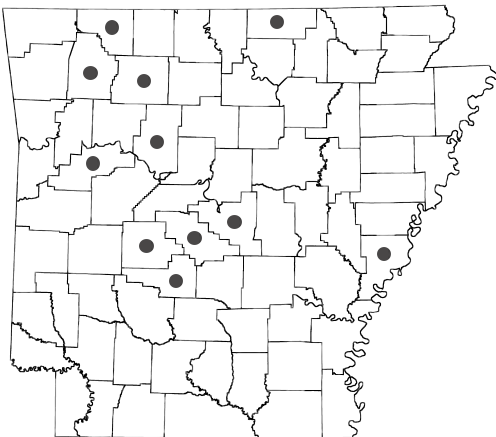
ROSACEAE
Chaenomeles speciosa (Sweet) Nakai
 flowering-quince



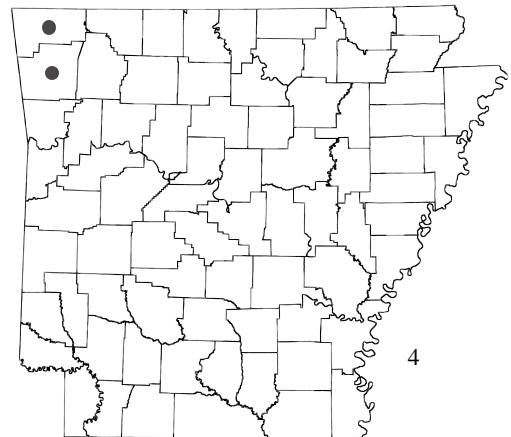
ROSACEAE
Crataegus berberifolia Torr. & A.Gray
 barberry hawthorn



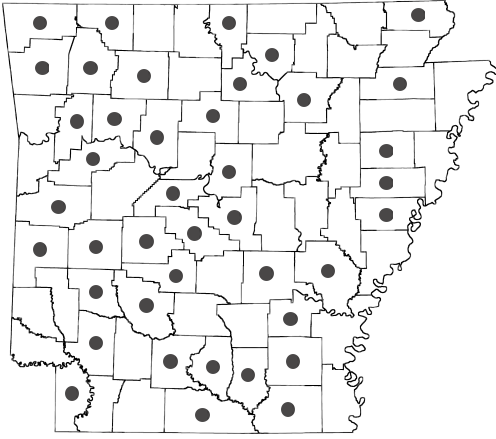
ROSACEAE
Crataegus brachycantha Sarg. & Engelm.
 blueberry hawthorn



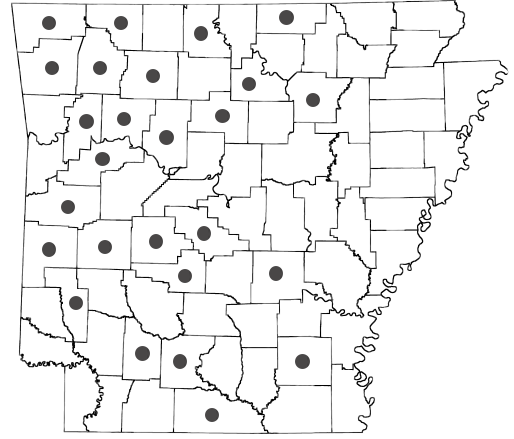
ROSACEAE
Crataegus calpodendron (Ehrh.) Medik.
 pear hawthorn



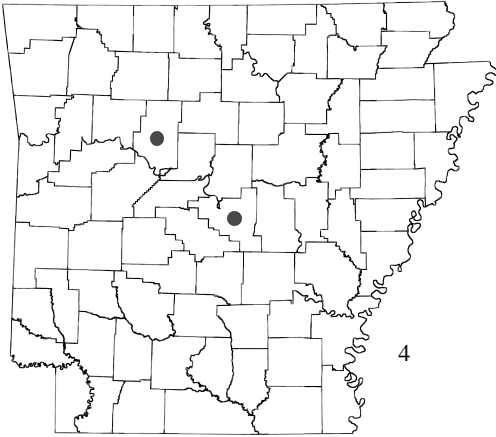
ROSACEAE
Crataegus coccinioides Ashe
 Kansas hawthorn



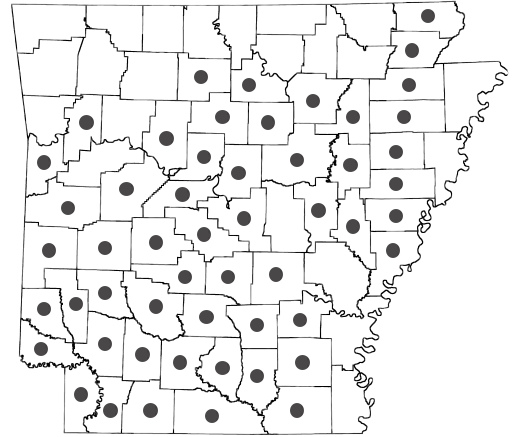
ROSACEAE
Crataegus crus-galli L.
 cockspur hawthorn



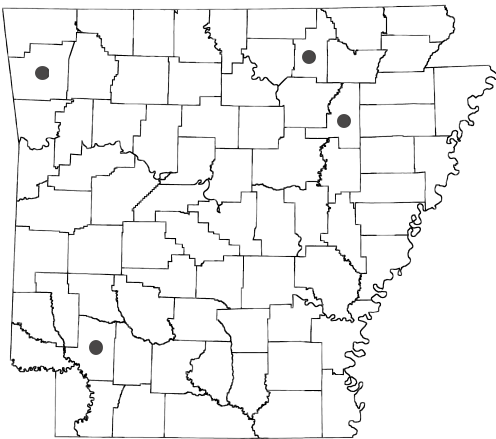
ROSACEAE
Crataegus intricata Lange
 hawthorn



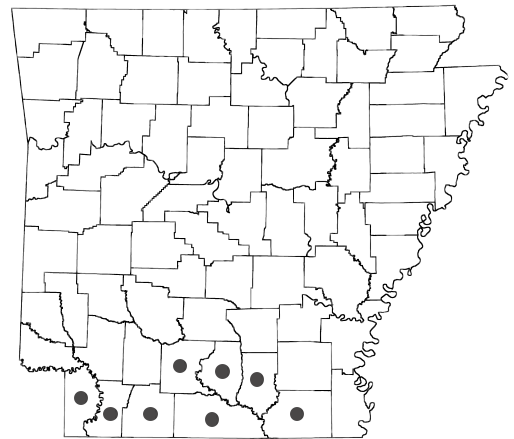
ROSACEAE
Crataegus macrosperma Ashe
 fan-leaf hawthorn



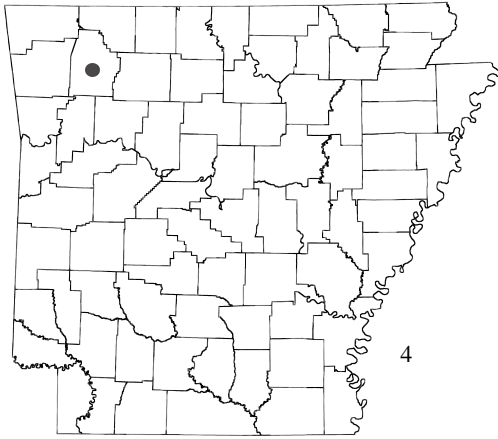
ROSACEAE
Crataegus marshallii Eggl.
 parsley hawthorn



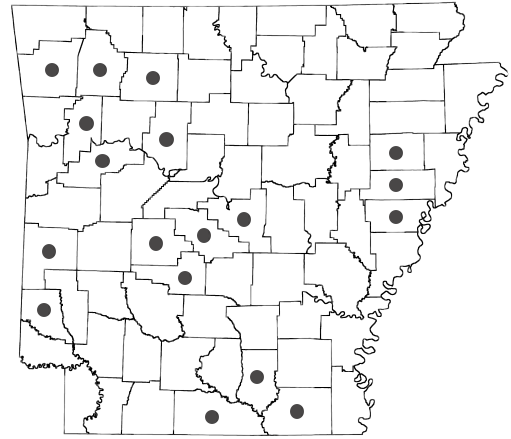
ROSACEAE
Crataegus mollis Scheele
 downy hawthorn



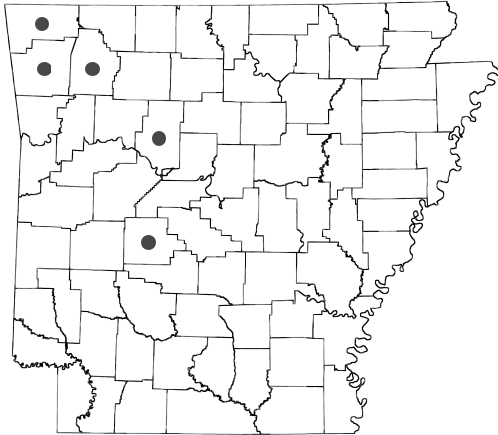
ROSACEAE
Crataegus opaca Hook. & Arn.
 mayhaw, apple haw



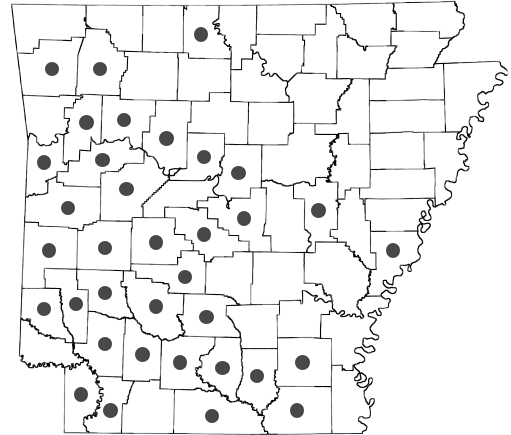
ROSACEAE
Crataegus phaenopyrum (L.f.) Medik.
Washington hawthorn



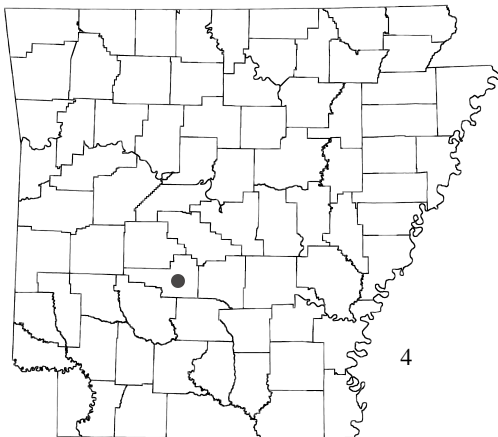
ROSACEAE
Crataegus pruinosa (H.L.Wendl.) K.Koch
hawthorn



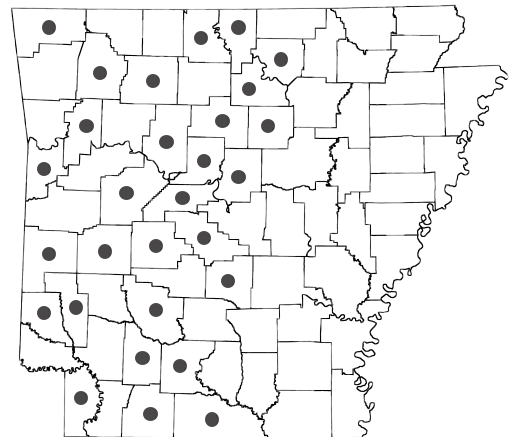
ROSACEAE
Crataegus punctata Jacq.
hawthorn



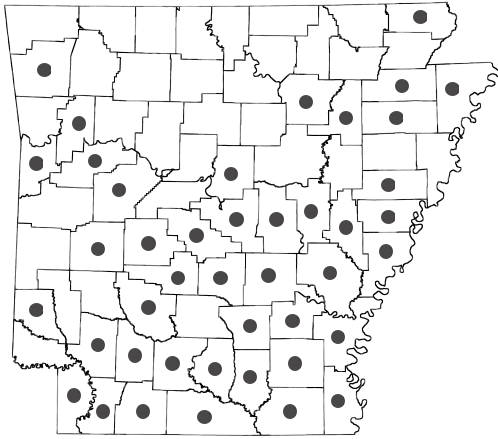
ROSACEAE
Crataegus spathulata Michx.
pasture hawthorn



ROSACEAE
Crataegus triflora Chapm.
three-flower hawthorn



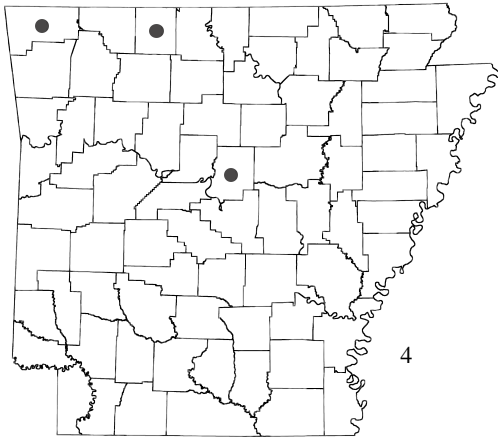
ROSACEAE
Crataegus uniflora Münchh.
dwarf hawthorn



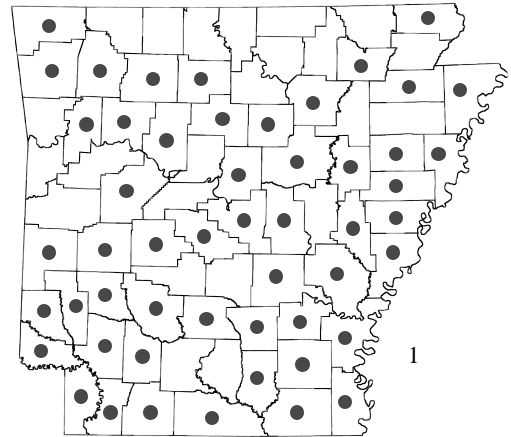
ROSACEAE
Crataegus viridis L.
 green hawthorn



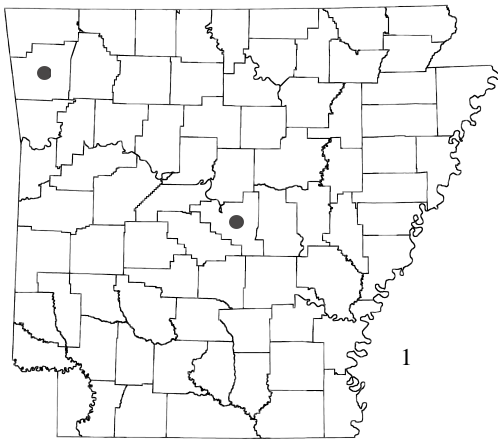
ROSACEAE
Crataegus x canescens (J.B.Phipps) T.A.Dickinson & E.Y.Y.Lo
 Stern's medlar



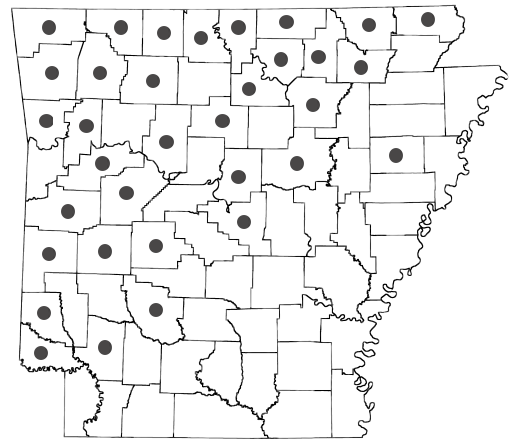
ROSACEAE
Drymocallis arguta (Pursh) Rydb.
 tall cinquefoil



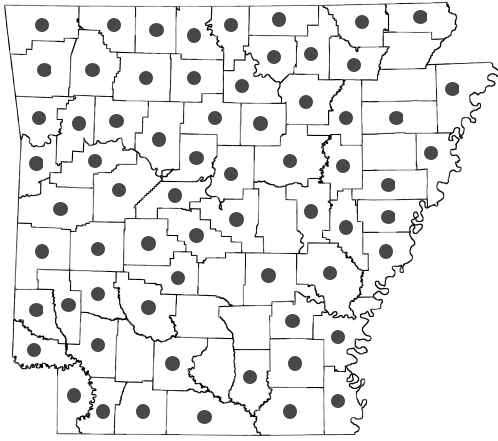
ROSACEAE
Duchesnea indica (Andrews) Focke
 Indian-strawberry



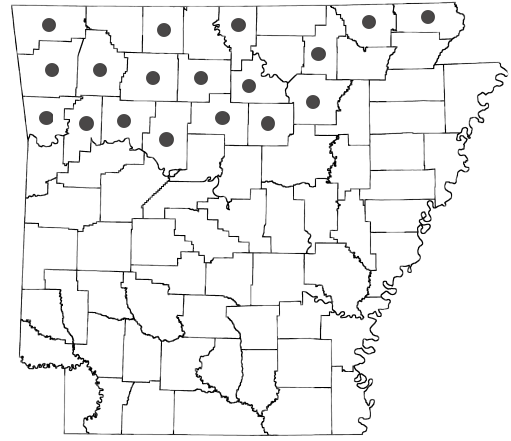
ROSACEAE
Exochorda racemosa (Lindl.) Rehder
 pearlbush



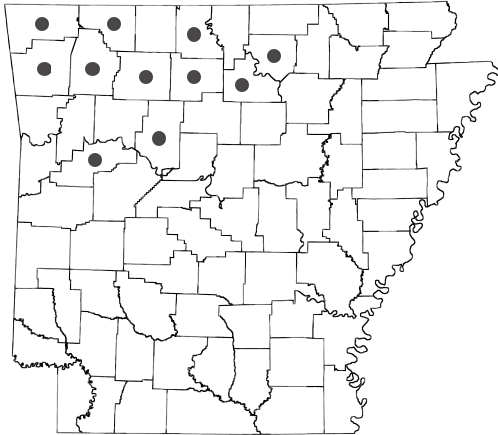
ROSACEAE
Fragaria virginiana Mill.
 wild strawberry



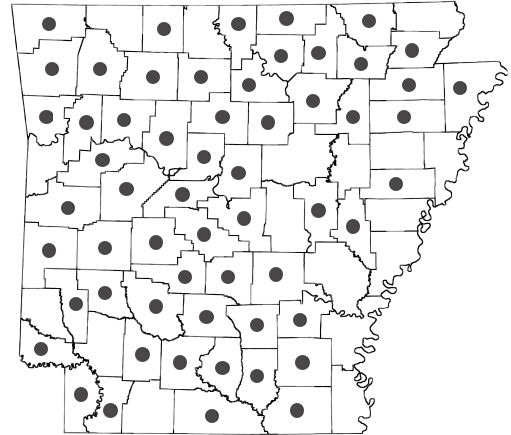
ROSACEAE
Geum canadense Jacq.
 white avens



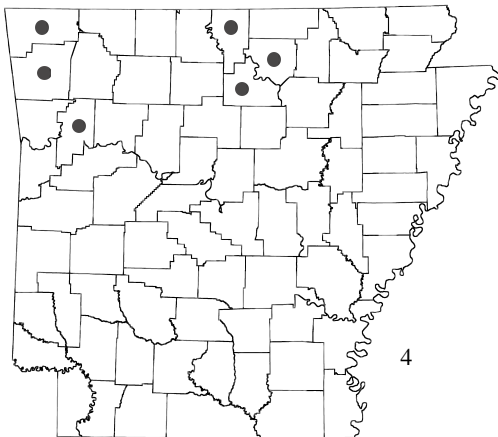
ROSACEAE
Geum vernum (Raf.) Torr. & A.Gray
 spring avens



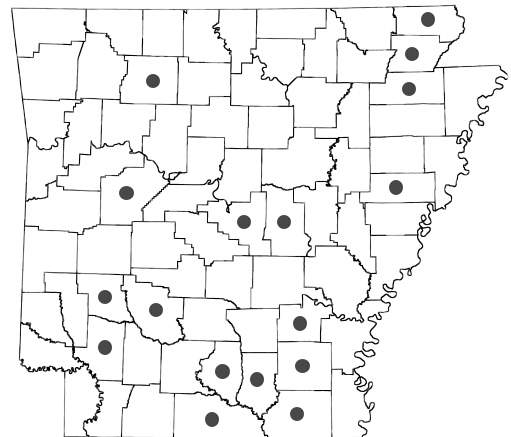
ROSACEAE
Geum virginianum L.
 cream avens



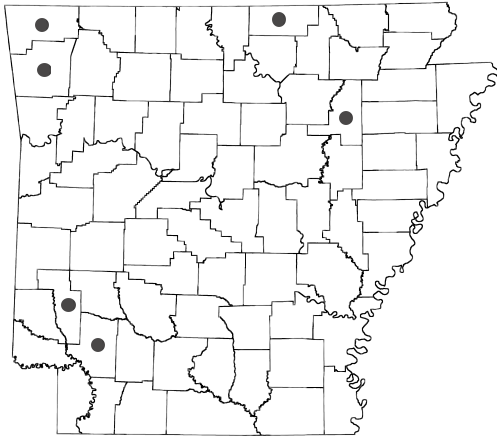
ROSACEAE
Gillenia stipulata (Muhl. ex Willd.) Nutt. in W.P.C.Barton
 American-ipecac, Indian-physic



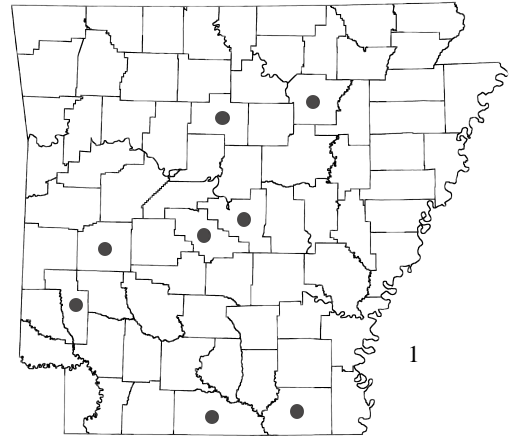
ROSACEAE
Gillenia trifoliata (L.) Moench
 Bowman's-root



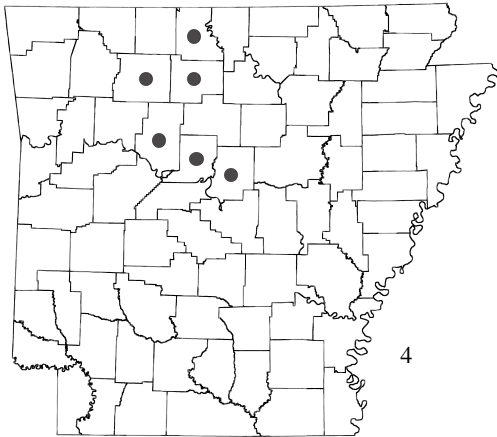
ROSACEAE
Malus angustifolia (Aiton) Michx.
 southern crabapple, wild crabapple



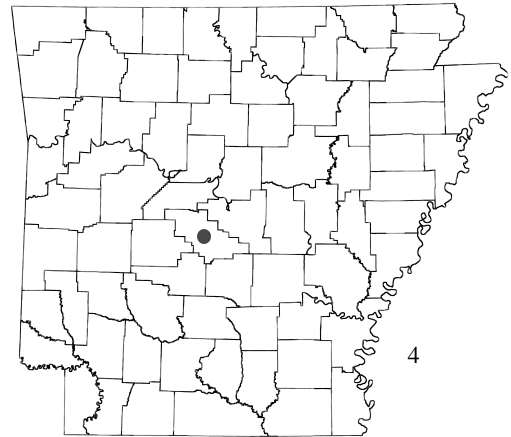
ROSACEAE
Malus ioensis (A.W.Wood) Britton
 prairie crabapple



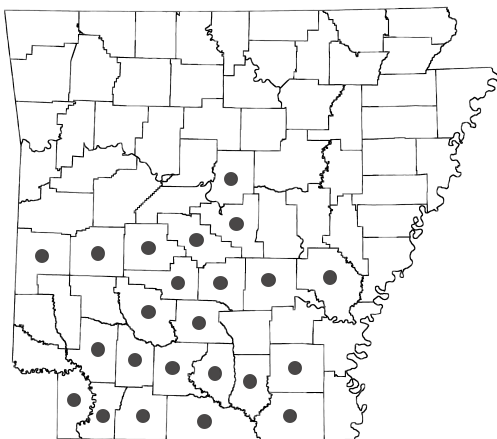
ROSACEAE
Malus pumila Mill.
 apple



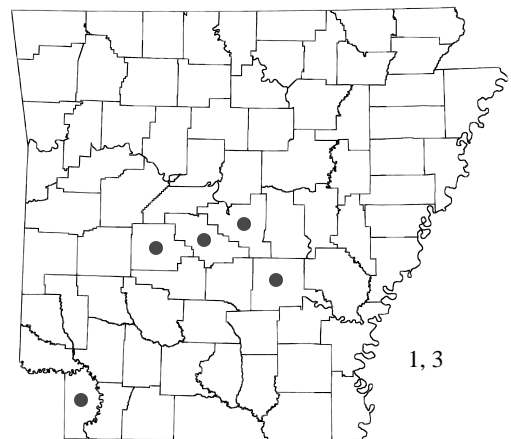
ROSACEAE
Nevisia alabamensis A.Gray
 Alabama snow-wreath



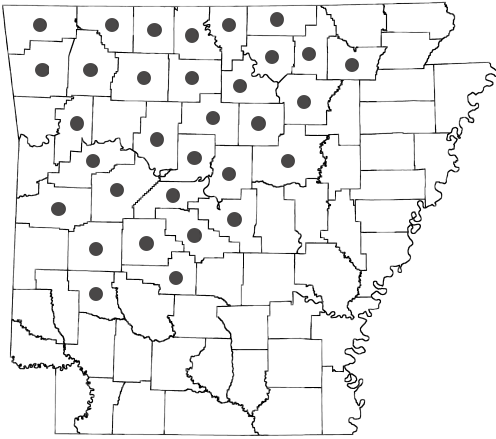
ROSACEAE
Photinia melanocarpa (Michx.) K.R.Robertson & J.B.Phipps
 black chokeberry



ROSACEAE
Photinia pyrifolia (Lam.) K.R.Robertson & J.B.Phipps
 red chokeberry



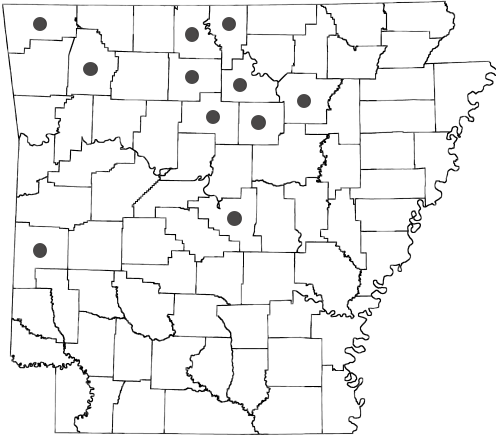
ROSACEAE
Photinia serratifolia (Desf.) Kalkman
 Chinese photinia



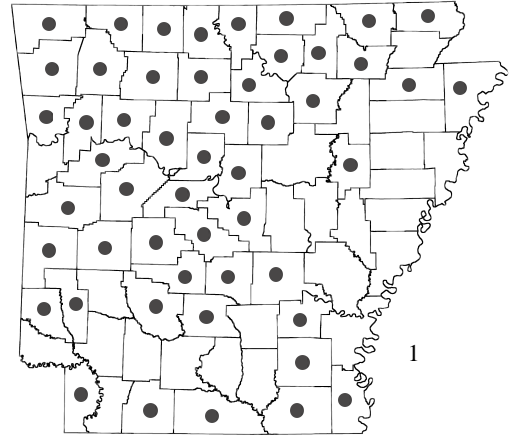
ROSACEAE
Physocarpus opulifolius (L.) Maxim.
ninebark



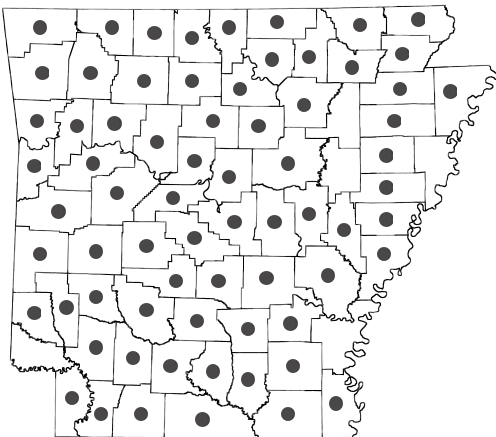
ROSACEAE
Potentilla canadensis L.
cinquefoil, five-finger



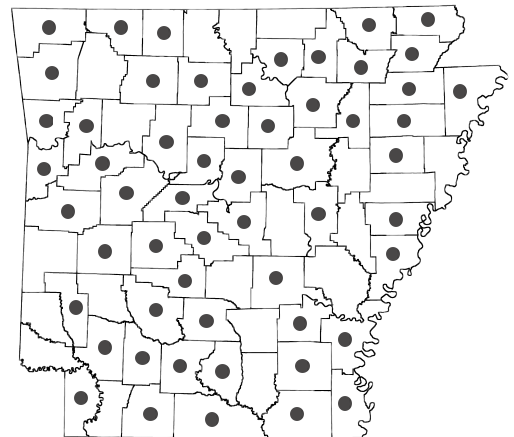
ROSACEAE
Potentilla norvegica L.
rough cinquefoil



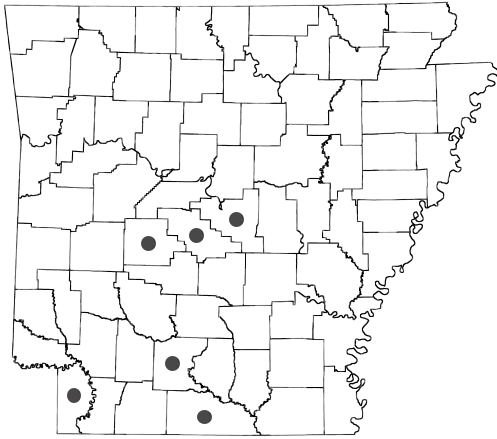
ROSACEAE
Potentilla recta L.
sulphur cinquefoil, rough-fruit cinquefoil



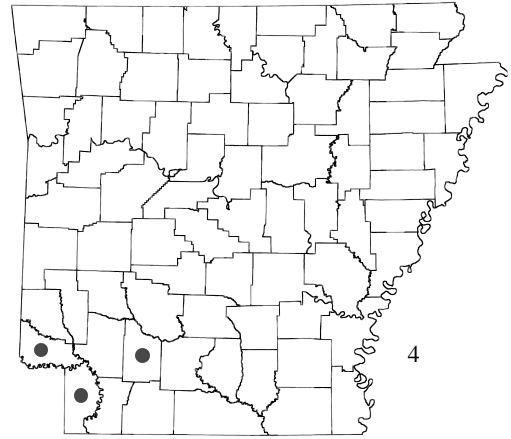
ROSACEAE
Potentilla simplex Michx.
oldfield cinquefoil, five-finger



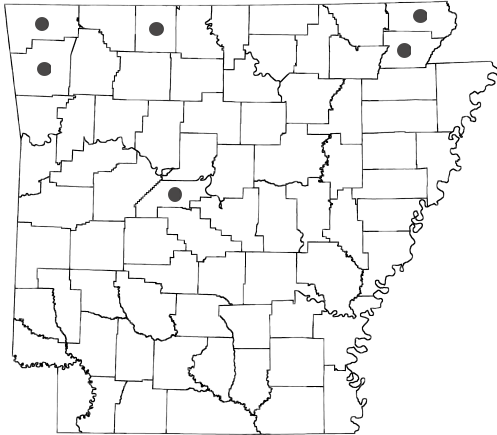
ROSACEAE
Prunus angustifolia Marshall
Chickasaw plum



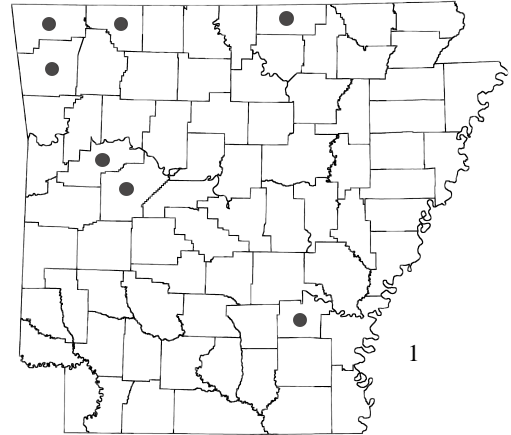
ROSACEAE
Prunus caroliniana (Mill.) Aiton
 Carolina laurel cherry



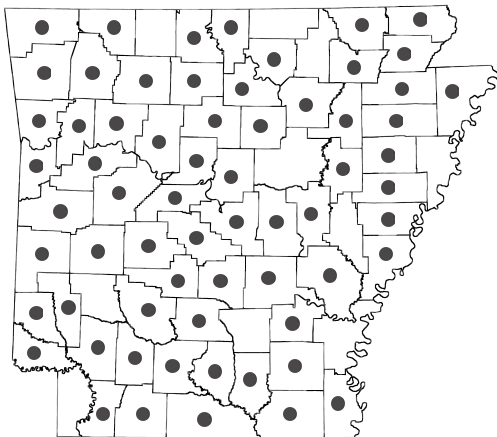
ROSACEAE
Prunus gracilis Engelm. & A. Gray
 Oklahoma plum



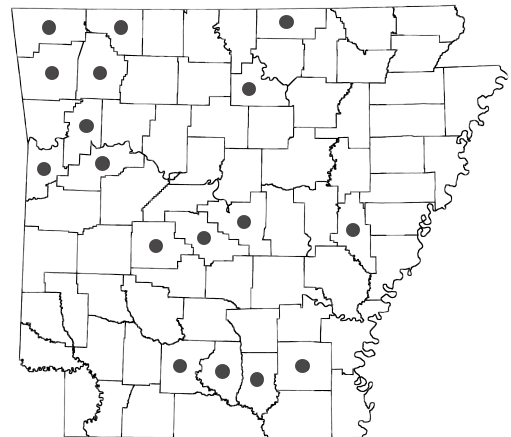
ROSACEAE
Prunus hortulana L.H. Bailey
 hortulan plum



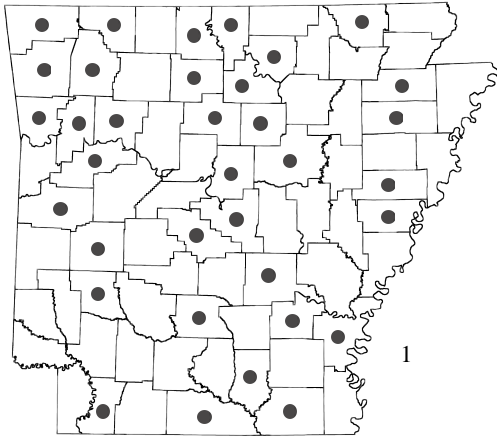
ROSACEAE
Prunus mahaleb L.
 perfumed cherry



ROSACEAE
Prunus mexicana S. Watson
 bigtree plum, Mexican plum



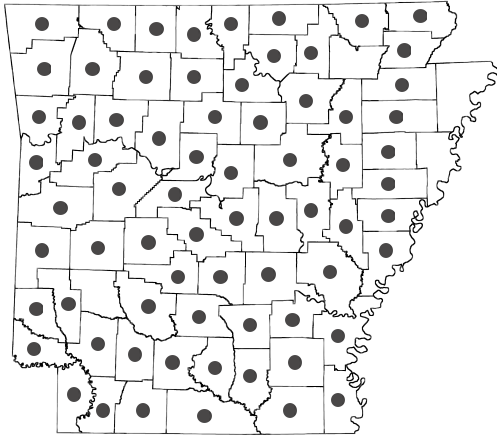
ROSACEAE
Prunus munsoniana W. Wight & Hedrick
 wild goose plum



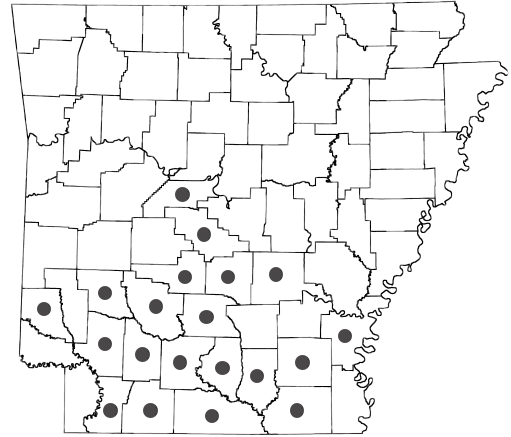
ROSACEAE
Prunus persica (L.) Batsch
 peach



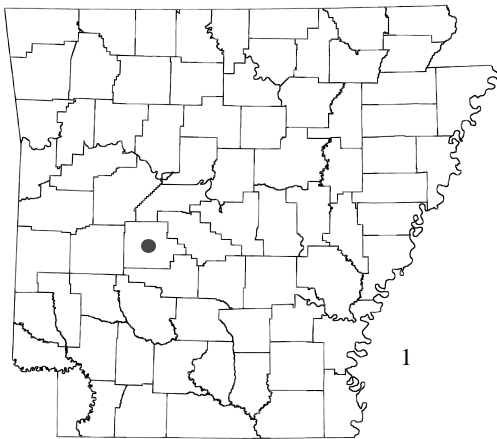
ROSACEAE
Prunus pumila L.
var. susquehanae (Willd.) H.Jaeger
 sand cherry



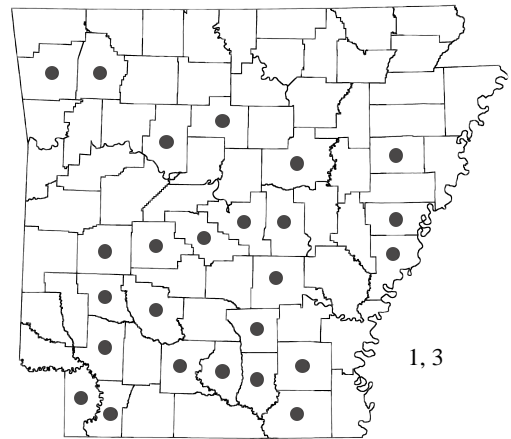
ROSACEAE
Prunus serotina Ehrh.
 black cherry



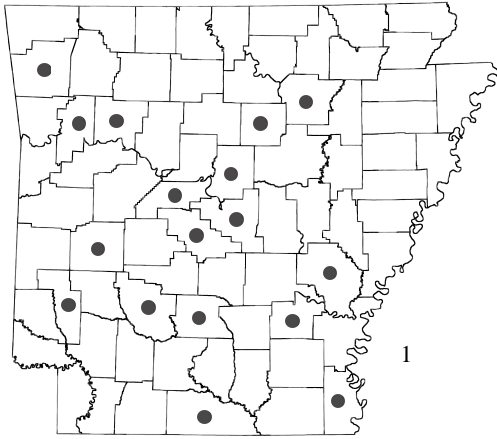
ROSACEAE
Prunus umbellata Elliott
 sloe plum, flatwoods plum, hog plum



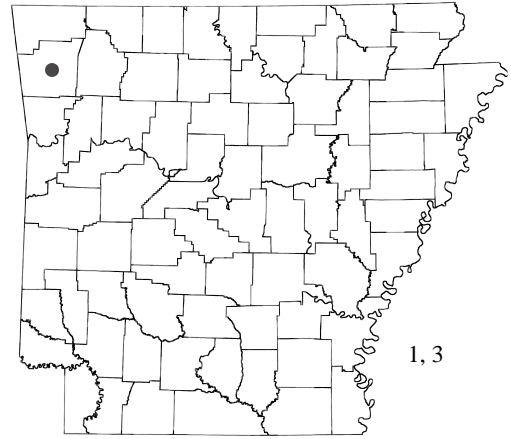
ROSACEAE
Pyracantha koidzumii (Hayata) Rehder
 firethorn



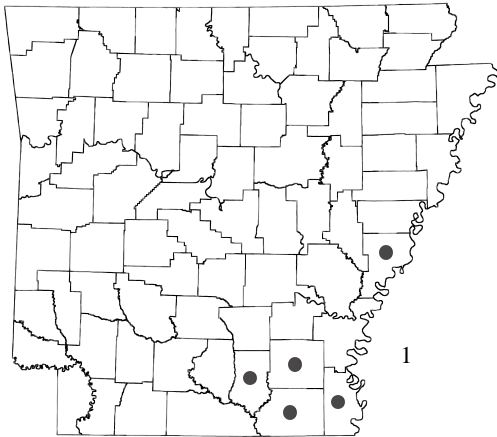
ROSACEAE
Pyrus calleryana Decne.
 Callery pear, Bradford pear



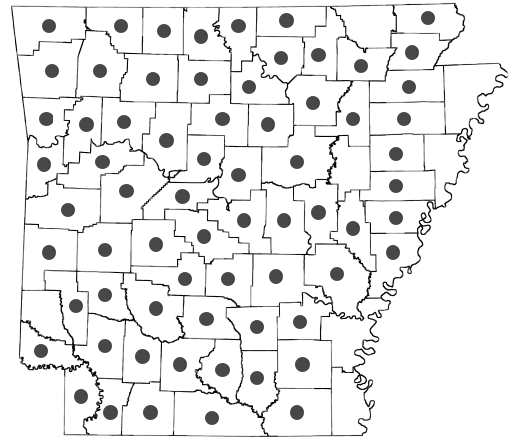
ROSACEAE
***Pyrus communis* L.**
pear



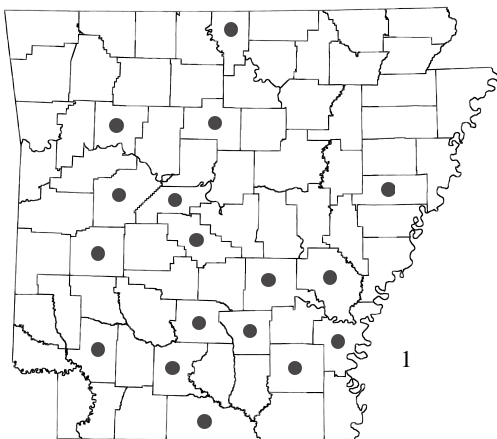
ROSACEAE
***Rhodotypos scandens* (Thunb.) Makino**
jetbead



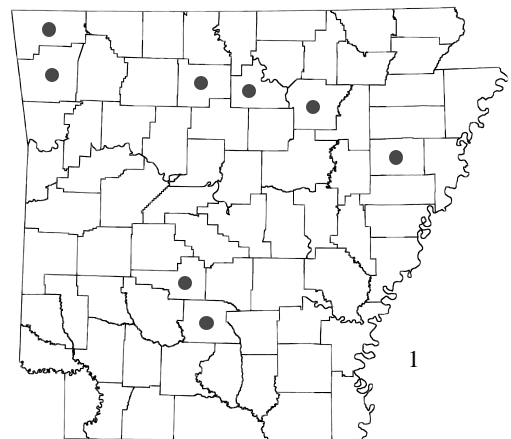
ROSACEAE
***Rosa bracteata* J.C.Wendl.**
McCartney rose



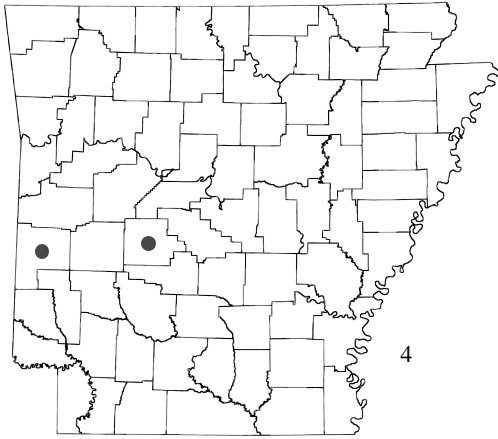
ROSACEAE
***Rosa carolina* L.**
Carolina rose



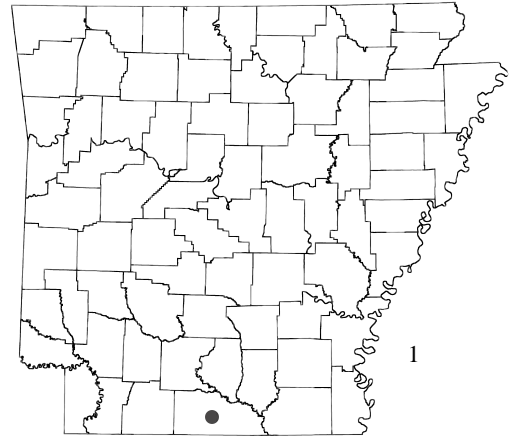
ROSACEAE
***Rosa chinensis* Jacq.**
Chinese rose



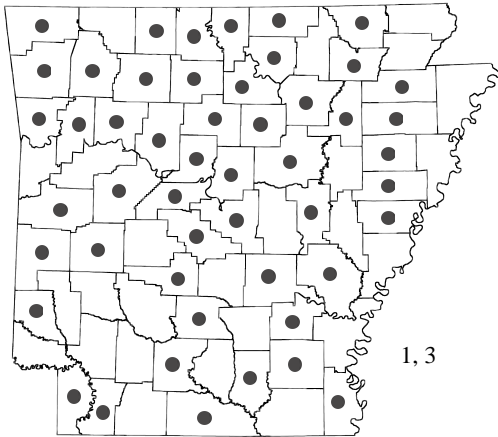
ROSACEAE
***Rosa eglanteria* L.**
sweetbrier rose



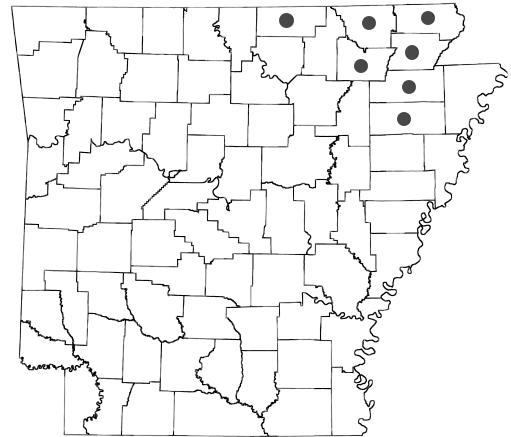
ROSACEAE
Rosa foliolosa Nutt. ex Torr. & A.Gray
white prairie rose



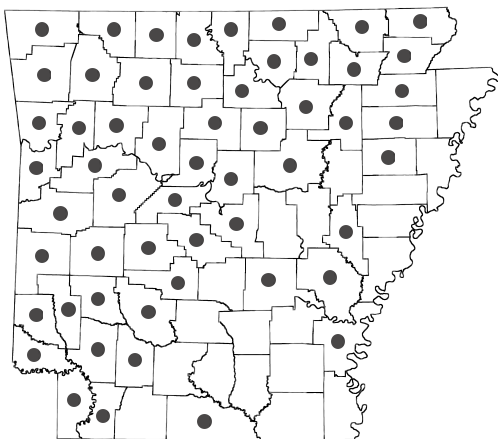
ROSACEAE
Rosa laevigata Michx.
Cherokee rose



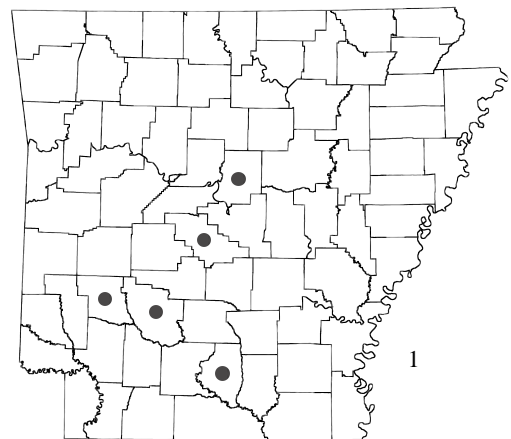
ROSACEAE
Rosa multiflora Thunb. ex Murray
multiflora rose



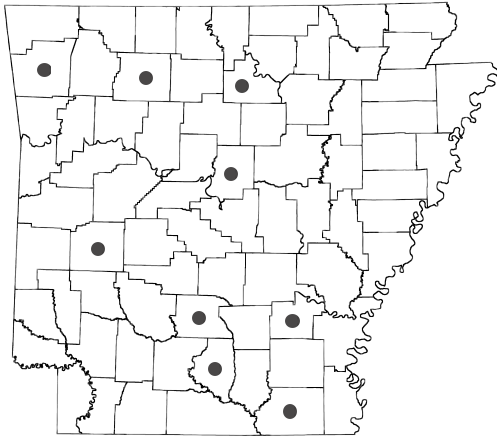
ROSACEAE
Rosa palustris Marshall
swamp rose



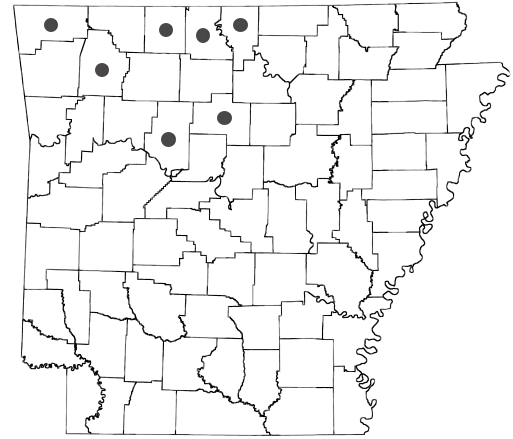
ROSACEAE
Rosa setigera Michx.
climbing rose



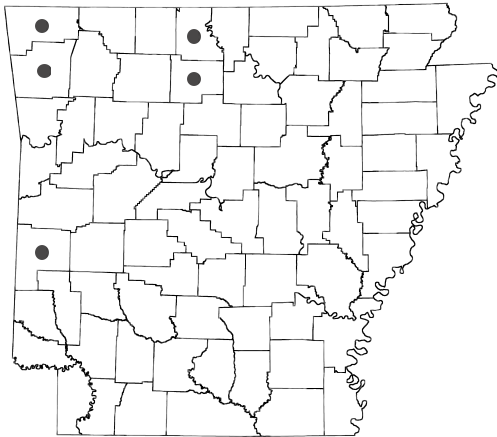
ROSACEAE
Rosa wichuraiana Crép.
memorial rose



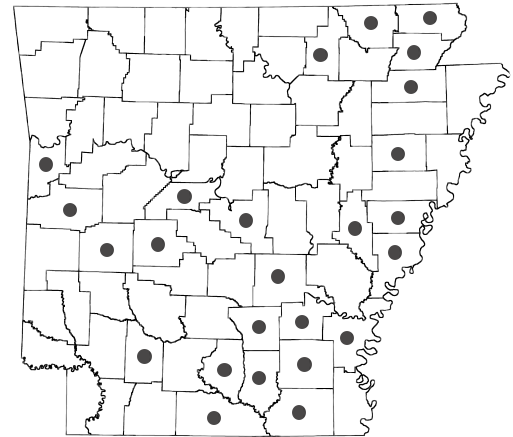
ROSACEAE
Rubus aboriginum Rydb.
 dewberry



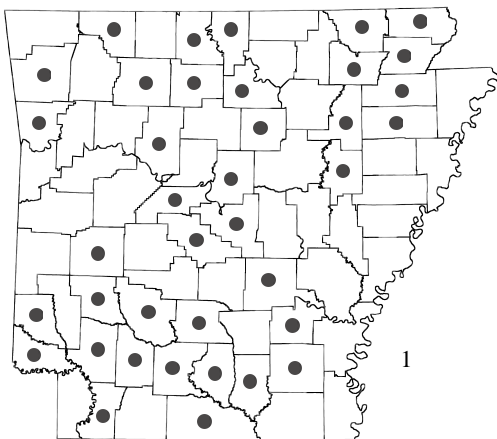
ROSACEAE
Rubus allegheniensis Porter ex L.H.Bailey
 high-bush blackberry, common blackberry



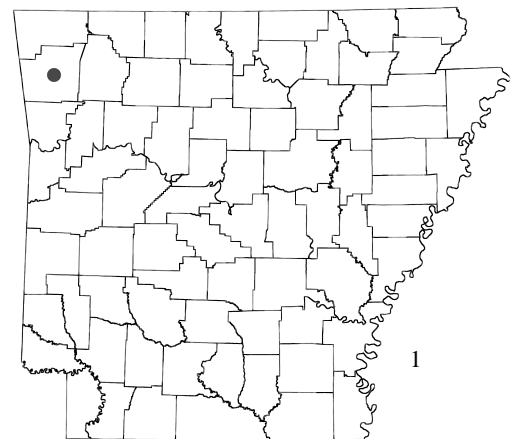
ROSACEAE
Rubus alumnus L.H.Bailey
 high-bush blackberry



ROSACEAE
Rubus argutus Link
 high-bush blackberry, southern blackberry



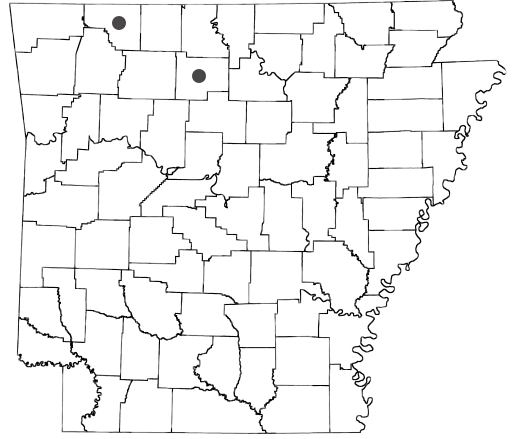
ROSACEAE
Rubus armeniacus Focke
 Himalayan blackberry, Armenian blackberry



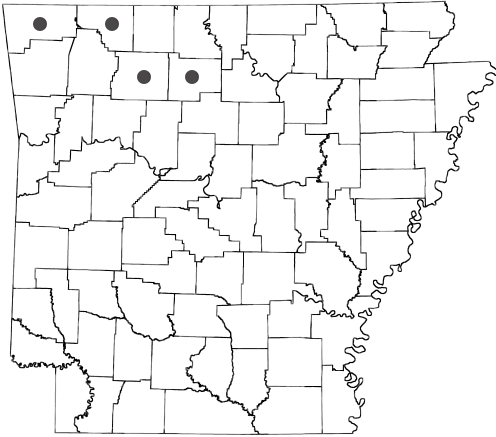
ROSACEAE
Rubus bifrons Vest ex Tratt.
 Himalayan-berry



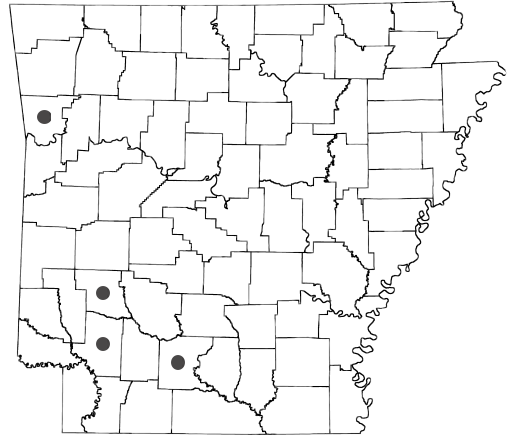
ROSACEAE
Rubus enslenii Tratt.
dewberry



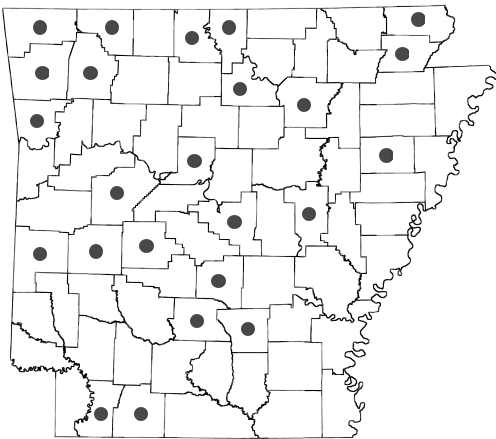
ROSACEAE
Rubus flagellaris Willd.
northern dewberry



ROSACEAE
Rubus frondosus Bigelow
high-bush blackberry



ROSACEAE
Rubus ictus L.H.Bailey
savannah dewberry



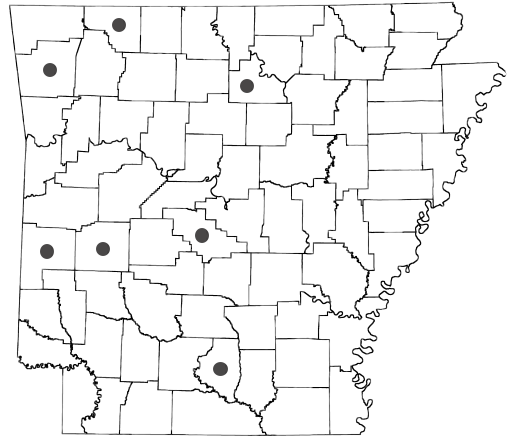
ROSACEAE
Rubus laudatus Berger
high-bush blackberry



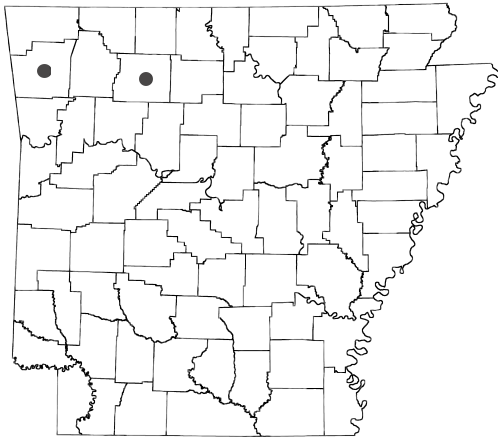
ROSACEAE
Rubus leviculus L.H.Bailey
dewberry



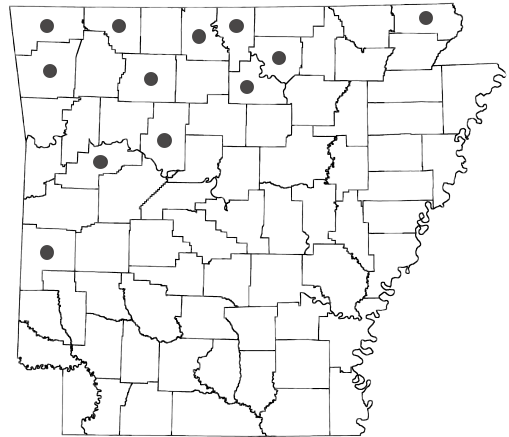
ROSACEAE
Rubus louisianus Berger
high-bush blackberry, swampberry



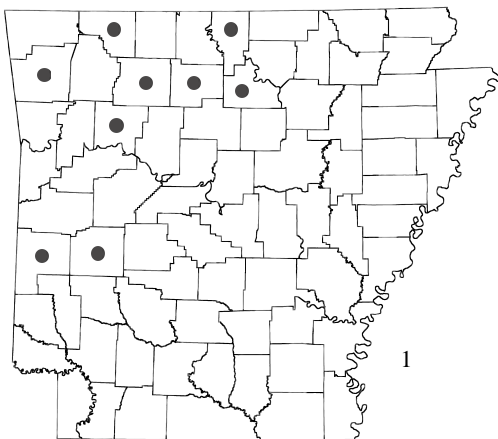
ROSACEAE
Rubus meracus L.H. Bailey
dewberry



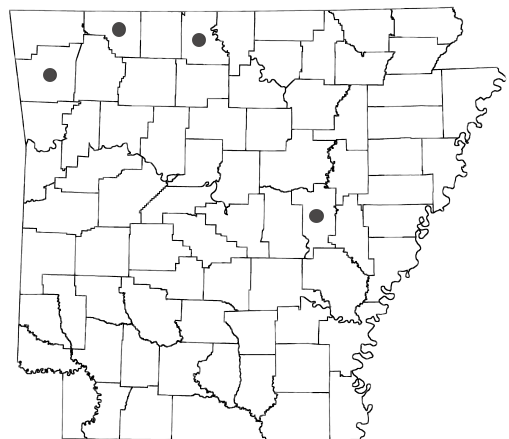
ROSACEAE
Rubus mollior L.H. Bailey
high-bush blackberry



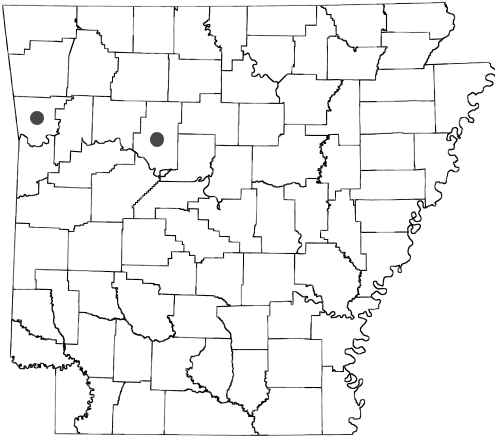
ROSACEAE
Rubus occidentalis L.
black raspberry



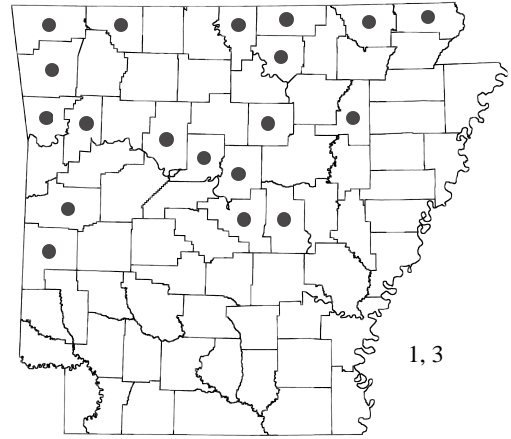
ROSACEAE
Rubus phoenicolasius Maxim.
wineberry, wine raspberry



ROSACEAE
Rubus roribaccus (L.H. Bailey) Rydb.
Lucretia dewberry

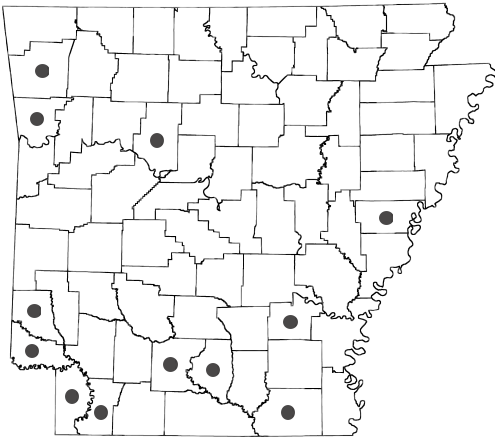


ROSACEAE
Rubus rubrisetus Rydb.
southern dewberry



ROSACEAE
Rubus serissimus L.H. Bailey
everbearing blackberry

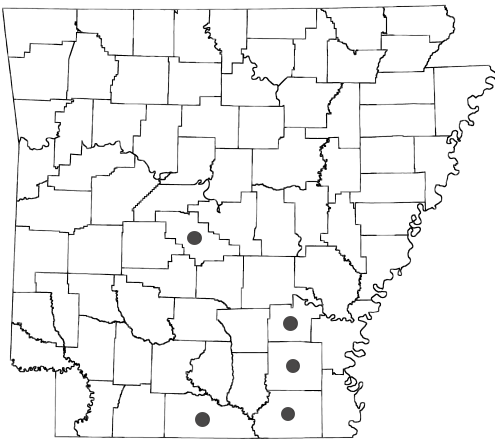
1, 3



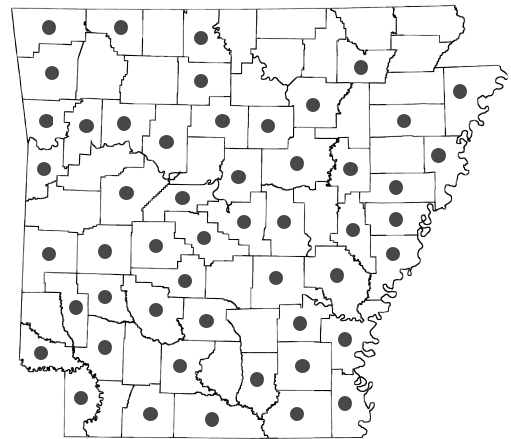
ROSACEAE
Rubus sons L.H. Bailey
southern dewberry



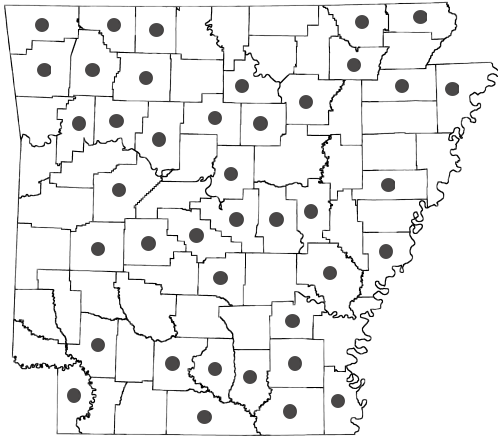
ROSACEAE
Rubus steelei L.H. Bailey
Steele's dewberry



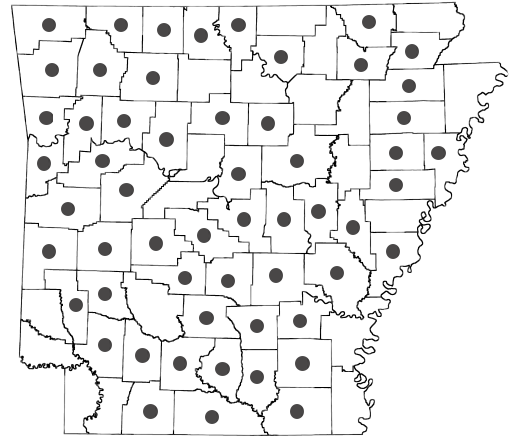
ROSACEAE
Rubus suus L.H. Bailey
high-bush blackberry



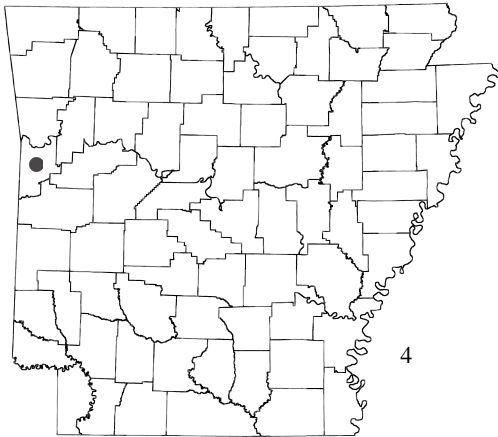
ROSACEAE
Rubus trivialis Michx.
southern dewberry



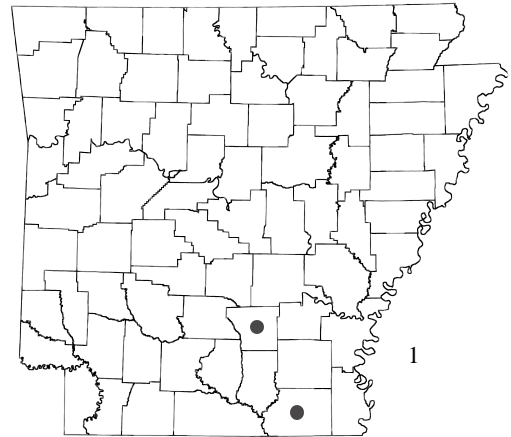
ROSACEAE
Rubus subg. Rubus sect. Arguti Rydberg



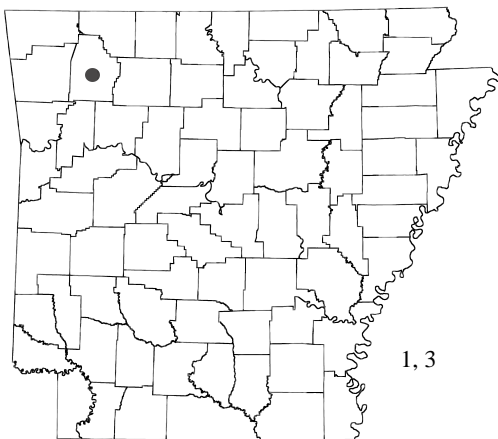
ROSACEAE
Rubus subg. Rubus sect. Flagellares L.H. Bailey



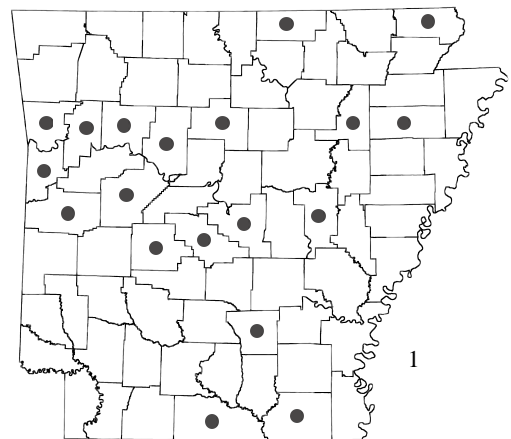
ROSACEAE
Sanguisorba annua (Nutt. ex Hook.) Nutt. ex Torr. & A.Gray
 prairie burnet



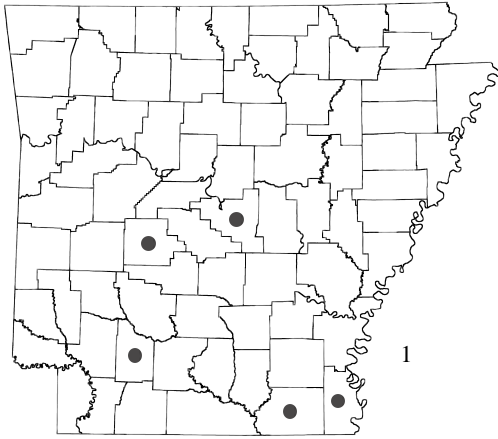
ROSACEAE
Spiraea cantoniensis Lour.
 double bridal-wreath spiraea, Reeves' spiraea



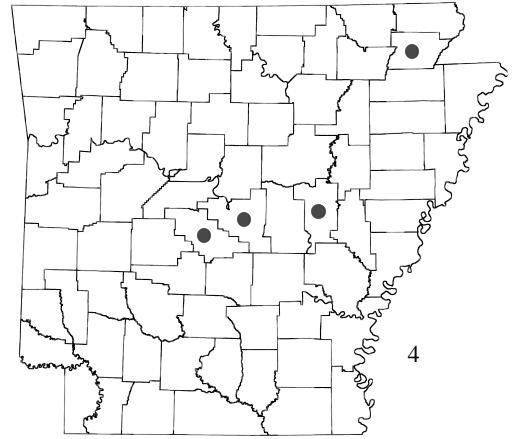
ROSACEAE
Spiraea japonica L.f.
 Japanese spiraea, Japanese meadowsweet



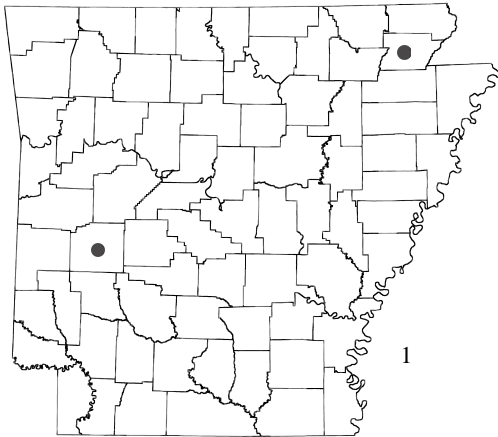
ROSACEAE
Spiraea prunifolia Siebold & Zucc.
 bridal-wreath spiraea



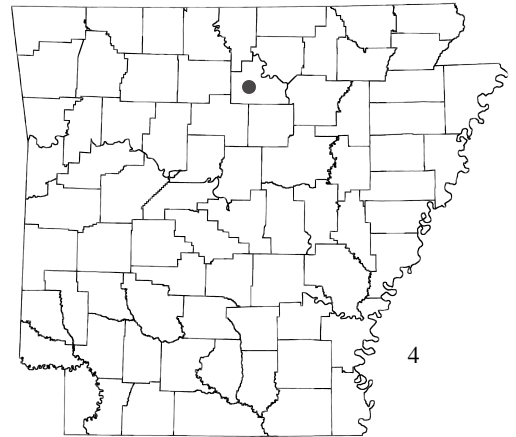
ROSACEAE
***Spiraea thunbergii* Siebold ex Blume**
 Thunberg's spiraea



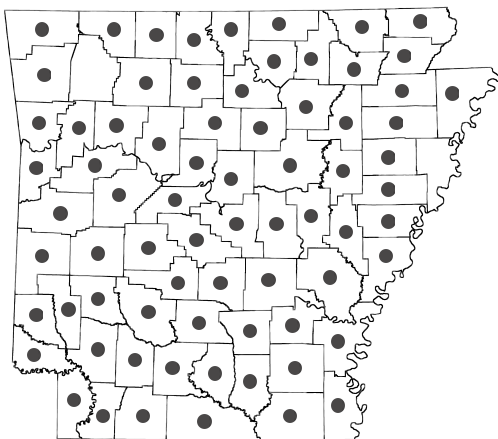
ROSACEAE
***Spiraea tomentosa* L.**
 hardhack, steeple-bush



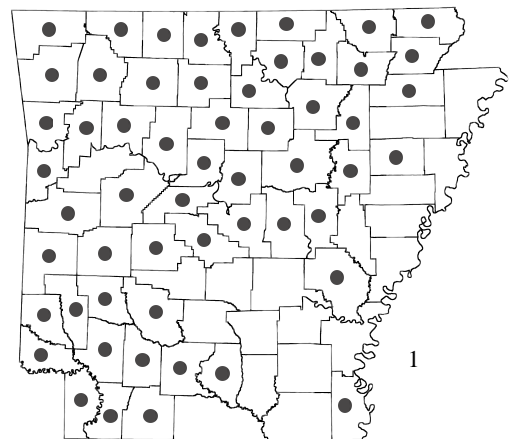
ROSACEAE
***Spiraea* × *billiardii* Hérincq**
 Billiard's spiraea



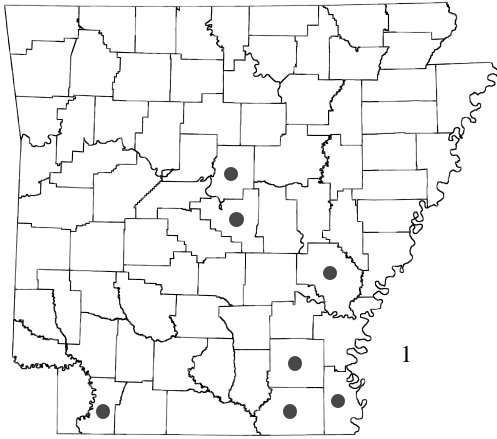
ROSACEAE
***Waldsteinia fragarioides* (Michx.) Tratt.**
 barren-strawberry



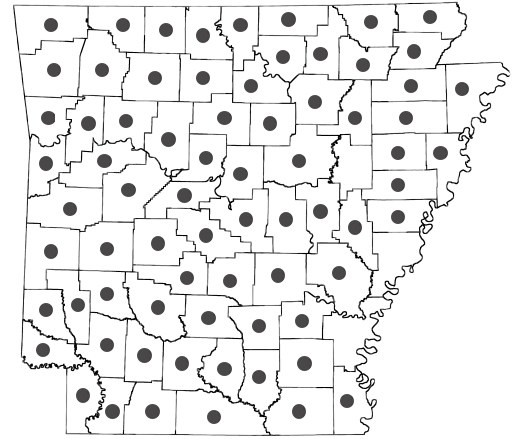
RUBIACEAE
***Cephalanthus occidentalis* L.**
 buttonbush



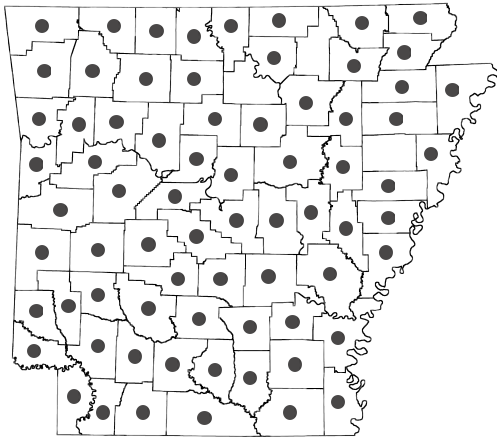
RUBIACEAE
***Cruciata pedemontana* (Bellardi) Ehrend.**
 Piedmont bedstraw



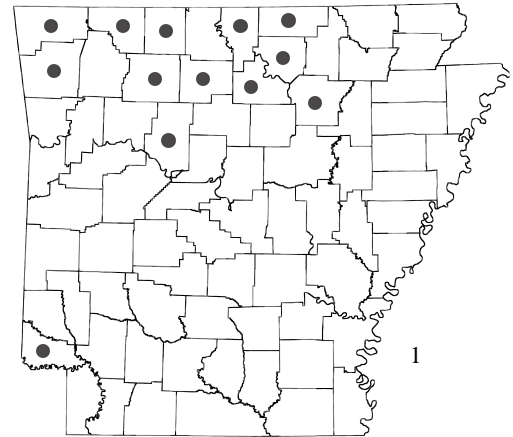
RUBIACEAE
Diodia dasycephala Cham. & Schtdl.
 buttonweed



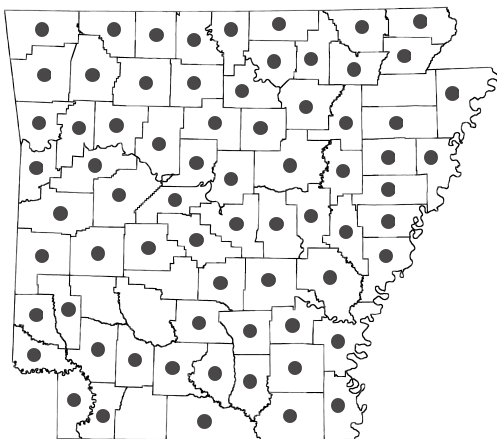
RUBIACEAE
Diodia teres Walter
 poor-Joe, rough buttonweed



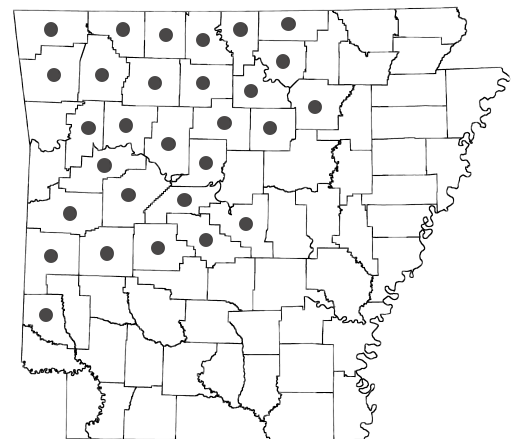
RUBIACEAE
Diodia virginiana L.
 Virginia buttonweed



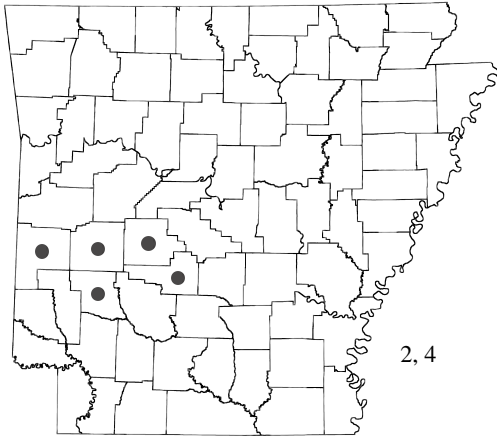
RUBIACEAE
Galium anglicum Huds.
 English bedstraw



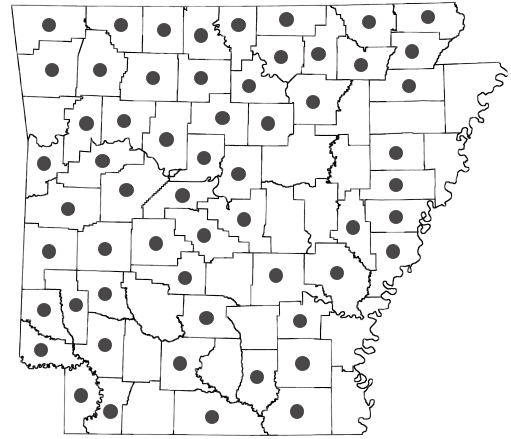
RUBIACEAE
Galium aparine L.
 cleavers



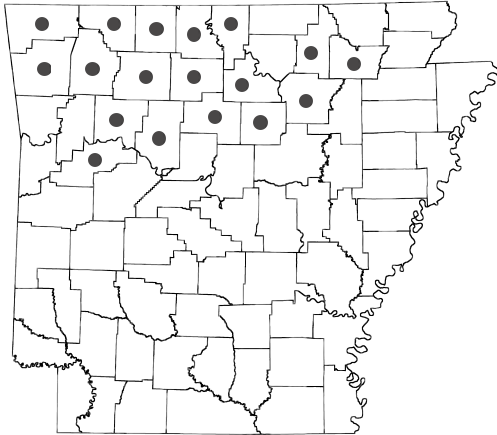
RUBIACEAE
Galium arkansanum A.Gray
var. arkansanum
 Arkansas bedstraw



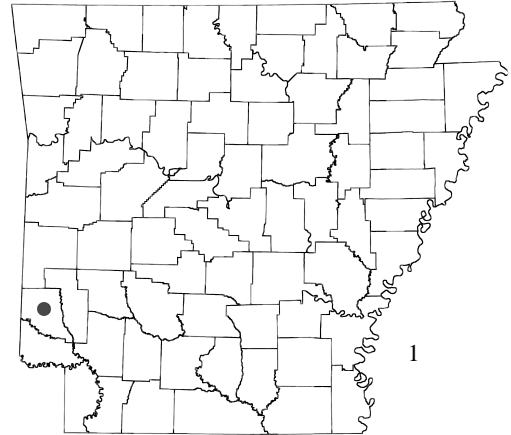
RUBIACEAE
Galium arkansanum A.Gray
var. pubiflorum E.B.Sm.
hairy-flower Arkansas bedstraw



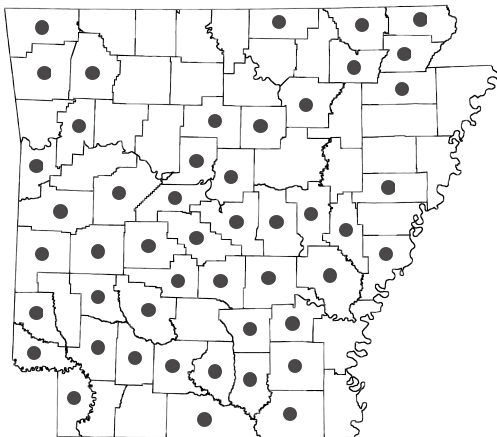
RUBIACEAE
Galium circaezans Michx.
wild licorice



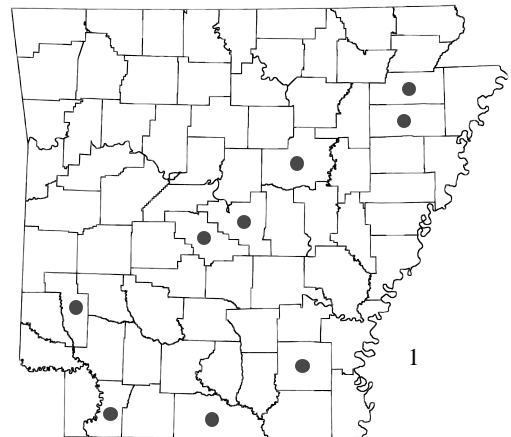
RUBIACEAE
Galium concinnum Torr. & A.Gray
shining bedstraw



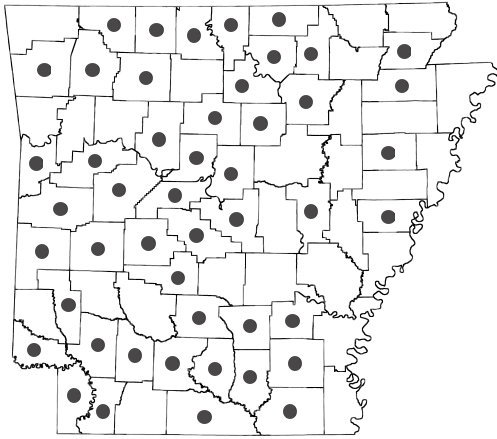
RUBIACEAE
Galium divaricatum Pourr. ex Lam.
Lamarck's bedstraw



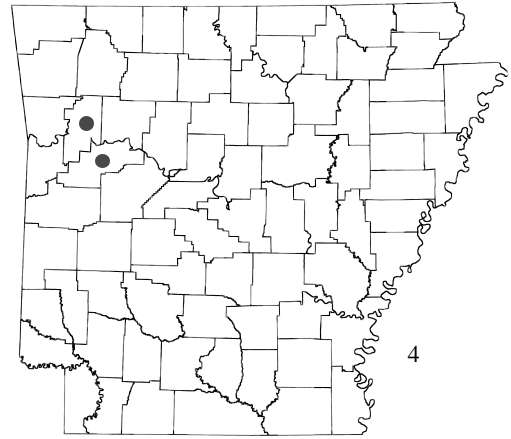
RUBIACEAE
Galium obtusum Bigelow
blunt-leaf bedstraw



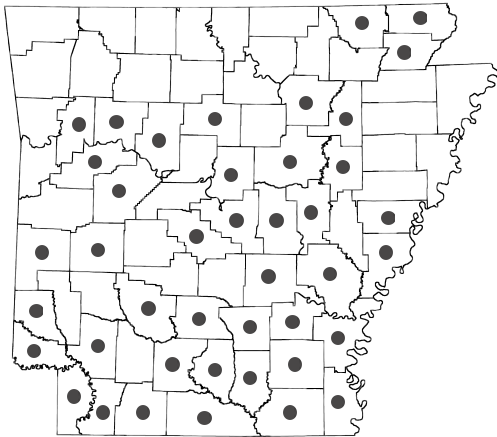
RUBIACEAE
Galium parisiense L.
wall bedstraw



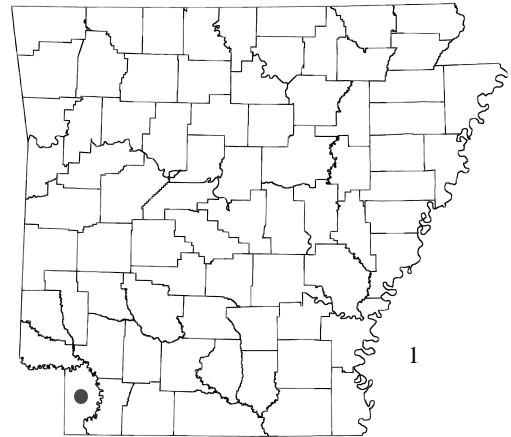
RUBIACEAE
Galium pilosum Aiton
hairy bedstraw



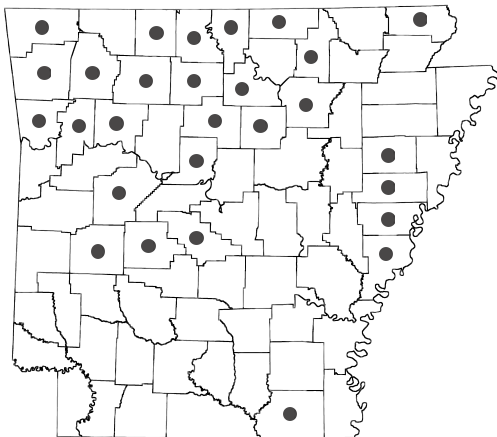
RUBIACEAE
Galium texense A. Gray
Texas bedstraw



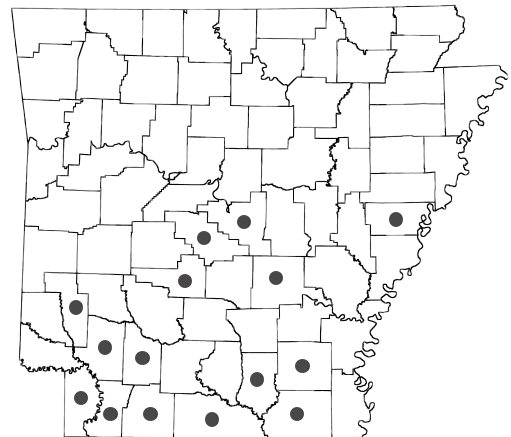
RUBIACEAE
Galium tinctorium L.
dye bedstraw



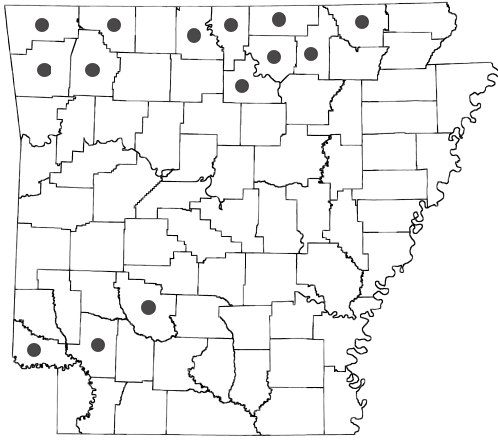
RUBIACEAE
Galium tricornutum Dandy
rough corn bedstraw



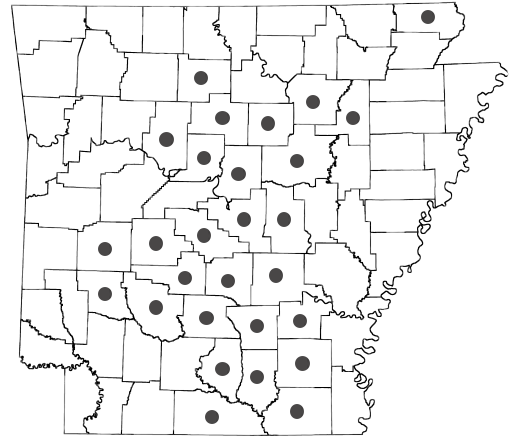
RUBIACEAE
Galium triflorum Michx.
sweet-scent bedstraw



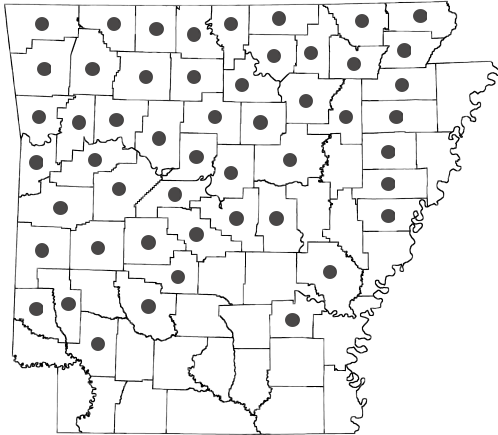
RUBIACEAE
Galium uniflorum Michx.
one-flower bedstraw



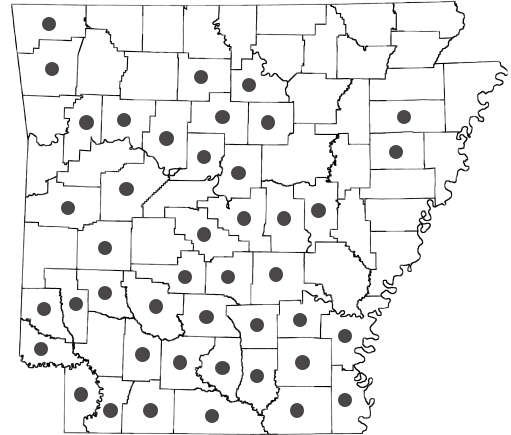
RUBIACEAE
Galium virgatum Nutt. ex Torr. & A.Gray
 southwestern bedstraw



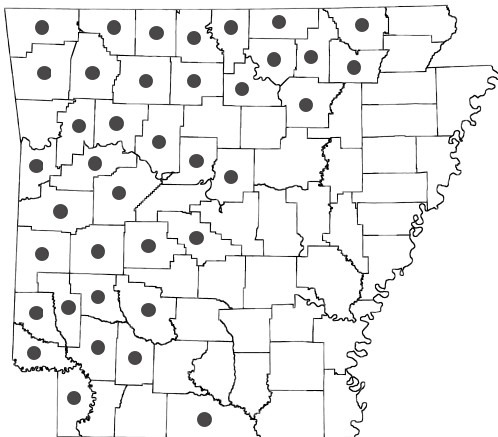
RUBIACEAE
Houstonia caerulea L.
 Quaker-ladies, bluet



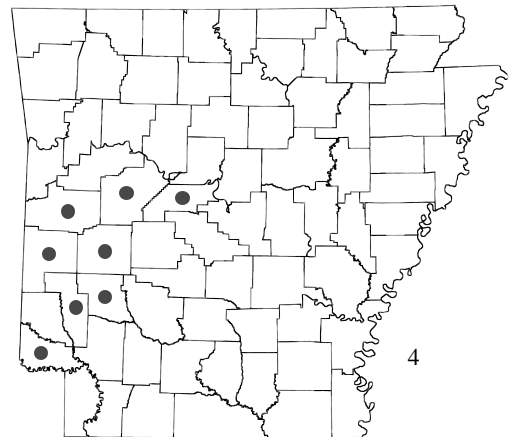
RUBIACEAE
Houstonia longifolia Gaertn.
 long-leaf bluet, summer bluet



RUBIACEAE
Houstonia micrantha (Shinners) Terrell
 southern bluet, white bluet

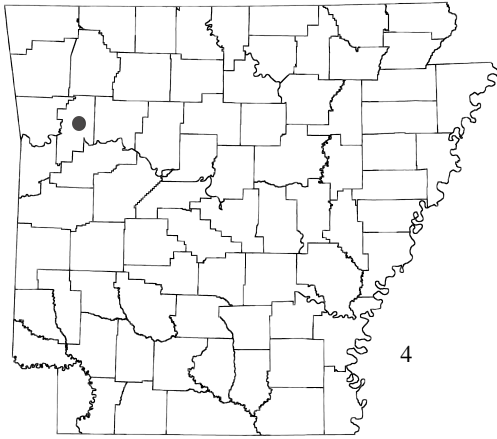


RUBIACEAE
Houstonia nigricans (Lam.) Fernald
var. nigricans
 diamond-flower, glade bluet

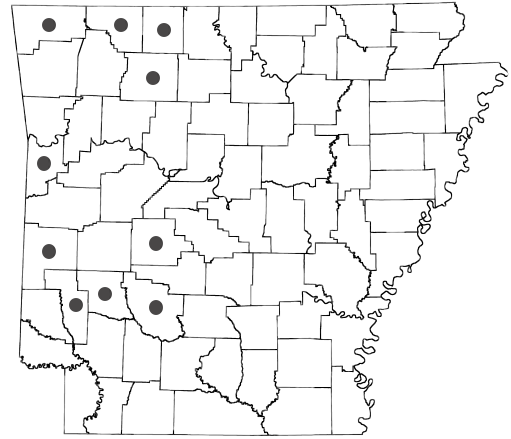


RUBIACEAE
Houstonia ouachitana (E.B.Sm.) Terrell
 Ouachita bluet

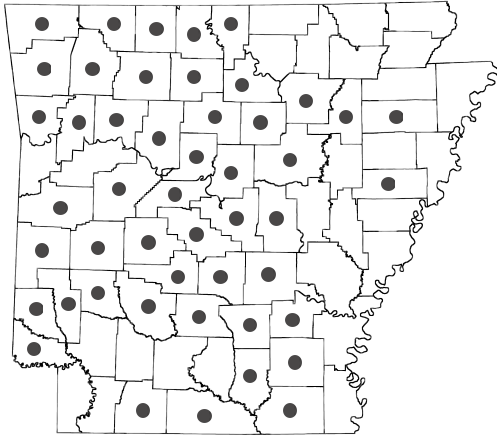
4



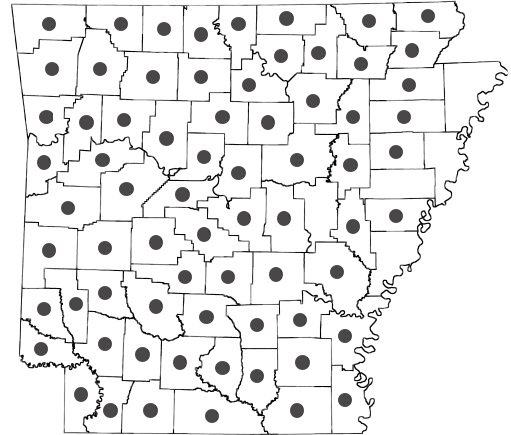
RUBIACEAE
Houstonia parviflora Holz. ex Greenm.
 Greenman's bluet



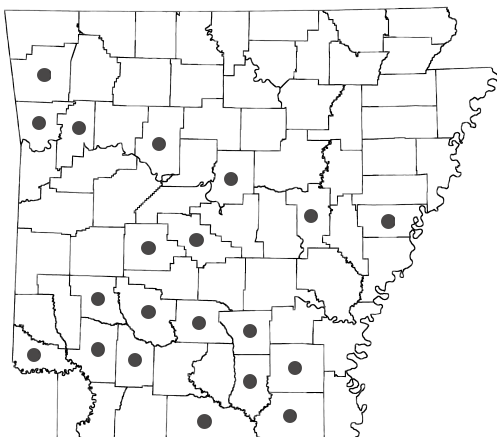
RUBIACEAE
Houstonia purpurea L.
var. calycosa Shuttlw. ex A.Gray
 glade mountain houstonia



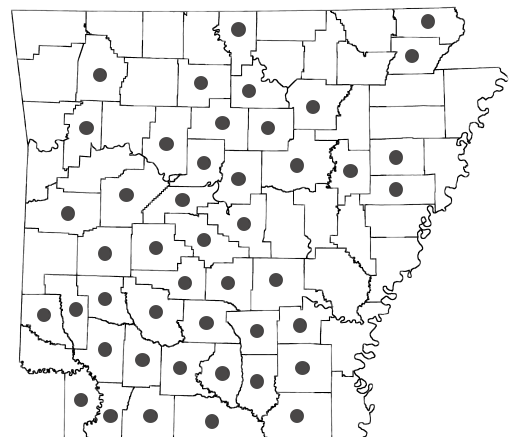
RUBIACEAE
Houstonia purpurea L.
var. purpurea
 mountain houstonia, summer bluet



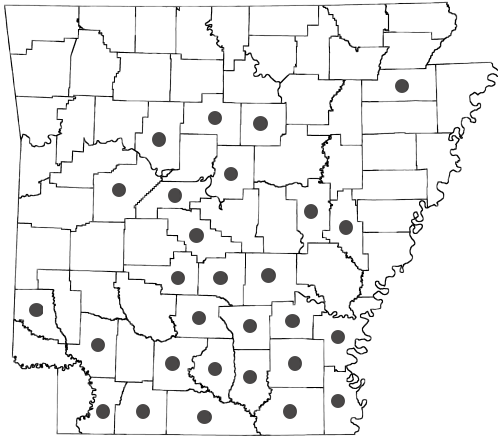
RUBIACEAE
Houstonia pusilla Schoepf
 star-violet, tiny bluet



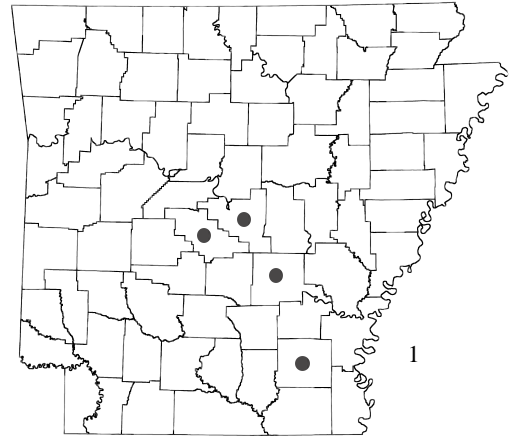
RUBIACEAE
Houstonia rosea (Raf.) Terrell
 rose bluet



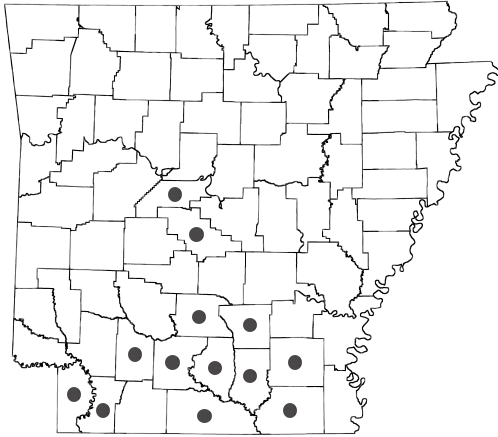
RUBIACEAE
Mitchella repens L.
 partridge-berry



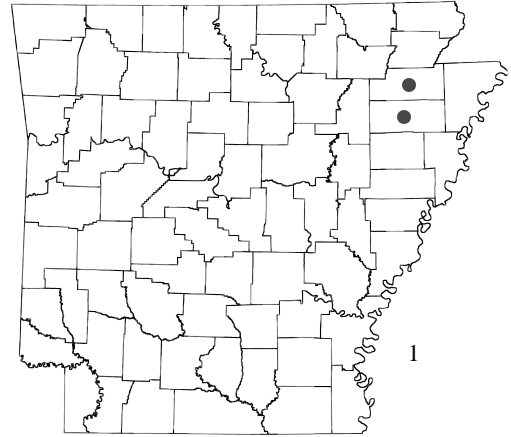
RUBIACEAE
Oldenlandia boscii (DC.) Chapm.
Bosc's bluet



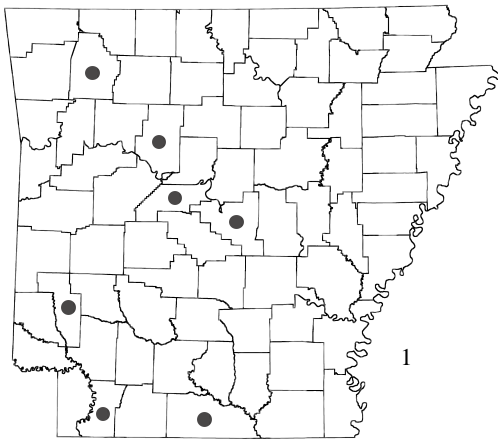
RUBIACEAE
Oldenlandia corymbosa L.
bluet, diamond-flower



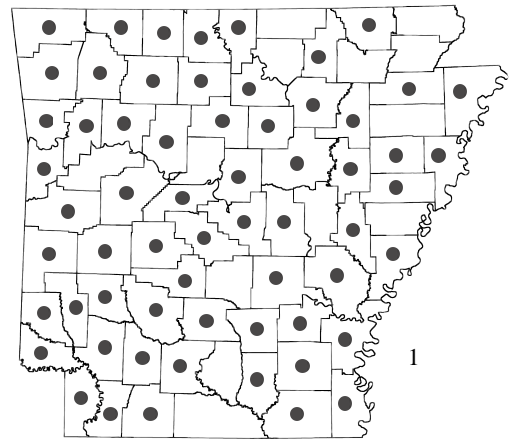
RUBIACEAE
Oldenlandia uniflora L.
oldenlandia, bluet



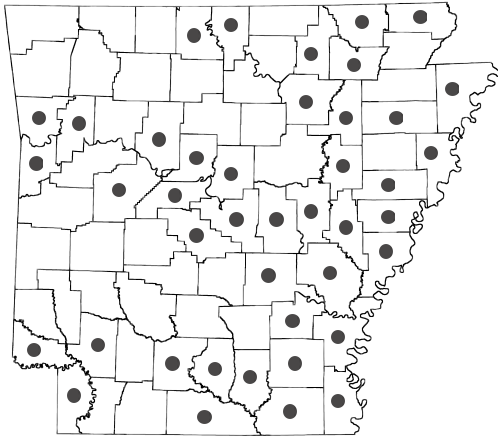
RUBIACEAE
Pentodon pentandrus (Schumach. & Thonn.) Vatke
pentodon



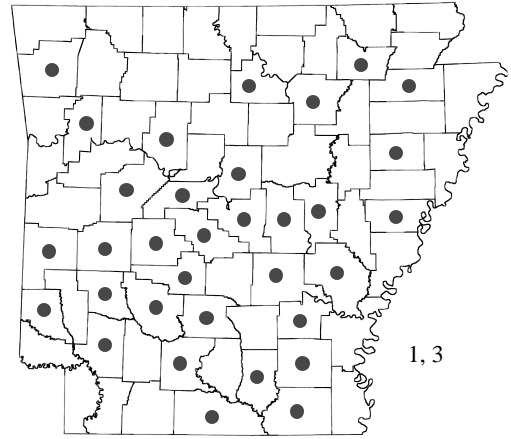
RUBIACEAE
Richardia scabra L.
rough Mexican-clover, pusley



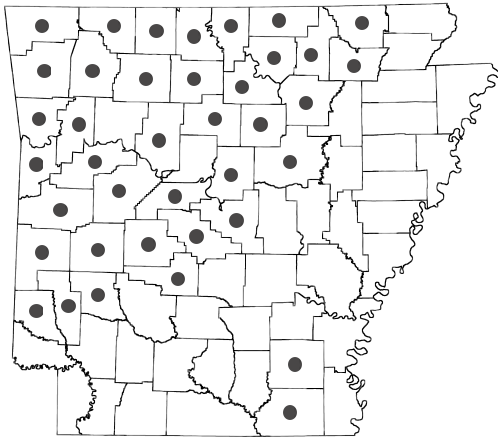
RUBIACEAE
Sherardia arvensis L.
field-madder



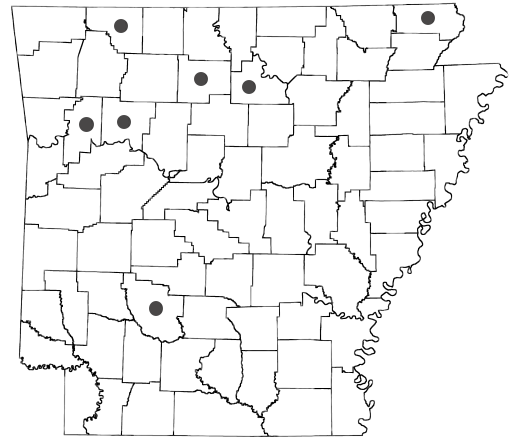
RUBIACEAE
Spermacoe glabra Michx.
 smooth buttonweed



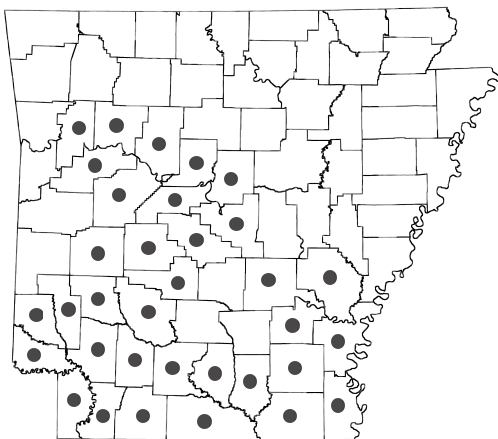
RUTACEAE
Citrus trifoliata L.
 trifoliolate orange



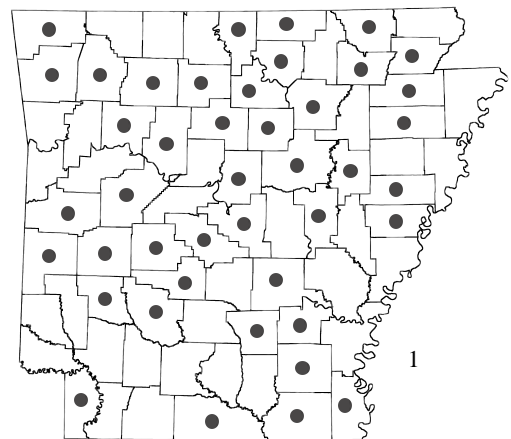
RUTACEAE
Ptelea trifoliata L.
 wafer-ash, hop-tree



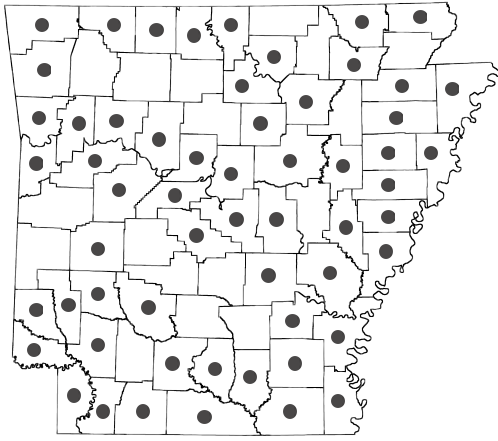
RUTACEAE
Zanthoxylum americanum Mill.
 prickly-ash, toothache-tree



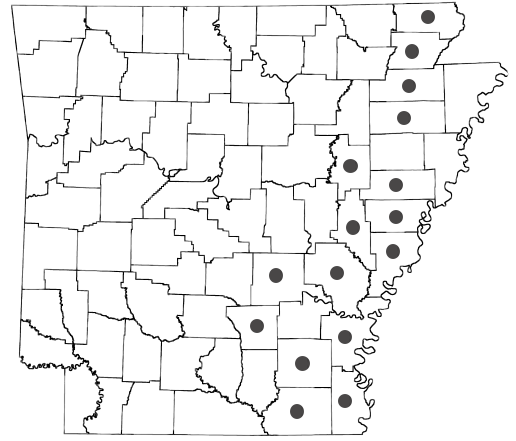
RUTACEAE
Zanthoxylum clava-herculis L.
 toothache-tree, Hercules'-club, prickly-ash



SALICACEAE
Populus alba L.
 white poplar, silver poplar



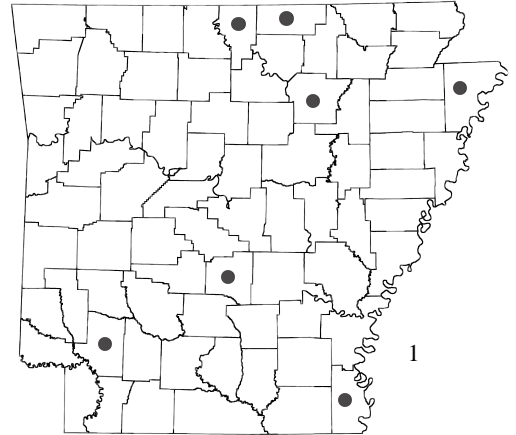
SALICACEAE
Populus deltoides W.Bartram ex Marshall
 subsp. *deltoides*
 eastern cottonwood



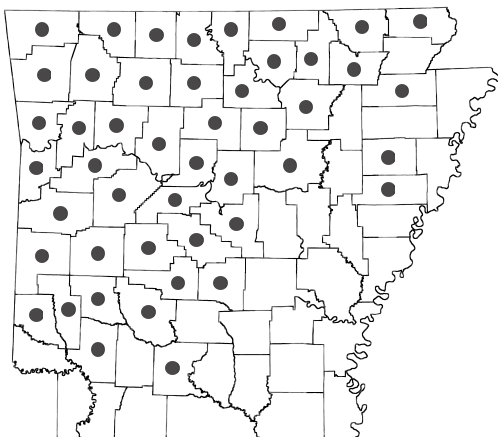
SALICACEAE
Populus heterophylla L.
 swamp cottonwood



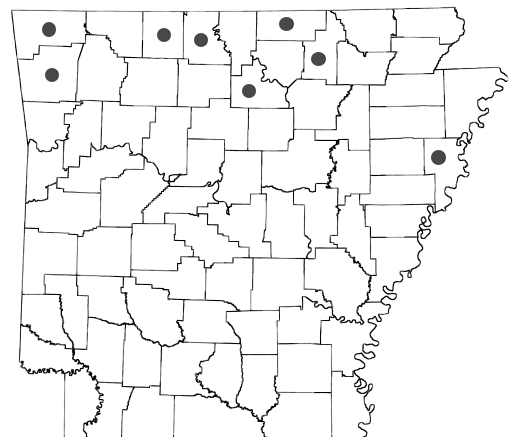
SALICACEAE
Salix alba L.
 white willow



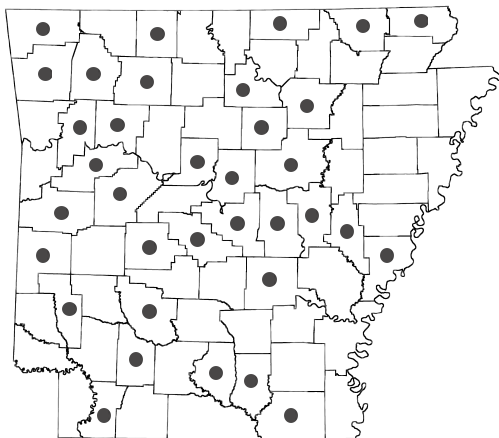
SALICACEAE
Salix babylonica L.
 weeping willow



SALICACEAE
Salix caroliniana Michx.
 Carolina willow, Ward's willow



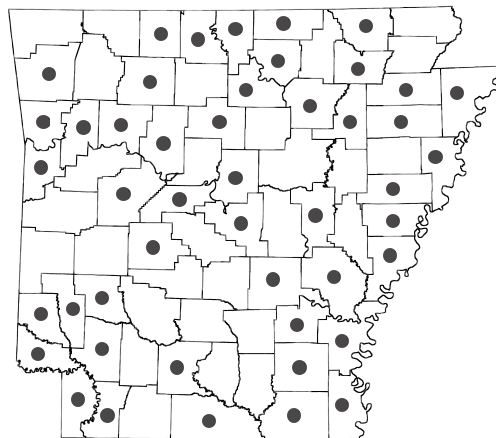
SALICACEAE
Salix eriocephala Michx.
 Missouri willow



SALICACEAE
Salix humilis Marshall

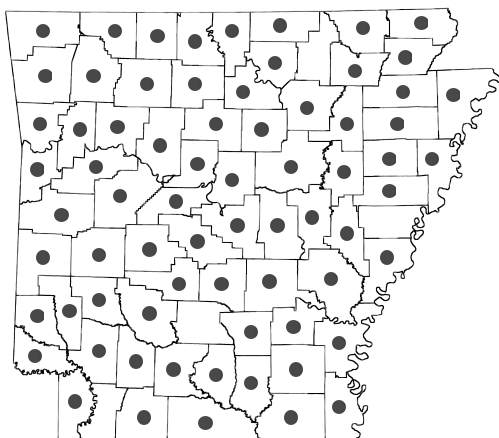
upland willow, prairie willow

See Appendix I for infraspecific taxa and species status.



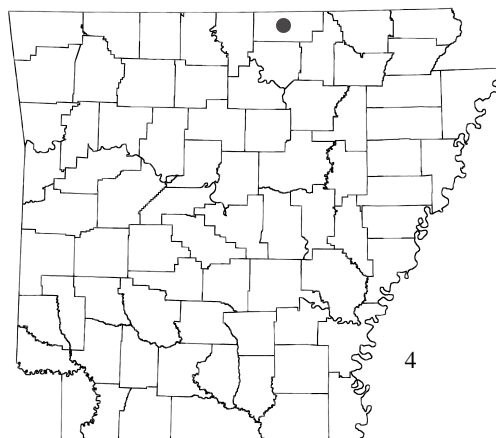
SALICACEAE
Salix interior Rowlee

sandbar willow



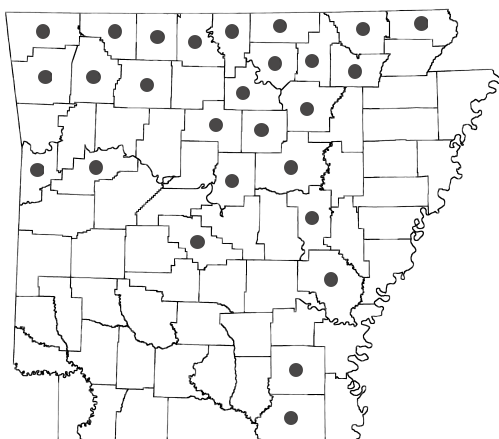
SALICACEAE
Salix nigra Marshall

black willow



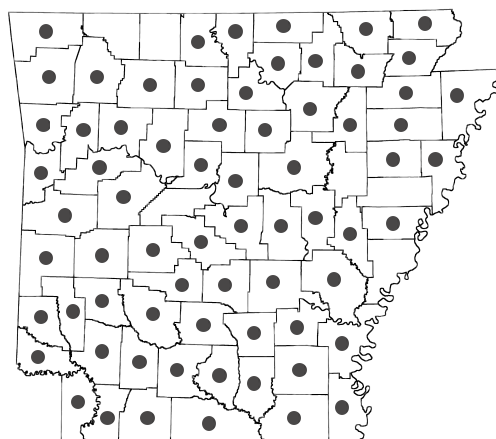
SALICACEAE
Salix sericea Marshall

silky willow



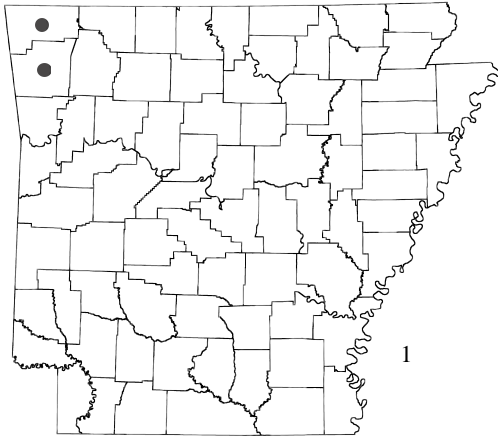
SANTALACEAE
Comandra umbellata (L.) Nutt.
subsp. umbellata

bastard-toadflax

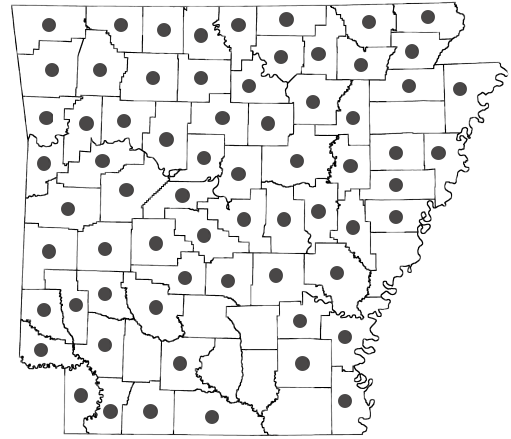


SANTALACEAE
Phoradendron leucarpum (Raf.) Reveal & M.C. Johnst.

mistletoe

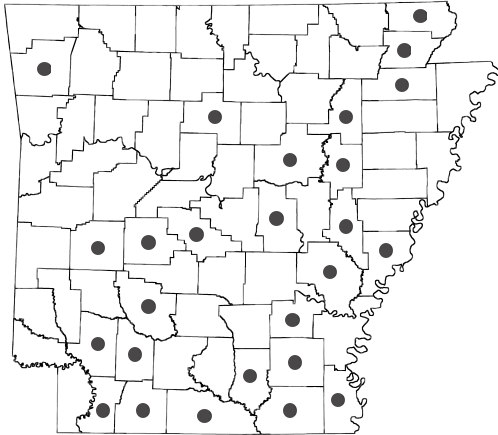


SAPINDACEAE
Acer ginnala Maxim.
 Amur maple

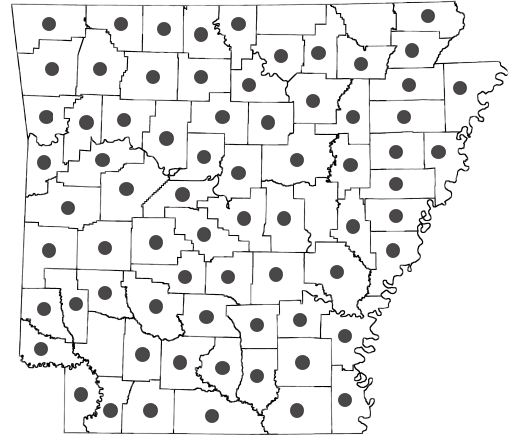


SAPINDACEAE
Acer negundo L.
 box elder

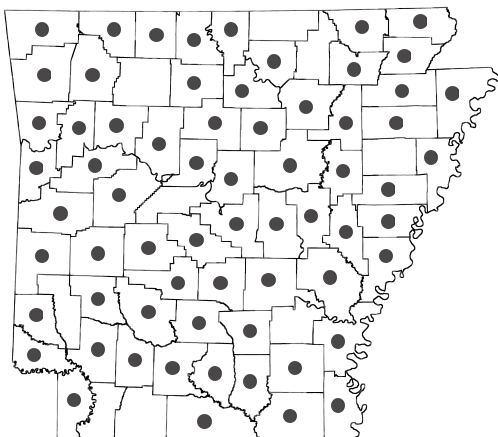
See *Appendix I* for infraspecific taxa and species status.



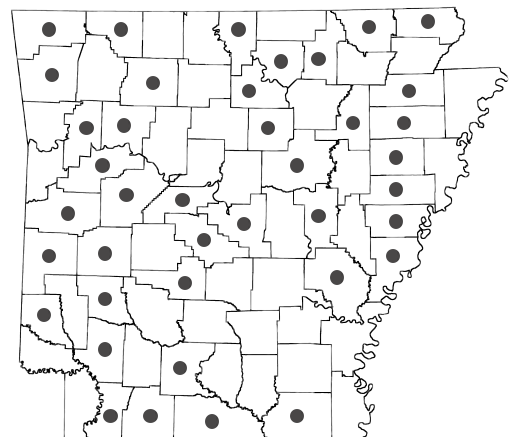
SAPINDACEAE
Acer rubrum L.
var. drummondii (Hook. & Arn. ex Nutt.) Sarg.
 swamp red maple



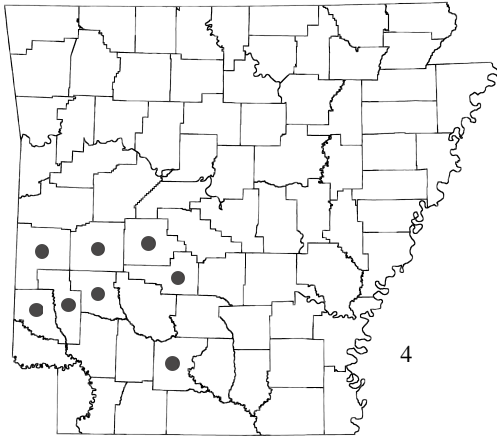
SAPINDACEAE
Acer rubrum L.
var. rubrum
 red maple



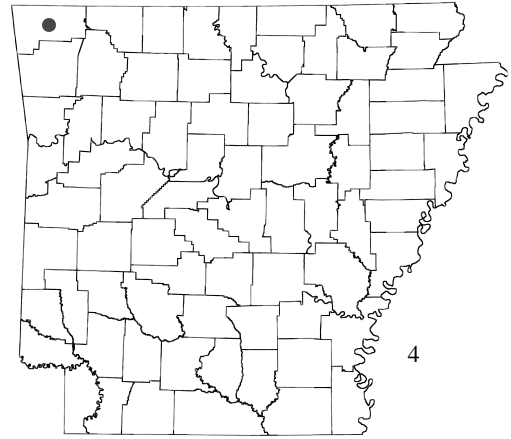
SAPINDACEAE
Acer saccharinum L.
 silver maple



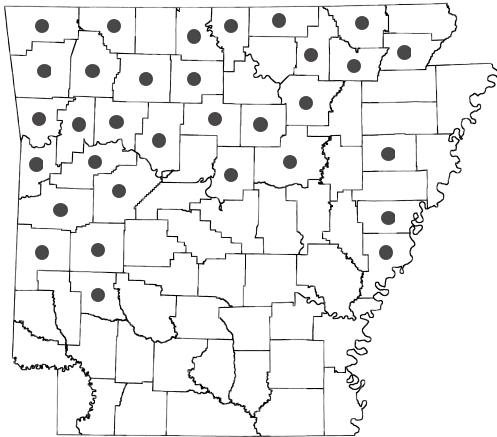
SAPINDACEAE
Acer saccharum Marshall
var. floridanum (Chapm.) Small & A.Heller
 southern sugar maple



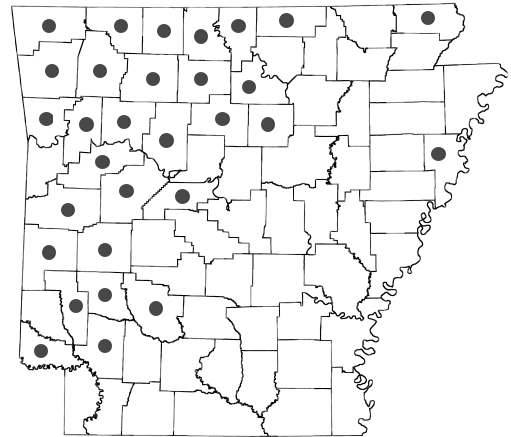
SAPINDACEAE
Acer saccharum Marshall
var. leucoderme (Small) Sarg.
 chalk maple



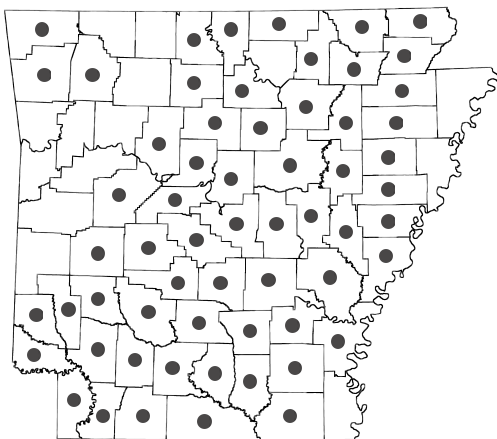
SAPINDACEAE
Acer saccharum Marshall
var. nigrum (F.Michx.) Britton
 black maple



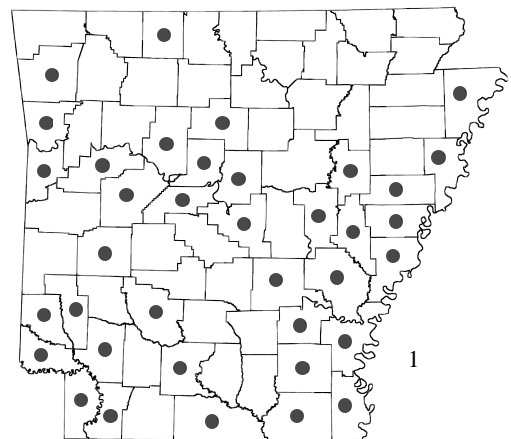
SAPINDACEAE
Acer saccharum Marshall
var. saccharum
 sugar maple



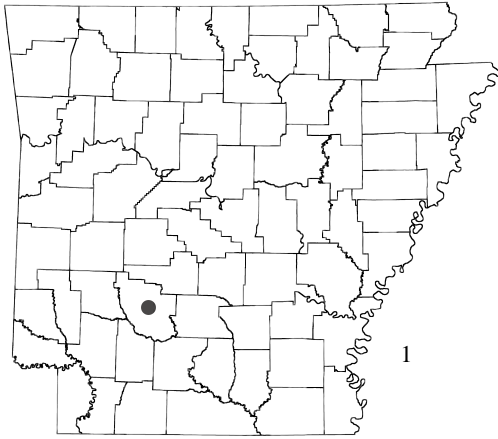
SAPINDACEAE
Aesculus glabra Willd.
 Ohio buckeye
 See *Appendix I* for infraspecific taxa and species status.



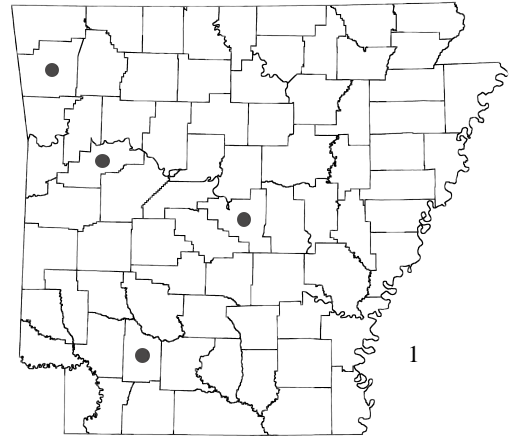
SAPINDACEAE
Aesculus pavia L.
var. pavia
 red buckeye



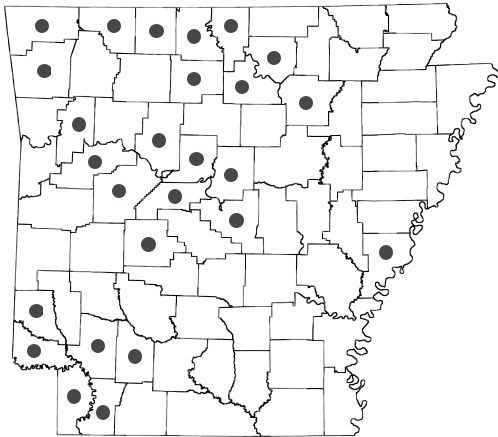
SAPINDACEAE
Cardiospermum halicacabum L.
 balloon-vine



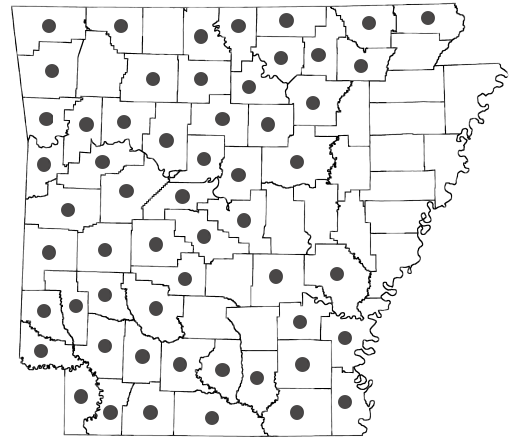
SAPINDACEAE
Koelreuteria bipinnata Franch.
 Chinese flame-tree, golden-rain-tree



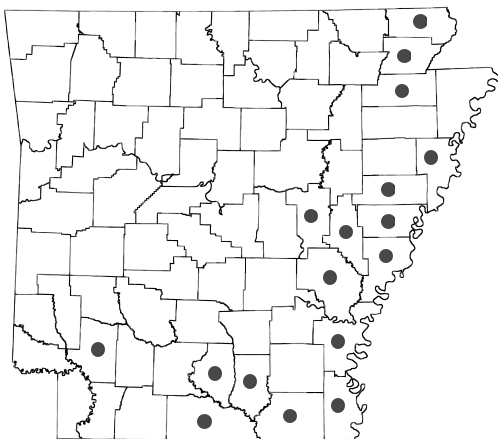
SAPINDACEAE
Koelreuteria paniculata Laxm.
 golden-rain-tree



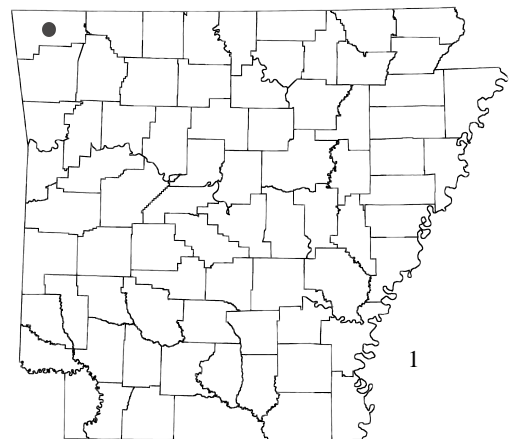
SAPINDACEAE
Sapindus saponaria L.
var. drummondii (Hook. & Arn.) L.D.Benson
 soapberry



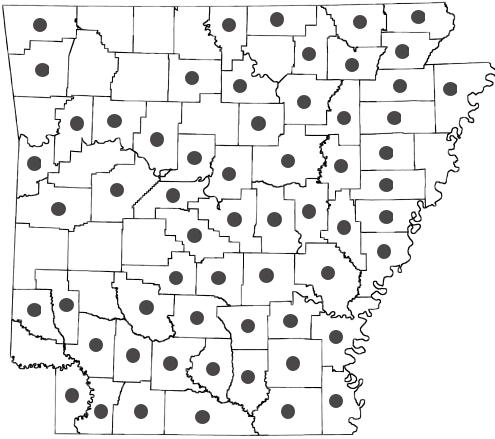
SAPOTACEAE
Sideroxylon lanuginosum Michx.
 gum bumelia, chittamwood



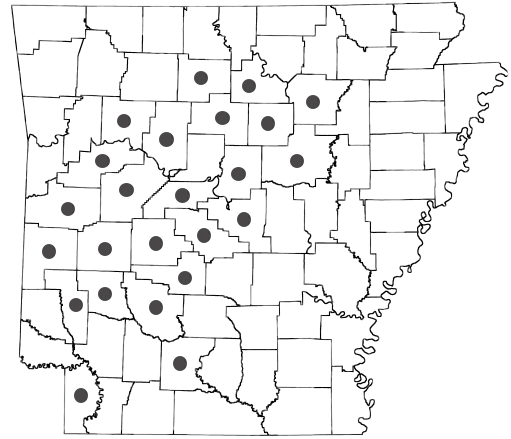
SAPOTACEAE
Sideroxylon lycioides L.
 buckthorn bumelia



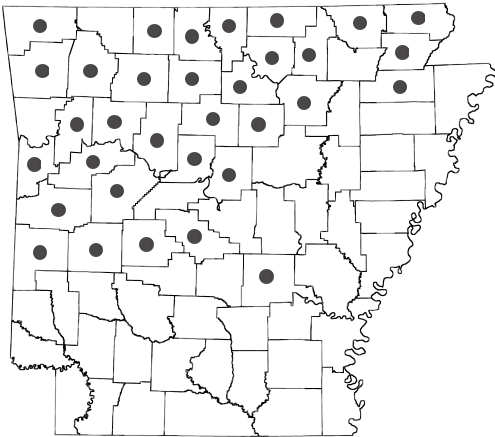
SAURURACEAE
Houttuynia cordata Thunb.
 chameleon



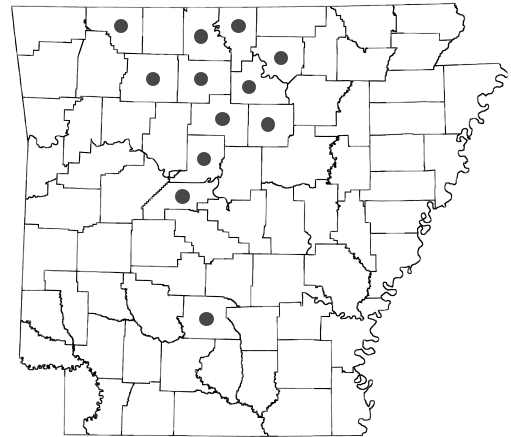
SAURURACEAE
Saururus cernuus L.
 lizard's-tail



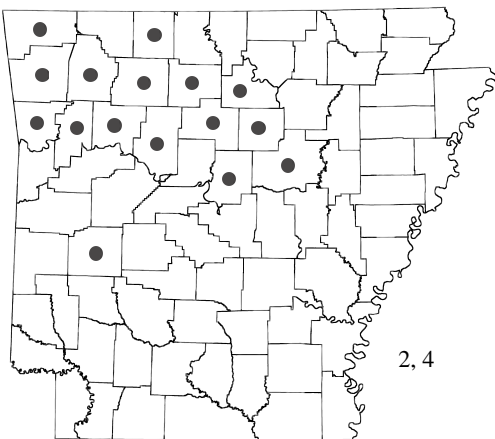
SAXIFRAGACEAE
Heuchera americana L.
var. americana
 American alumroot, rock-geranium



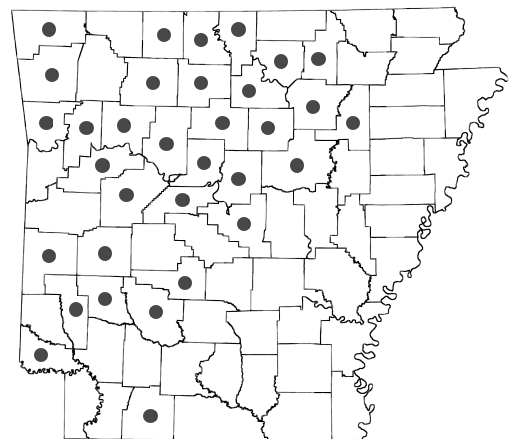
SAXIFRAGACEAE
Heuchera americana L.
var. hirsuticaulis (Wheelock) Rosend., Butters & Lakela
 American alumroot, rock-geranium



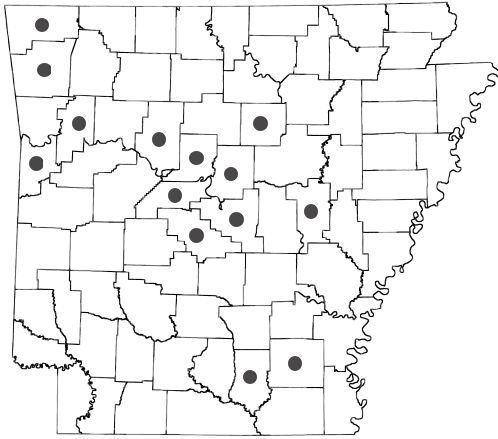
SAXIFRAGACEAE
Heuchera parviflora Bartl.
var. puberula (Mack. & Bush) E.F.Wells
 alumroot



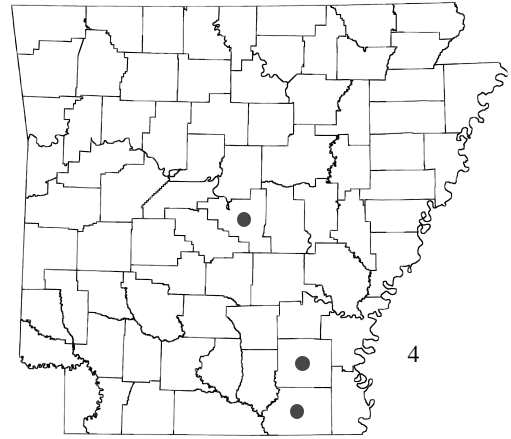
SAXIFRAGACEAE
Heuchera villosa Michx.
var. arkansana (Rydb.) E.B.Sm.
 Arkansas alumroot



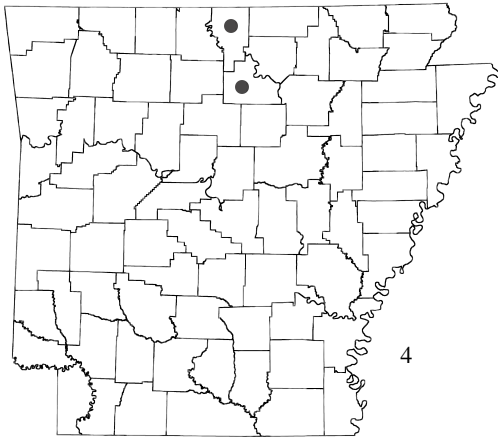
SAXIFRAGACEAE
Micranthes palmeri Bush
 Palmer's saxifrage



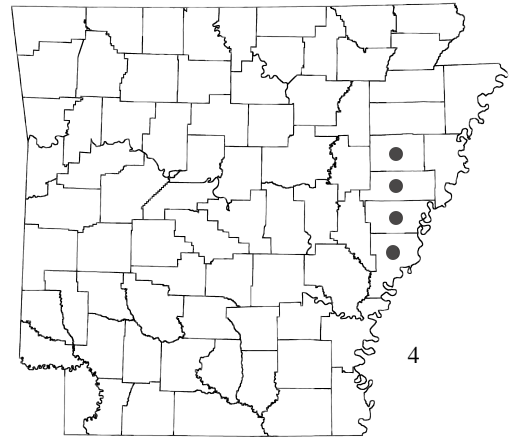
SAXIFRAGACEAE
***Micranthes texana* (Buckley) Small**
 Texas saxifrage



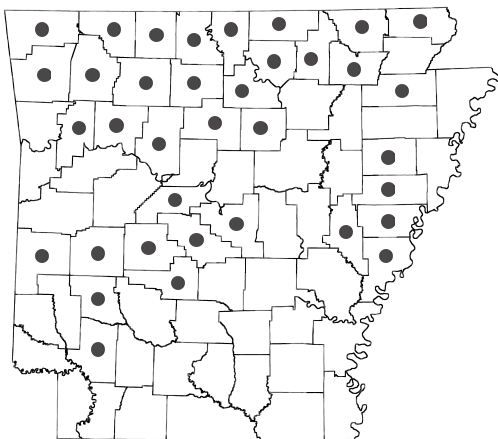
SAXIFRAGACEAE
***Micranthes virginiensis* (Michx.) Small**
 early saxifrage



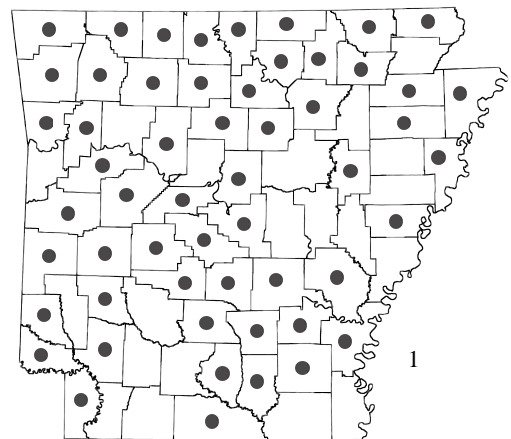
SAXIFRAGACEAE
***Mitella diphylla* L.**
 miterwort, bishop's-cap



SCHISANDRACEAE
***Schisandra glabra* (Brickell) Rehder**
 bay star-vine, climbing-magnolia



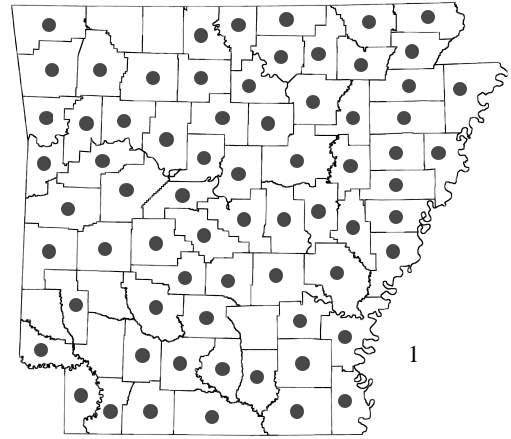
SCROPHULARIACEAE
***Scrophularia marilandica* L.**
 carpenter's-square, figwort



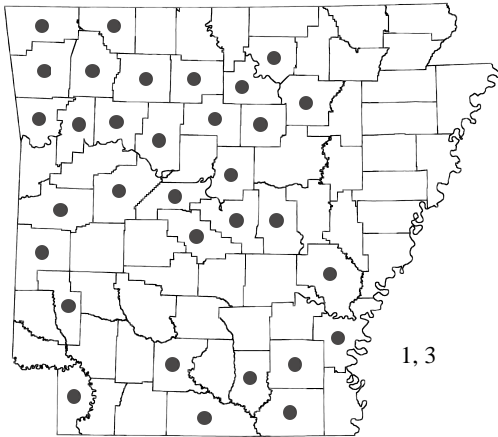
SCROPHULARIACEAE
***Verbascum blattaria* L.**
 moth mullein



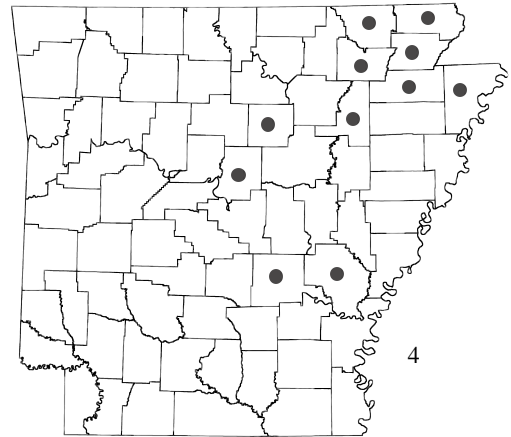
SCROPHULARIACEAE
Verbascum phlomoides L.
 orange mullein



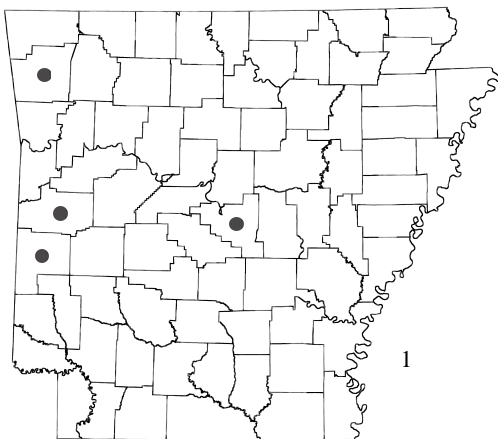
SCROPHULARIACEAE
Verbascum thapsus L.
 woolly mullein



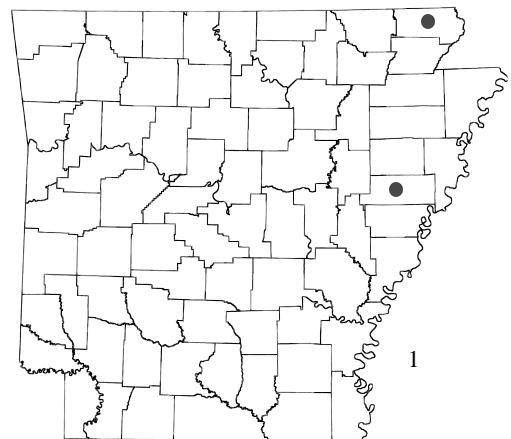
SIMAROUBACEAE
Ailanthus altissima (Mill.) Swingle
 tree-of-heaven, stink-tree



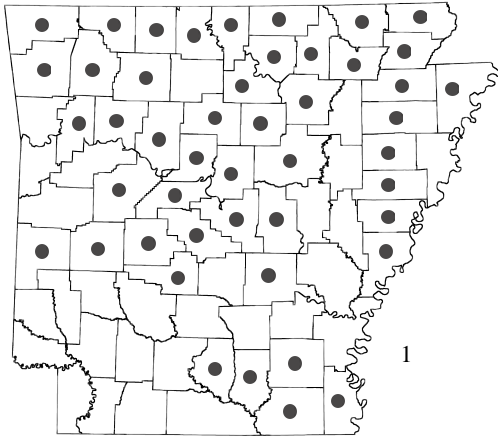
SIMAROUBACEAE
Leitneria floridana Chapm.
 corkwood



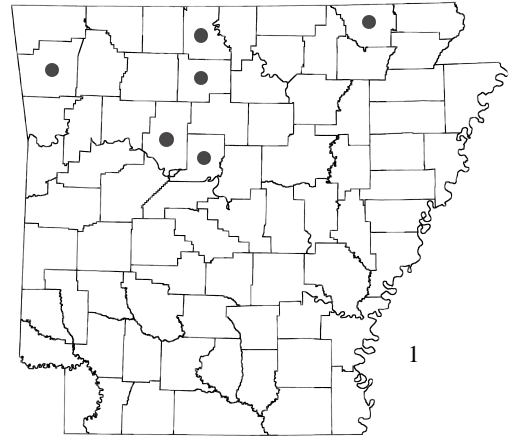
SOLANACEAE
Datura innoxia Mill.
 jimsonweed, Indian-apple



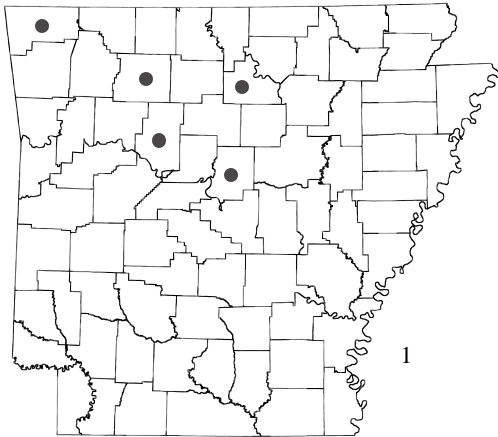
SOLANACEAE
Datura quercifolia Kunth
 oak-leaf thorn-apple



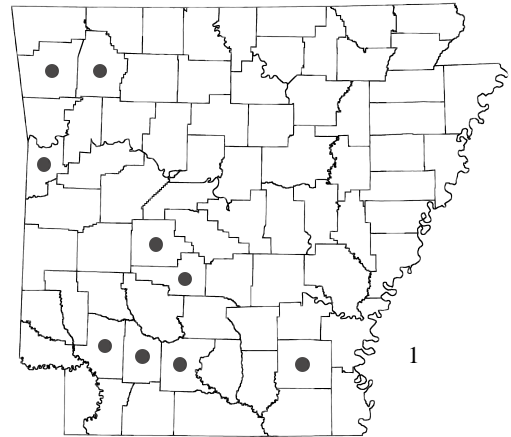
SOLANACEAE
***Datura stramonium* L.**
 jimsonweed



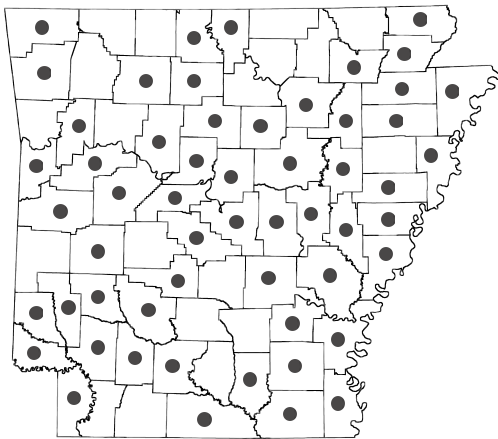
SOLANACEAE
***Lycium barbarum* L.**
 matrimony-vine



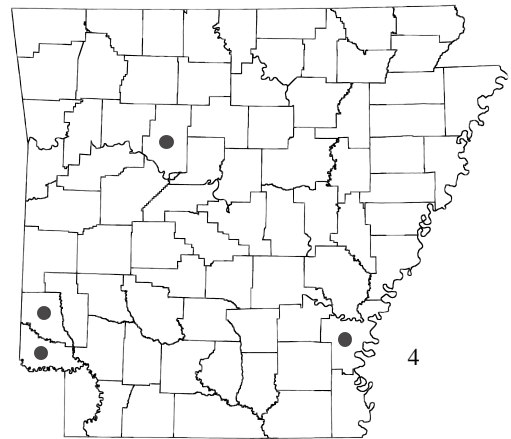
SOLANACEAE
***Nicandra physalodes* (L.) Gaertn.**
 apple-of-Peru



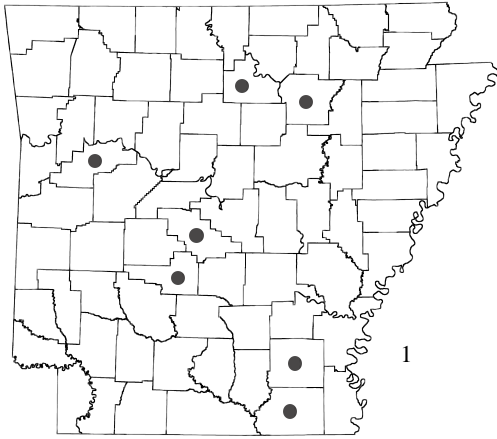
SOLANACEAE
***Petunia* ×*atkinsiana* D. Don ex Loudon**
 garden petunia



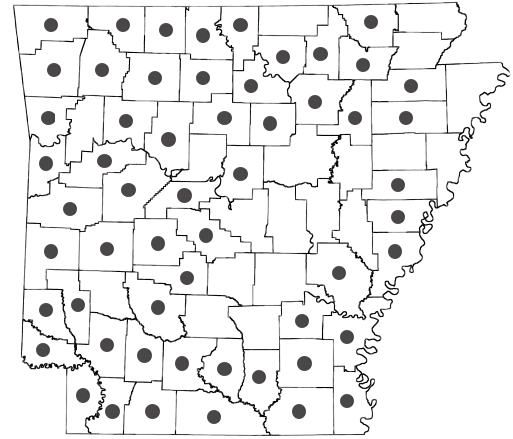
SOLANACEAE
***Physalis angulata* L.**
 cut-leaf ground-cherry



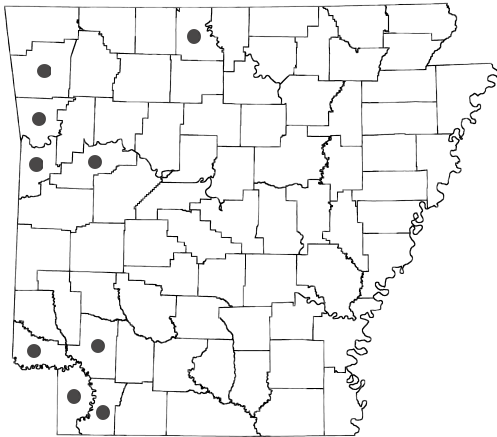
SOLANACEAE
***Physalis cinerascens* (Dunal) Hitchc.**
var. *cinerascens*
 small-flower ground-cherry



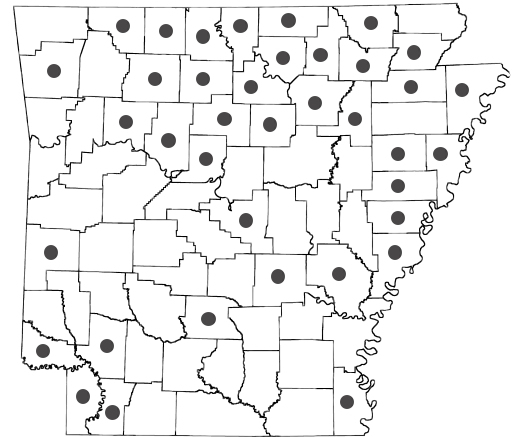
SOLANACEAE
Physalis cordata Mill.
 heart-leaf ground-cherry



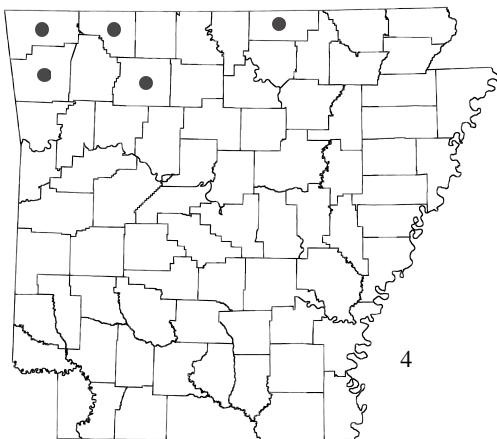
SOLANACEAE
Physalis heterophylla Nees
 clammy ground-cherry



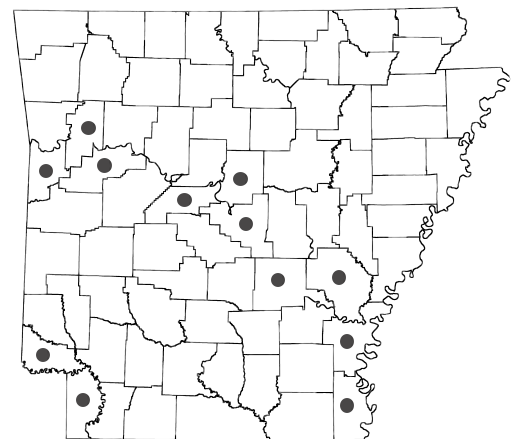
SOLANACEAE
Physalis longifolia Nutt.
var. longifolia
 long-leaf ground-cherry



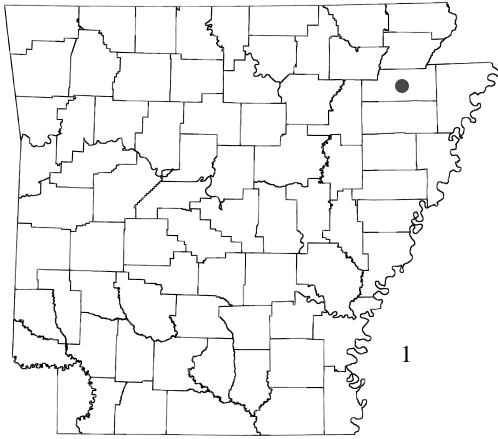
SOLANACEAE
Physalis longifolia Nutt.
var. subglabrata (Mack. & Bush) Cronquist
 long-leaf ground-cherry



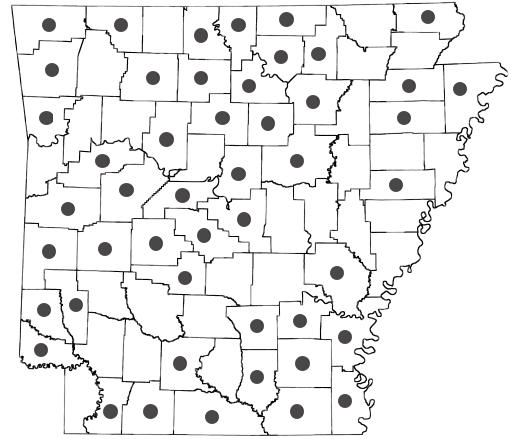
SOLANACEAE
Physalis missouriensis Mackenzie & Bush
 Missouri ground-cherry



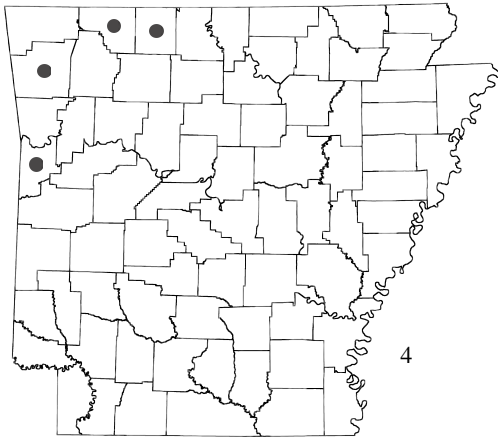
SOLANACEAE
Physalis mollis Nutt.
 field ground-cherry



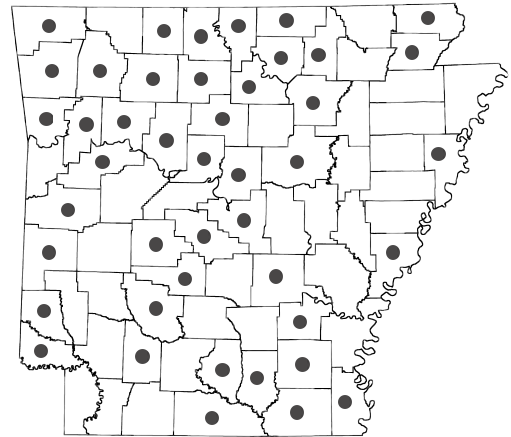
SOLANACEAE
***Physalis philadelphica* Lam.**
tomatillo, Mexican ground-cherry



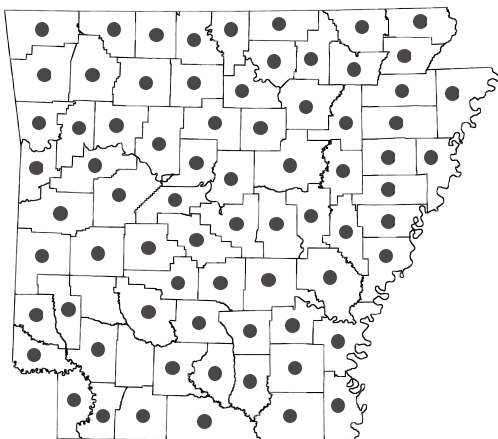
SOLANACEAE
***Physalis pubescens* L.**
downy ground-cherry



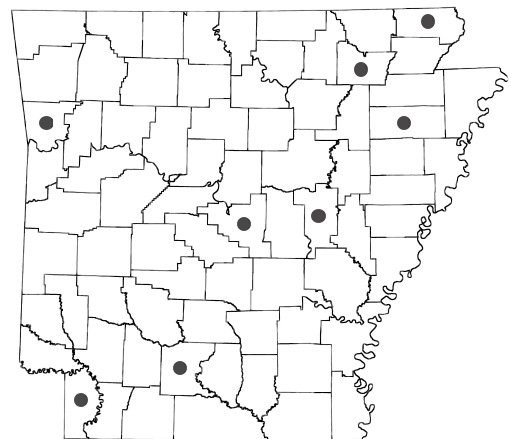
SOLANACEAE
***Physalis pumila* Nutt.**
prairie ground-cherry



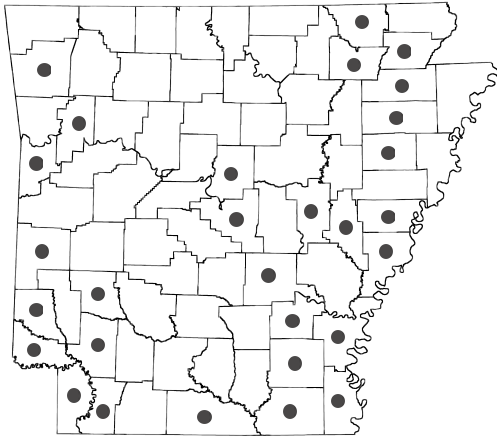
SOLANACEAE
***Physalis virginiana* Mill.**
Virginia ground-cherry



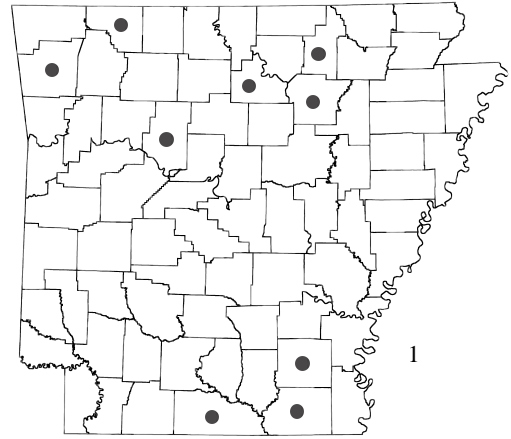
SOLANACEAE
***Solanum carolinense* L.**
Carolina horse-nettle



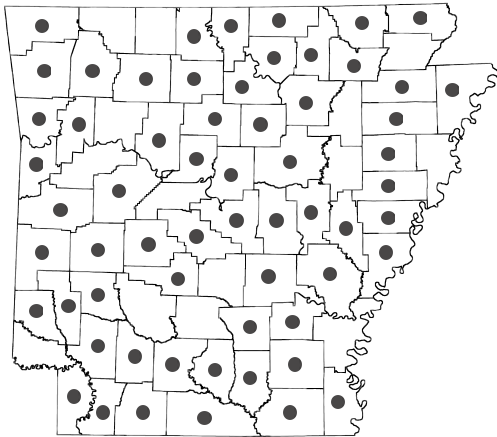
SOLANACEAE
***Solanum dimidiatum* Raf.**
western horse-nettle



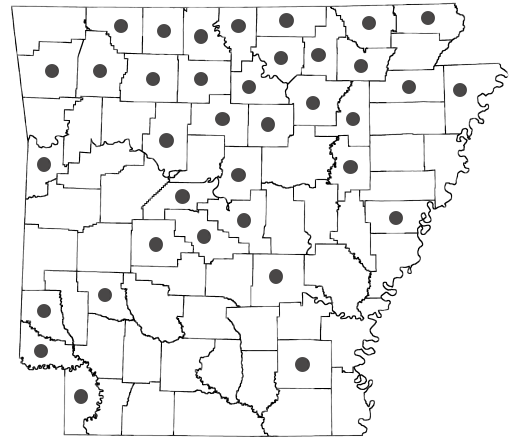
SOLANACEAE
Solanum elaeagnifolium Cav.
 silver-leaf nightshade, white horse-nettle



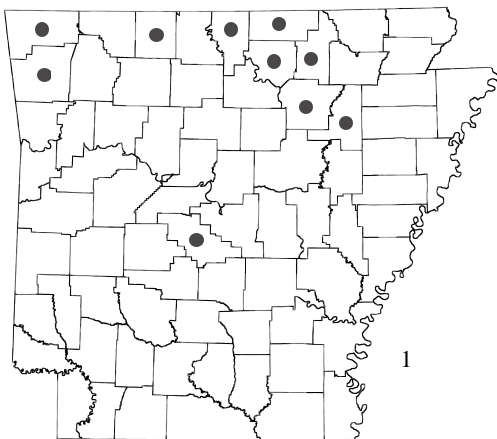
SOLANACEAE
Solanum lycopersicum L.
 garden tomato



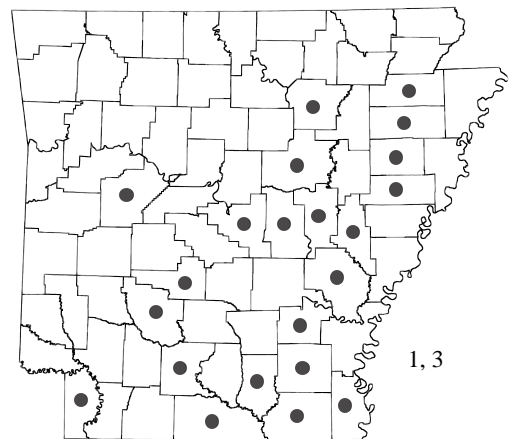
SOLANACEAE
Solanum ptychanthum Dunal
 black nightshade



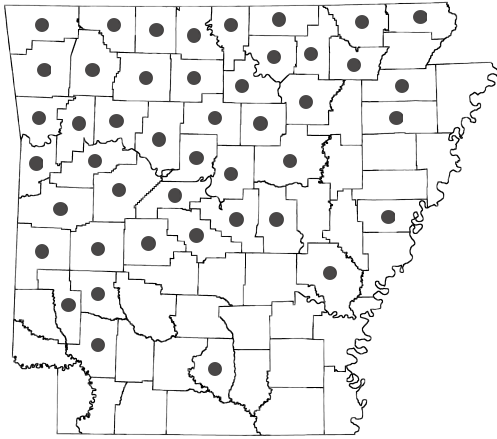
SOLANACEAE
Solanum rostratum Dunal
 buffalo-bur



SOLANACEAE
Solanum sarrachoides Sendtn.
 hairy nightshade



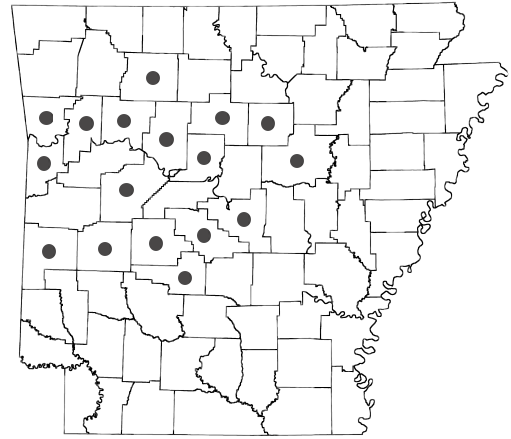
SPHENOCLEACEAE
Sphenoclea zeylanica Gaertn.
 chickenspike



STAPHYLEACEAE

Staphylea trifolia L.

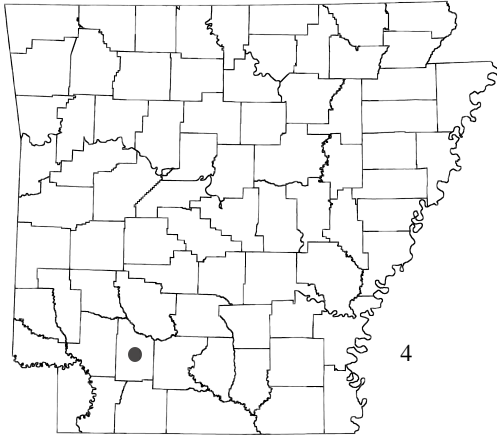
bladdernut



STYRACACEAE

Halesia carolina L.

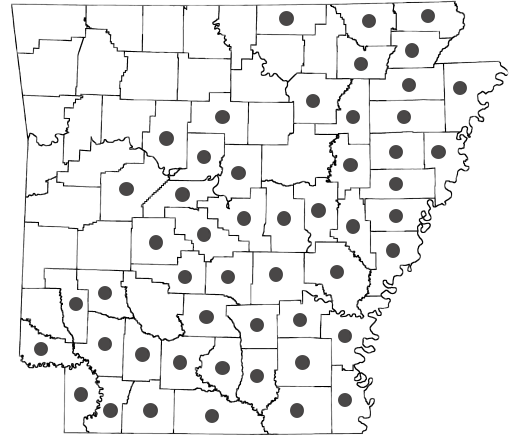
silverbell, Carolina silverbell



STYRACACEAE

Halesia diptera J.Ellis

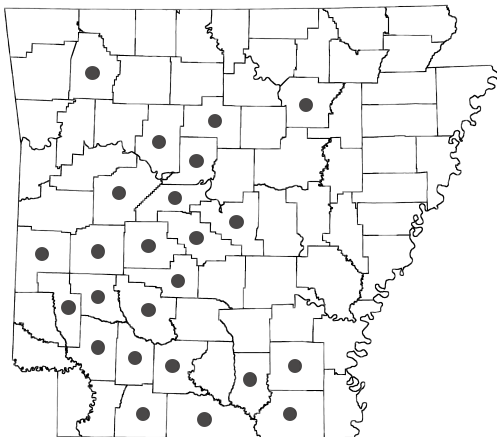
two-wing silverbell, snowdrop



STYRACACEAE

Styrax americanus Lam. in Lam. et al.

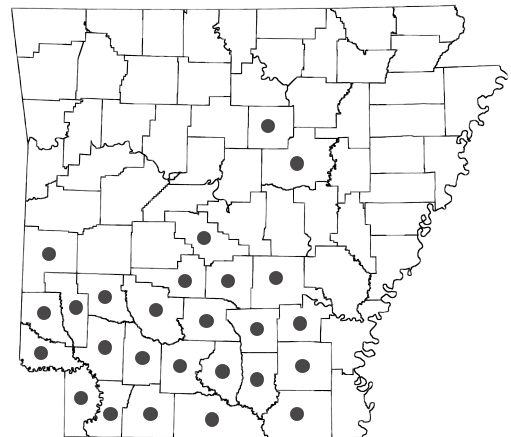
American snowbell, storax



STYRACACEAE

Styrax grandifolius Aiton

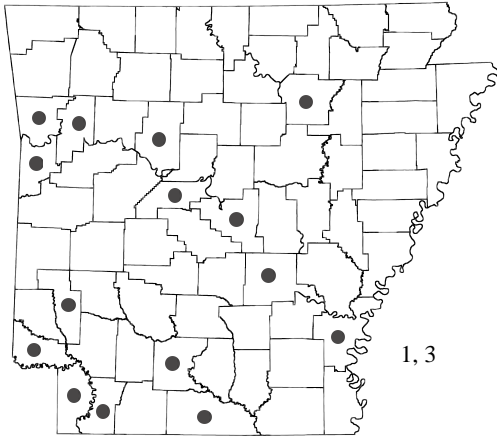
big-leaf snowbell, big-leaf storax



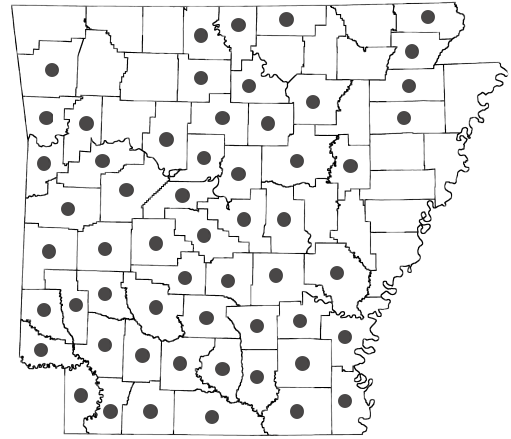
SYMPLOCACEAE

Symplocos tinctoria (L.) L'Hér.

sweetleaf, horsesugar



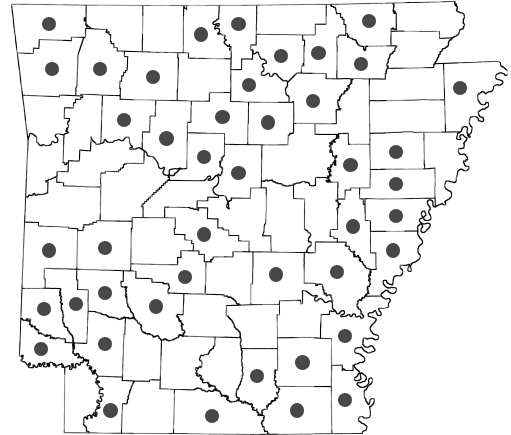
TAMARICACEAE
Tamarix ramosissima Ledeb.
 tamarisk, salt-cedar



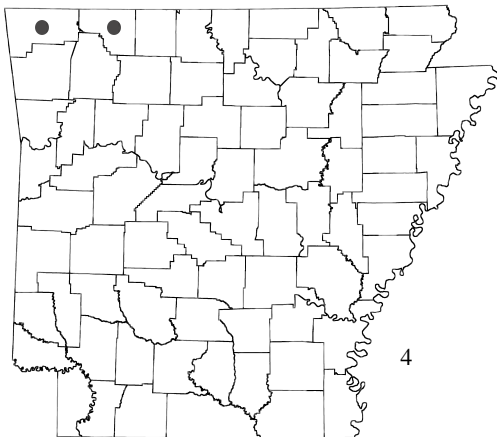
TETRACHONDRAEAE
Polypremum procumbens L.
 juniper-leaf



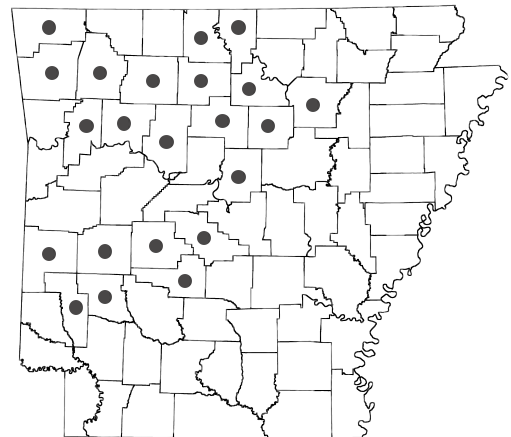
THEACEAE
Stewartia malacodendron L.
 silky-camellia



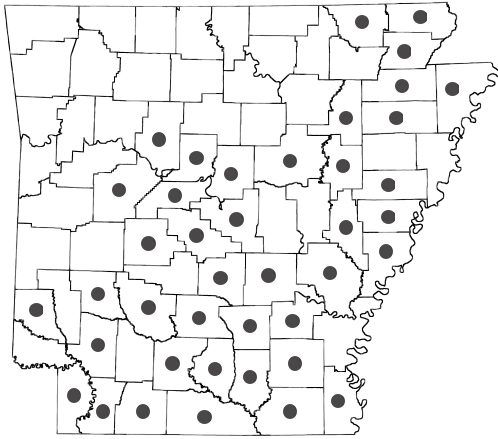
THEOPHRASTACEAE
Samolus parviflorus Raf.
 water-pimpernel, brookweed



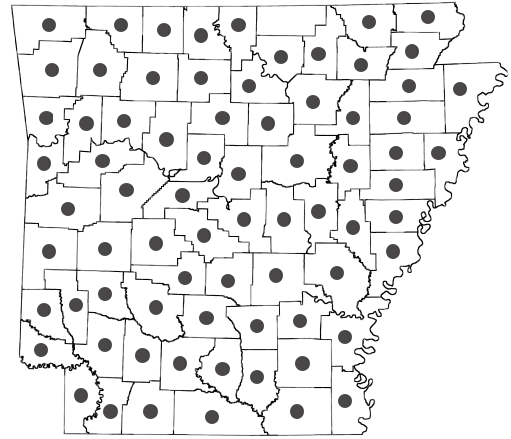
THYMELAEACEAE
Dirca decipiens A.J.Floden
 Ozark leatherwood



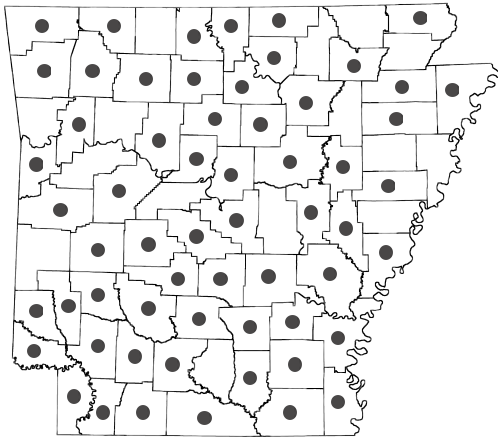
THYMELAEACEAE
Dirca palustris L.
 leatherwood



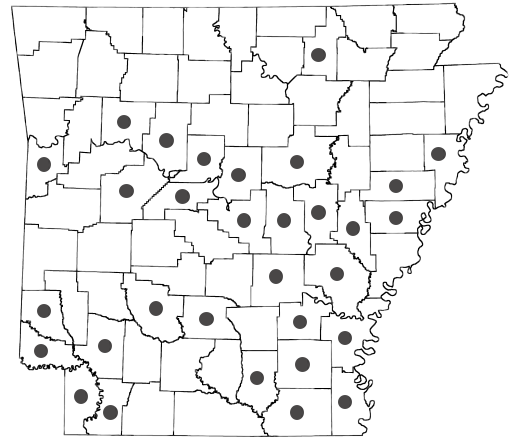
ULMACEAE
Planera aquatica J.F.Gmel.
water-elm, planer-tree



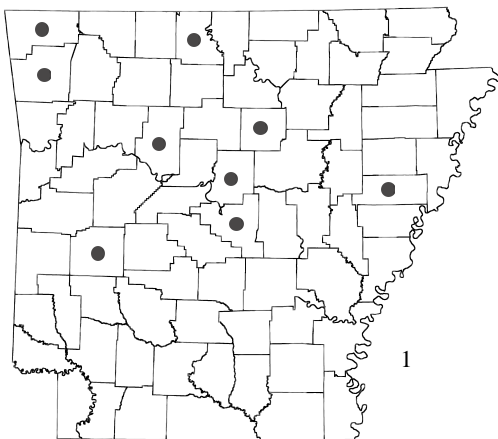
ULMACEAE
Ulmus alata Michx.
winged elm



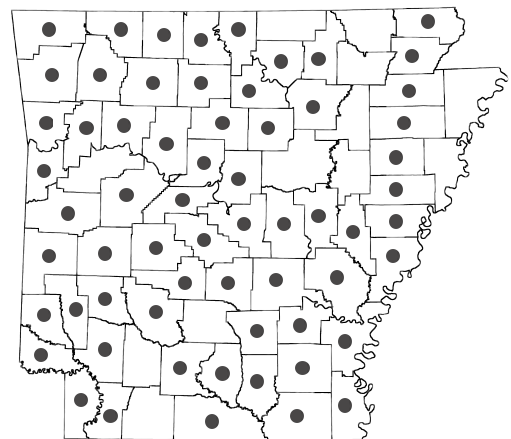
ULMACEAE
Ulmus americana L.
American elm



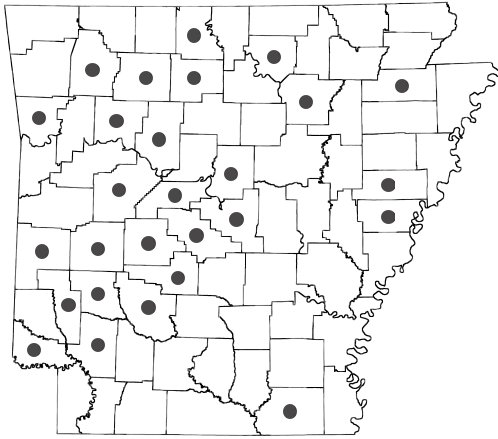
ULMACEAE
Ulmus crassifolia Nutt.
cedar elm



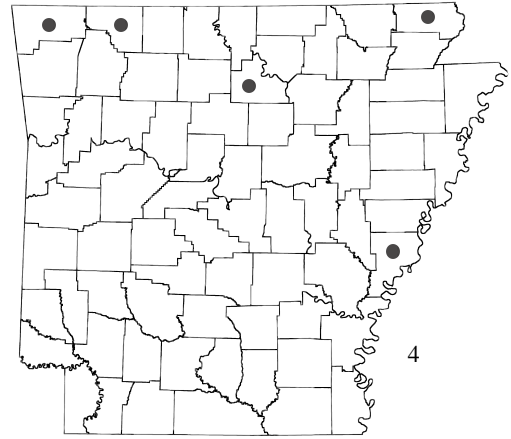
ULMACEAE
Ulmus pumila L.
Siberian elm



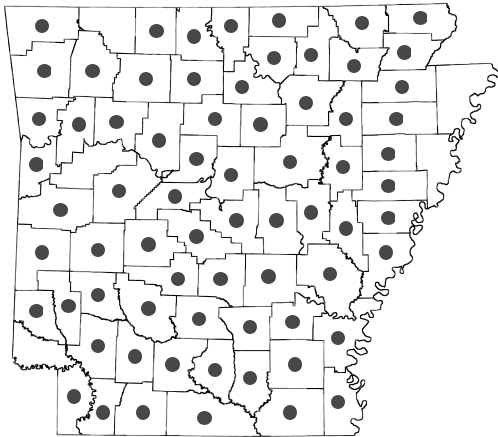
ULMACEAE
Ulmus rubra Muhl.
slippery elm, red elm



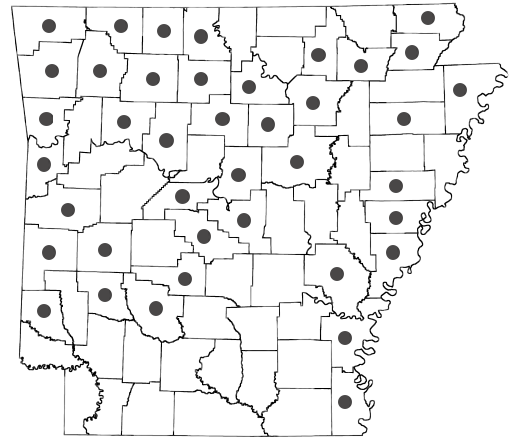
ULMACEAE
Ulmus serotina Sarg.
 September elm



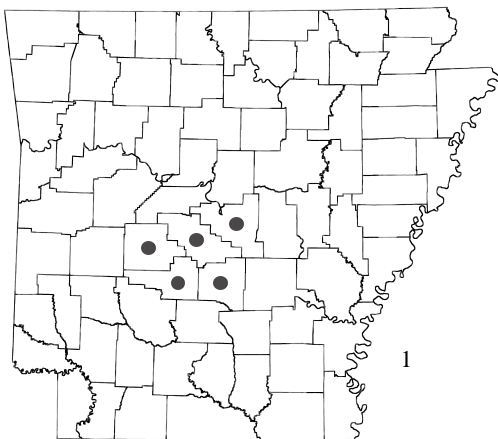
ULMACEAE
Ulmus thomasii Sarg.
 rock elm



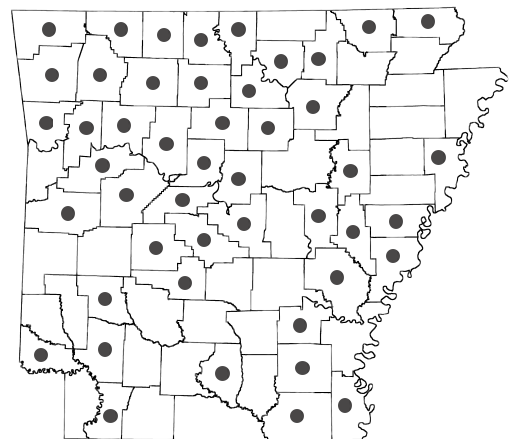
URTICACEAE
Boehmeria cylindrica (L.) Sw.
 false nettle



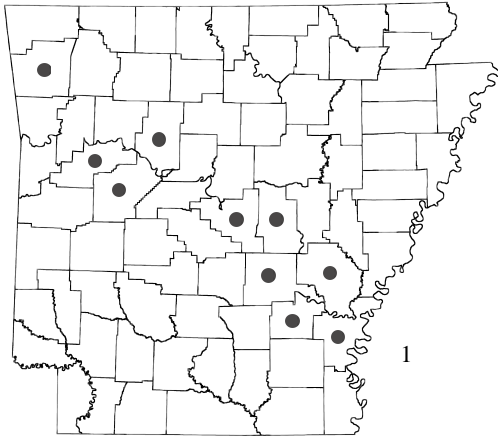
URTICACEAE
Laportea canadensis (L.) Wedd.
 wood-nettle



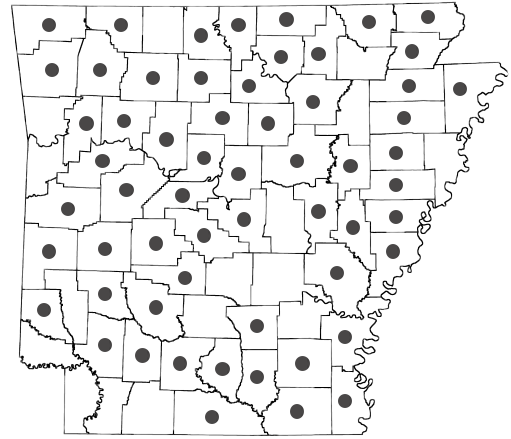
URTICACEAE
Parietaria floridana Nutt.
 Florida pellitory



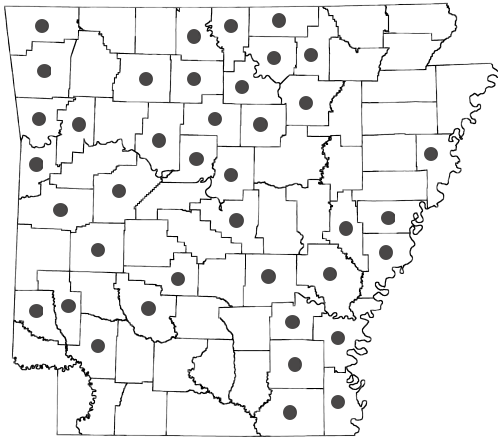
URTICACEAE
Parietaria pensylvanica Muhl. ex Willd.
 pellitory



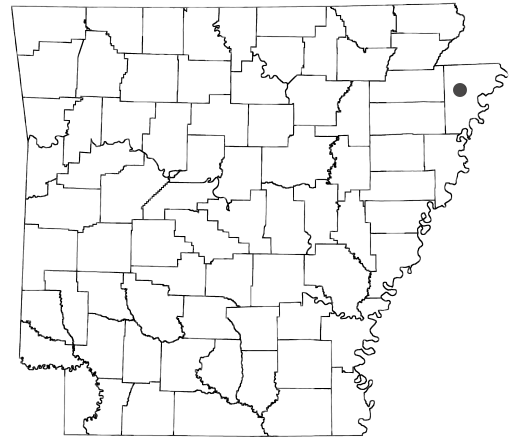
URTICACEAE
***Pilea microphylla* (L.) Liebm.**
artillery-weed



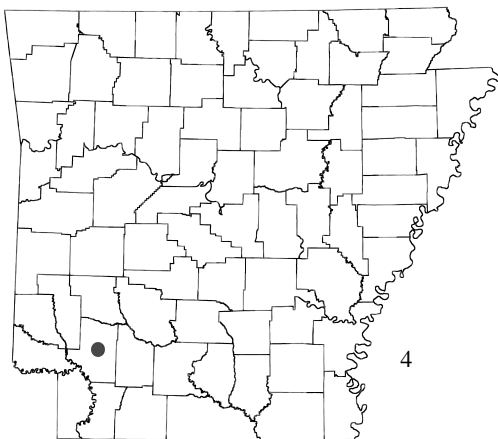
URTICACEAE
***Pilea pumila* (L.) A.Gray**
clearweed



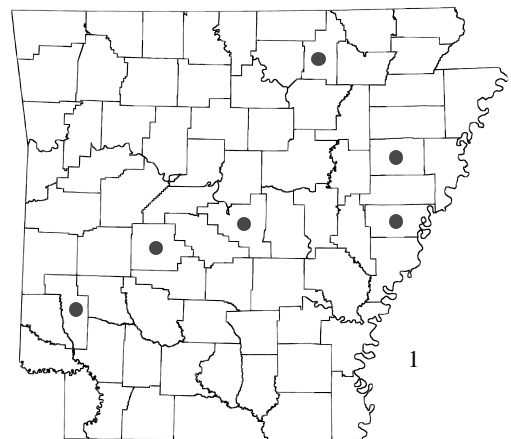
URTICACEAE
***Urtica chamaedryoides* Pursh**
stinging nettle



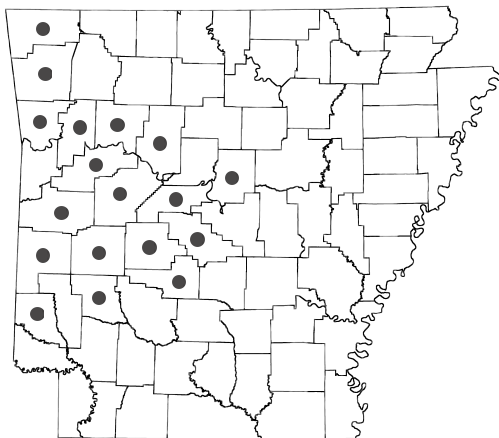
URTICACEAE
***Urtica gracilis* Aiton**
stinging nettle



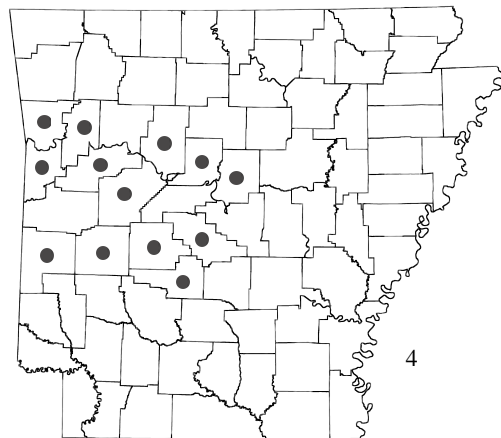
VALERIANACEAE
***Valerianella amarella* (Lindl. ex A.Gray) Krok**
hairy cornsalad



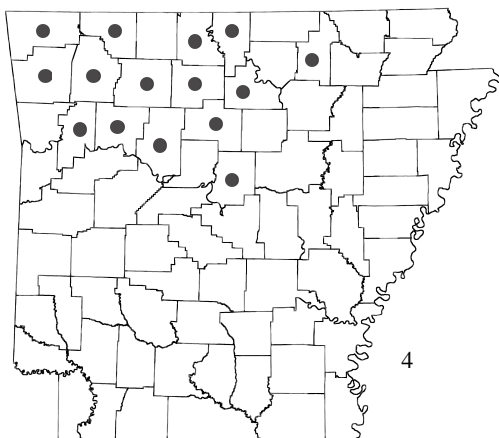
VALERIANACEAE
***Valerianella locusta* (L.) Laterr.**
European cornsalad



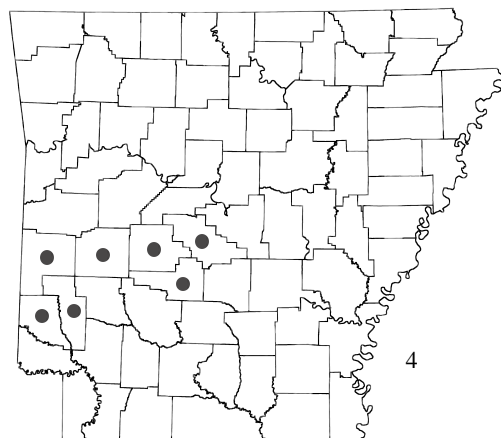
VALERIANACEAE
Valerianella longiflora (Torr. & A.Gray) Walp.
 long-flower cornsalad



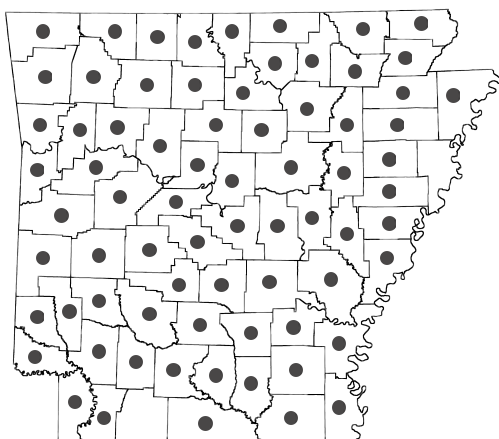
VALERIANACEAE
Valerianella nuttallii (Torr. & A.Gray) Walp.
 Nuttall's cornsalad



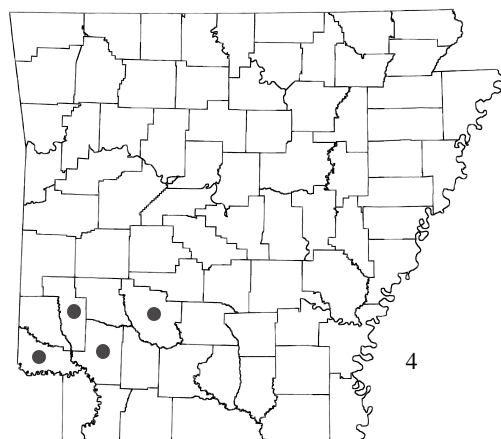
VALERIANACEAE
Valerianella ozarkana Dyal
 Ozark cornsalad



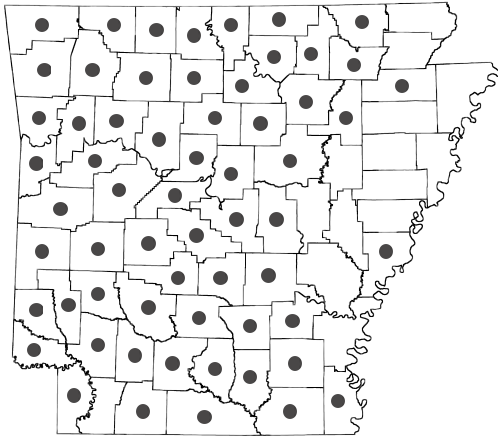
VALERIANACEAE
Valerianella palmeri Dyal
 Palmer's cornsalad



VALERIANACEAE
Valerianella radiata (L.) Dufr.
 cornsalad



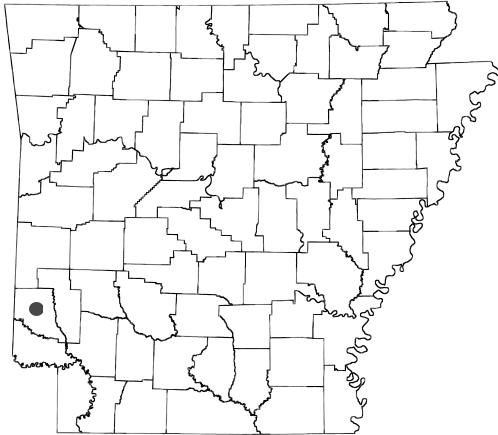
VERBENACEAE
Glandularia bipinnatifida (Nutt.) Nutt.
var. bipinnatifida
 Dakota vervain



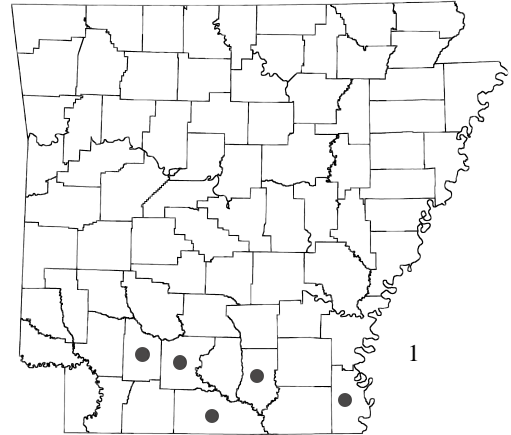
VERBENACEAE
Glandularia canadensis (L.) Nutt.
rose vervain



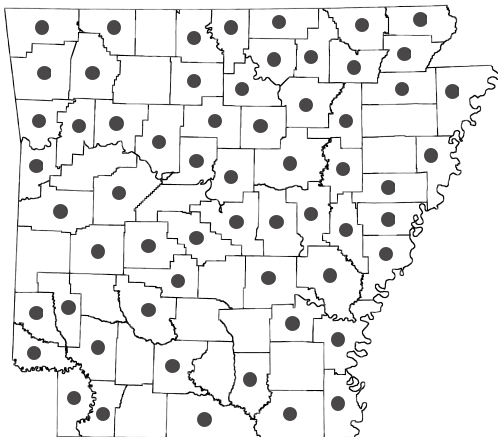
VERBENACEAE
Glandularia pulchella (Sweet) Tronc.
moss vervain, South American vervain



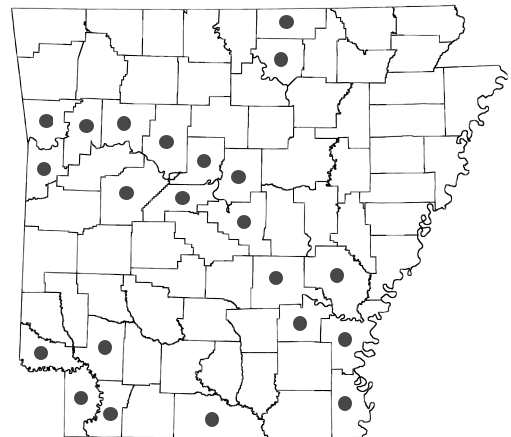
VERBENACEAE
Glandularia pumila (Rydb.) Umber
pink vervain



VERBENACEAE
Lantana camara L.
lantana



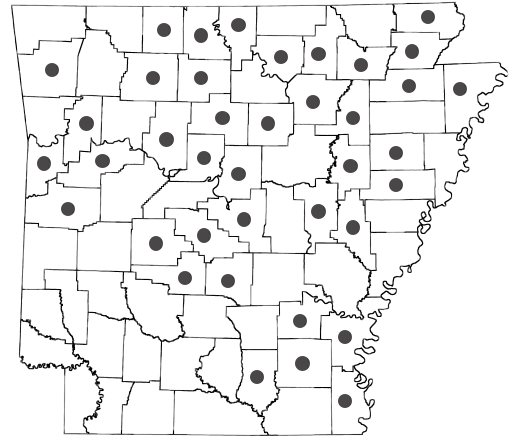
VERBENACEAE
Phyla lanceolata (Michx.) Greene
northern frog-fruit



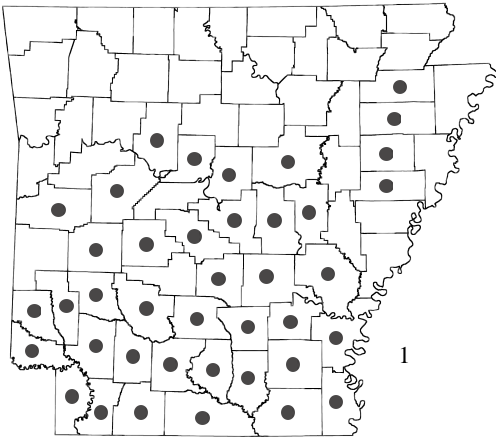
VERBENACEAE
Phyla nodiflora (L.) Greene
turkey-tangle frog-fruit, Texas frog-fruit



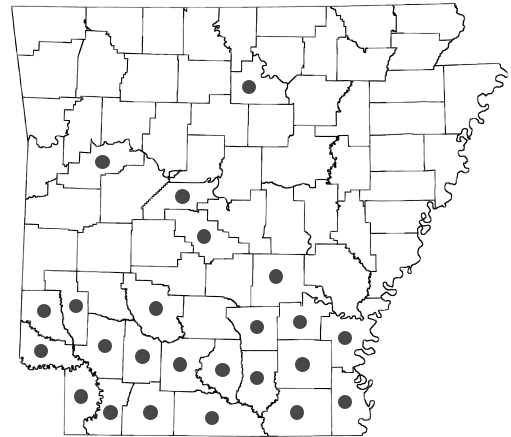
VERBENACEAE
Verbena bonariensis L.
 South American vervain



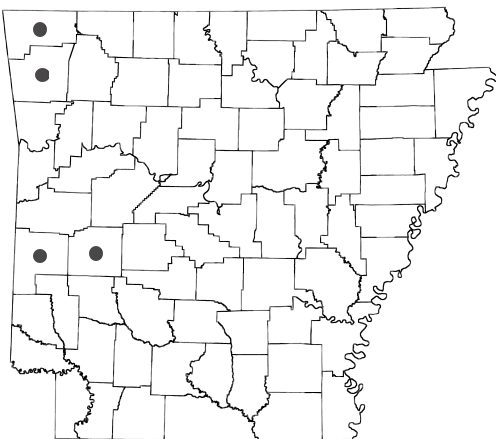
VERBENACEAE
Verbena bracteata Lag. & Rodr.
 prostrate vervain



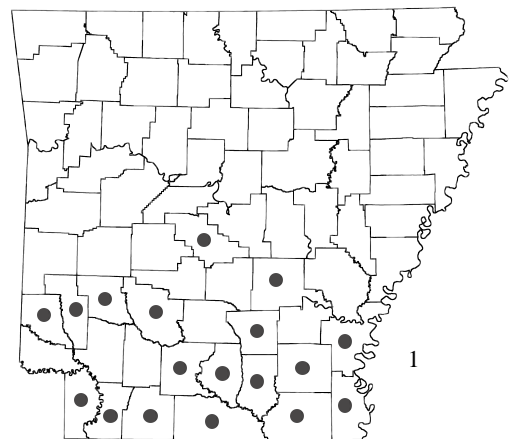
VERBENACEAE
Verbena brasiliensis Vell.
 Brazilian vervain



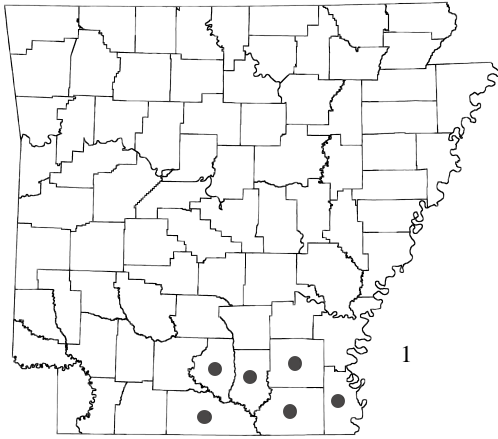
VERBENACEAE
Verbena halei Small
 Texas vervain



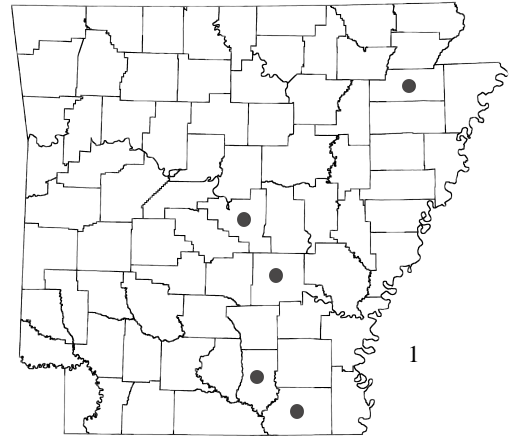
VERBENACEAE
Verbena hastata L.
 blue vervain



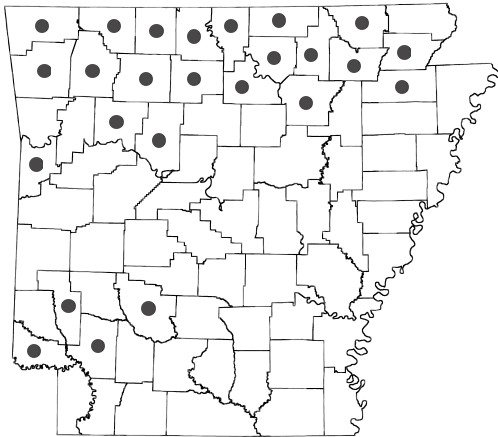
VERBENACEAE
Verbena incompta P.W.Michael
 South American vervain



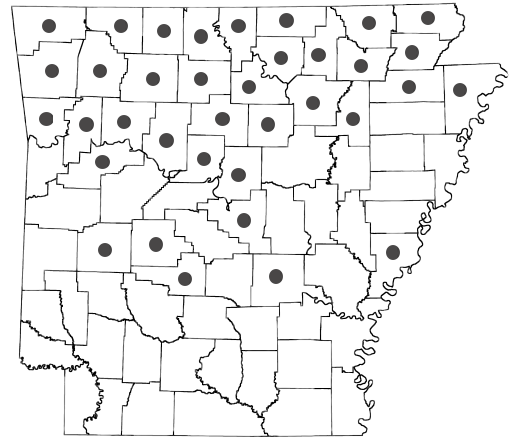
VERBENACEAE
Verbena montevidensis Spreng.
Uruguayan vervain



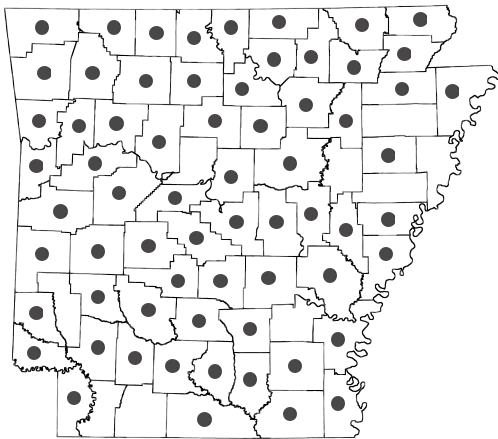
VERBENACEAE
Verbena rigida Spreng.
tuber vervain



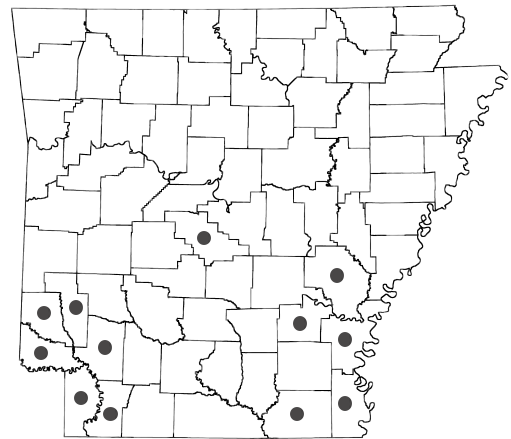
VERBENACEAE
Verbena simplex Lehm.
narrow-leaf vervain



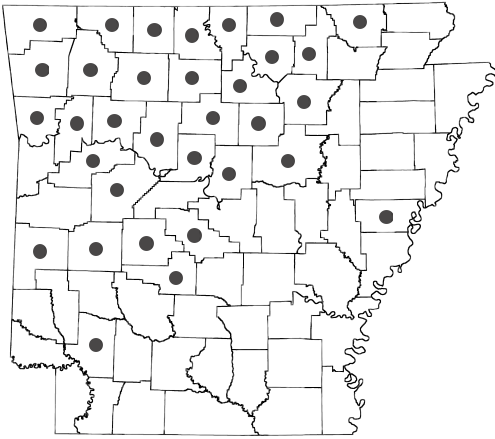
VERBENACEAE
Verbena stricta Vent.
hoary vervain



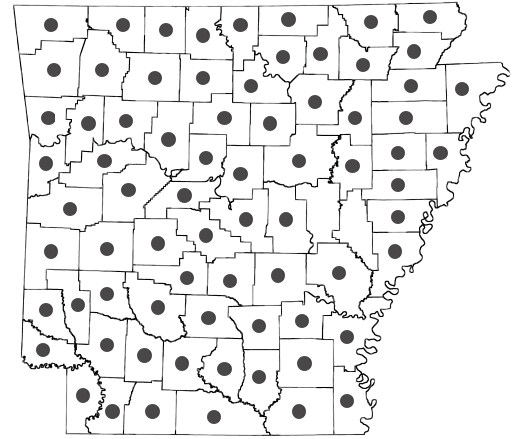
VERBENACEAE
Verbena urticifolia L.
white vervain



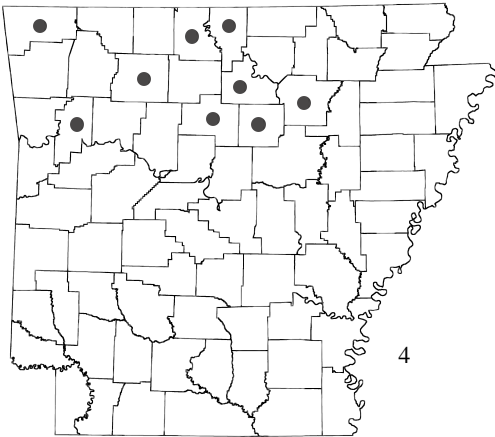
VERBENACEAE
Verbena xutha Lehm.
Gulf vervain



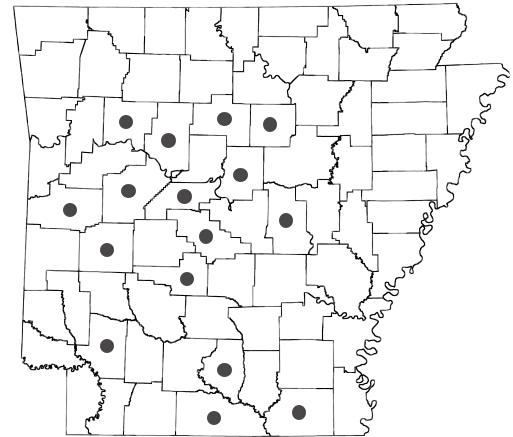
VIOLACEAE
Hybanthus concolor (T.F.Forst.) Spreng.
 green-violet



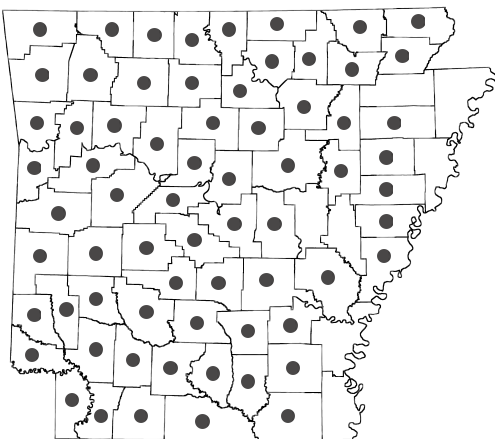
VIOLACEAE
Viola bicolor Pursh
 Johnny-jump-up, field pansy



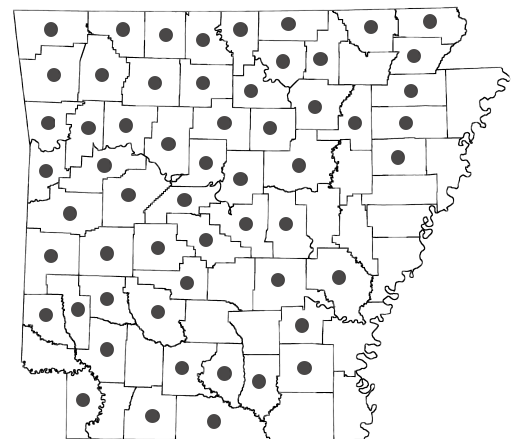
VIOLACEAE
Viola canadensis L.
var. canadensis
 Canadian white violet



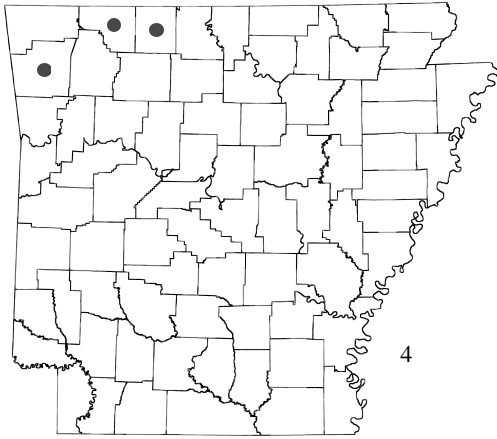
VIOLACEAE
Viola lanceolata L.
 lance-leaf violet



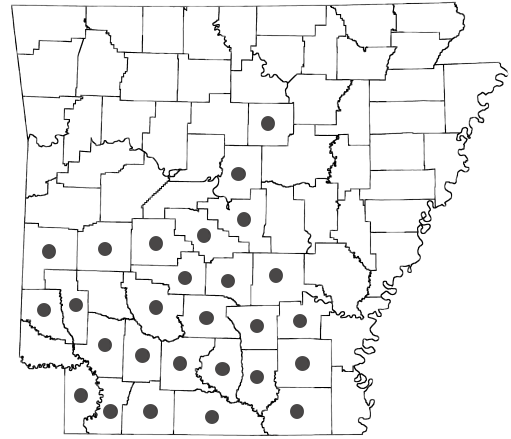
VIOLACEAE
Viola palmata L.
 three-lobe violet, wood violet



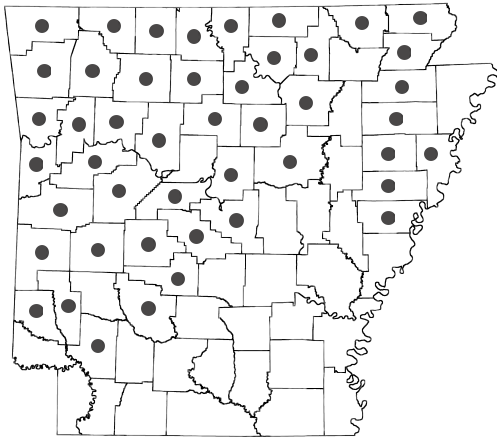
VIOLACEAE
Viola pedata L.
 bird's-foot violet



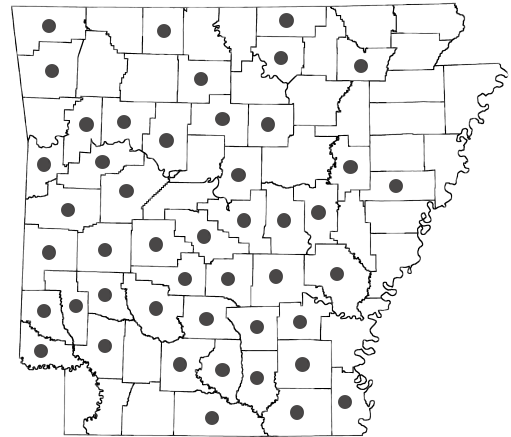
VIOLACEAE
Viola pedatifida G. Don
prairie violet, crow's-foot violet



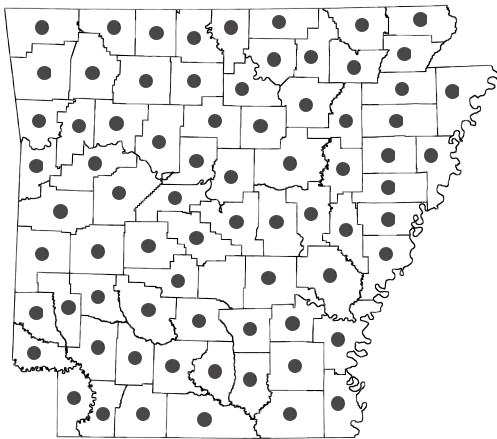
VIOLACEAE
Viola primulifolia L.
bog white violet, primrose-leaf violet



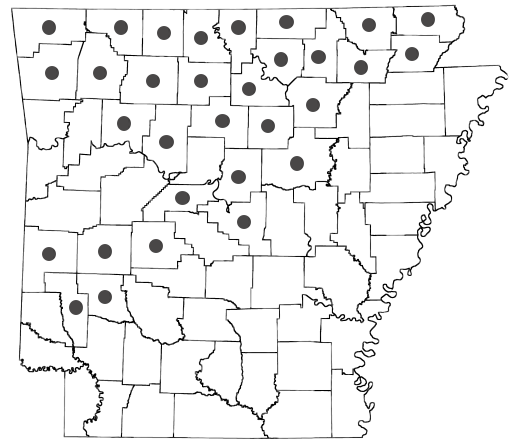
VIOLACEAE
Viola pubescens Aiton
downy yellow violet, smooth yellow violet



VIOLACEAE
Viola sagittata Aiton
arrow-leaf violet

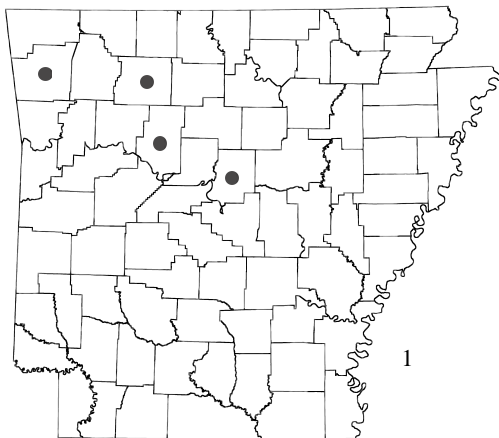


VIOLACEAE
Viola sororia Willd.
woolly blue violet



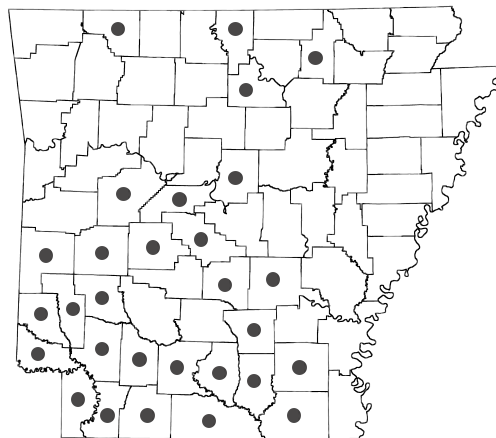
VIOLACEAE
Viola striata Aiton
cream violet, pale violet

See *Appendix I* for infraspecific taxa and species status.



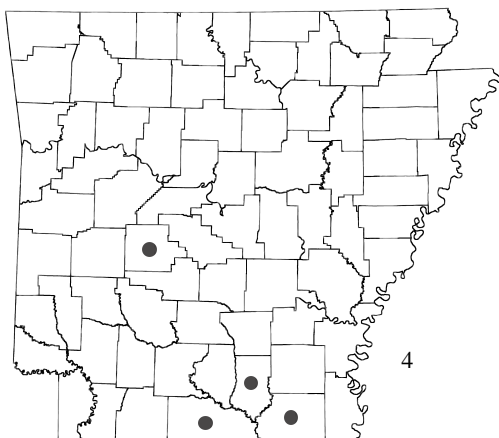
VIOLACEAE
Viola tricolor L.

Johnny-jump-up, wild pansy



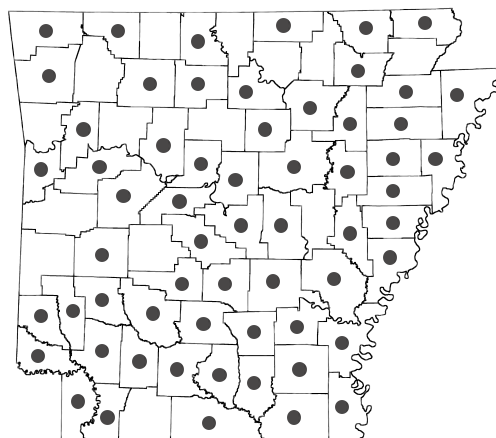
VIOLACEAE
Viola villosa Walter

Carolina violet, southern woolly violet



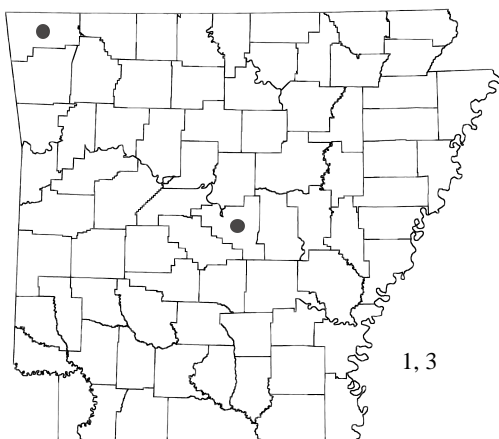
VIOLACEAE
Viola walteri House

Walter's violet, prostrate blue violet



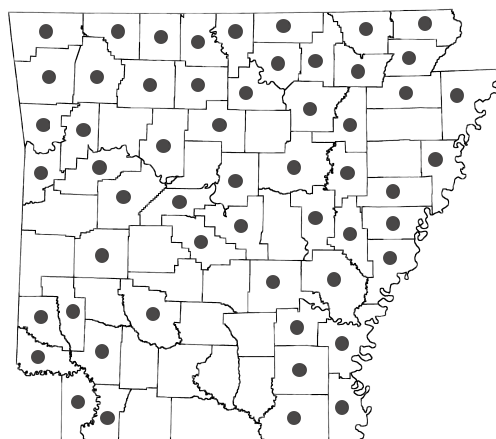
VITACEAE
Ampelopsis arborea (L.) Koehne

peppervine



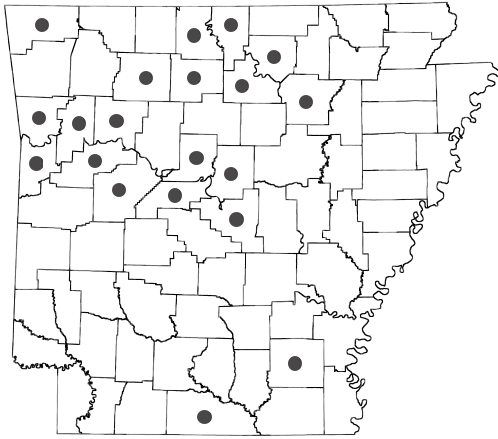
VITACEAE
Ampelopsis brevipedunculata (Maxim.) Trautv.

porcelain-berry

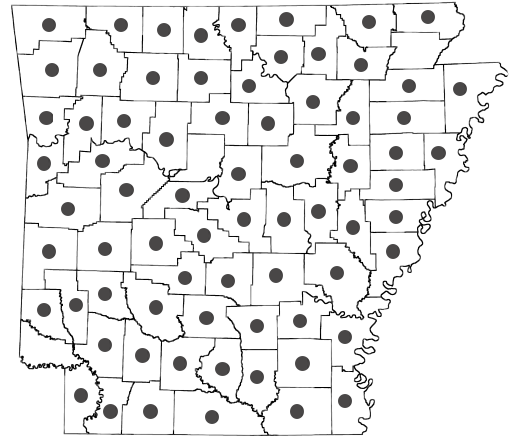


VITACEAE
Ampelopsis cordata Michx.

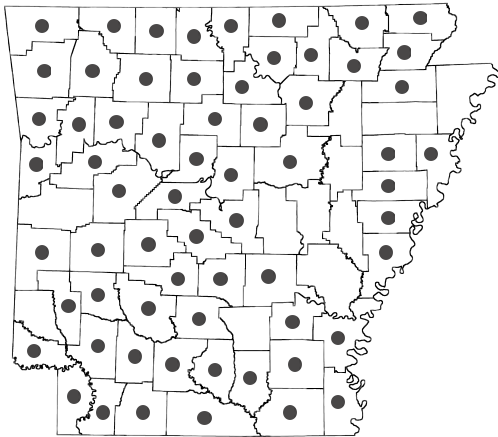
false grape, raccoon-grape, heart-leaf peppervine



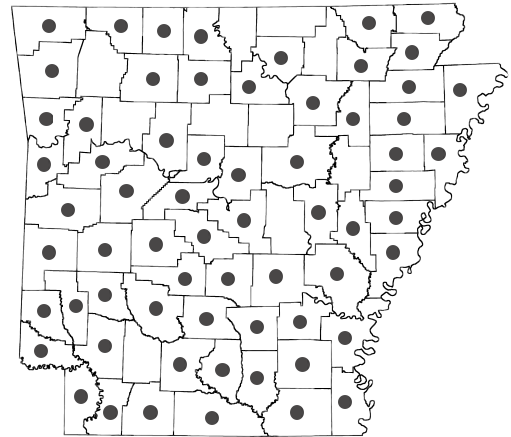
VITACEAE
Cissus trifoliata (L.) L.
marine-ivy



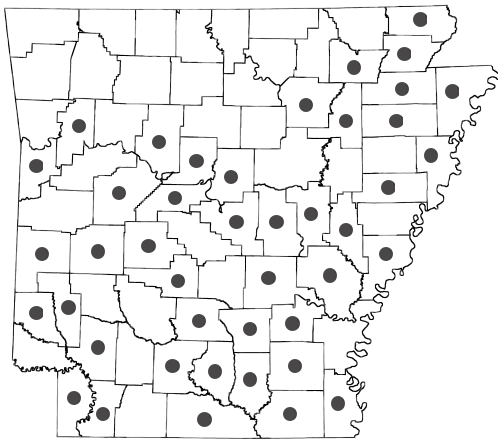
VITACEAE
Parthenocissus quinquefolia (L.) Planch.
Virginia-creeper, woodbine



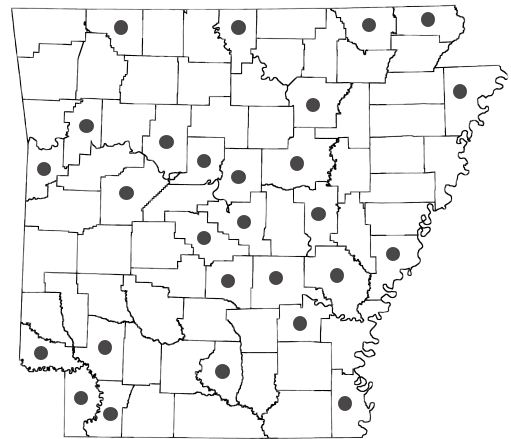
VITACEAE
Vitis aestivalis Michx.
summer grape



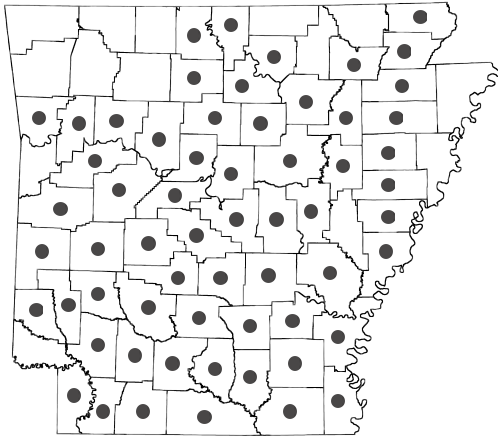
VITACEAE
Vitis cinerea (Engelm. in A.Gray) Engelm. ex Millardet
winter grape, downy grape, gray-bark grape



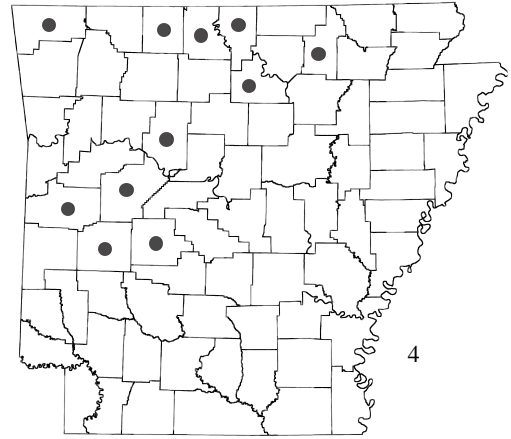
VITACEAE
Vitis palmata Vahl
catbird grape, red grape



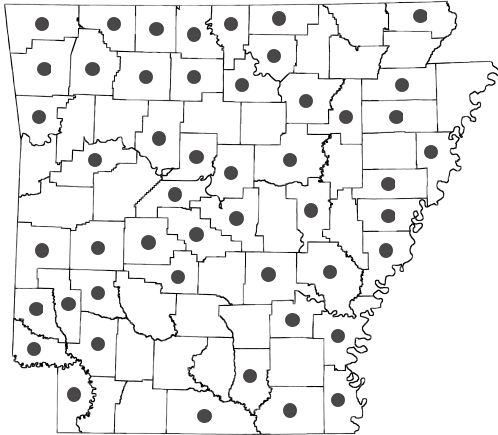
VITACEAE
Vitis riparia Michx.
river-bank grape



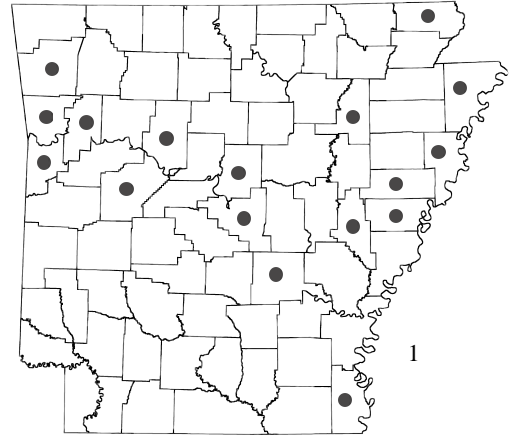
VITACEAE
Vitis rotundifolia Michx.
muscadine



VITACEAE
Vitis rupestris Scheele
sand grape, rock grape



VITACEAE
Vitis vulpina L.
frost grape, fox grape

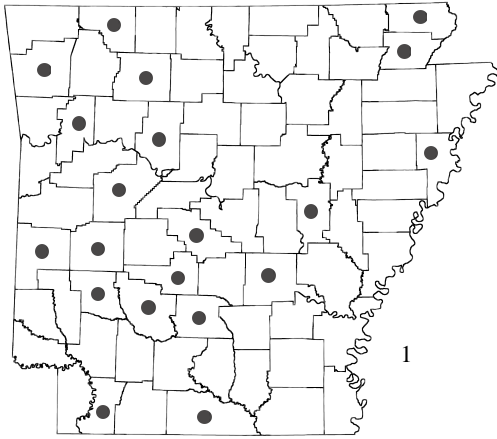


ZYGOPHYLLACEAE
Tribulus terrestris L.
puncture-vine, caltrop, goat's-head

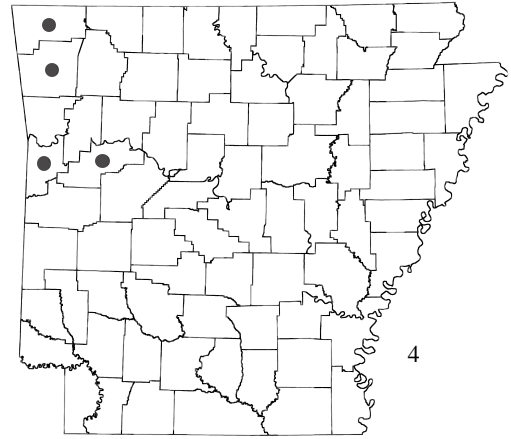
A dense forest floor covered in green plants with white flowers, likely Trillium, with the text "Angiosperm Monocots" overlaid.

Angiosperm Monocots

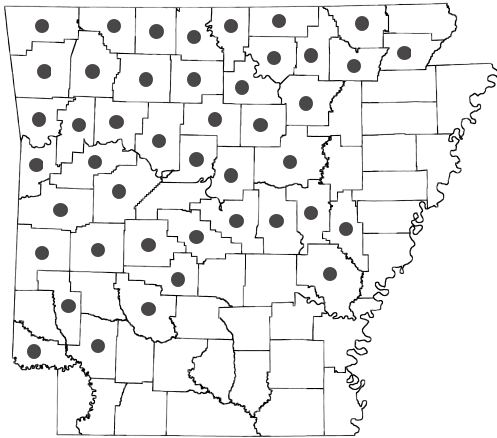




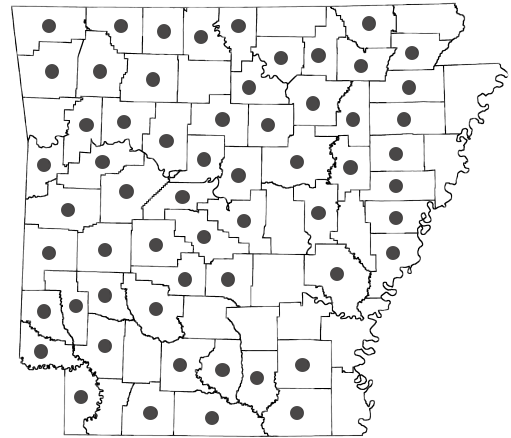
ACORACEAE
Acorus calamus L.
 sweet-flag



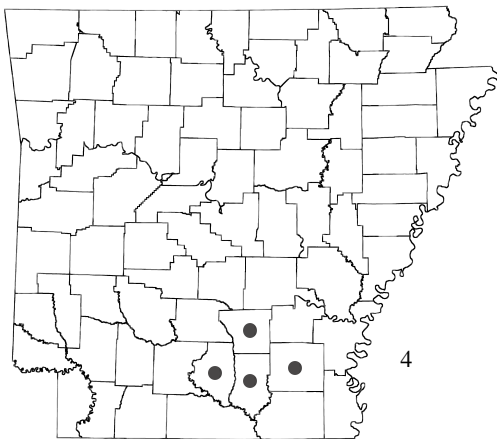
AGAVACEAE
Camassia angusta (Engelm. & A.Gray) Blank.
 prairie wild hyacinth, prairie camas



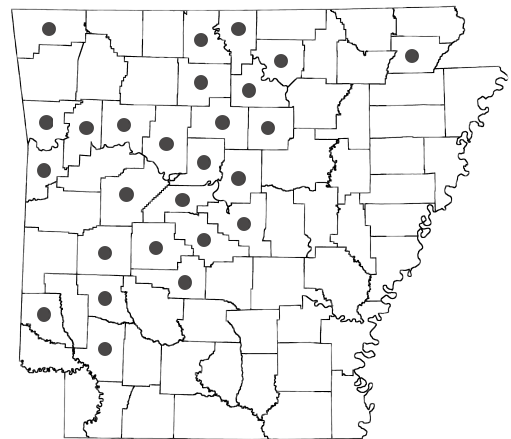
AGAVACEAE
Camassia scilloides (Raf.) Cory
 wild hyacinth



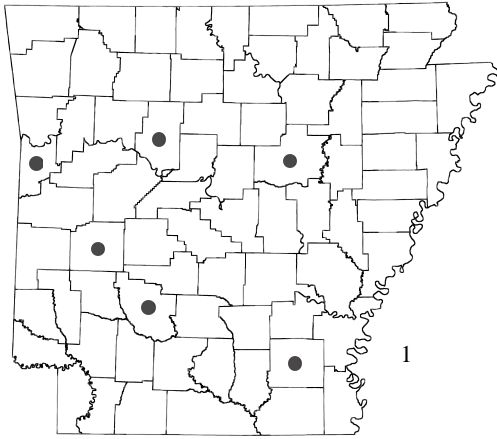
AGAVACEAE
Manfreda virginica (L.) Salisb. ex Rose
 false aloe



AGAVACEAE
Schoenolirion wrightii Sherman
 Texas sunnybell

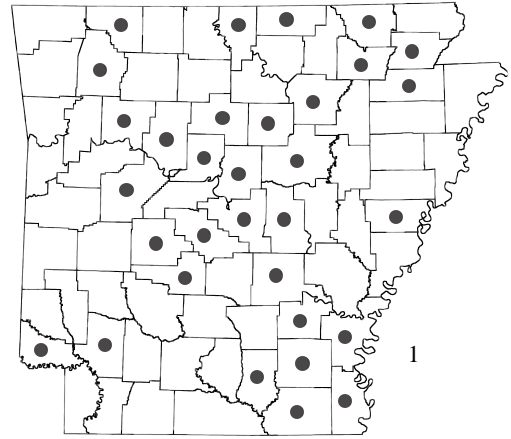


AGAVACEAE
Yucca arkansana Trel.
 Arkansas yucca, soapweed



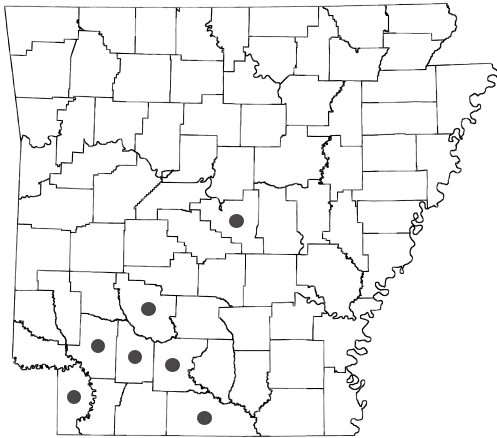
AGAVACEAE
***Yucca filamentosa* L.**

Adam's-needle, Spanish-bayonet, yucca



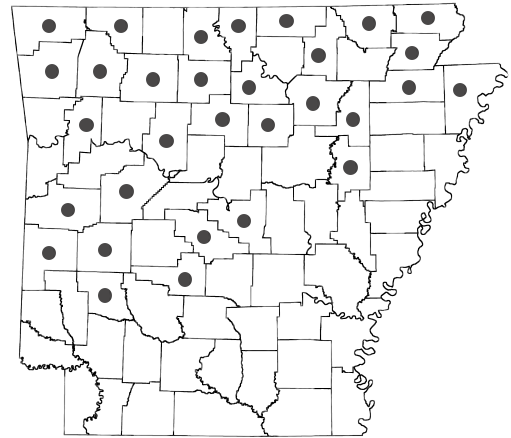
AGAVACEAE
***Yucca flaccida* Haw.**

Adam's-needle, Spanish-bayonet, yucca



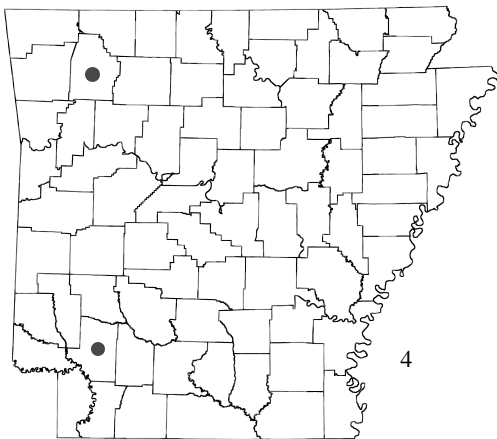
AGAVACEAE
***Yucca louisianensis* Trel.**

Louisiana yucca, sandhill yucca



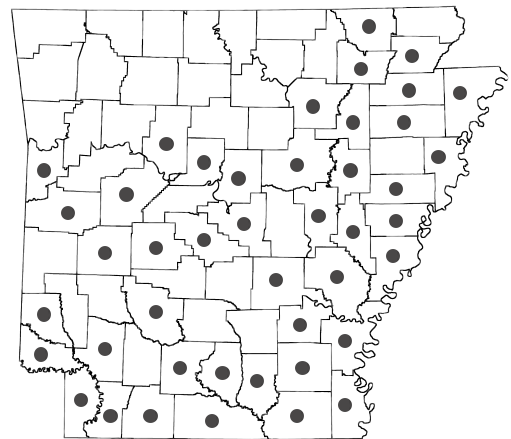
ALISMATACEAE
***Alisma subcordatum* Raf.**

water-plantain



ALISMATACEAE
***Echinodorus berteroi* (Spreng.) Fassett**

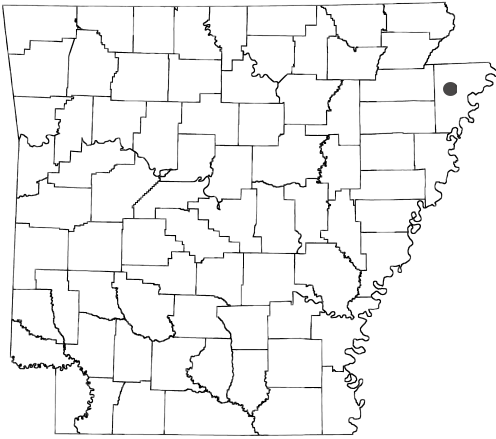
upright burhead



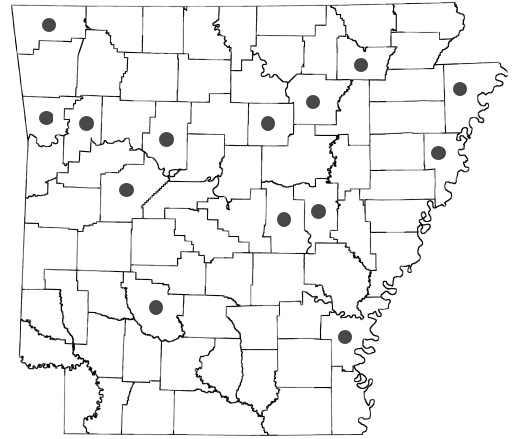
ALISMATACEAE
***Echinodorus cordifolius* (L.) Griseb.**

subsp. cordifolius

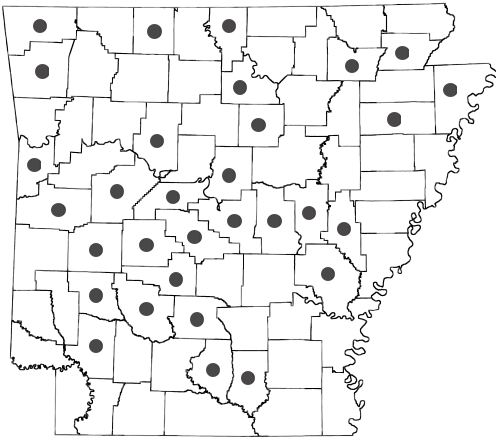
creeping burhead



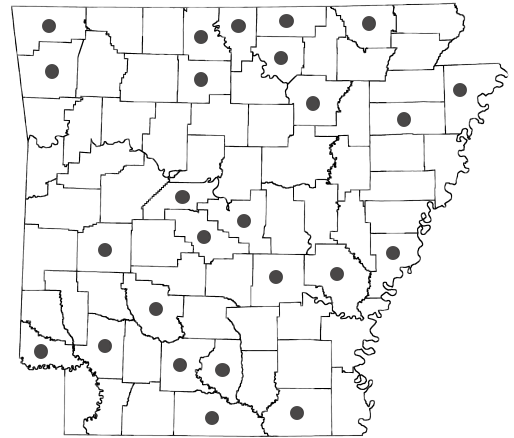
ALISMATACEAE
Sagittaria australis (J.G.Sm.) Small
arrowhead



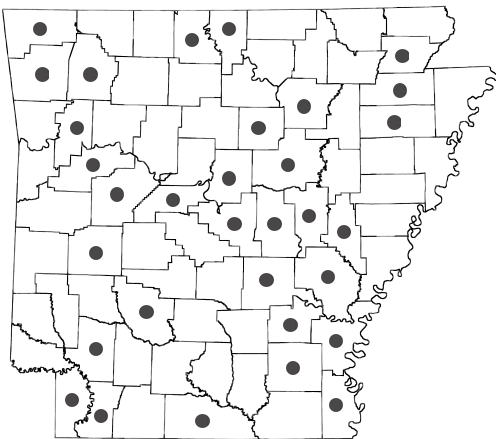
ALISMATACEAE
Sagittaria brevirostra Mack. & Bush
arrowhead



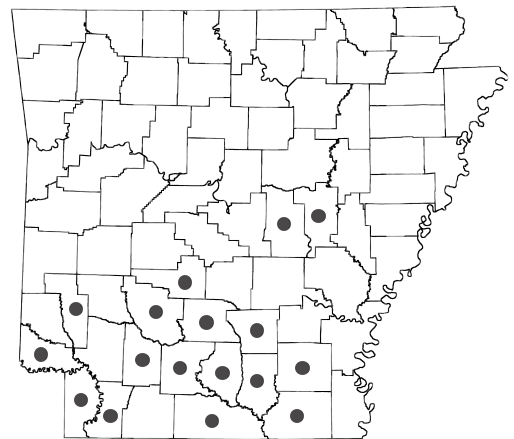
ALISMATACEAE
Sagittaria graminea Michx.
grass-leaf arrowhead



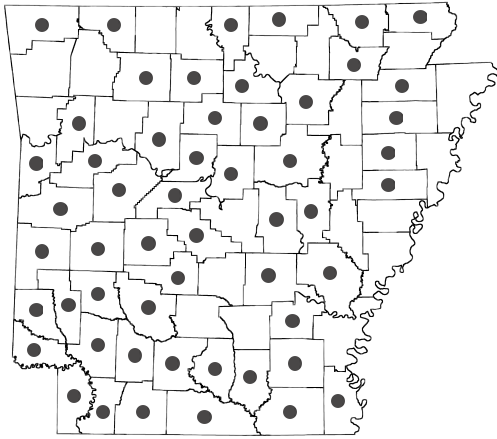
ALISMATACEAE
Sagittaria latifolia Willd.
arrowhead, duck-potato



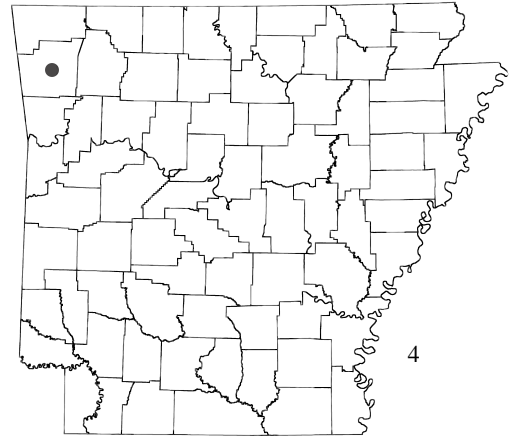
ALISMATACEAE
Sagittaria montevidensis Cham. & Schtdl.
subsp. calycina (Engelm.) Bogin
arrowhead



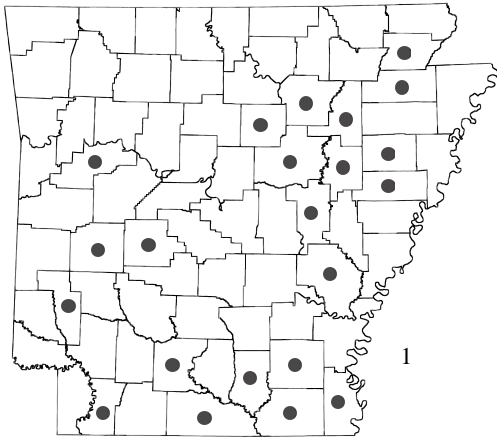
ALISMATACEAE
Sagittaria papillosa Buchenau
arrowhead



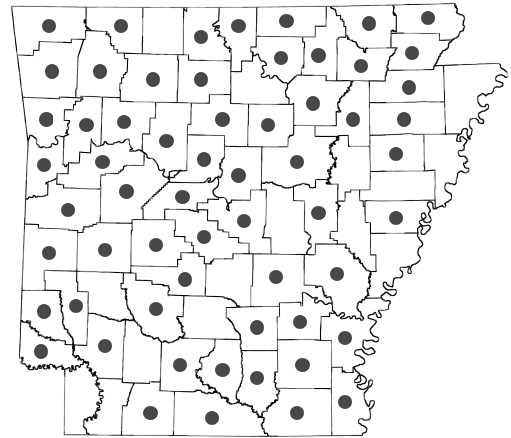
ALISMATACEAE
Sagittaria platyphylla (Engelm.) J.G.Sm.
 arrowhead



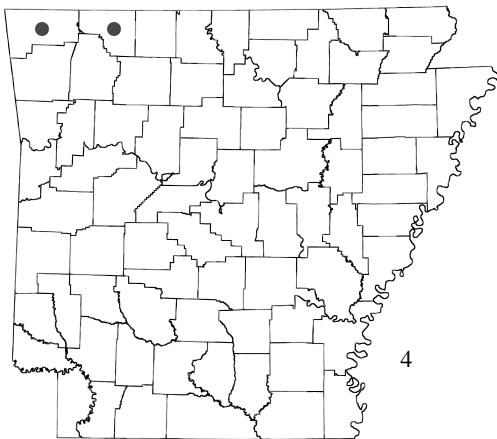
ALISMATACEAE
Sagittaria rigida Pursh
 stiff arrowhead



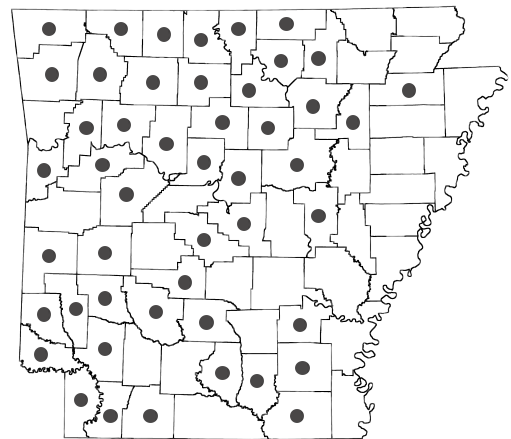
ALLIACEAE
Allium ampeloprasum L.
 wild leek



ALLIACEAE
Allium canadense L.
var. canadense
 wild onion, wild garlic, meadow garlic



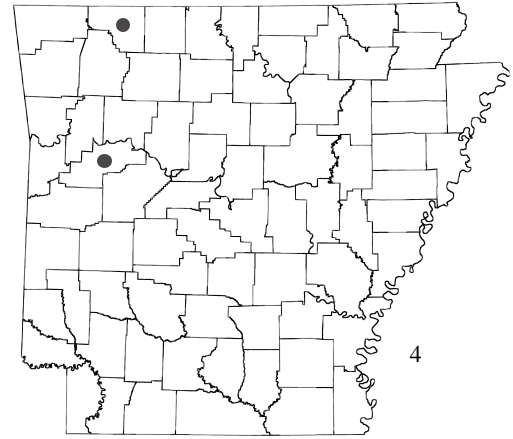
ALLIACEAE
Allium canadense L.
var. lavendulare (Bates) Ownbey & Aase
 tall pink glade onion



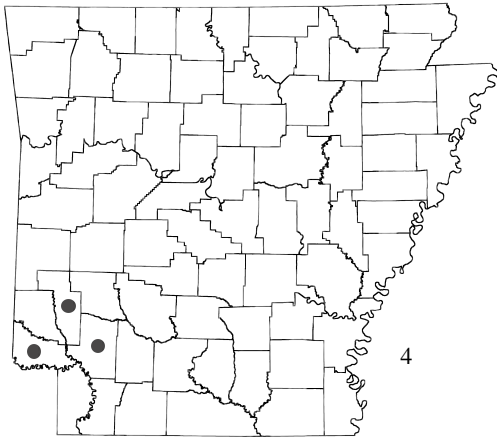
ALLIACEAE
Allium canadense L.
var. mobilense (Regel) Ownbey
 meadow wild onion



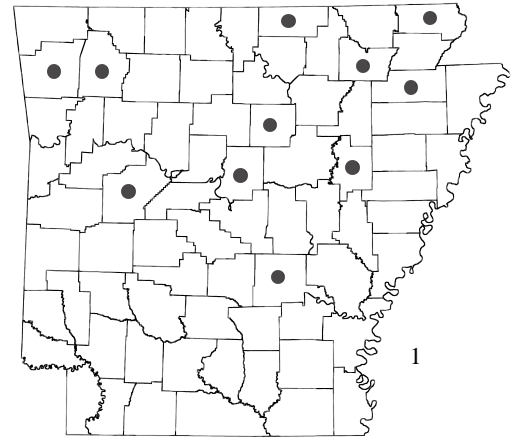
ALLIACEAE
Allium cepa L.
 garden onion



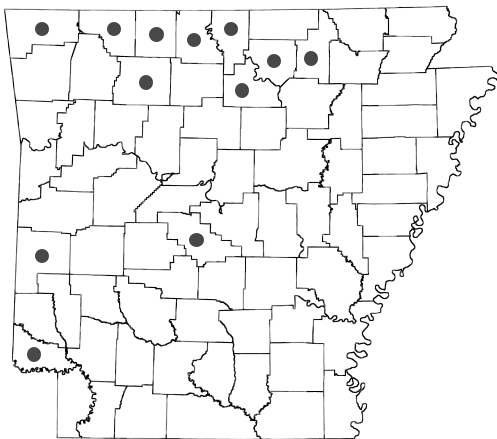
ALLIACEAE
Allium cernuum Roth
 nodding wild onion



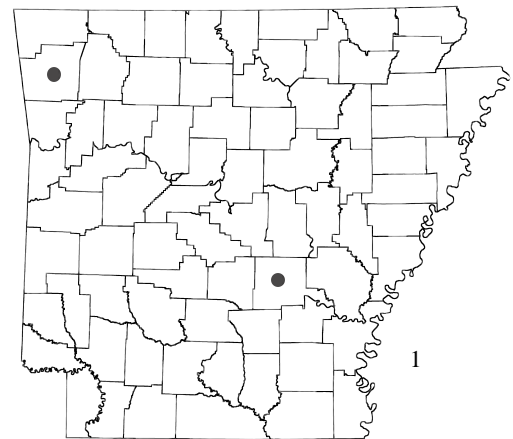
ALLIACEAE
Allium drummondii Regel
 Drummond's wild onion



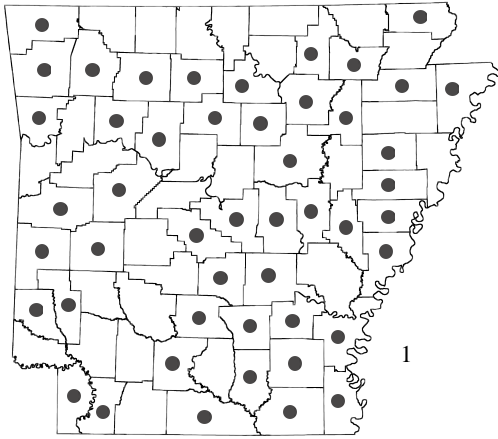
ALLIACEAE
Allium sativum L.
 garlic



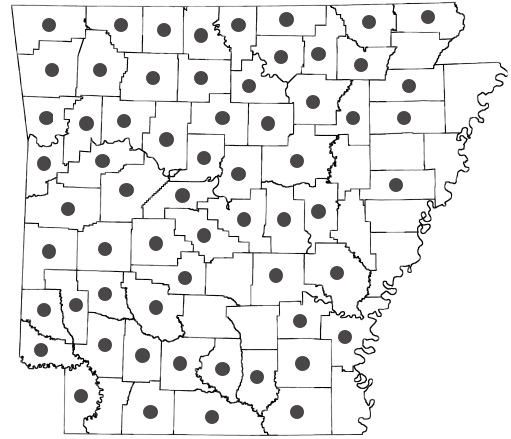
ALLIACEAE
Allium stellatum Nutt. ex Ker Gawl.
 glade onion



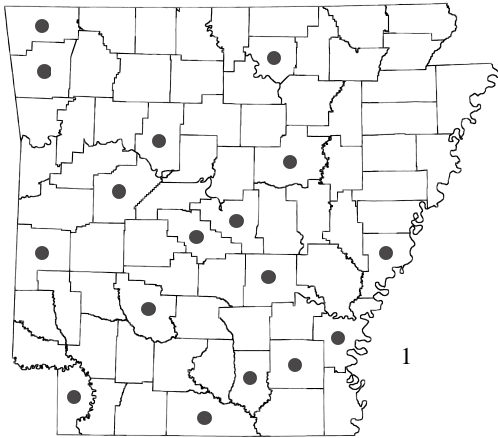
ALLIACEAE
Allium tuberosum Rottler ex Spreng.
 Chinese chives



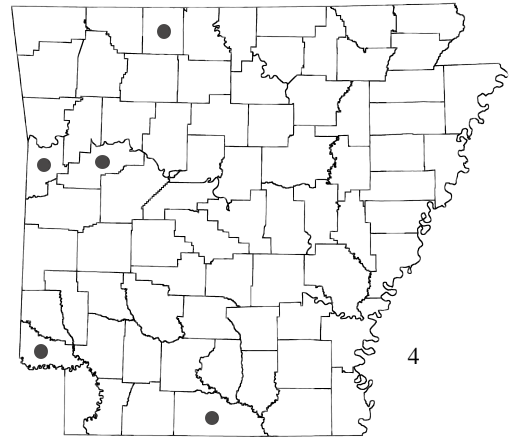
ALLIACEAE
Allium vineale L.
 field garlic



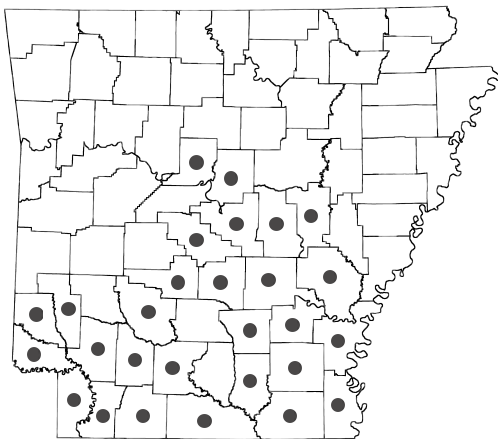
ALLIACEAE
Nothoscordum bivalve (L.) Britton in Britton & A.Br.
 crow-poison, false garlic



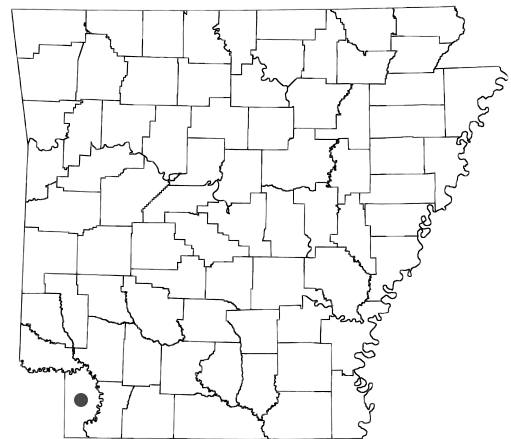
ALLIACEAE
Tristagma uniflorum (Lindl.) Traub
 spring star-flower



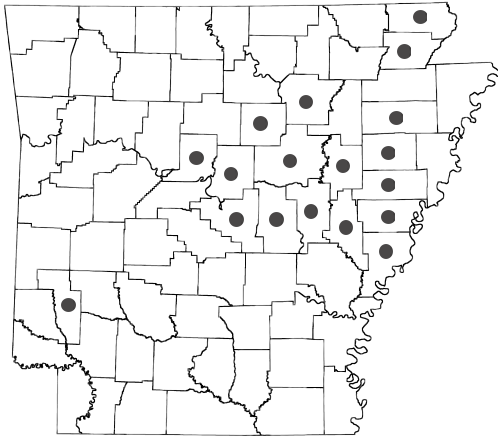
AMARYLLIDACEAE
Cooperia drummondii Herb.
 rain-lily, cebolleta



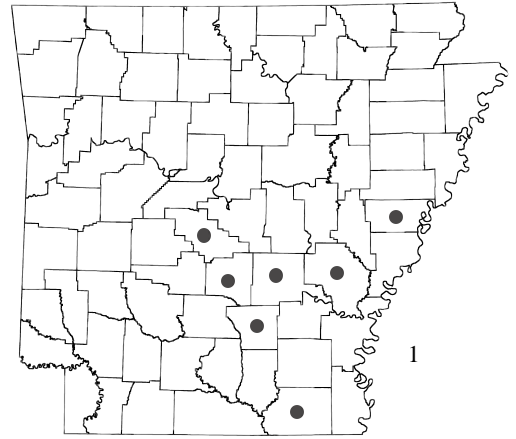
AMARYLLIDACEAE
Hymenocallis liriosme (Raf.) Shinnery
 spring spider-lily



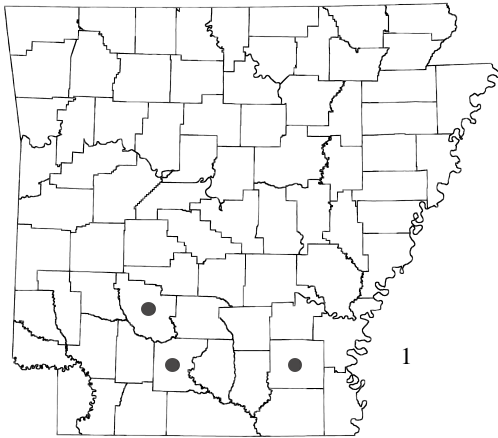
AMARYLLIDACEAE
Hymenocallis occidentalis (Leconte) Kunth
var. eulae (Shinnery) G.Lom.Sm. & Flory
 summer spider-lily



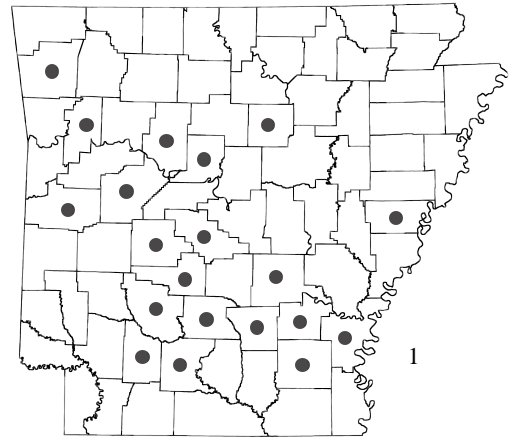
AMARYLLIDACEAE
Hymenocallis occidentalis (Leconte) Kunth
var. occidentalis
summer spider-lily



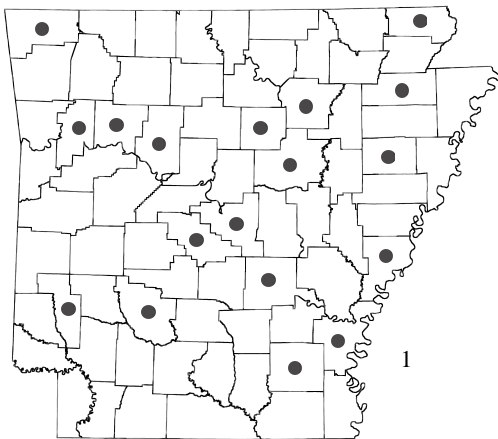
AMARYLLIDACEAE
Leucojum aestivum L.
summer snowflake



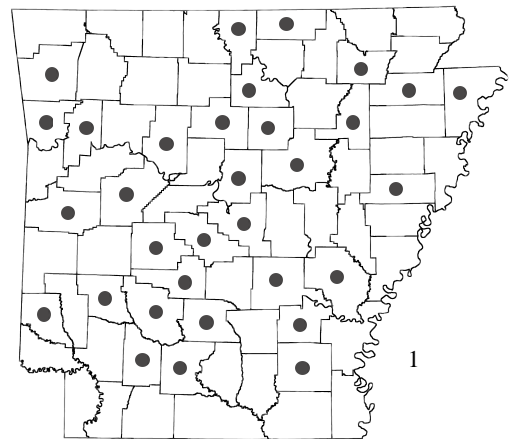
AMARYLLIDACEAE
Lycoris radiata (L'Hér.) Herb.
red spider-lily, surprise-lily



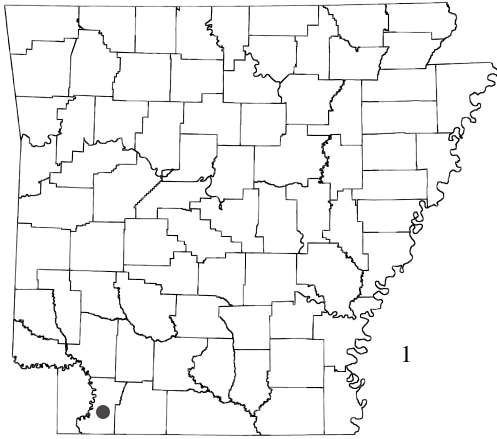
AMARYLLIDACEAE
Narcissus jonquilla L.
jonquil



AMARYLLIDACEAE
Narcissus poeticus L.
poet's narcissus, pheasant's-eye narcissus

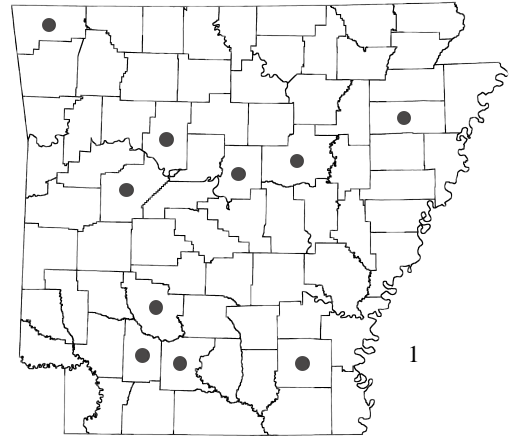


AMARYLLIDACEAE
Narcissus pseudonarcissus L.
daffodil, buttercup



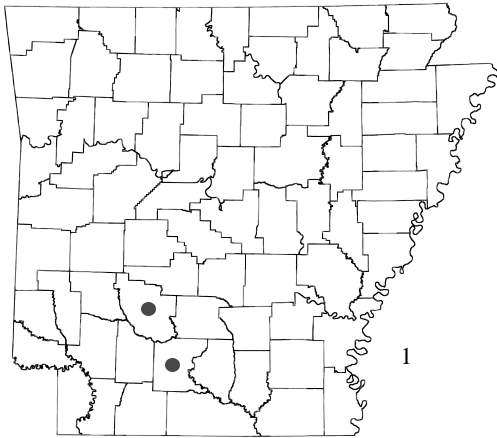
AMARYLLIDACEAE
Narcissus tazetta L.

bunch-flower narcissus, polyanthus narcissus



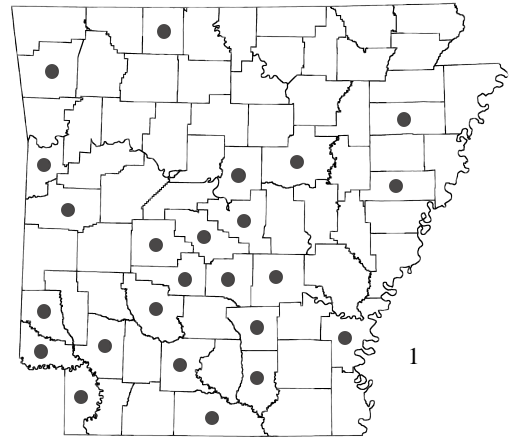
AMARYLLIDACEAE
Narcissus x incomparabilis Mill.

nonessuch daffodil, peerless narcissus



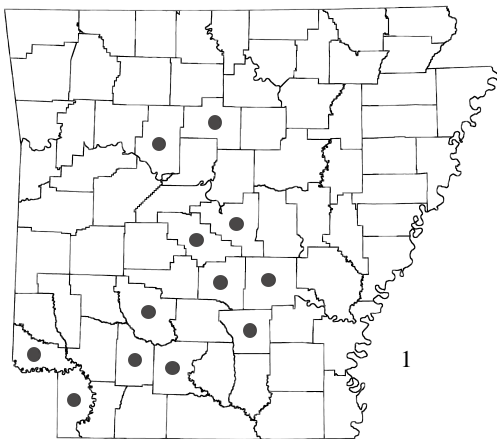
AMARYLLIDACEAE
Narcissus x intermedius Loisel.

Texas-star jonquil



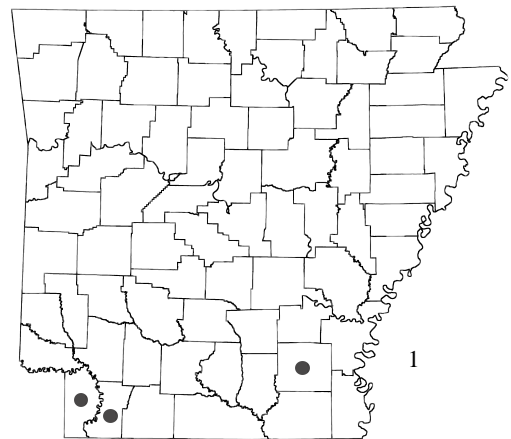
AMARYLLIDACEAE
Narcissus x medioluteus Mill.

primrose-peerless narcissus, two-flower daffodil



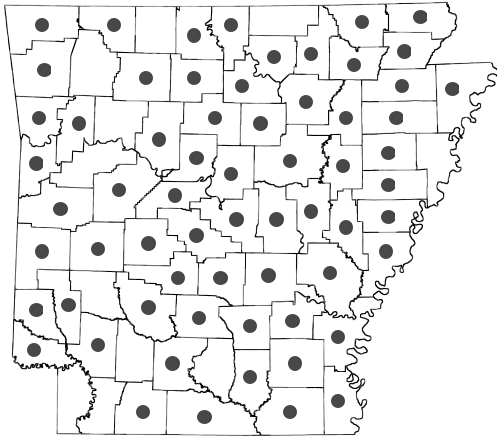
AMARYLLIDACEAE
Narcissus x odorus L.

Campernelle jonquil



AMARYLLIDACEAE
Zephyranthes candida (Lindl.) Herb.

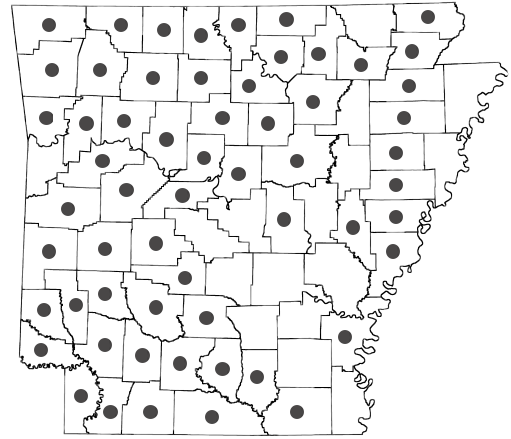
white rain-lily, autumn rain-lily, zephyr-lily



ARACEAE

Arisaema dracontium (L.) Schott in Schott & Endl.

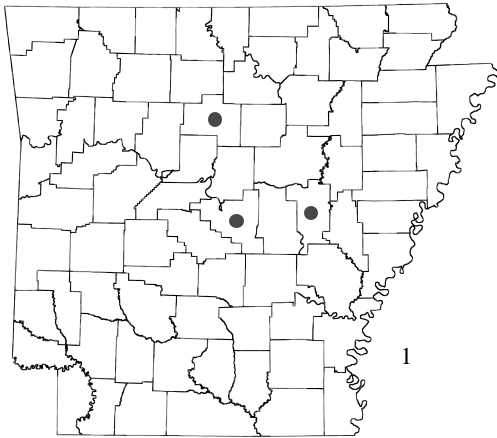
green-dragon, dragon-root



ARACEAE

Arisaema triphyllum (L.) Schott in Schott & Endl.

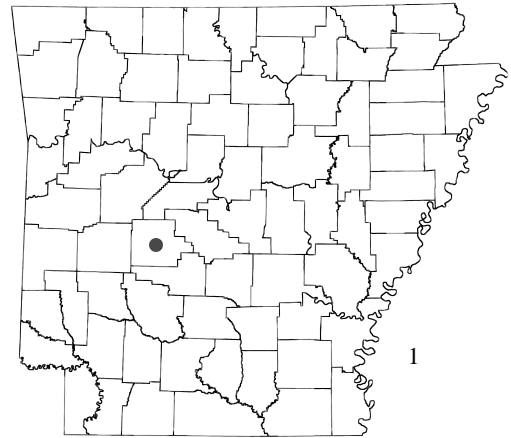
Jack-in-the-pulpit, Indian-turnip



ARACEAE

Arum italicum Mill.

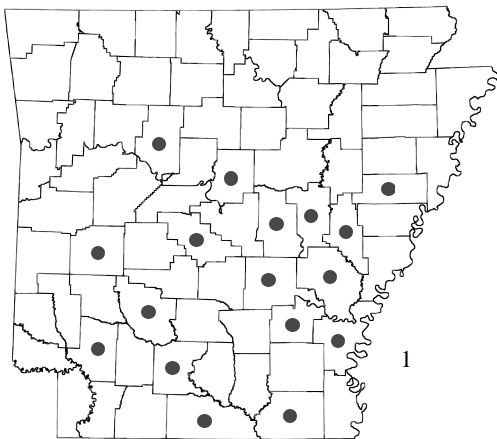
Italian lords-and-ladies, Italian arum



ARACEAE

Colocasia esculenta (L.) Schott in Schott & Endl.

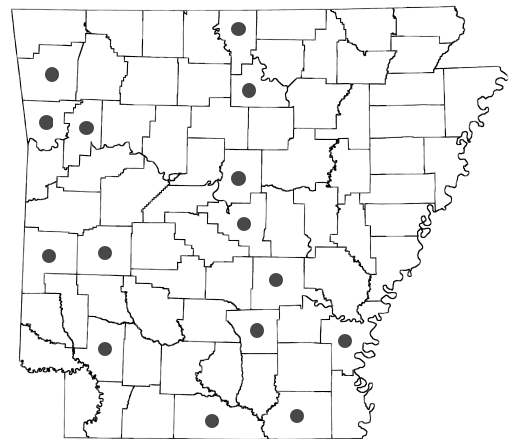
taro, elephant's-ear



ARACEAE

Landoltia punctata (G.Mey.) Les. & D.J.Crawford

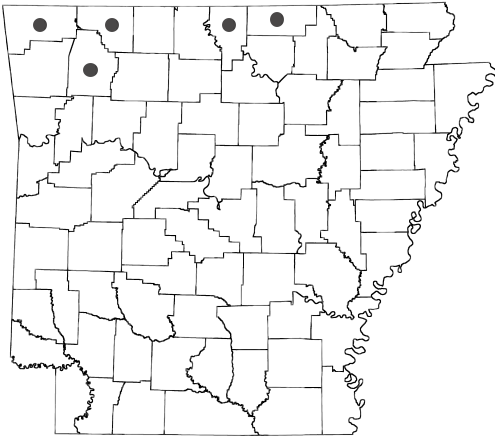
duckweed



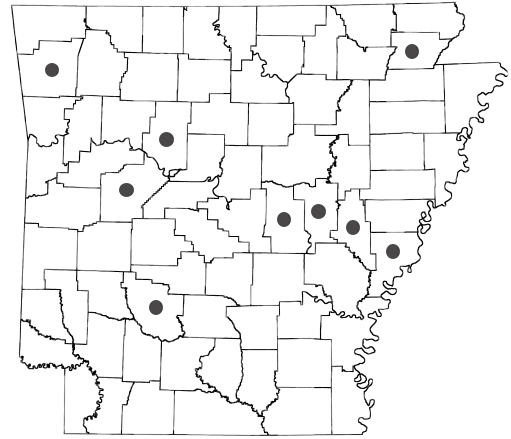
ARACEAE

Lemna aquinoctialis Welw.

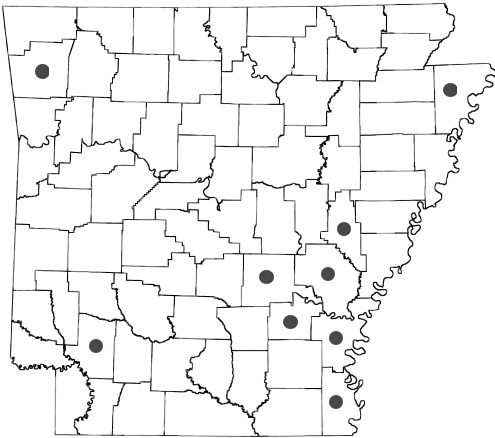
duckweed



ARACEAE
Lemna minor L.
duckweed



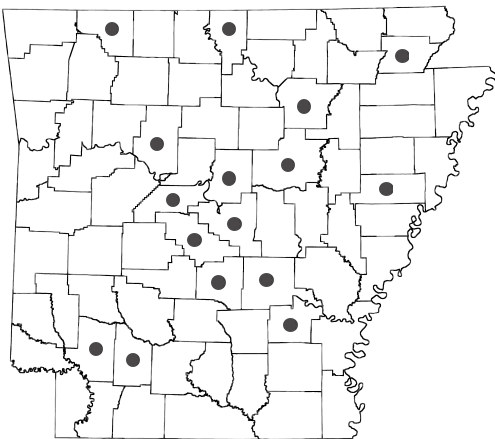
ARACEAE
Lemna minuta Kunth in Humb. et al.
duckweed



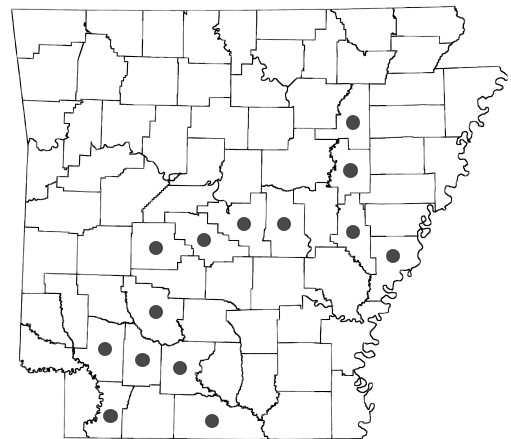
ARACEAE
Lemna obscura (Austin) Daubs
duckweed



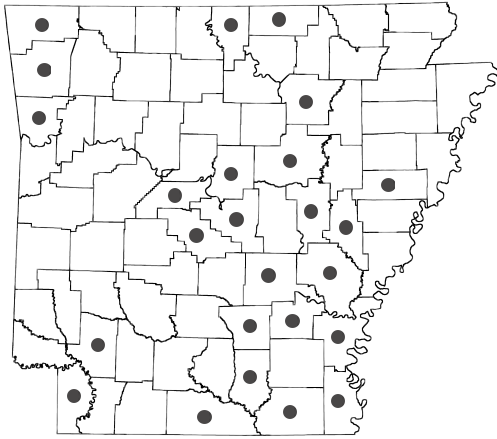
ARACEAE
Lemna perpusilla Torr.
duckweed



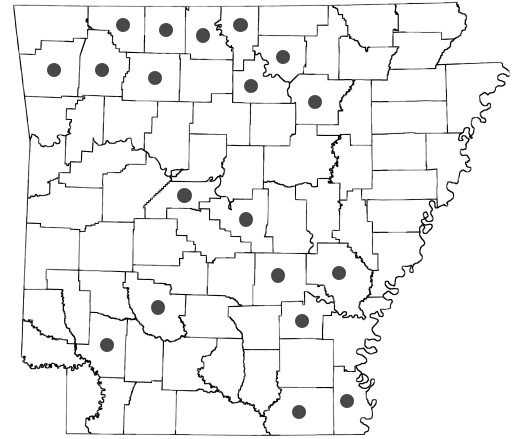
ARACEAE
Lemna valdiviana Phil.
duckweed



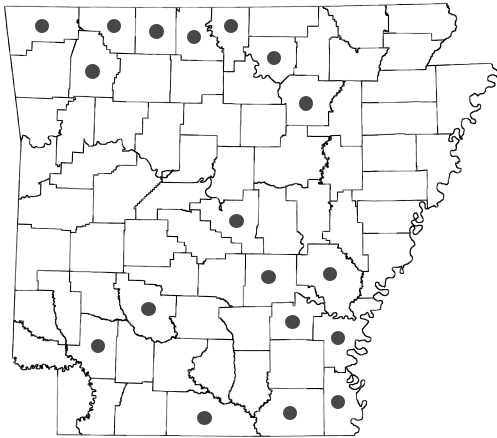
ARACEAE
Peltandra virginica (L.) Schott in Schott & Endl.
arrow-arum, tuckahoe



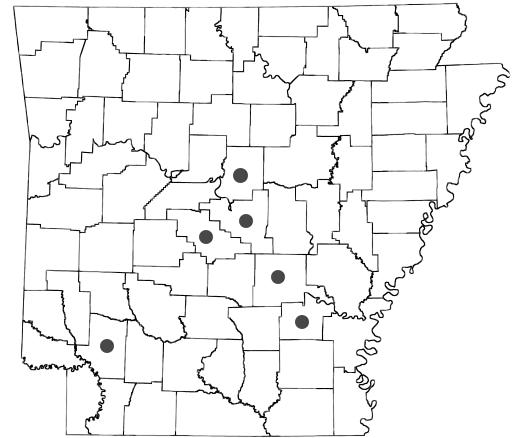
ARACEAE
Spirodela polyrrhiza (L.) Schleid.
 big duckweed



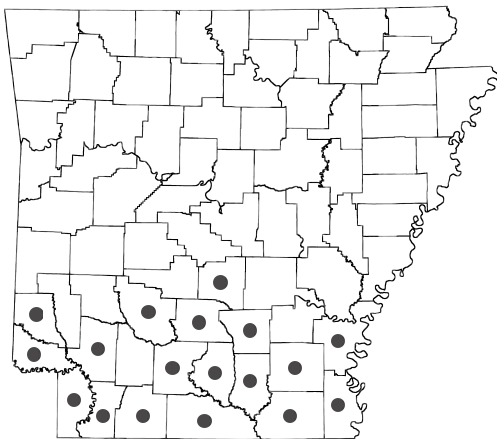
ARACEAE
Wolffia brasiliensis Wedd.
 water-meal



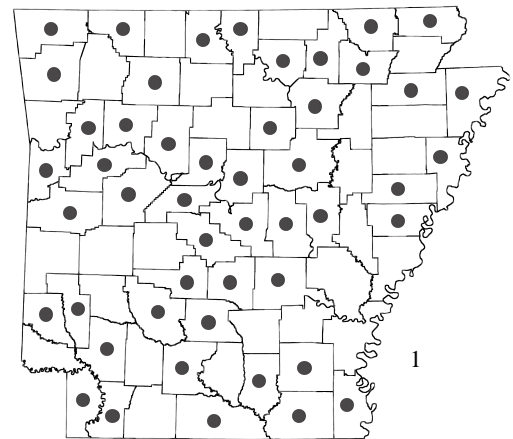
ARACEAE
Wolffia columbiana H.Karst.
 water-meal



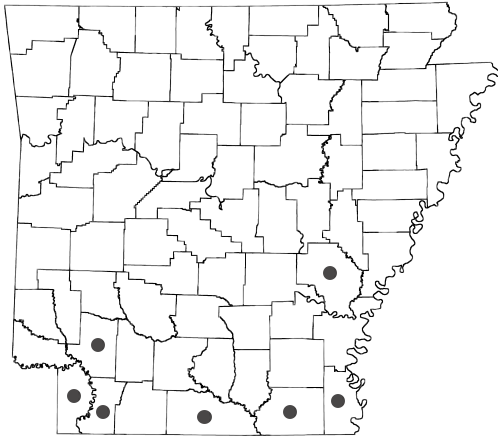
ARACEAE
Wolffia gladiata (Hegelm.) Hegelm.
 mud-midget, bog-mat



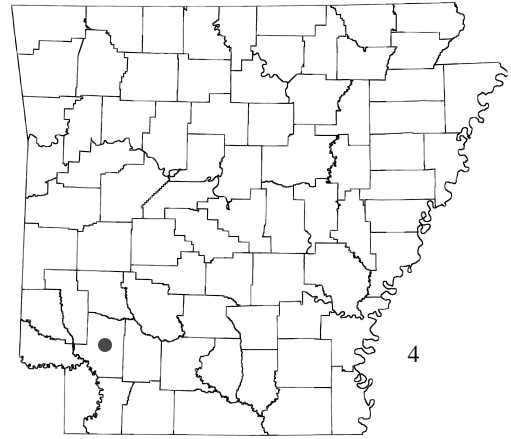
ARECACEAE
Sabal minor (Jacq.) Pers.
 dwarf palmetto



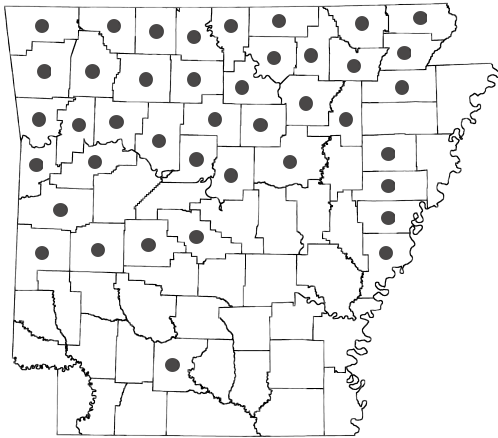
ASPARAGACEAE
Asparagus officinalis L.
 asparagus



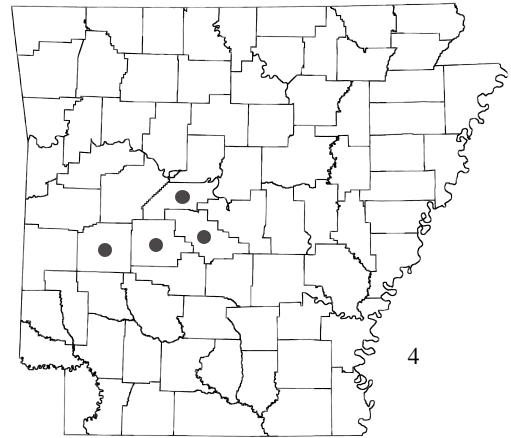
BROMELIACEAE
Tillandsia usneoides (L.) L.
Spanish-moss



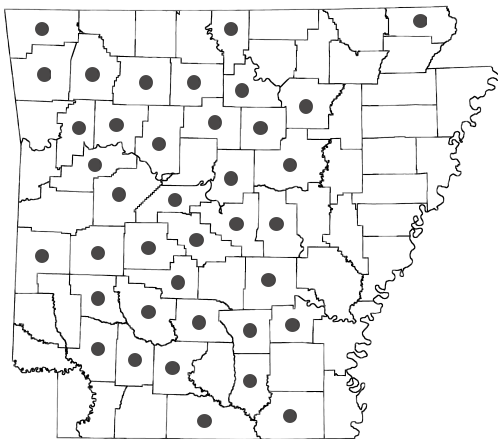
BURMANNIACEAE
Burmannia biflora L.
northern bluethead



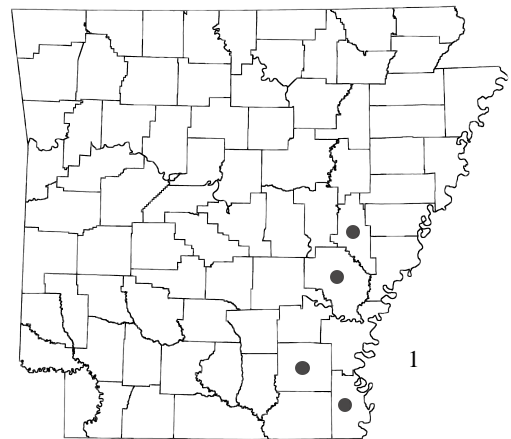
COLCHICACEAE
Uvularia grandiflora Sm.
large-flower bellwort



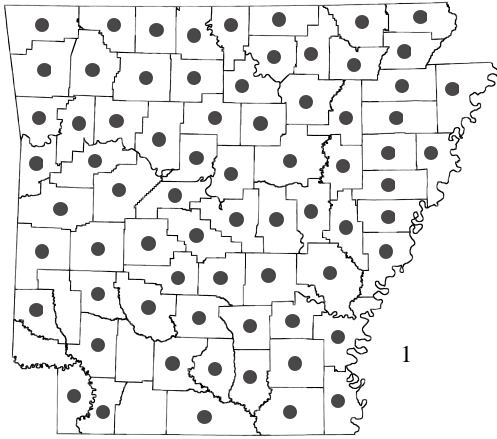
COLCHICACEAE
Uvularia perfoliata L.
perfoliate bellwort



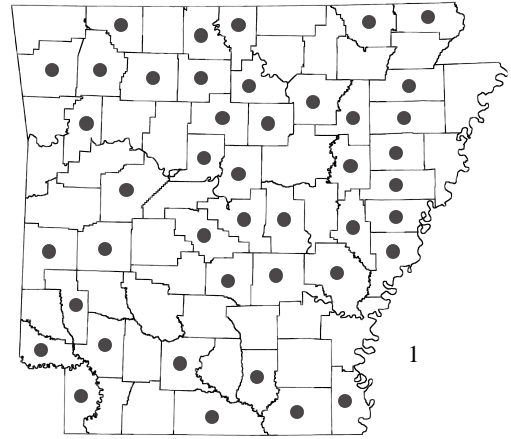
COLCHICACEAE
Uvularia sessilifolia L.
sessile-leaf bellwort



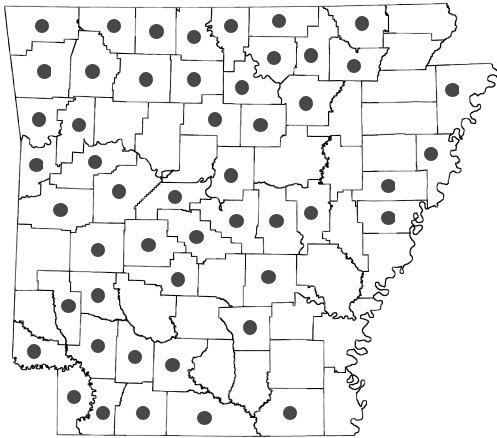
COMMELINACEAE
Commelina caroliniana Walter
Carolina dayflower



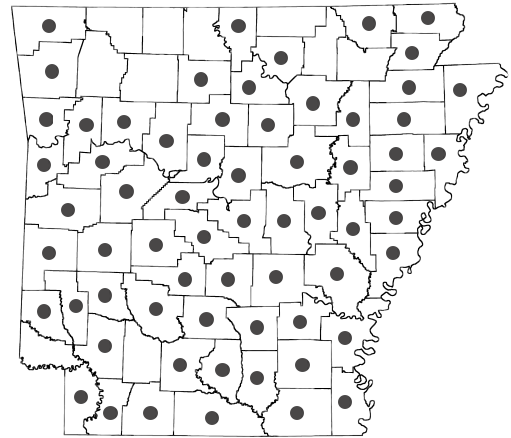
COMMELINACEAE
Commelina communis L.
 Asiatic dayflower



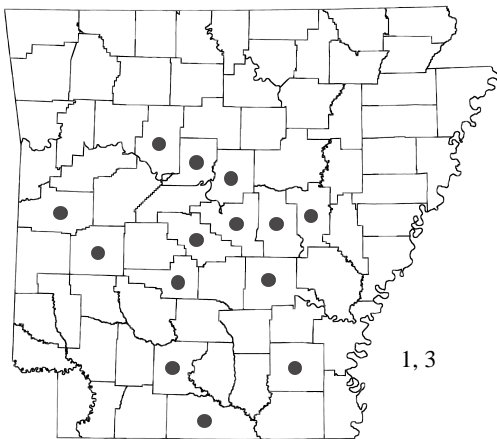
COMMELINACEAE
Commelina diffusa Burm.f.
var. diffusa
 spreading dayflower, climbing dayflower



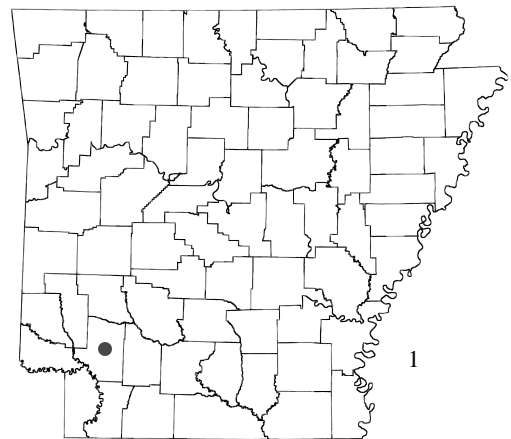
COMMELINACEAE
Commelina erecta L.
 erect dayflower



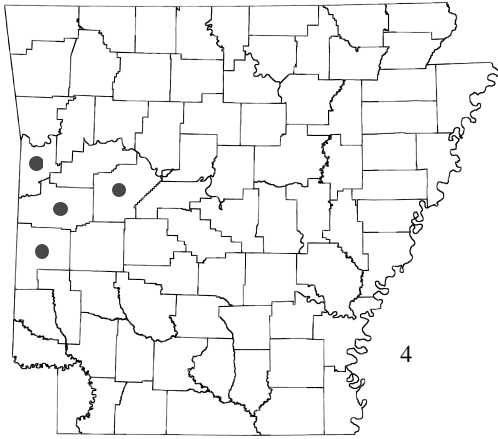
COMMELINACEAE
Commelina virginica L.
 Virginia dayflower



COMMELINACEAE
Murdannia keisak (Hassk.) Hand.-Mazz.
 Asian-spiderwort, marsh dewflower



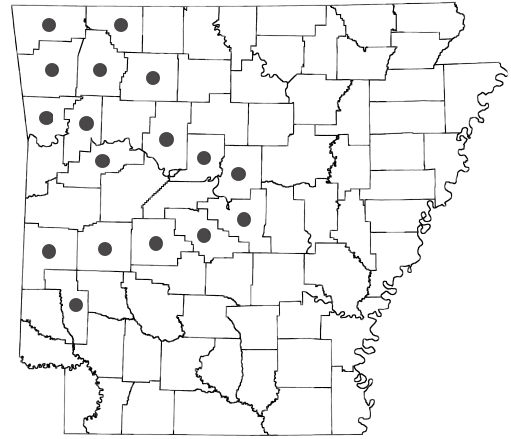
COMMELINACEAE
Murdannia nudiflora (L.) Brenan
 naked-stem dewflower



COMMELINACEAE

Tradescantia bracteata Small in Britton & A.Br.

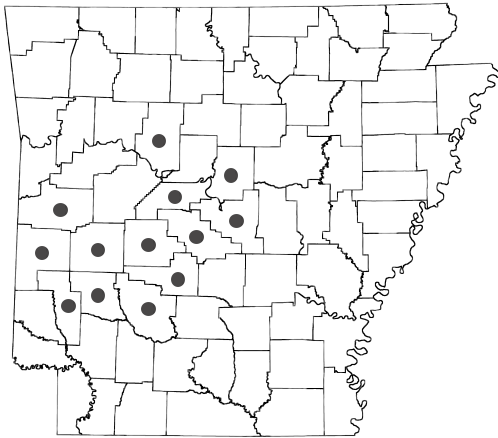
long-bract spiderwort



COMMELINACEAE

Tradescantia ernstiana E.S.Anderson & Woodson

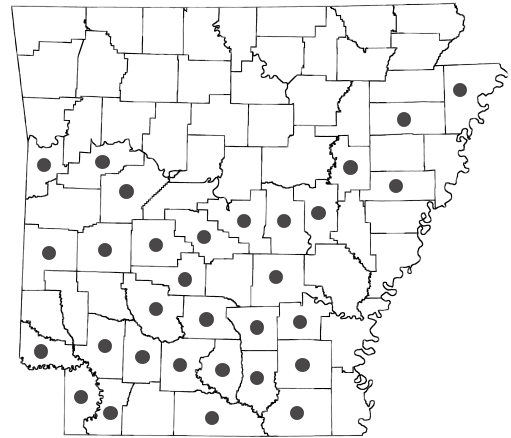
Ernest's spiderwort



COMMELINACEAE

Tradescantia hirsuticaulis Small

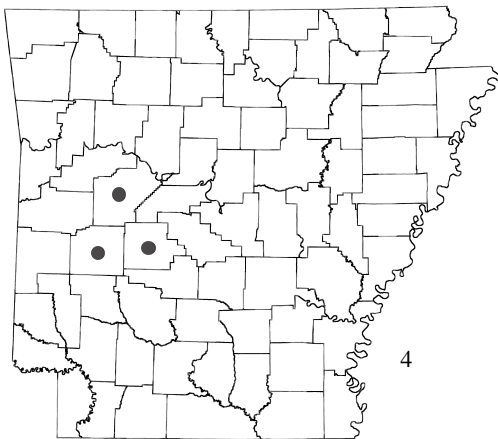
hairy-stem spiderwort



COMMELINACEAE

Tradescantia hirsutiflora Bush

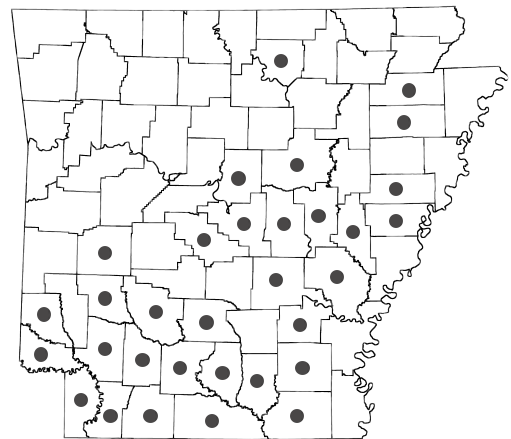
hairy spiderwort



COMMELINACEAE

Tradescantia longipes E.S.Anderson & Woodson

dwarf spiderwort, wild crocus

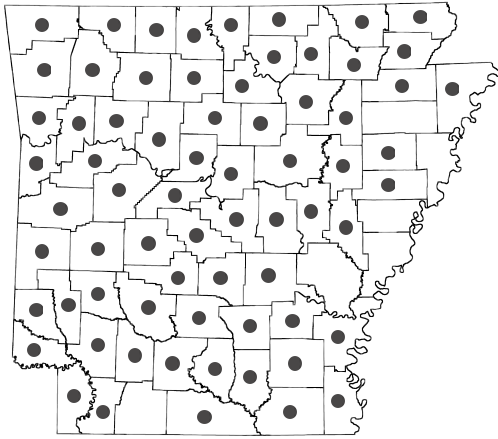


COMMELINACEAE

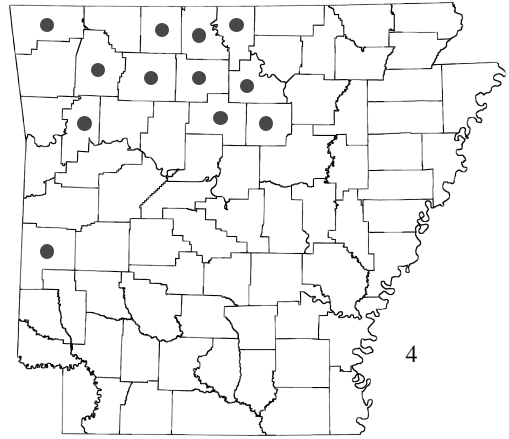
Tradescantia occidentalis (Britton) Smyth

var. **occidentalis**

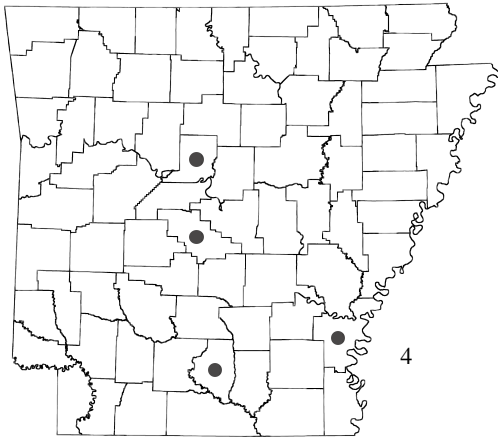
prairie spiderwort



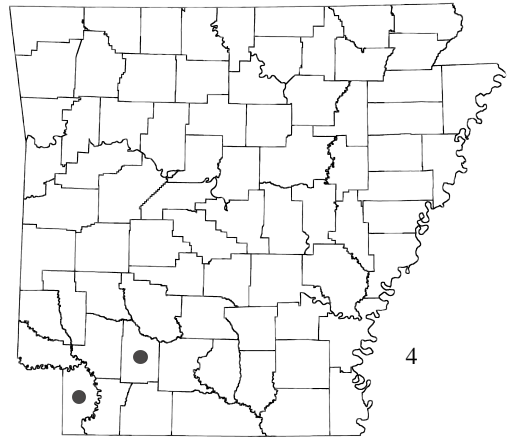
COMMELINACEAE
Tradescantia ohioensis Raf.
Ohio spiderwort



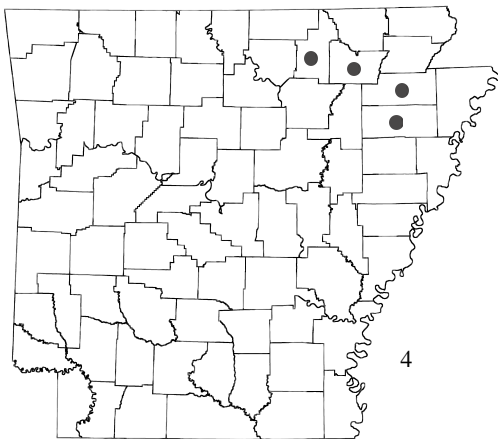
COMMELINACEAE
Tradescantia ozarkana E.S.Anderson & Woodson
Ozark spiderwort



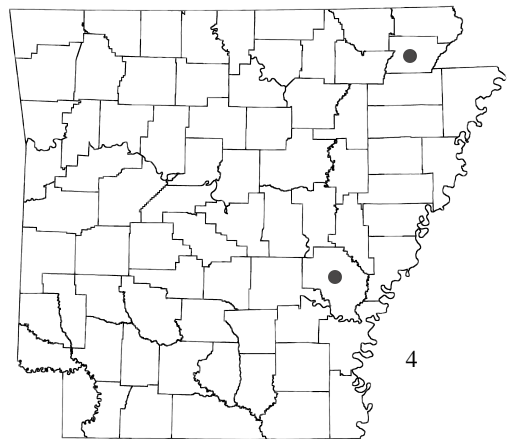
COMMELINACEAE
Tradescantia paludosa E.S.Anderson & Woodson
Confederate spiderwort, swamp spiderwort



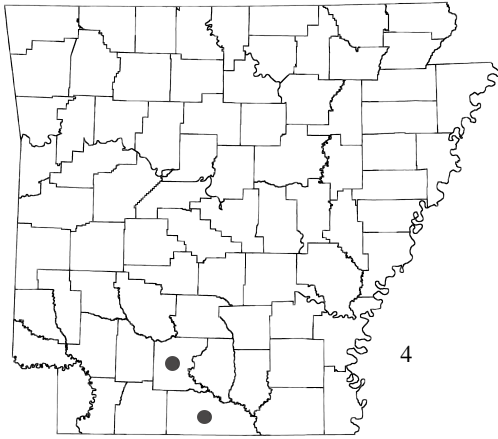
COMMELINACEAE
Tradescantia reverchonii Bush
Reverchon's spiderwort, woolly spiderwort



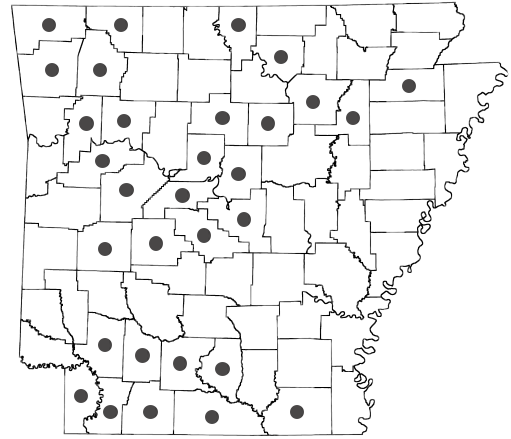
COMMELINACEAE
Tradescantia subaspera Ker Gawl.
zigzag spiderwort



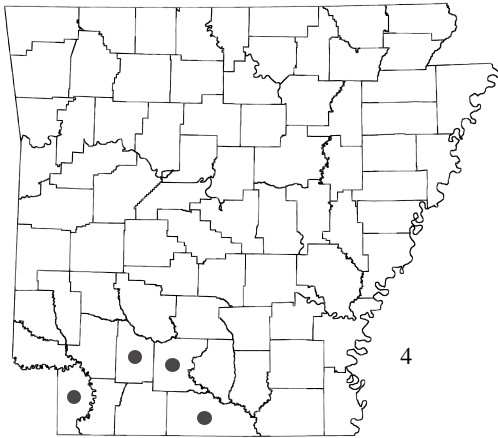
COMMELINACEAE
Tradescantia virginiana L.
Virginia spiderwort



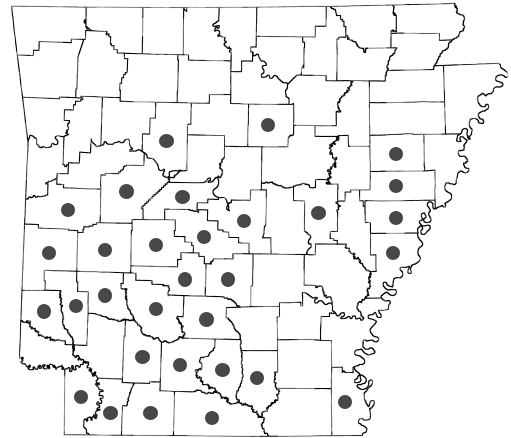
CYPERACEAE
***Bolboschoenus robustus* (Pursh) Soják**
 salt-marsh bulrush, seacoast bulrush



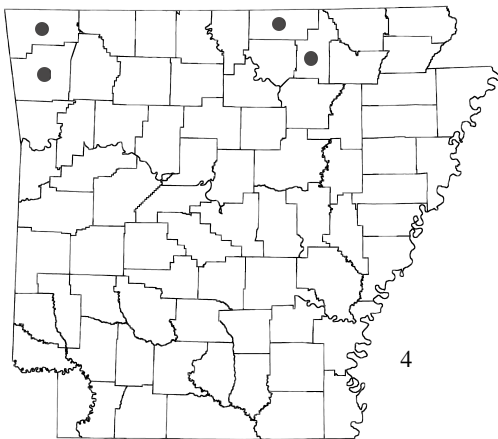
CYPERACEAE
***Bulbostylis capillaris* (L.) Kunth ex C.B. Clarke in Hook.f.**
 capillary hairsedge



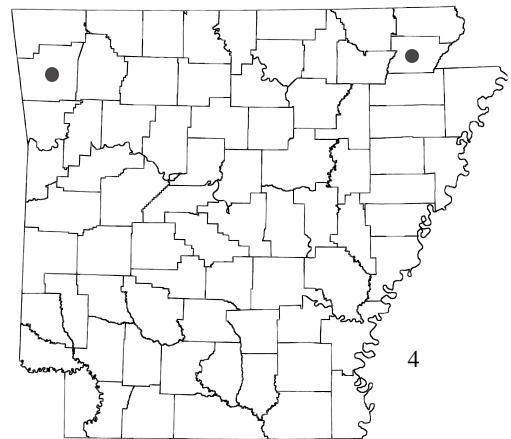
CYPERACEAE
***Bulbostylis ciliatifolia* (Elliott) Fernald**
var. *coarctata* (Elliott) Kral
 fringe-leaf hairsedge



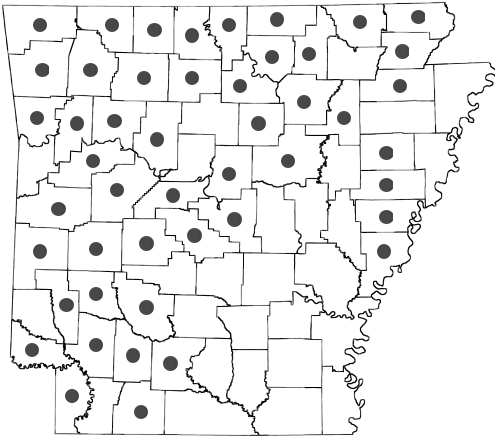
CYPERACEAE
***Carex abscondita* Mack.**
 sedge



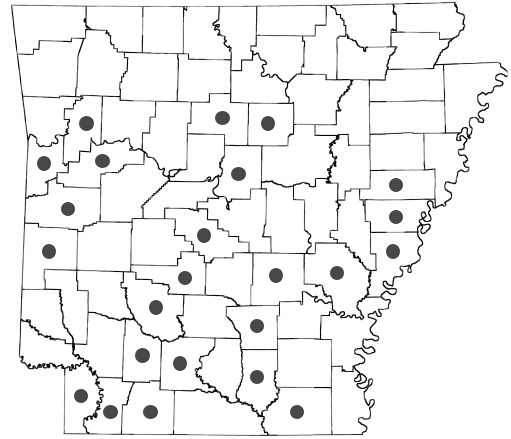
CYPERACEAE
***Carex aggregata* Mack.**
 cluster sedge



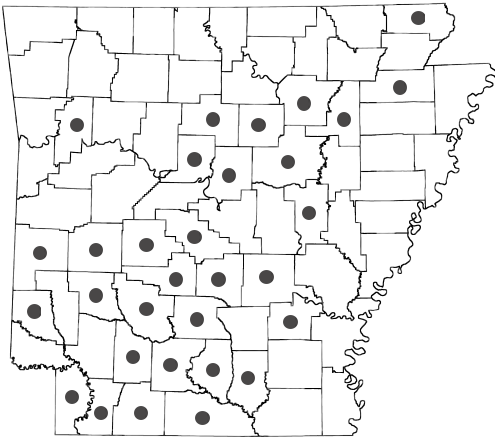
CYPERACEAE
***Carex alata* Torr.**
 broad-wing sedge



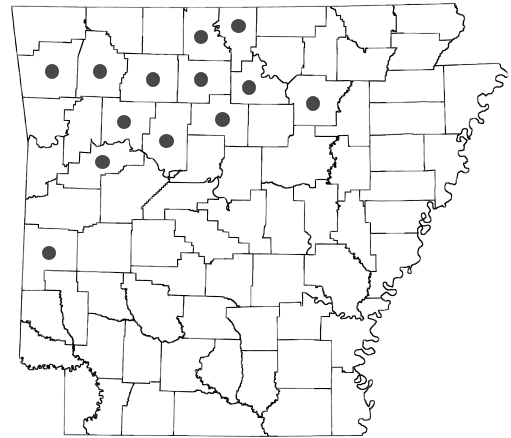
CYPERACEAE
Carex albicans Willd. ex Spreng.
var. albicans
 sedge



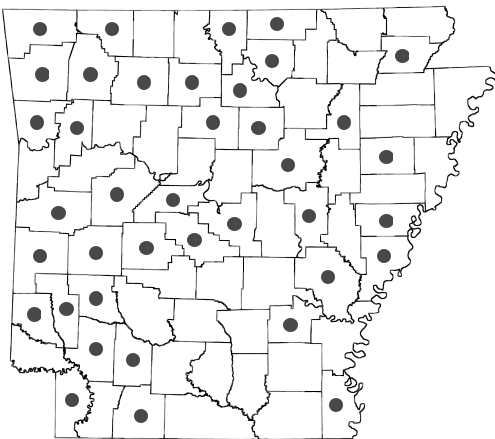
CYPERACEAE
Carex albicans Willd. ex Spreng.
var. australis (L.H.Bailey) Rettig
 sedge



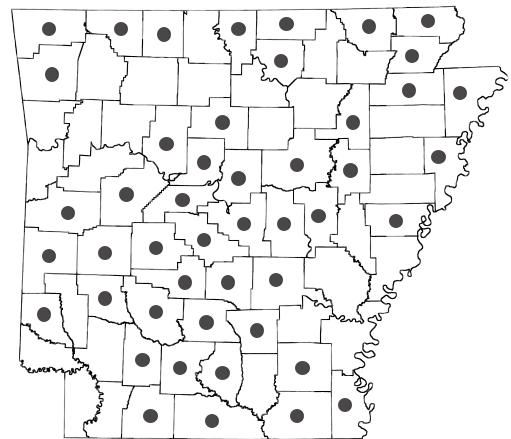
CYPERACEAE
Carex albolutescens Schwein.
 sedge



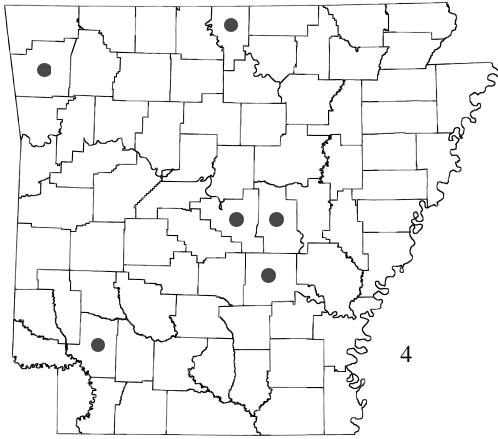
CYPERACEAE
Carex albursina E.Sheld.
 sedge



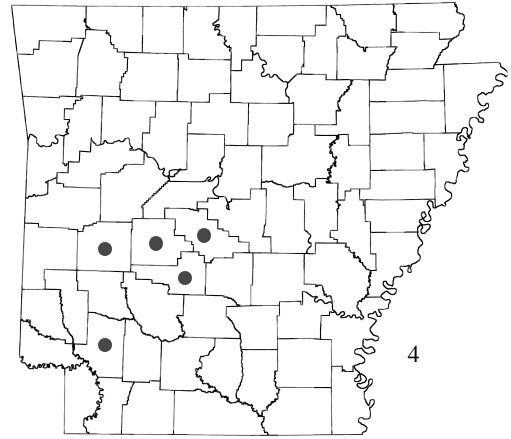
CYPERACEAE
Carex amphibola Steud.
 sedge



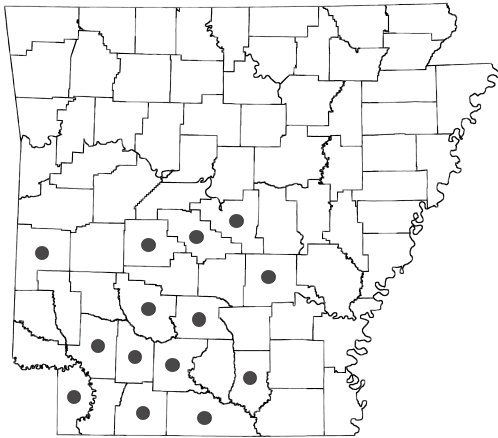
CYPERACEAE
Carex annectens (E.P.Bicknell) E.P.Bicknell
 sedge



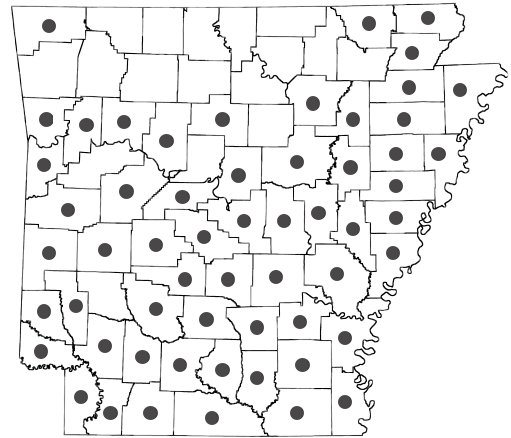
CYPERACEAE
Carex arkansana (L.H.Bailey) L.H.Bailey
 Arkansas sedge



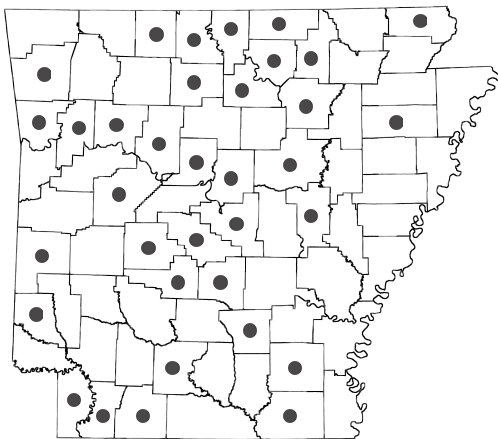
CYPERACEAE
Carex atlantica L.H.Bailey
subsp. atlantica
 prickly bog sedge



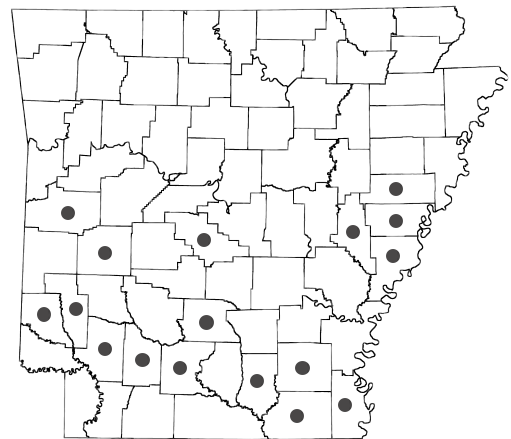
CYPERACEAE
Carex atlantica L.H.Bailey
subsp. capillacea (L.H.Bailey) Reznicek
 capillary prickly bog sedge



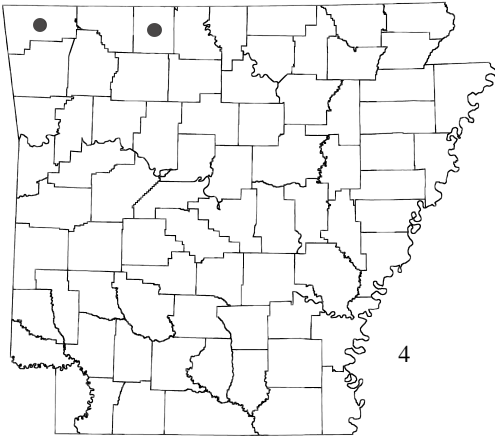
CYPERACEAE
Carex aureolensis Steud.
 sedge



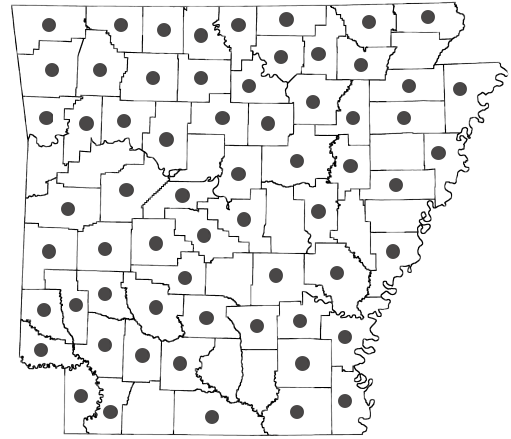
CYPERACEAE
Carex austrina (Small) Mack.
 sedge



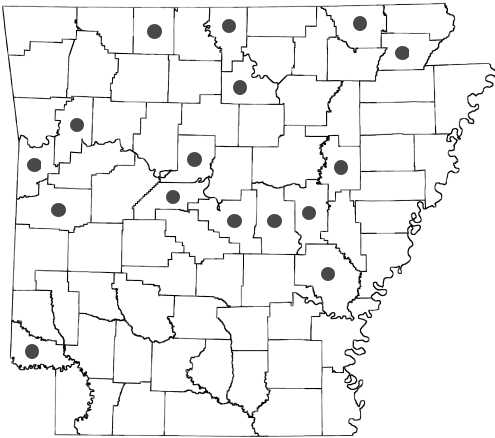
CYPERACEAE
Carex basiantha Steud.
 sedge



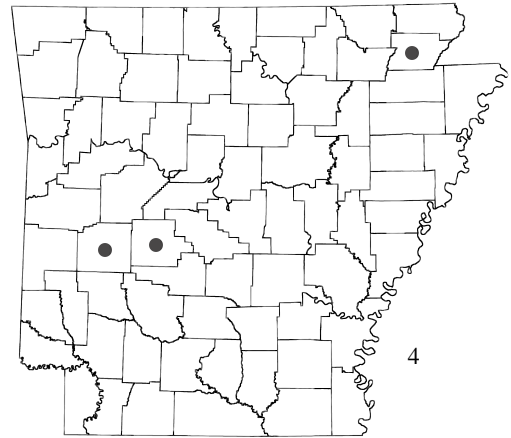
CYPERACEAE
Carex bicknellii Britton in Britton & A.Br.
 Bicknell's sedge



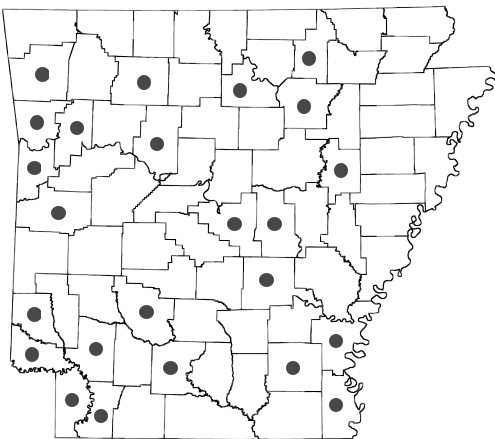
CYPERACEAE
Carex blanda Dewey
 sedge



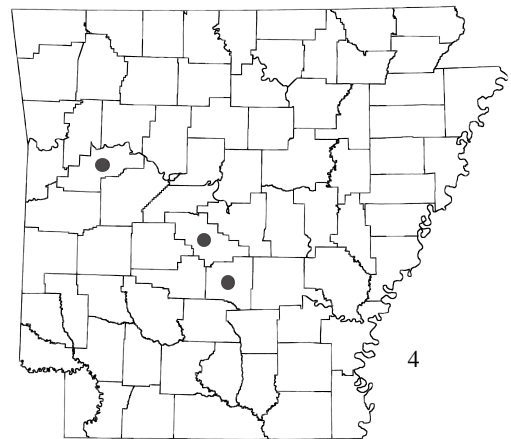
CYPERACEAE
Carex brevior (Dewey) Mack. ex Lunell
 sedge



CYPERACEAE
Carex bromoides Schkuhr ex Willd.
 subsp. **bromoides**
 brome sedge



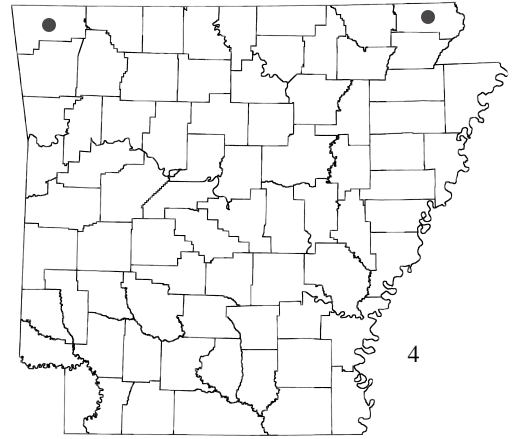
CYPERACEAE
Carex bulbostylis Mack.
 sedge



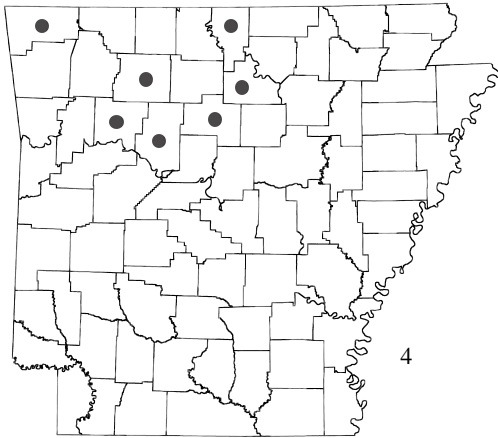
CYPERACEAE
Carex bullata Schkuhr ex Willd.
 button sedge



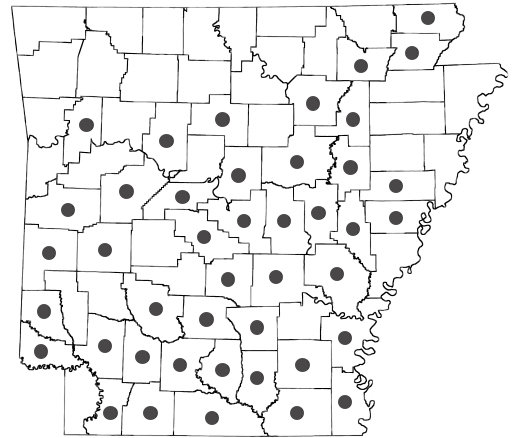
CYPERACEAE
Carex bushii Mack.
 Bush's sedge



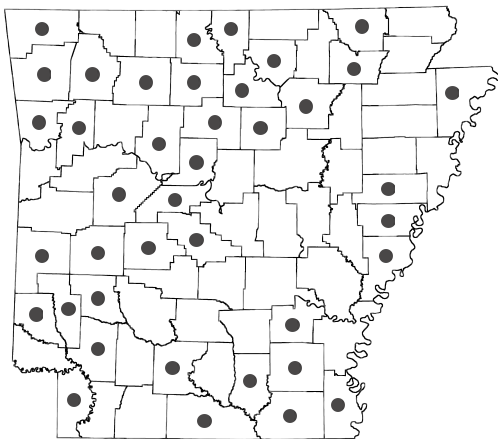
CYPERACEAE
Carex buxbaumii Wahlenb.
 brown bog sedge, Buxbaum's sedge



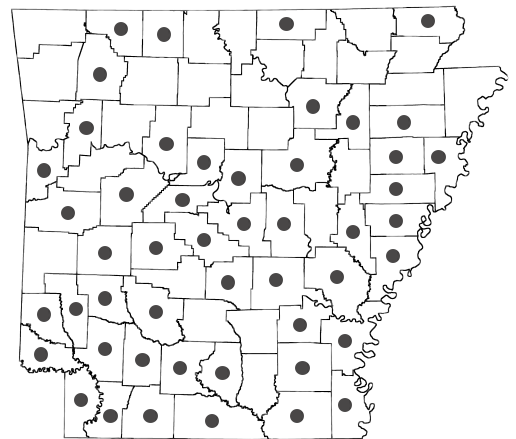
CYPERACEAE
Carex careyana Torr. ex Dewey
 Carey's sedge



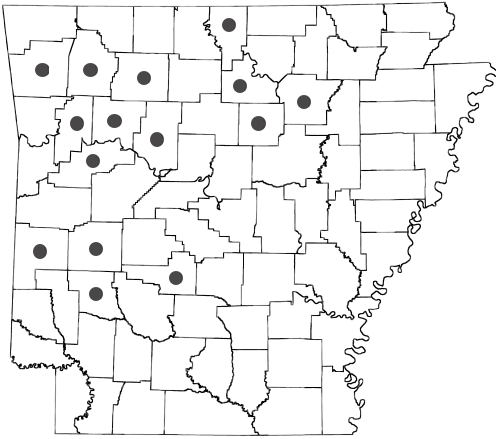
CYPERACEAE
Carex caroliniana Schwein.
 Carolina sedge



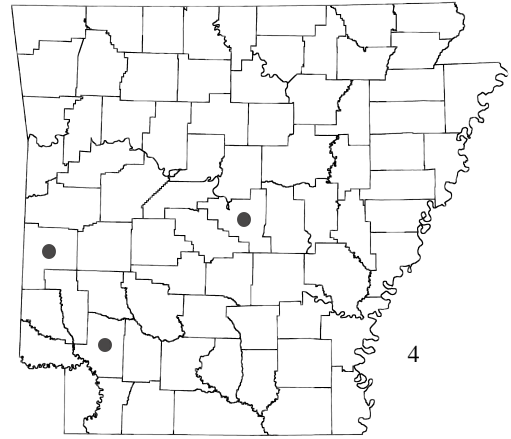
CYPERACEAE
Carex cephalophora Muhl. ex Willd.
 sedge



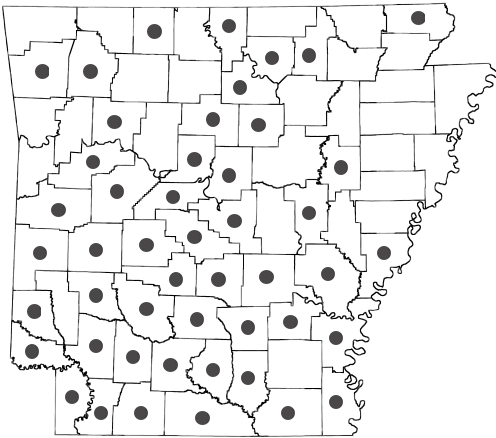
CYPERACEAE
Carex cherokeensis Schwein.
 Cherokee sedge



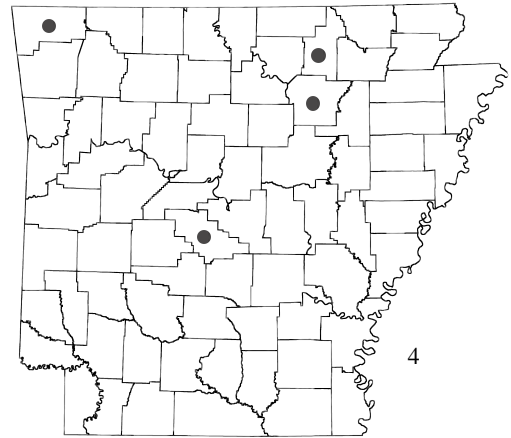
CYPERACEAE
Carex communis L.H.Bailey
 var. **communis**
 sedge



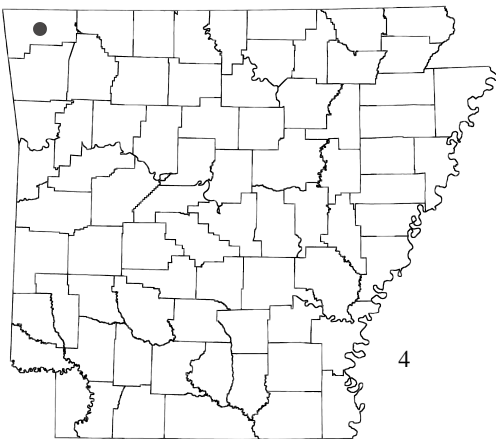
CYPERACEAE
Carex comosa Boott
 bottle-brush sedge



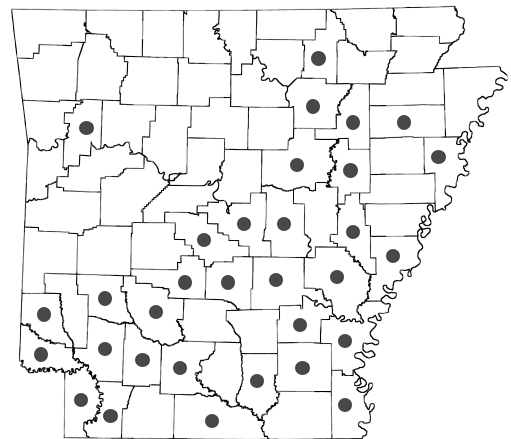
CYPERACEAE
Carex complanata Torr. & Hook.
 sedge



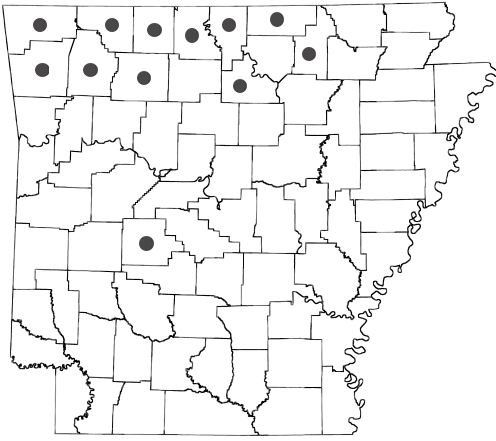
CYPERACEAE
Carex conjuncta Boott
 soft fox sedge



CYPERACEAE
Carex conoidea Schkuhr ex Willd.
 open-field sedge

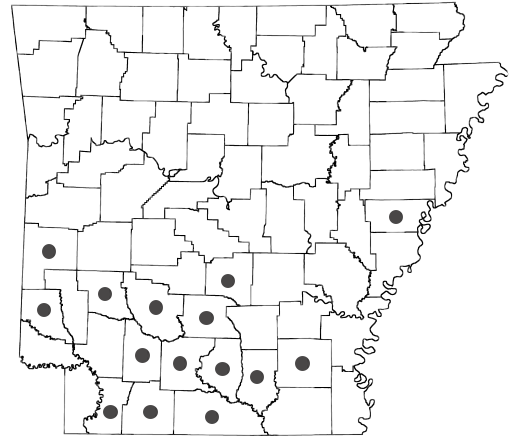


CYPERACEAE
Carex corrugata Fernald
 sedge



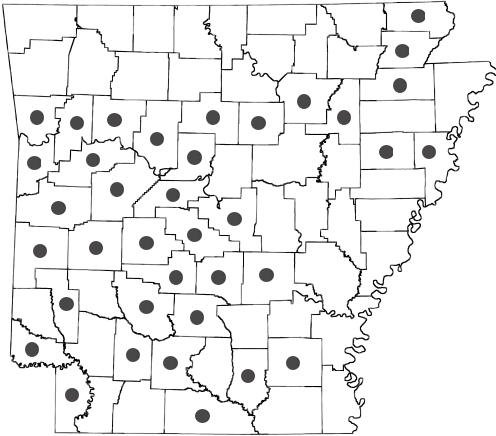
CYPERACEAE
Carex crawei Dewey

Crawe's sedge



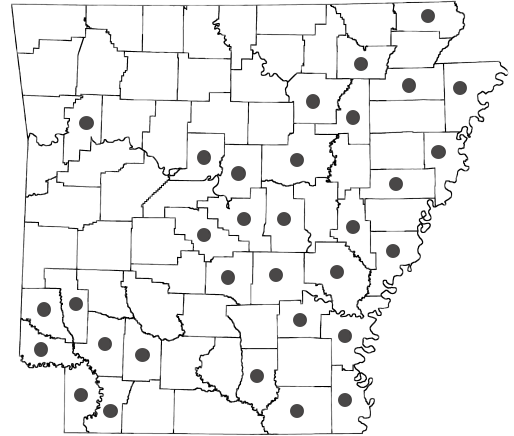
CYPERACEAE
Carex crebriflora Wiegand

sedge



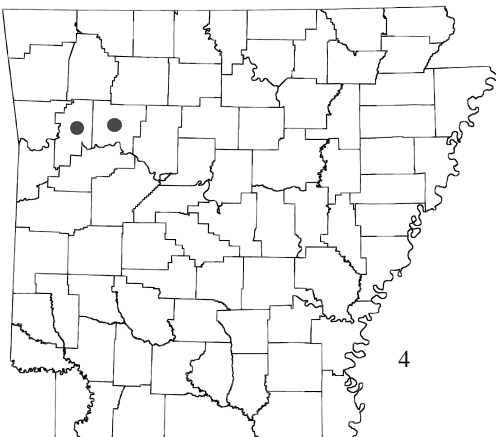
CYPERACEAE
Carex crinita Lam. in Lam. et al.
var. brevicrinis Fernald

fringed sedge



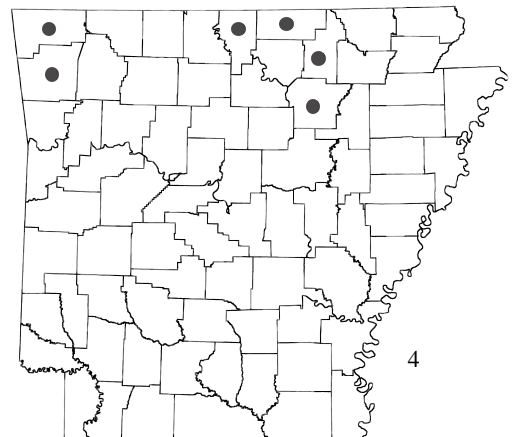
CYPERACEAE
Carex crus-corvi Shuttlew. ex Kunze

crow-foot sedge



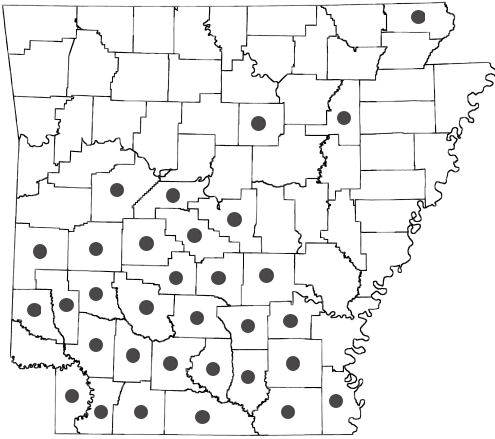
CYPERACEAE
Carex cumberlandensis Naczi, Kral, & Bryson

Cumberland sedge

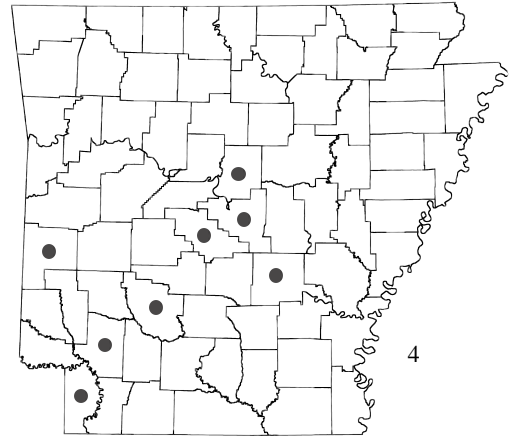


CYPERACEAE
Carex davisii Schwein. & Torr.

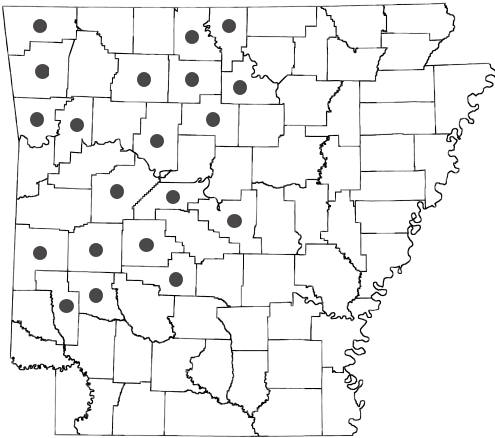
Davis' sedge



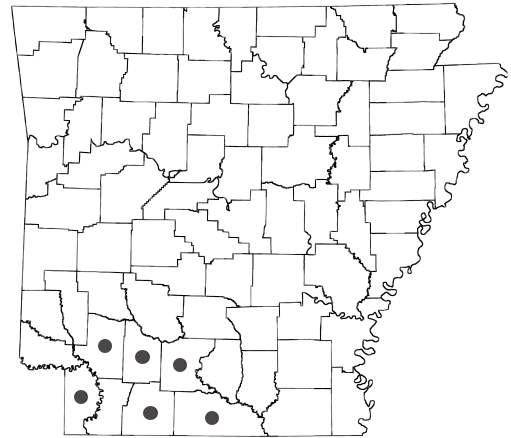
CYPERACEAE
Carex debilis Michx.
var. debilis
 sedge



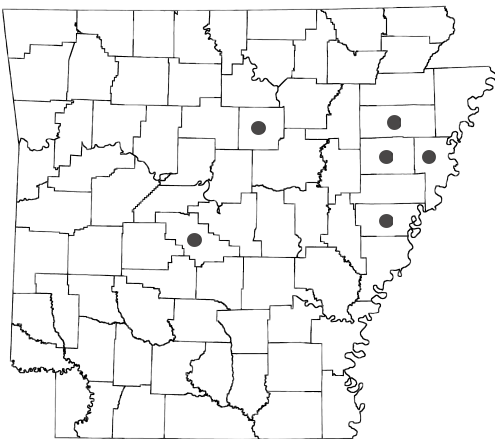
CYPERACEAE
Carex decomposita Muhl.
 cypress-knee sedge, epiphytic sedge



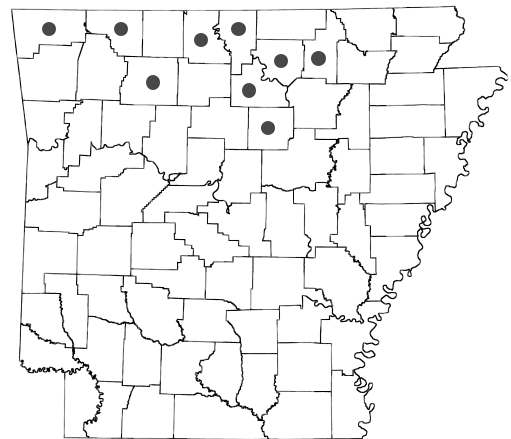
CYPERACEAE
Carex digitalis Willd.
var. digitalis
 sedge



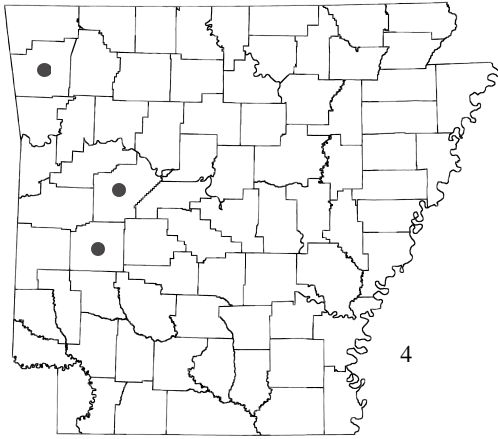
CYPERACEAE
Carex digitalis Willd.
var. floridana (L.H.Bailey) Naczi & Bryson
 sedge



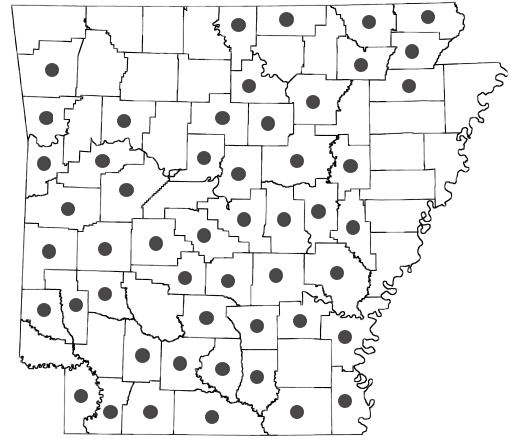
CYPERACEAE
Carex digitalis Willd.
var. macropoda Fernald
 sedge



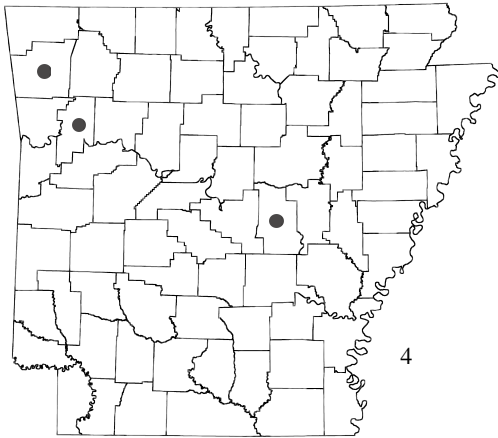
CYPERACEAE
Carex eburnea Boott in Hook.
 sedge



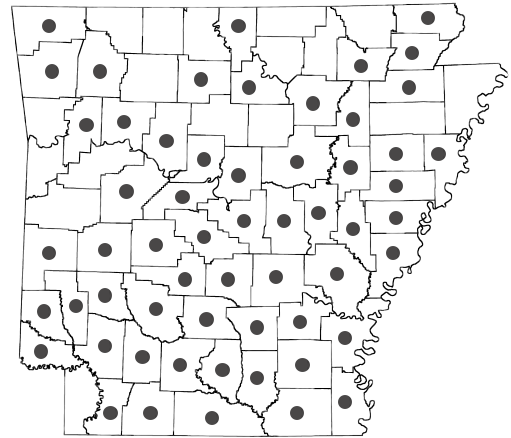
CYPERACEAE
Carex emoryi Dewey in Torr.
 Emory's sedge



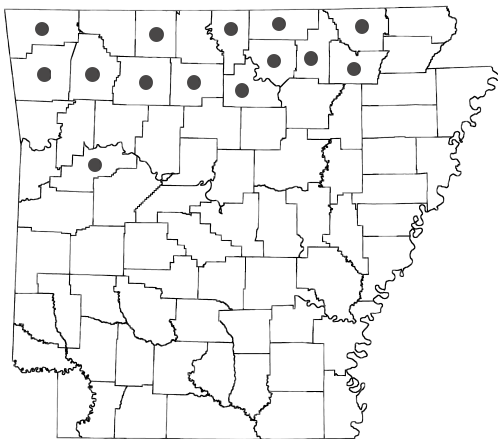
CYPERACEAE
Carex festuceacea Schkuhr ex Willd.
 fescue sedge



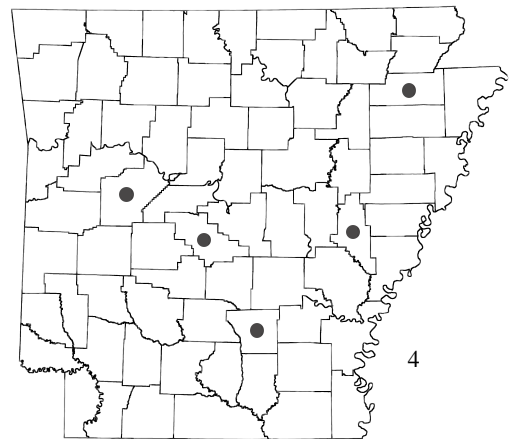
CYPERACEAE
Carex fissa Mack. in Britton et al.
var. fissa
 hammock sedge



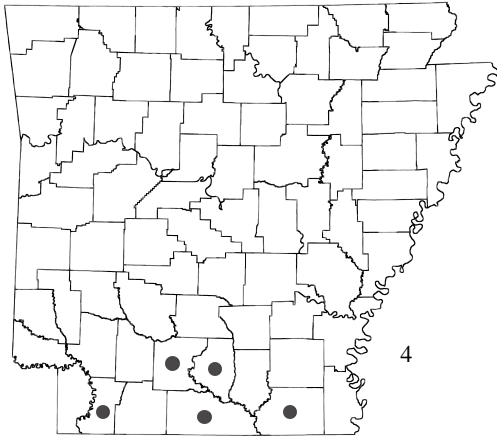
CYPERACEAE
Carex flaccosperma Dewey
 blue sedge



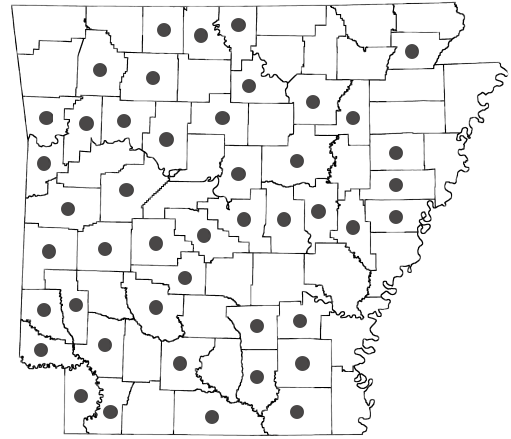
CYPERACEAE
Carex frankii Kunth
 Frank's sedge



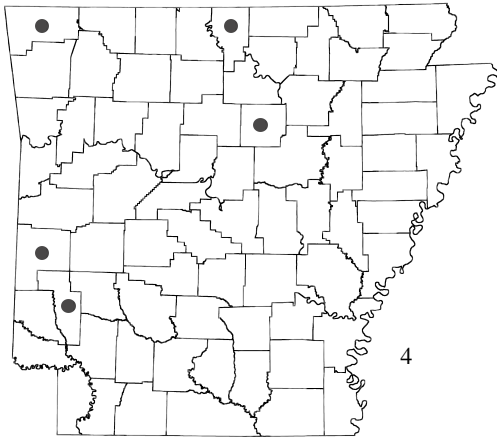
CYPERACEAE
Carex gigantea Rudge
 giant sedge



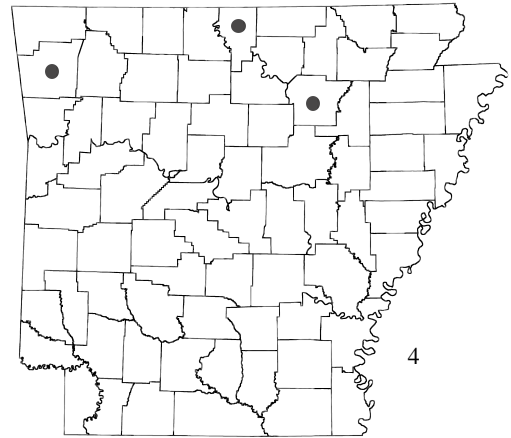
CYPERACEAE
Carex glaucescens Elliott
 southern waxy sedge



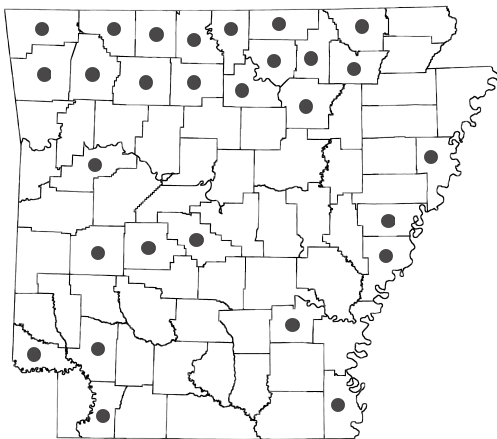
CYPERACEAE
Carex glaucoidea Tuck. ex Olney
 blue sedge



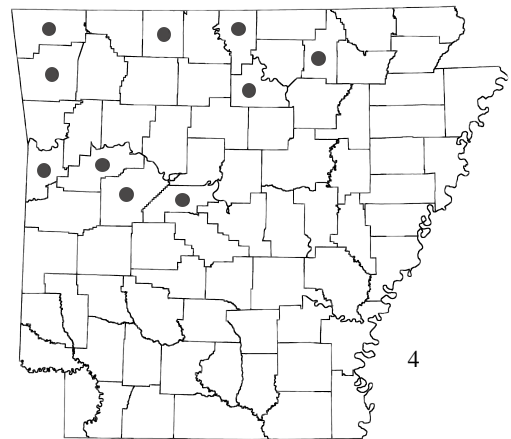
CYPERACEAE
Carex gracilescens Steud.
 slender wood sedge



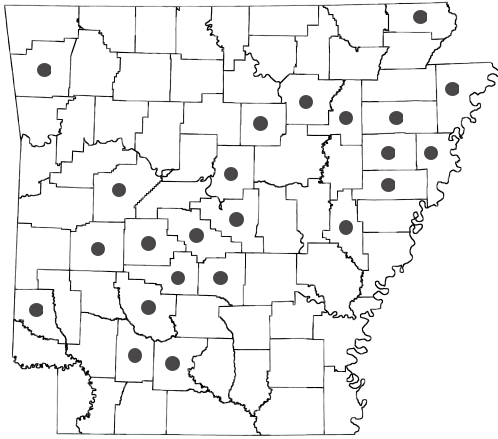
CYPERACEAE
Carex gracillima Schwein.
 graceful sedge



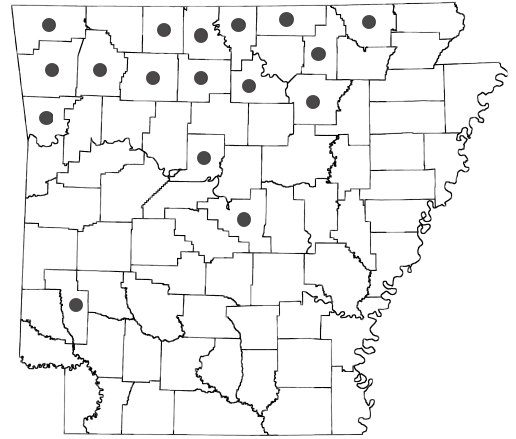
CYPERACEAE
Carex granularis Muhl. ex Willd.
 sedge



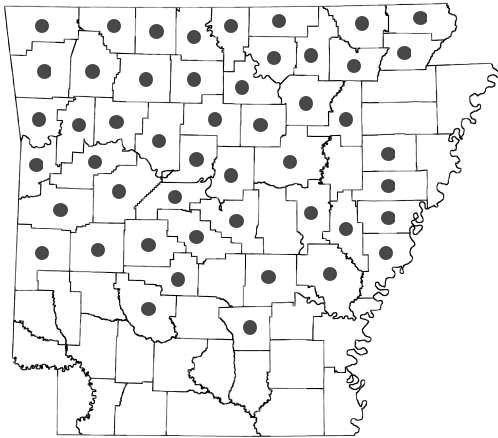
CYPERACEAE
Carex gravida L.H.Bailey
 heavy sedge



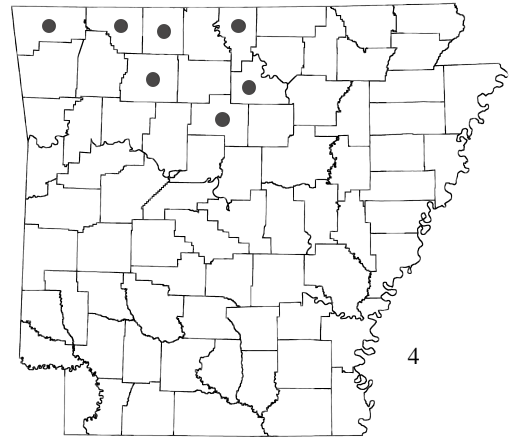
CYPERACEAE
Carex grayi J. Carey
globe sedge



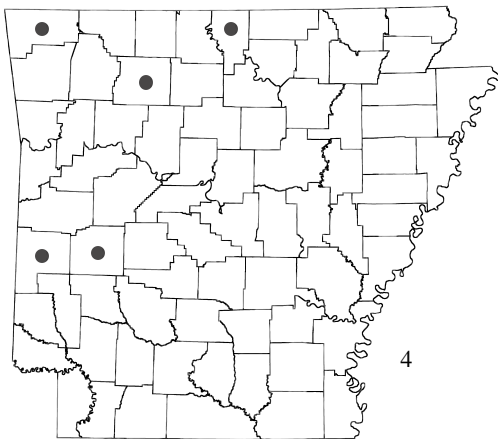
CYPERACEAE
Carex grisea Wahlenb.
sedge



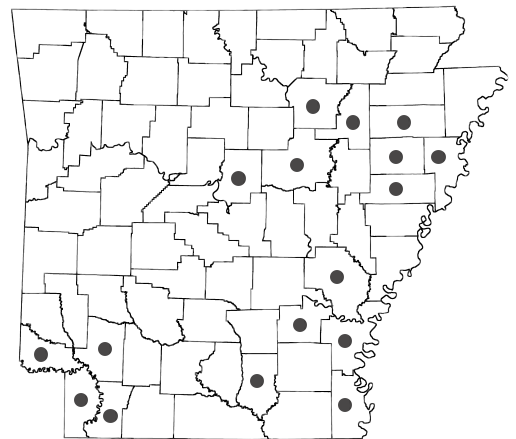
CYPERACEAE
Carex hirsutella Mack.
sedge



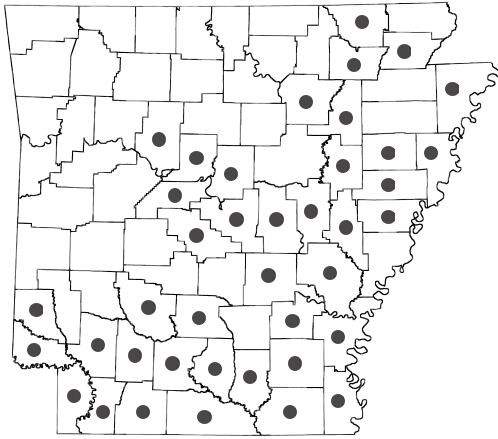
CYPERACEAE
Carex hirtifolia Mack.
hairy sedge



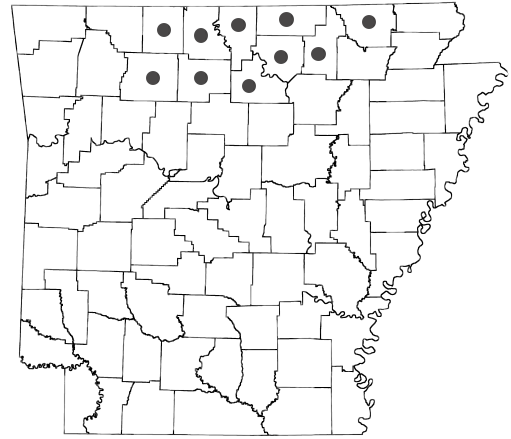
CYPERACEAE
Carex hitchcockiana Dewey
Hitchcock's sedge



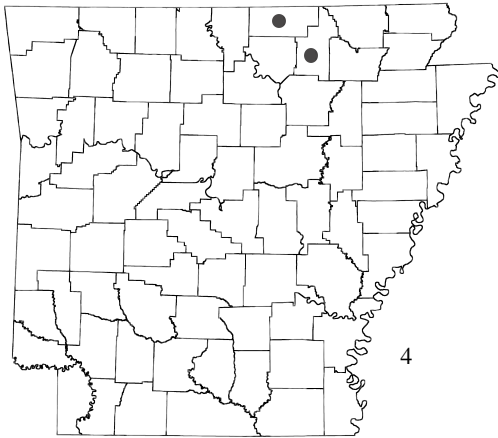
CYPERACEAE
Carex hyalina Boott
sedge



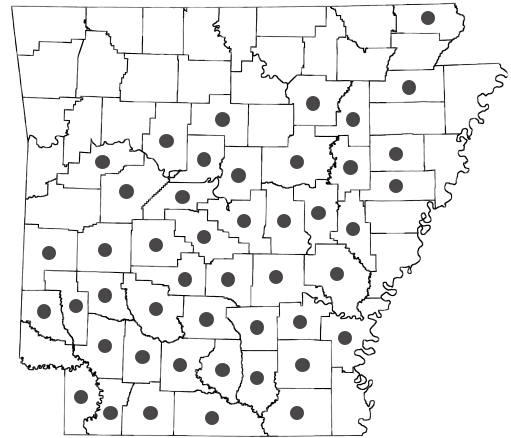
CYPERACEAE
Carex hyalinolepis Steud.
 shoreline sedge



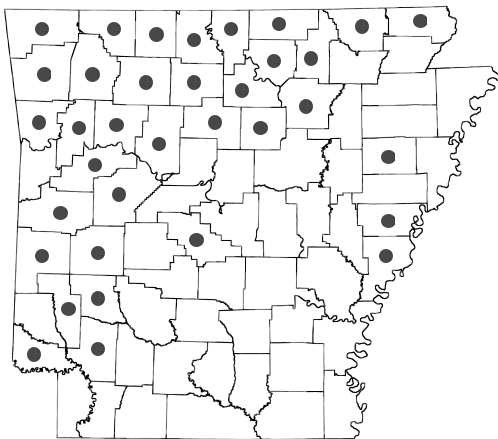
CYPERACEAE
Carex hystericina Muhl. ex Willd.
 porcupine sedge



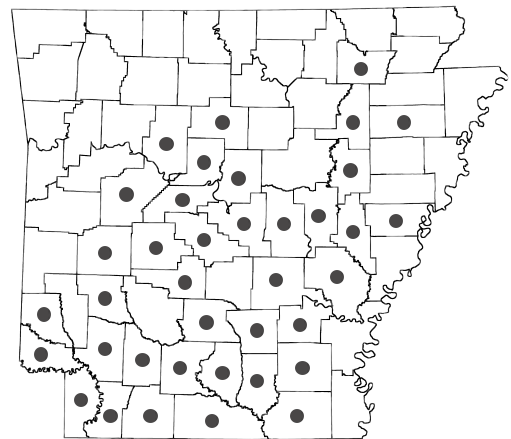
CYPERACEAE
Carex interior L.H. Bailey
 inland star sedge



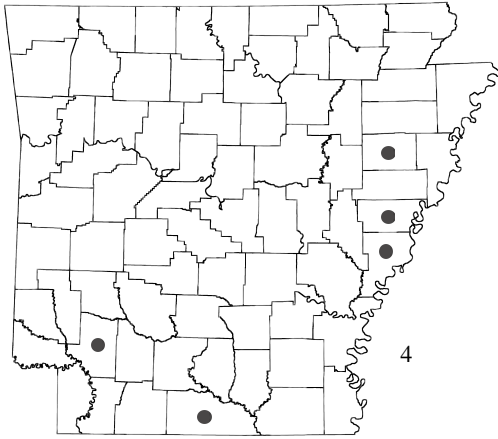
CYPERACEAE
Carex intumescens Rudge
 bladder sedge



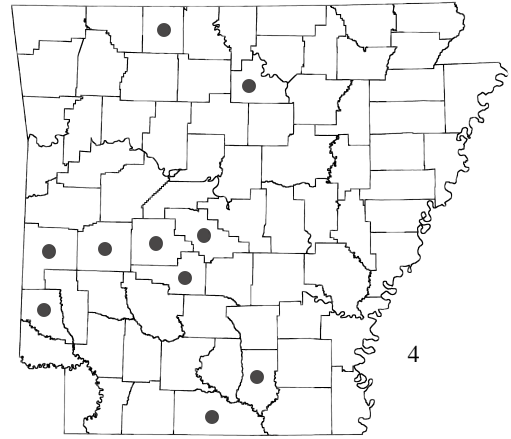
CYPERACEAE
Carex jamesii Schwein.
 James' sedge



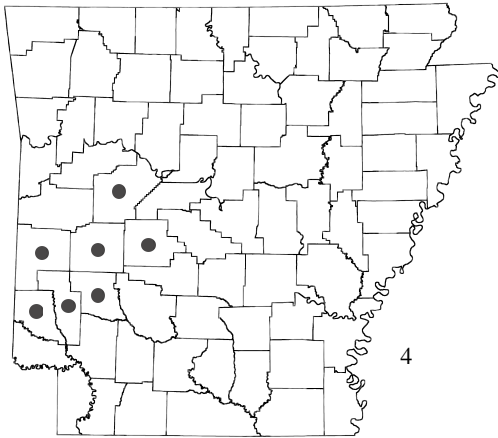
CYPERACEAE
Carex jorii L.H. Bailey
 Joor's sedge



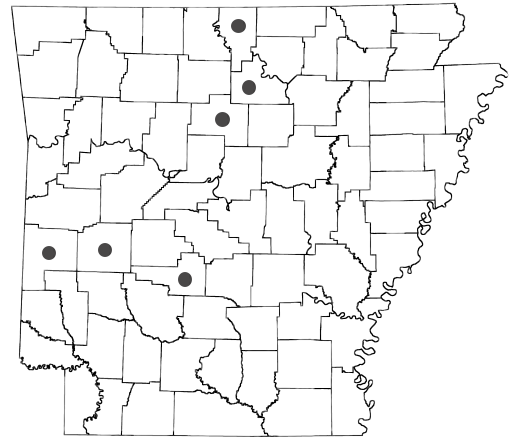
CYPERACEAE
Carex kraliana Naczi & Bryson
 Kral's sedge



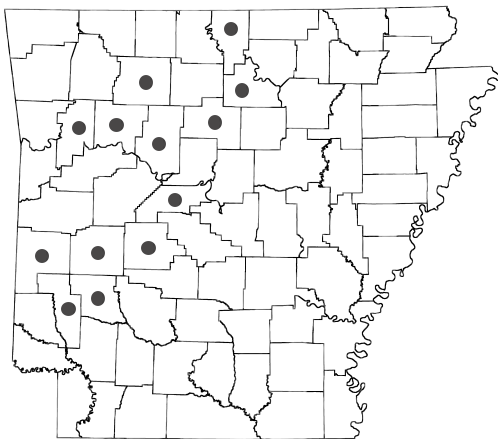
CYPERACEAE
Carex laevivaginata (Kük.) Mack. in Britton & A.Br.
 smooth-sheath sedge



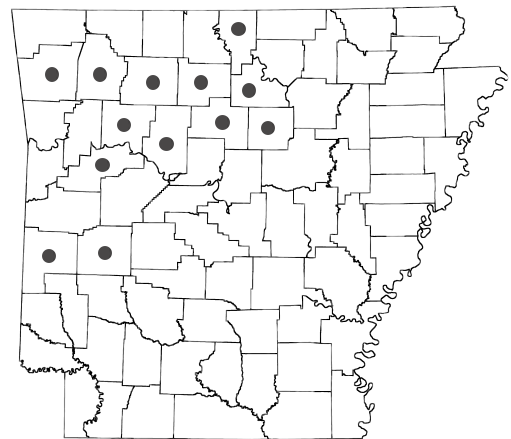
CYPERACEAE
Carex latebracteata Waterf.
 Waterfall's sedge



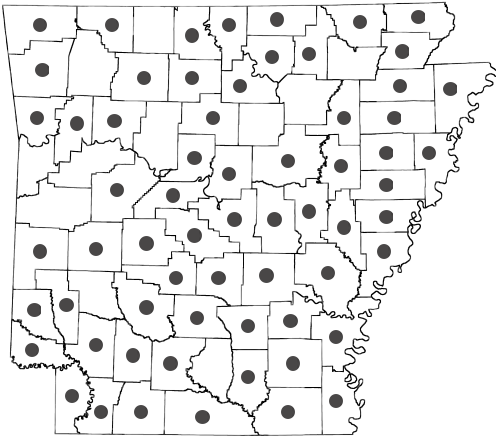
CYPERACEAE
Carex laxiculmis Schwein.
var. copulata (L.H.Bailey) Fernald
 sedge



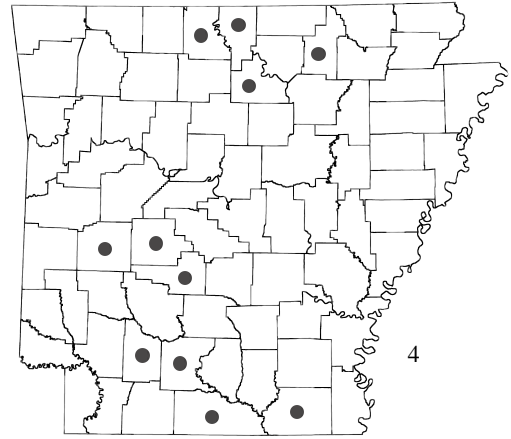
CYPERACEAE
Carex laxiculmis Schwein.
var. laxiculmis
 sedge



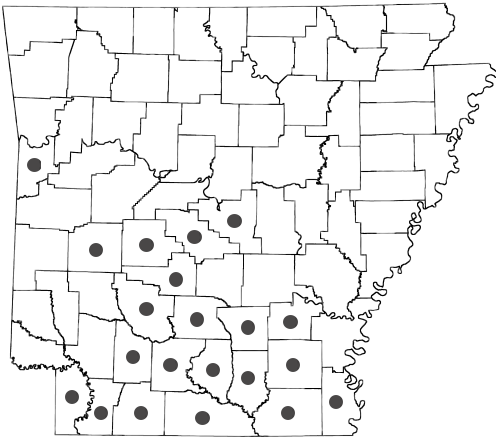
CYPERACEAE
Carex laxiflora Lam. in Lam. et al.
 sedge



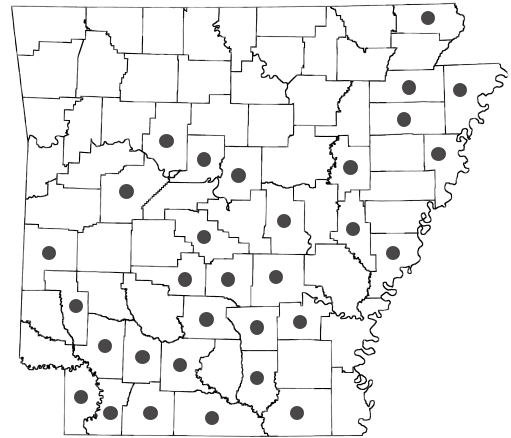
CYPERACEAE
Carex leavenworthii Dewey
 Leavenworth's sedge



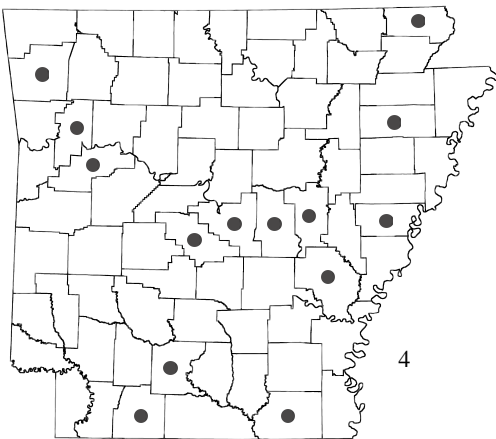
CYPERACEAE
Carex leptalea Wahlenb.
 bristly-stalk sedge



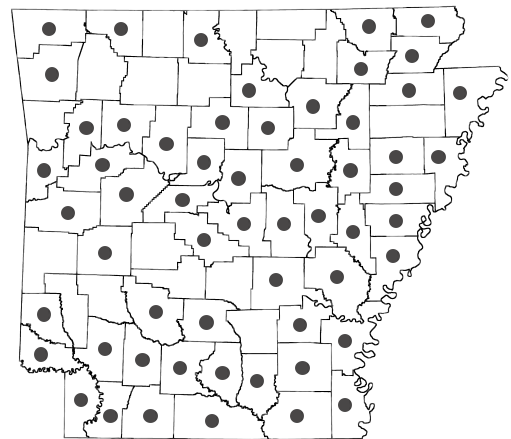
CYPERACEAE
Carex longii Mack.
 Long's sedge



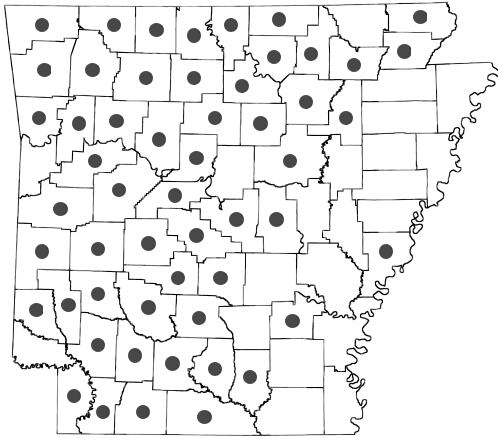
CYPERACEAE
Carex louisianica L.H.Bailey
 Louisiana sedge



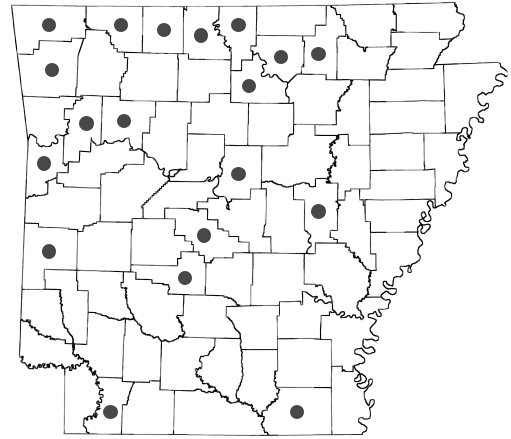
CYPERACEAE
Carex lupuliformis Sartwell ex Dewey
 false hop sedge



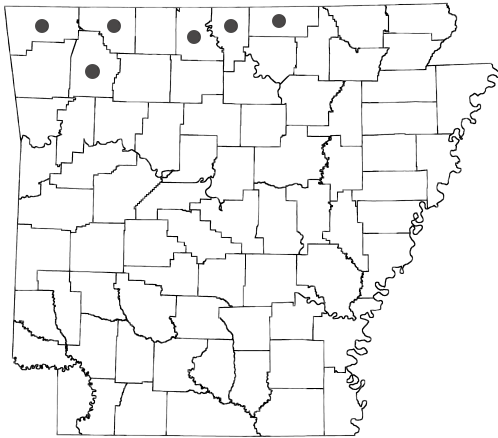
CYPERACEAE
Carex lupulina Muhl. ex Willd.
 hop sedge



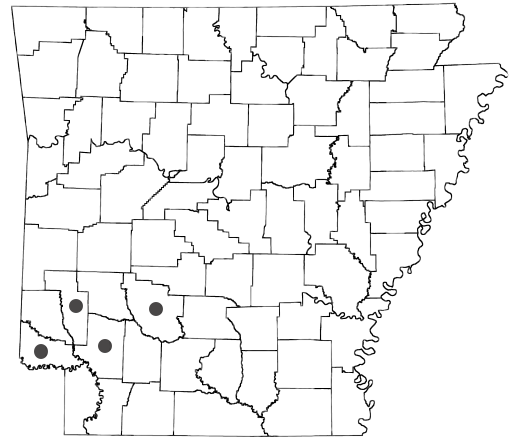
CYPERACEAE
Carex lurida Wahlenb.
sedge



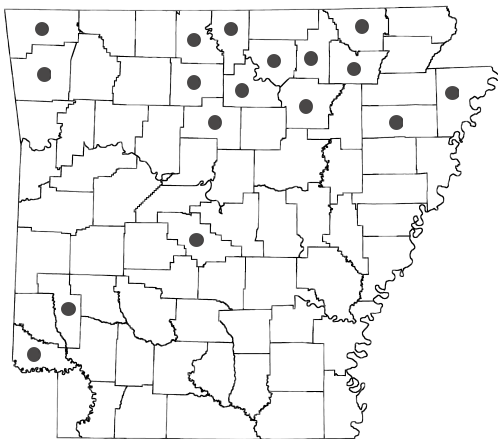
CYPERACEAE
Carex meadii Dewey
Mead's sedge



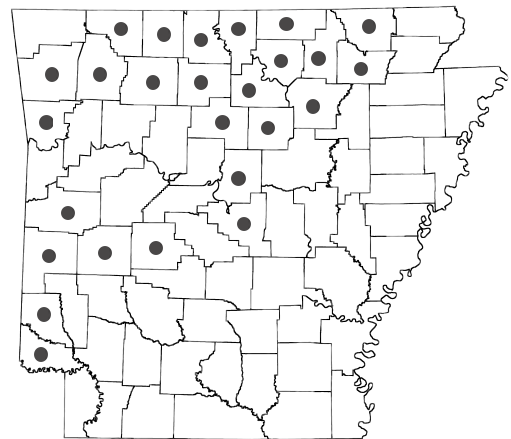
CYPERACEAE
Carex mesochorea Mack.
sedge



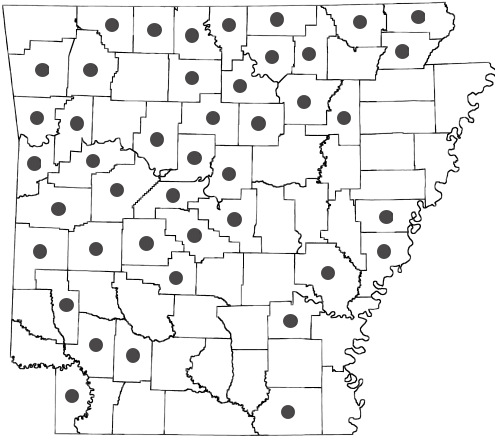
CYPERACEAE
Carex microdonta Torr. & Hook.
little-tooth sedge



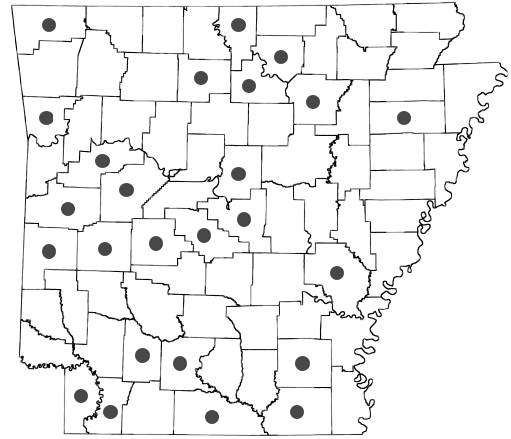
CYPERACEAE
Carex molesta Mack. ex Bright
sedge



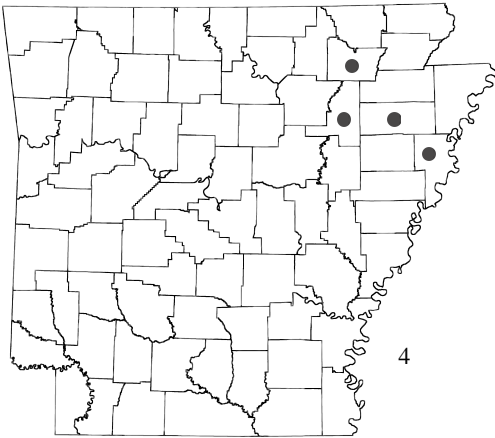
CYPERACEAE
Carex molestiformis Reznicek & P.E.Rothr.
sedge



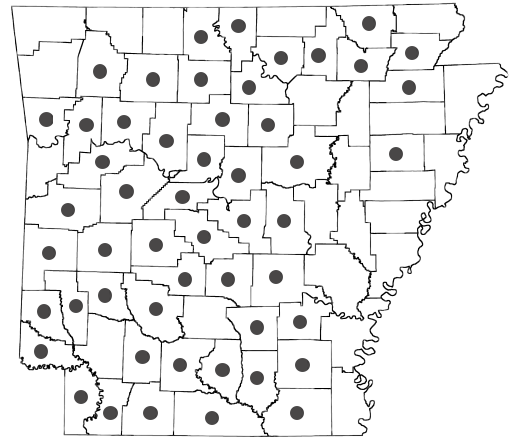
CYPERACEAE
Carex muehlenbergii Schkuhr ex Willd.
var. enervis Boott
 Muhlenberg's sedge



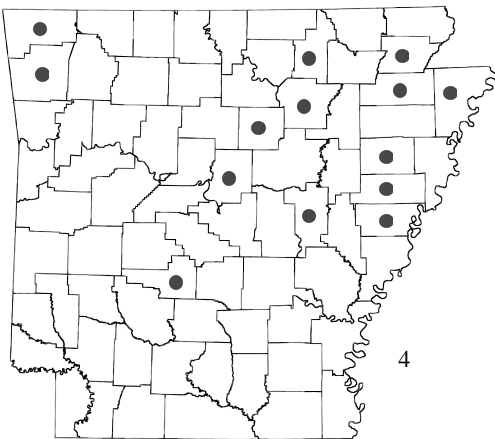
CYPERACEAE
Carex muehlenbergii Schkuhr ex Willd.
var. muehlenbergii
 Muhlenberg's sedge



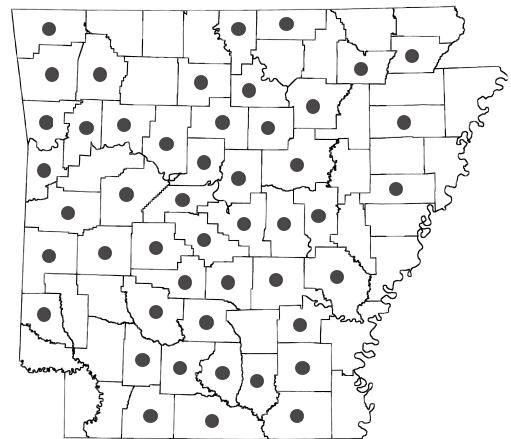
CYPERACEAE
Carex muskingumensis Schwein.
 palm sedge



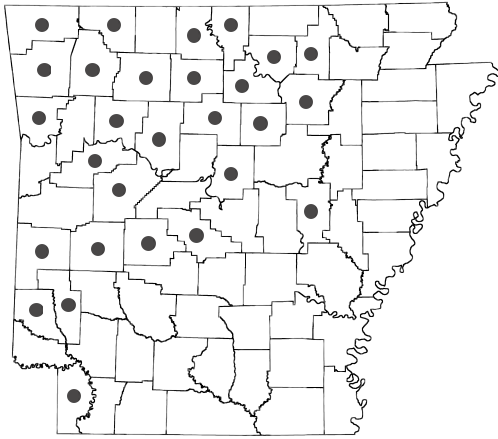
CYPERACEAE
Carex nigromarginata Schwein.
 sedge
 See *Appendix I* for infraspecific taxa and species status.



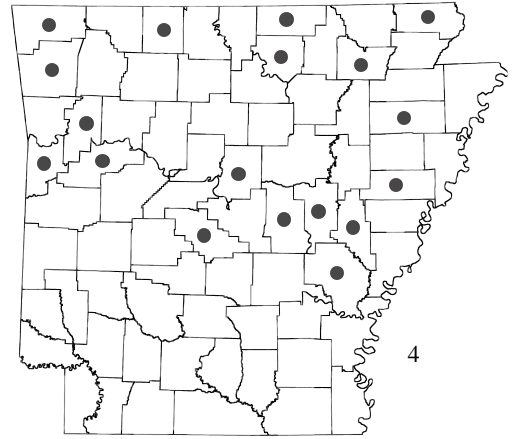
CYPERACEAE
Carex normalis Mack.
 spreading oval sedge



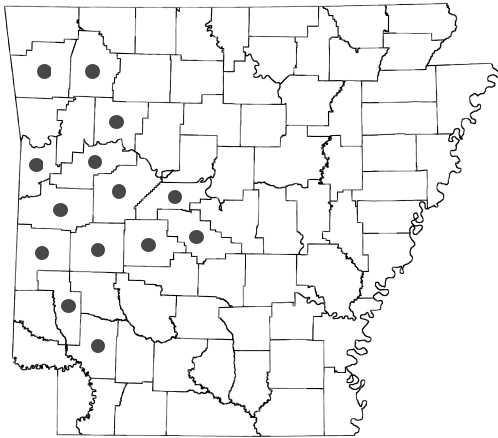
CYPERACEAE
Carex oklahomensis Mack.
 Oklahoma sedge



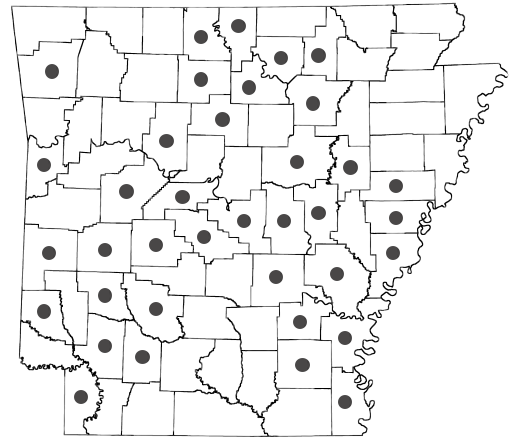
CYPERACEAE
Carex oligocarpa Schkuhr ex Willd.
 sedge



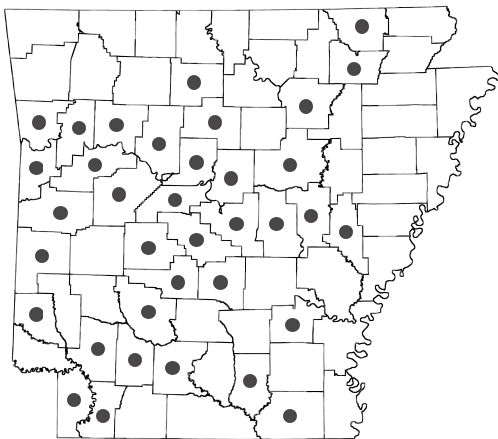
CYPERACEAE
Carex opaca (F.J.Herm.) P.E.Rothr. & Reznicek
 opaque prairie sedge



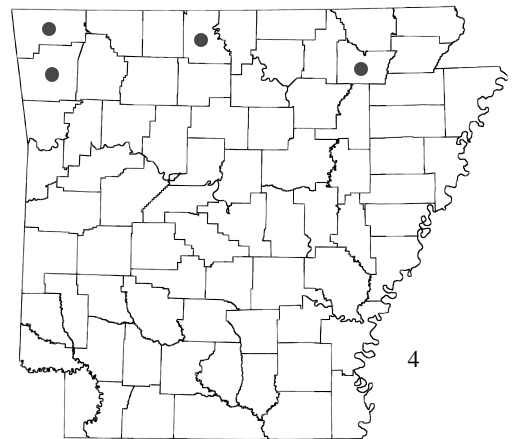
CYPERACEAE
Carex ouachitana Kral, Manhart, & Bryson
 Ouachita sedge



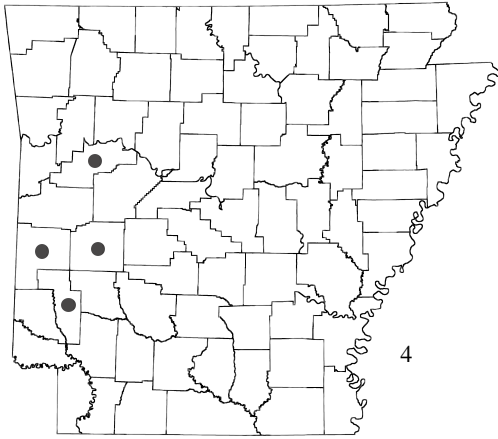
CYPERACEAE
Carex oxylepis Torr. & Hook.
 sharp-scale sedge



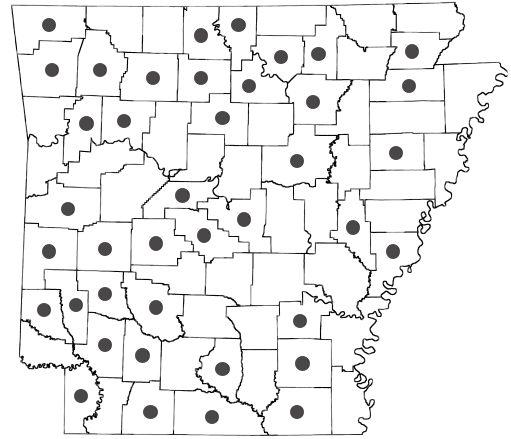
CYPERACEAE
Carex ozarkana P.E.Rothr. & Reznicek
 Ozark sedge



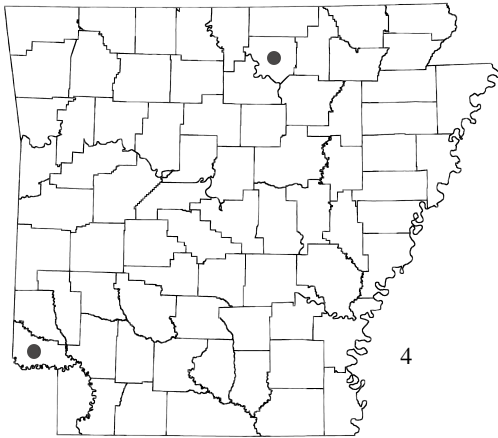
CYPERACEAE
Carex pellita Muhl. ex Willd.
 woolly sedge



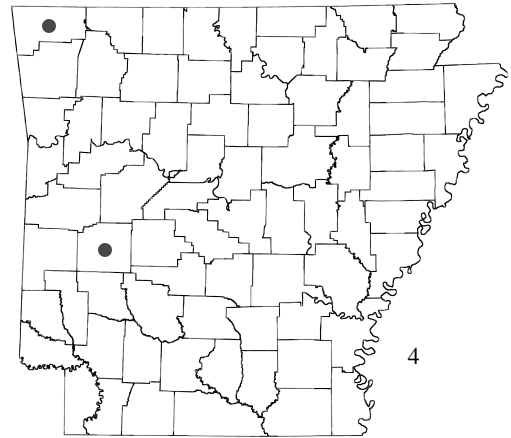
CYPERACEAE
Carex pennsylvanica Lam. in Lam. et al.
 Pennsylvania sedge



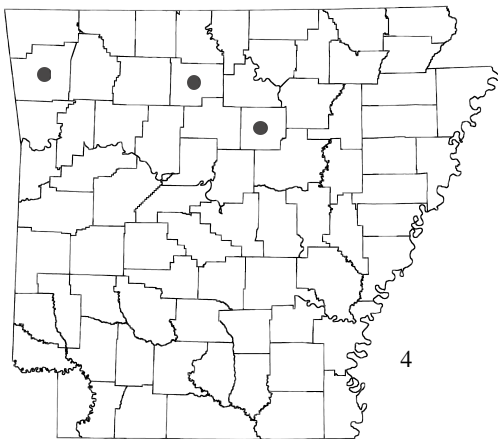
CYPERACEAE
Carex planispicata Naczi
 sedge



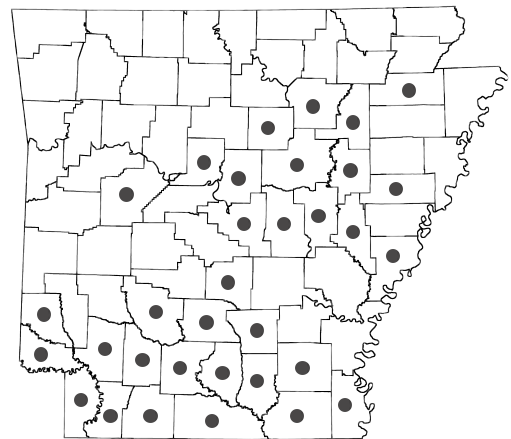
CYPERACEAE
Carex planostachys Kunze
 cedar sedge



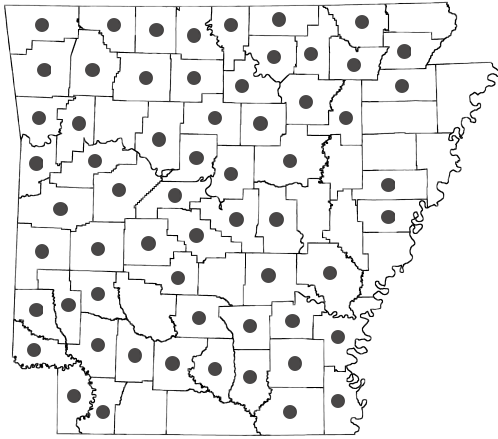
CYPERACEAE
Carex prasina Wahlenb.
 drooping sedge



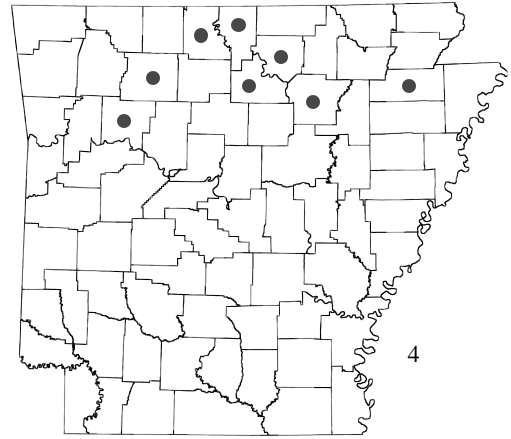
CYPERACEAE
Carex radiata (Wahlenb.) Small
 eastern star sedge



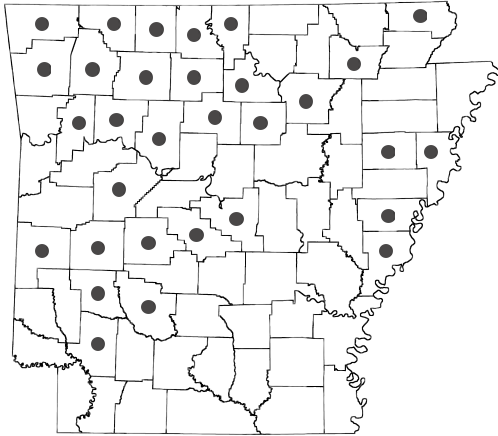
CYPERACEAE
Carex reniformis (L.H.Bailey) Small
 sedge



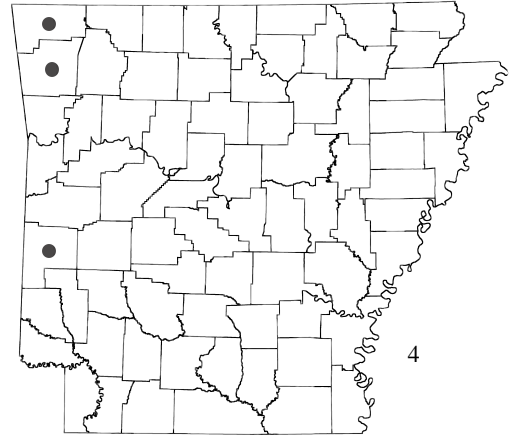
CYPERACEAE
Carex retroflexa Muhl. ex Willd.
sedge



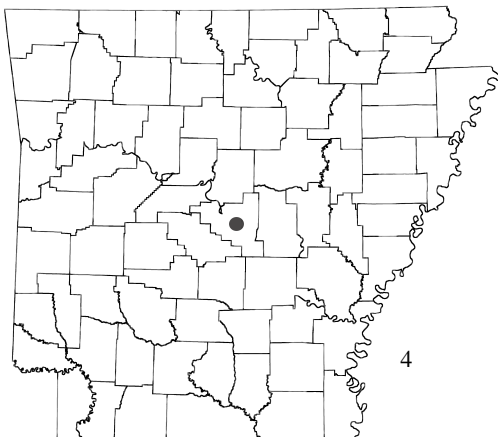
CYPERACEAE
Carex reznicekii Werier
Reznicek's sedge



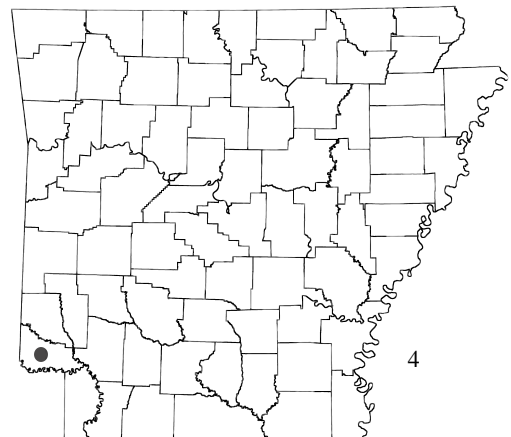
CYPERACEAE
Carex rosea Schkuhr ex Willd.
sedge



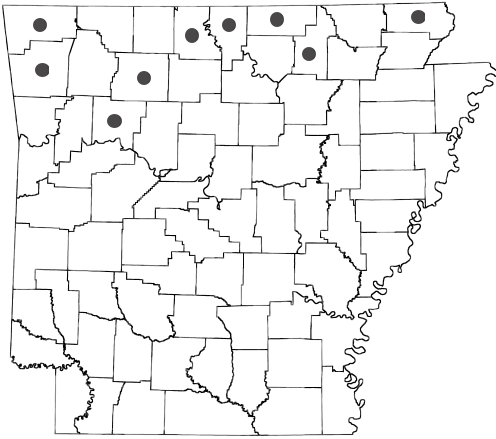
CYPERACEAE
Carex scoparia Schkuhr ex Willd.
var. scoparia
pointed broom sedge



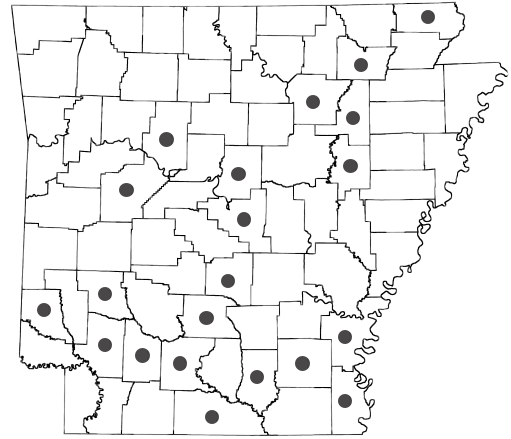
CYPERACEAE
Carex seorsa Howe in H.C.Gordinier & Howe
swamp star sedge



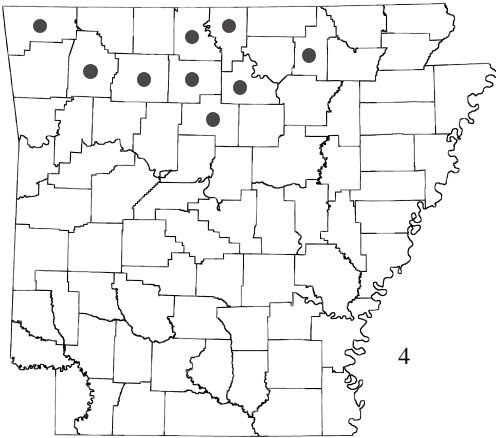
CYPERACEAE
Carex shinersii P.E.Rothr. & Reznicek
Shinners' sedge



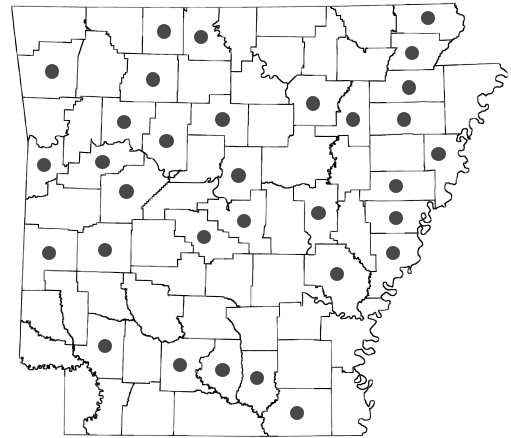
CYPERACEAE
Carex shortiana Dewey
 Short's sedge



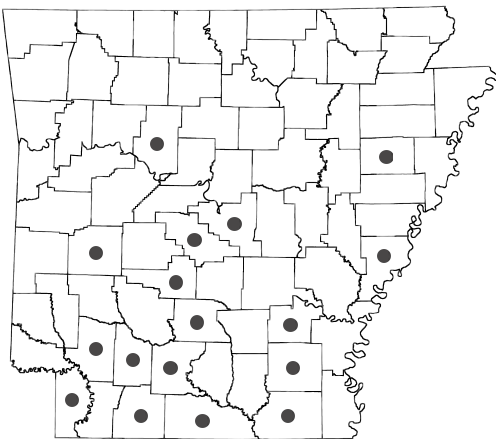
CYPERACEAE
Carex socialis Mohlenbr. & Schwegman
 sedge



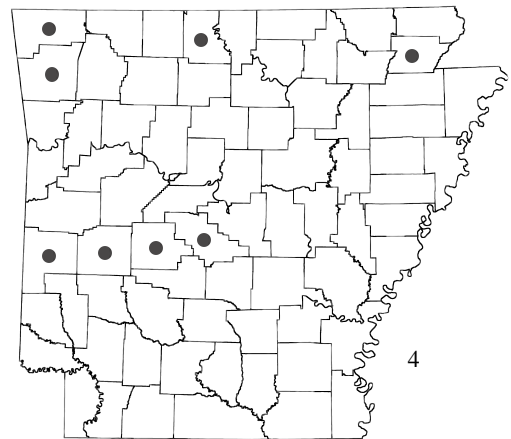
CYPERACEAE
Carex sparganioides Muhl. ex Willd.
 bur-reed sedge



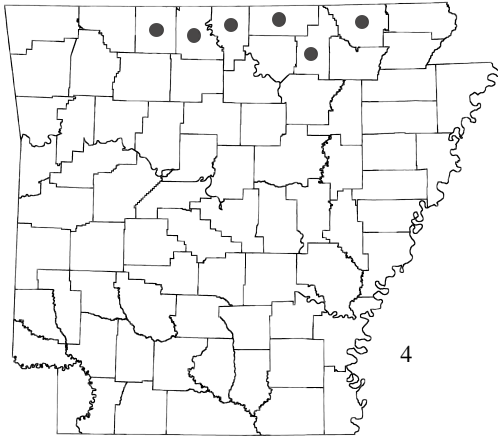
CYPERACEAE
Carex squarrosa L.
 sedge



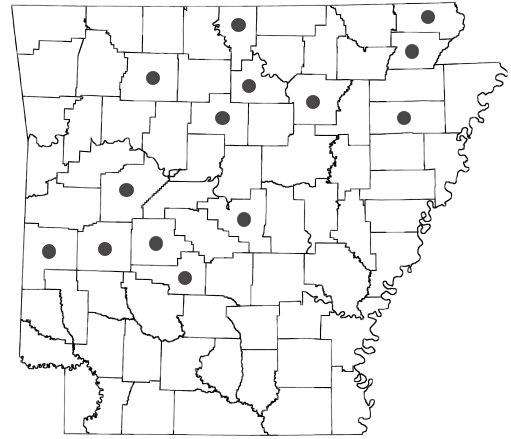
CYPERACEAE
Carex striatula Michx.
 sedge



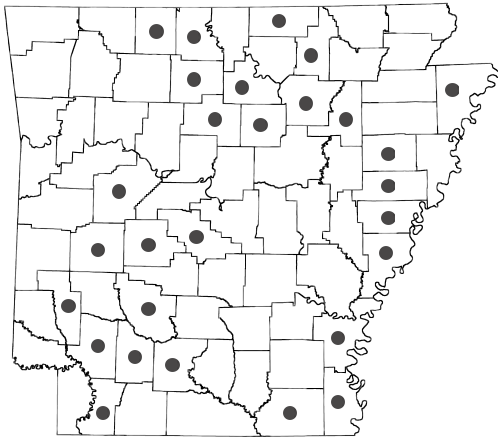
CYPERACEAE
Carex stricta Lam. in Lam. et al.
 tussock sedge



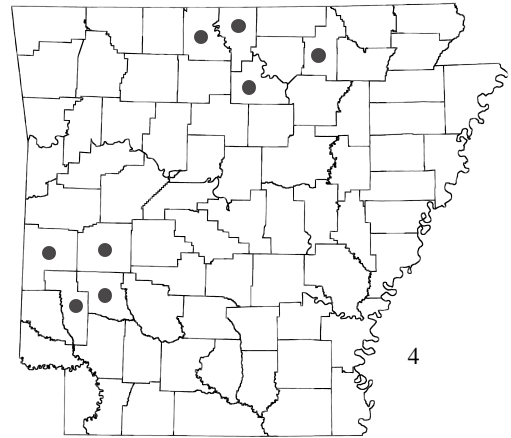
CYPERACEAE
Carex suberecta (Olney) Britton
 prairie straw sedge



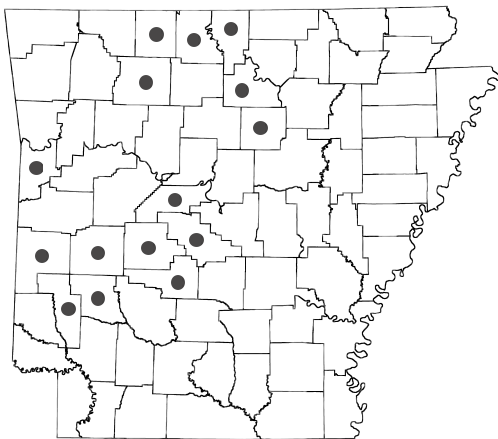
CYPERACEAE
Carex swanii (Fernald) Mack.
 Swan's sedge



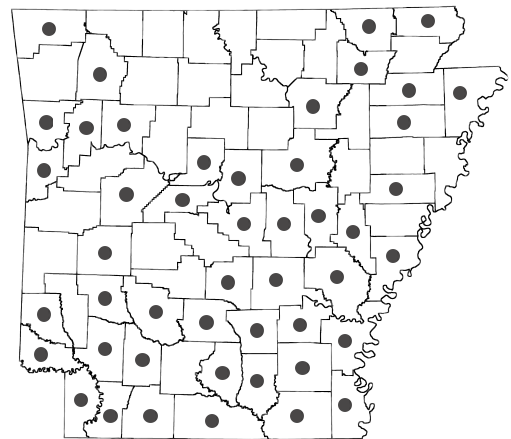
CYPERACEAE
Carex texensis (Torr. ex L.H.Bailey) L.H.Bailey
 Texas sedge



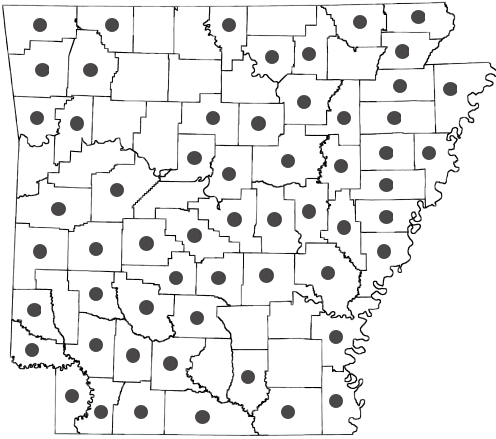
CYPERACEAE
Carex timida Naczi & B.A.Ford
 timid sedge



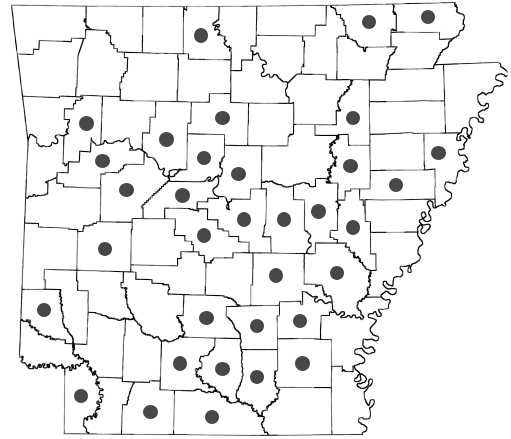
CYPERACEAE
Carex torta Boott ex Tuck.
 twisted sedge



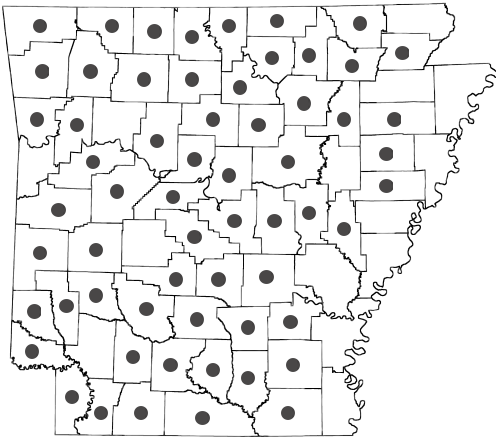
CYPERACEAE
Carex triangularis Boeck.
 sedge



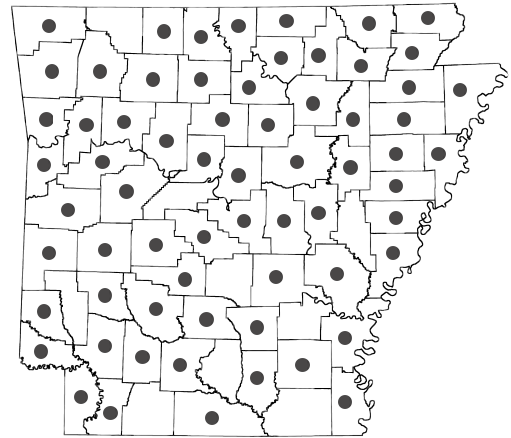
CYPERACEAE
Carex tribuloides Wahlenb.
var. sangamonensis Clokey
 sedge



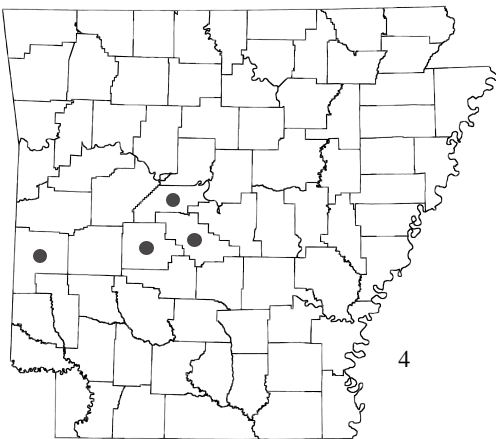
CYPERACEAE
Carex typhina Michx.
 cat-tail sedge



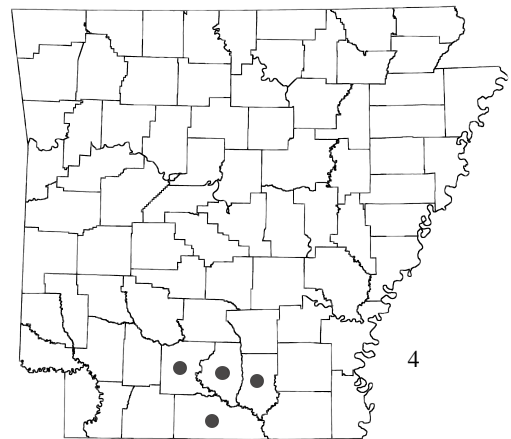
CYPERACEAE
Carex umbellata Schkuhr ex Willd.
 sedge



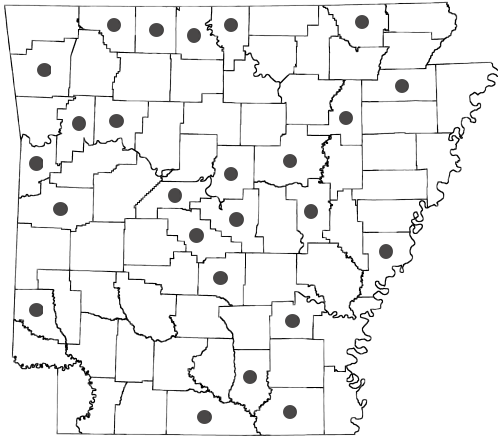
CYPERACEAE
Carex vulpinoidea Michx.
 fox sedge



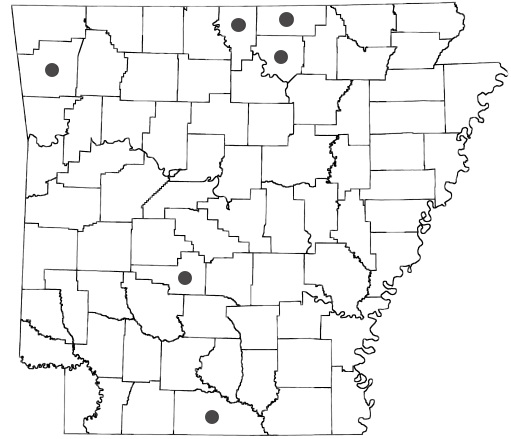
CYPERACEAE
Carex willdenowii Schkuhr ex Willd.
 Willdenow's sedge



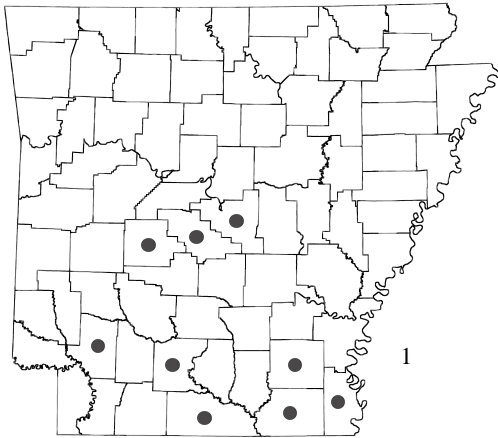
CYPERACEAE
Cladium jamaicense Crantz
 saw-grass



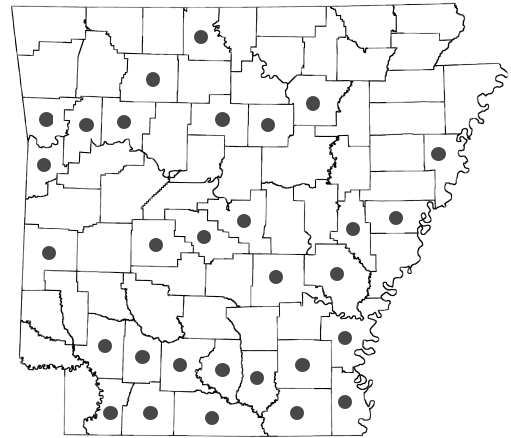
CYPERACEAE
***Cyperus acuminatus* Torr. & Hook.**
 flatsedge



CYPERACEAE
***Cyperus bipartitus* Torr.**
 flatsedge



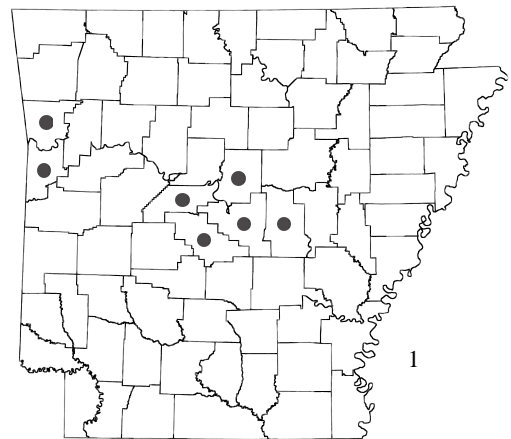
CYPERACEAE
***Cyperus compressus* L.**
 flatsedge



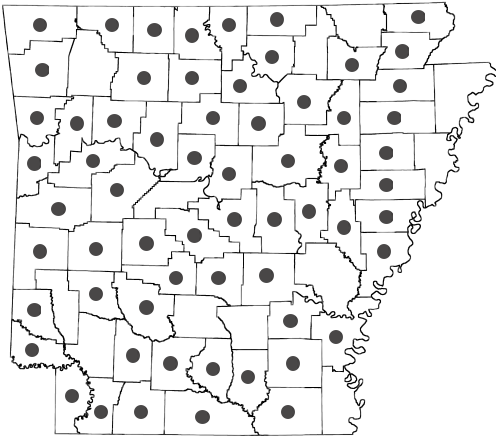
CYPERACEAE
***Cyperus croceus* Vahl**
 Baldwin's flatsedge



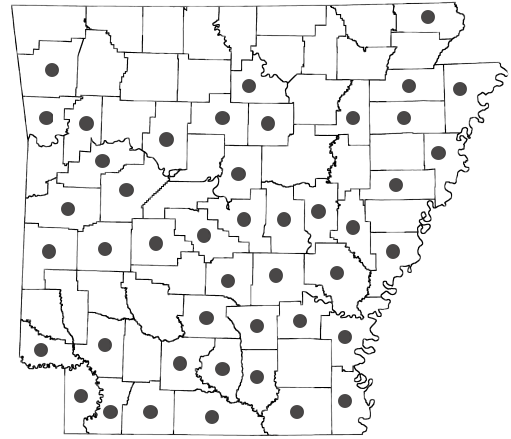
CYPERACEAE
***Cyperus cuspidatus* Kunth in Humb. et al.**
 flatsedge



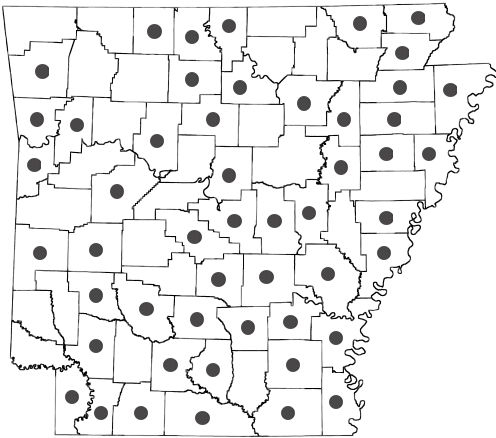
CYPERACEAE
***Cyperus difformis* L.**
 variable flatsedge



CYPERACEAE
Cyperus echinatus (L.) A.W. Wood
 globe flatsedge

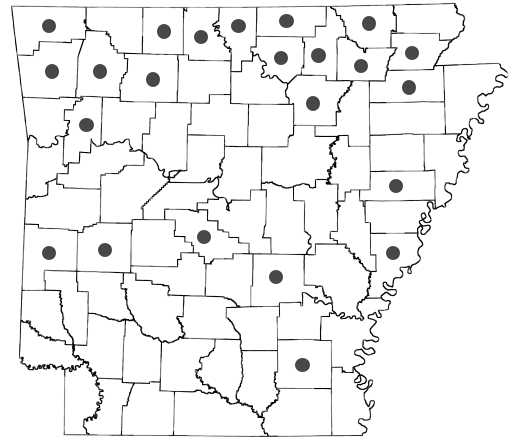


CYPERACEAE
Cyperus erythrorhizos Muhl.
 red-root flatsedge

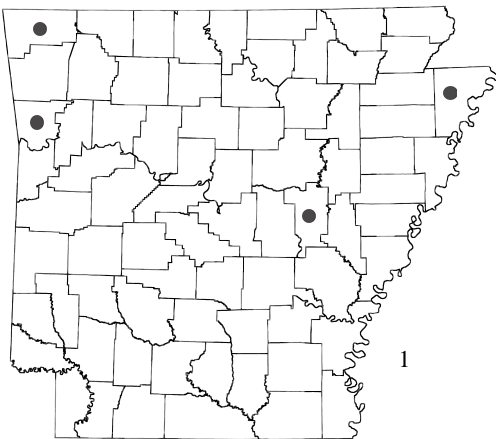


CYPERACEAE
Cyperus esculentus L.
 yellow nutsedge, chufa

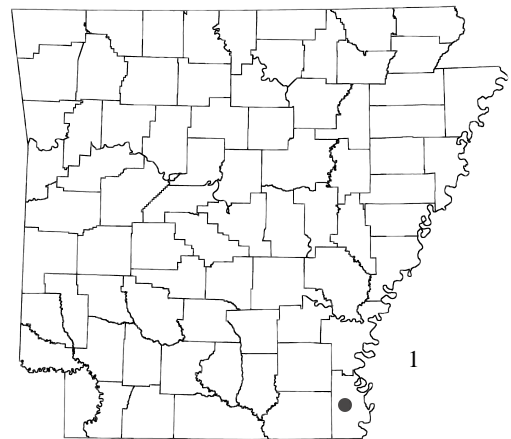
See *Appendix I* for infraspecific taxa and species status.



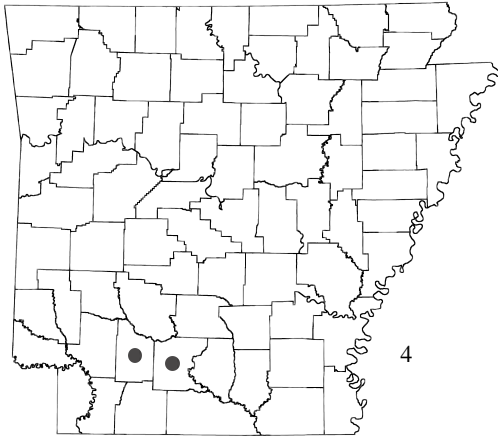
CYPERACEAE
Cyperus flavescens L.
 yellow flatsedge



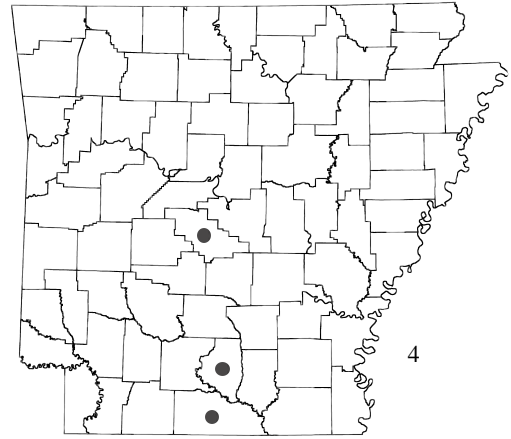
CYPERACEAE
Cyperus flavicomus Michx.
 flatsedge



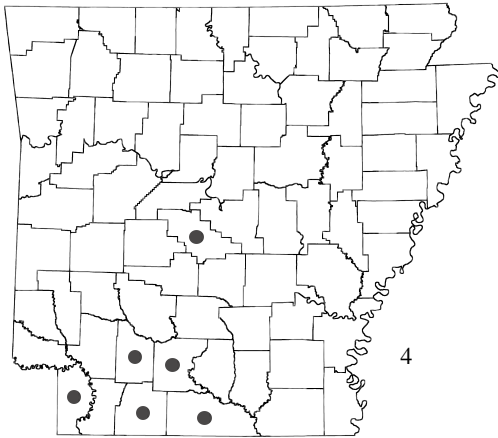
CYPERACEAE
Cyperus fuscus L.
 brown galingale, brown flatsedge



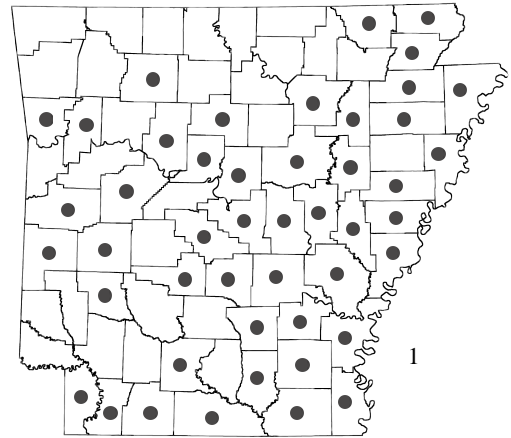
CYPERACEAE
***Cyperus grayoides* Mohlenbr.**
 Illinois flatsedge



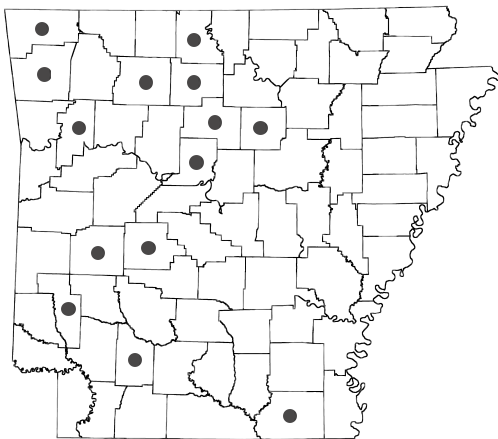
CYPERACEAE
***Cyperus haspan* L.**
 haspan flatsedge



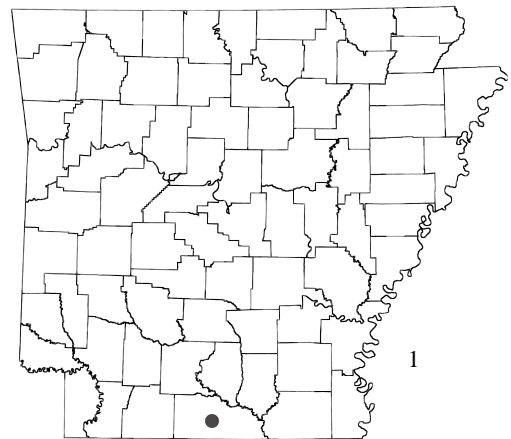
CYPERACEAE
***Cyperus hystricinus* Fernald**
 bristly flatsedge



CYPERACEAE
***Cyperus iria* L.**
 ricefield flatsedge



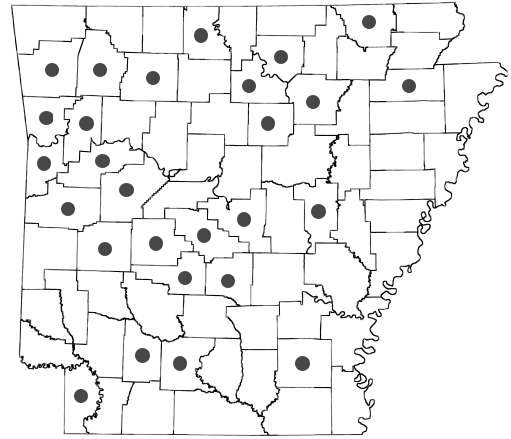
CYPERACEAE
***Cyperus lancastriensis* Porter in A.Gray**
 flatsedge



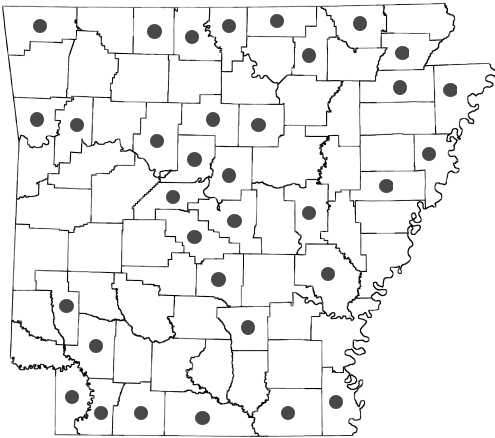
CYPERACEAE
***Cyperus lanceolatus* Poir. in Lam. et al.**
 flatsedge



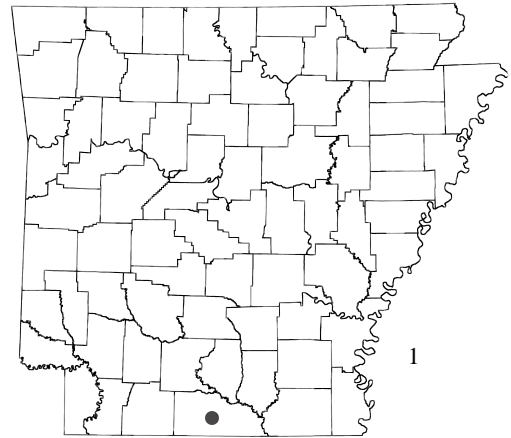
CYPERACEAE
Cyperus lecontei Torr. ex Steud.
 Le Conte's flatsedge



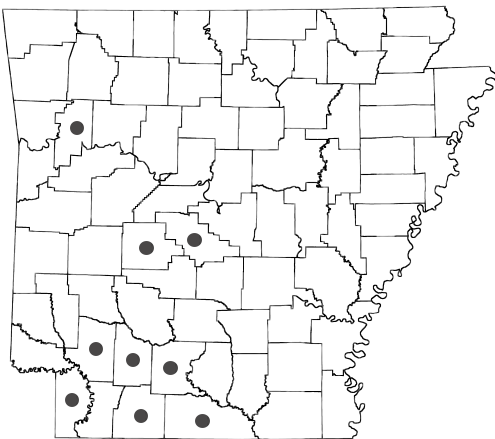
CYPERACEAE
Cyperus lupulinus (Spreng.) Marcks
 flatsedge



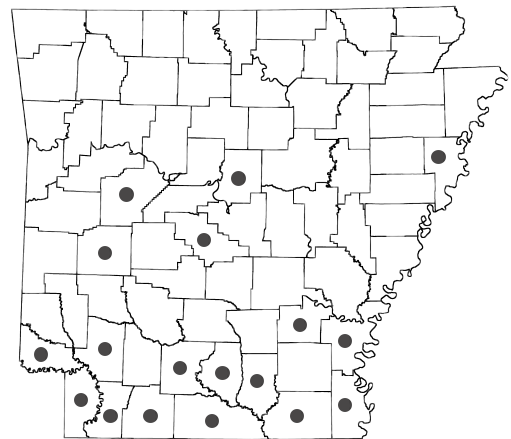
CYPERACEAE
Cyperus odoratus L.
 rusty flatsedge



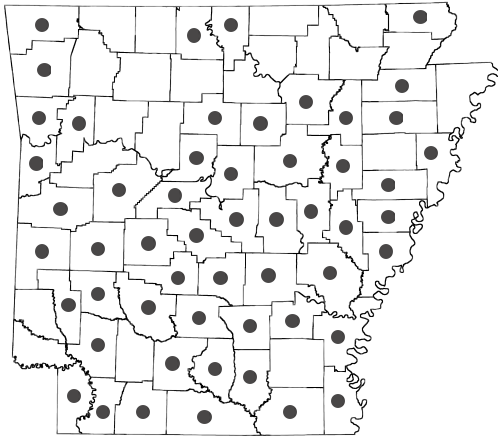
CYPERACEAE
Cyperus oxylepis Nees ex Steud.
 flatsedge



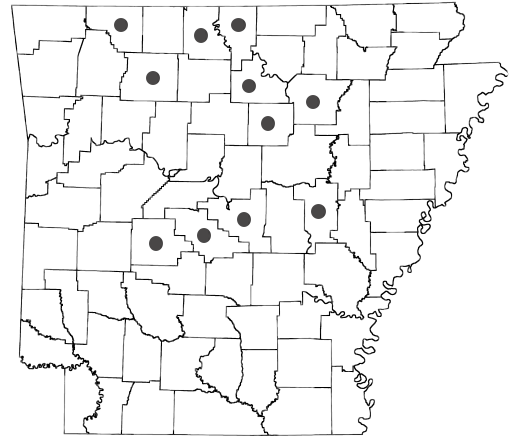
CYPERACEAE
Cyperus plukenetii Fernald
 Plukenet's flatsedge



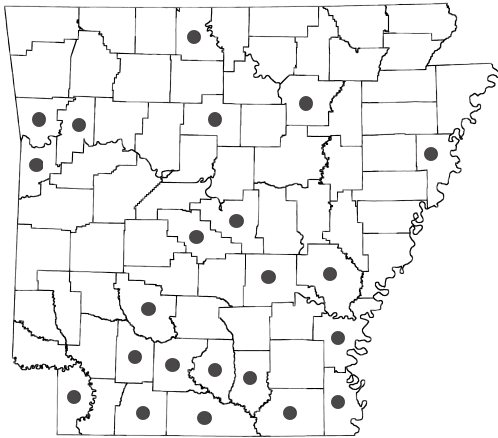
CYPERACEAE
Cyperus polystachyos Rotth.
 flatsedge



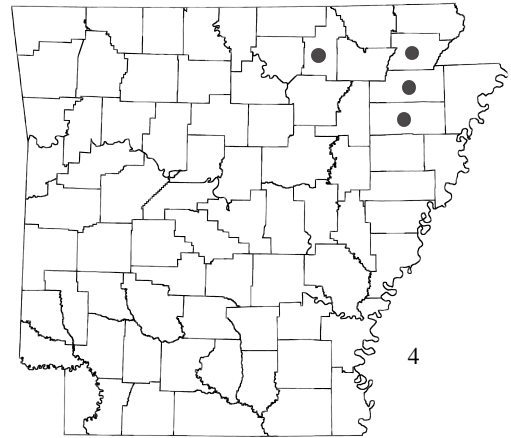
CYPERACEAE
Cyperus pseudovegetus Steud.
 marsh flatsedge



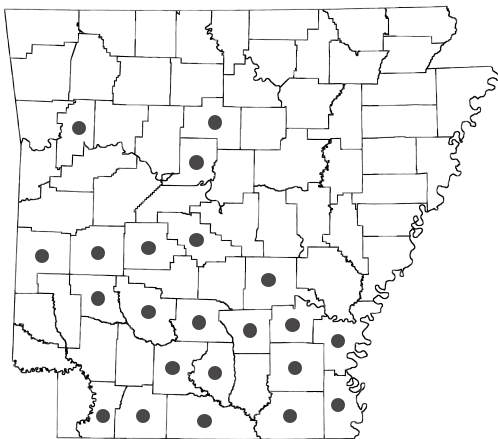
CYPERACEAE
Cyperus refractus Engelm. ex Boeck.
 flatsedge



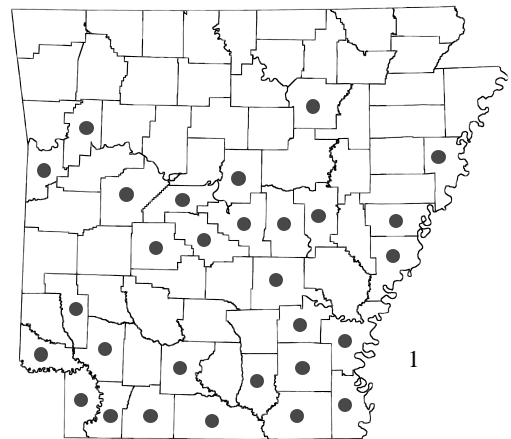
CYPERACEAE
Cyperus retroflexus Buckley
 flatsedge



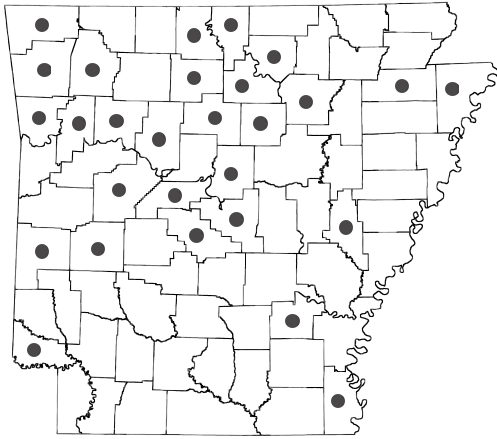
CYPERACEAE
Cyperus retrofractus (L.) Torr. in J. Carey
 rough flatsedge



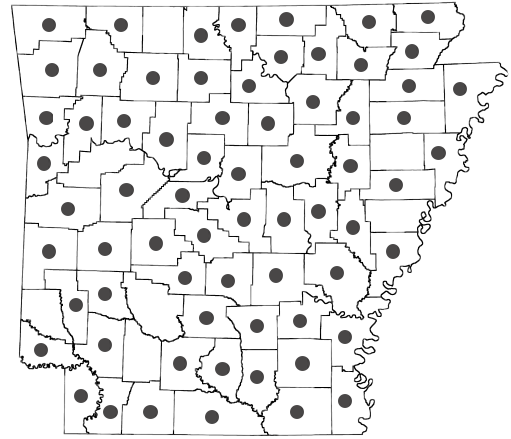
CYPERACEAE
Cyperus retrorsus Chapm.
 flatsedge



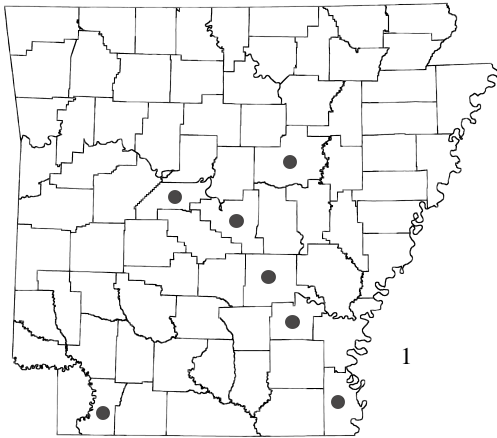
CYPERACEAE
Cyperus rotundus L.
 purple nutsedge, purple flatsedge



CYPERACEAE
Cyperus squarrosus L.
flatsedge



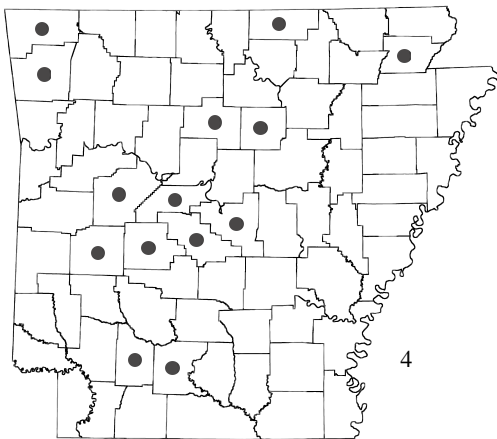
CYPERACEAE
Cyperus strigosus L.
false nutsedge, flatsedge



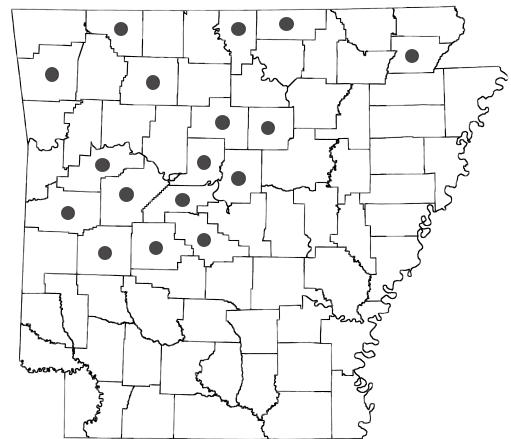
CYPERACEAE
Cyperus surinamensis Rottb.
tropical flatsedge



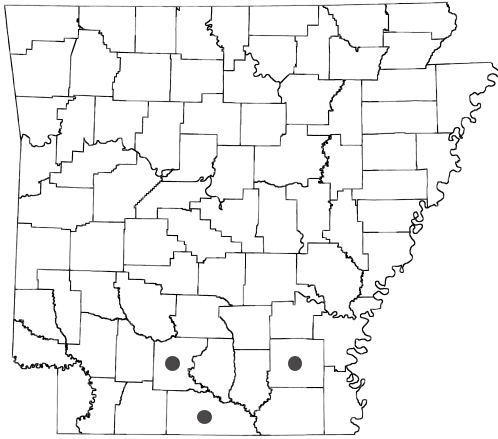
CYPERACEAE
Cyperus virens Michx.
flatsedge



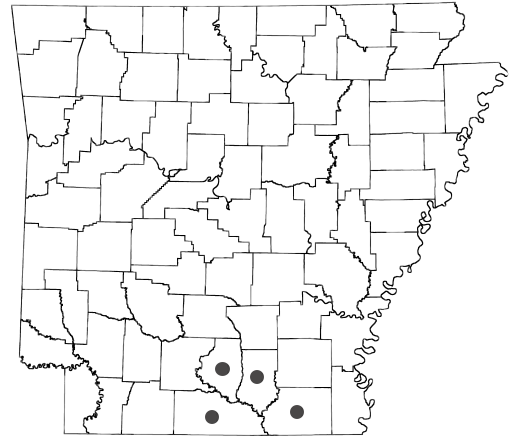
CYPERACEAE
Dulichium arundinaceum (L.) Britton
var. arundinaceum
three-way sedge



CYPERACEAE
Eleocharis acicularis (L.) Roem. & Schult. in Roem. et al.
least spike-rush, slender spike-rush



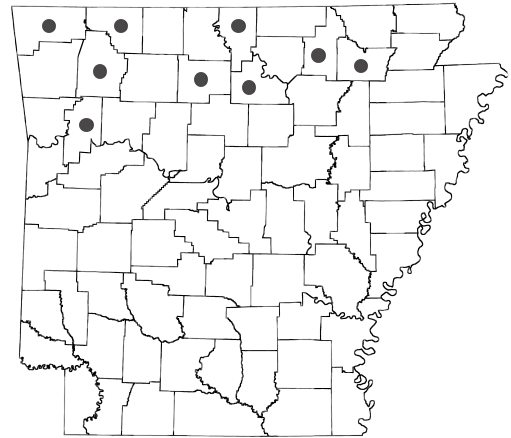
CYPERACEAE
Eleocharis baldwinii (Torr.) Chapm.
Baldwin's spike-rush



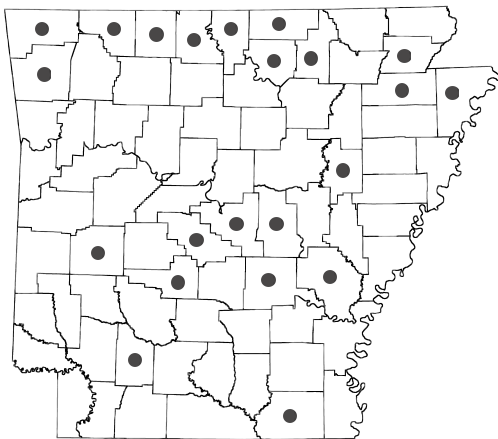
CYPERACEAE
Eleocharis brittonii Svenson ex Small
Britton's spike-rush



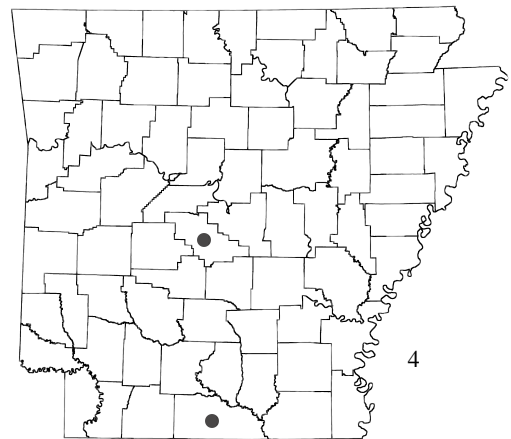
CYPERACEAE
Eleocharis cellulosa Torr.
Gulf Coast spike-rush



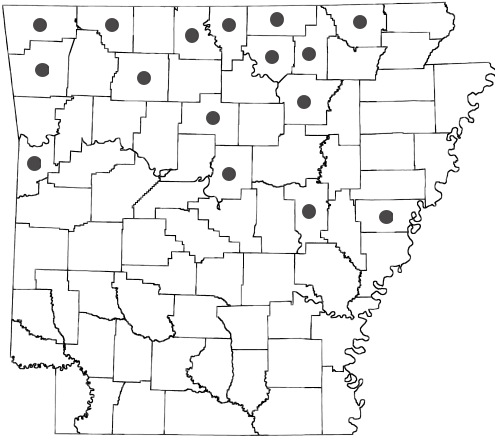
CYPERACEAE
Eleocharis compressa Sull.
var. compressa
flat-stem spike-rush



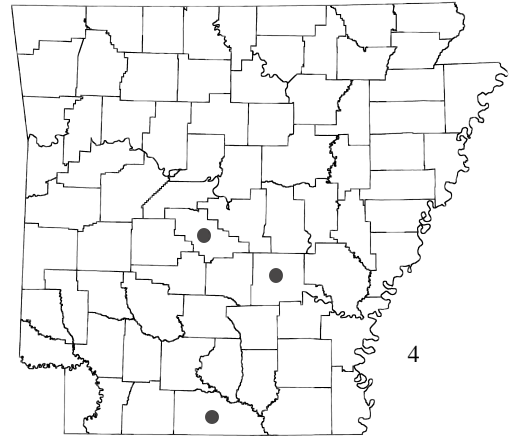
CYPERACEAE
Eleocharis engelmannii Steud.
Engelmann's spike-rush



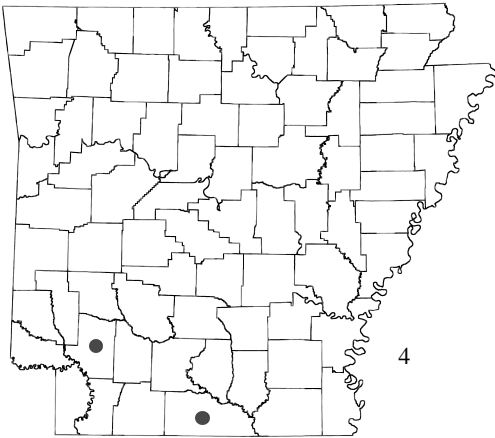
CYPERACEAE
Eleocharis equisetoides (Elliott) Torr.
horsetail spike-rush



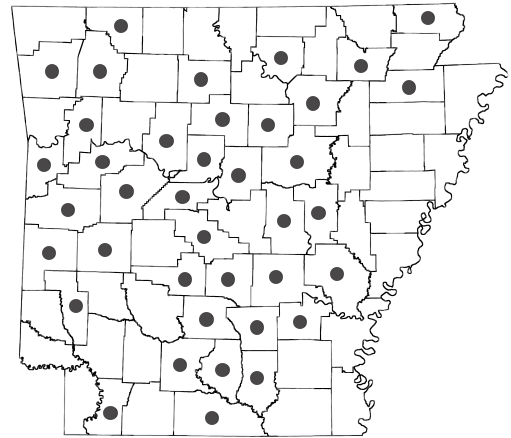
CYPERACEAE
Eleocharis erythropoda Steud.
 spike-rush



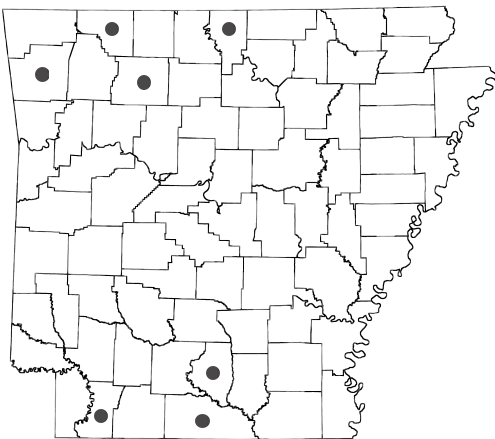
CYPERACEAE
Eleocharis flavescens (Poir.) Urb.
var. flavescens
 yellow spike-rush



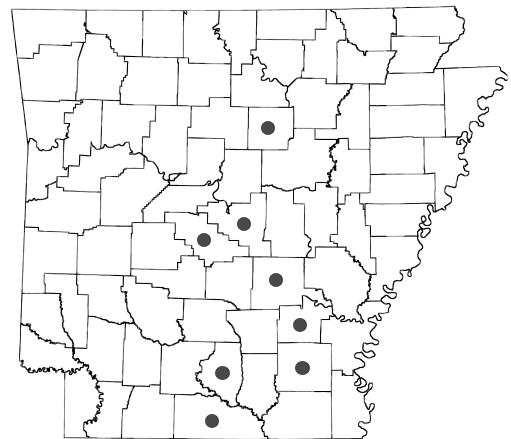
CYPERACEAE
Eleocharis flavescens (Poir.) Urb.
var. olivacea (Torr.) Gleason
 bright-green spike-rush



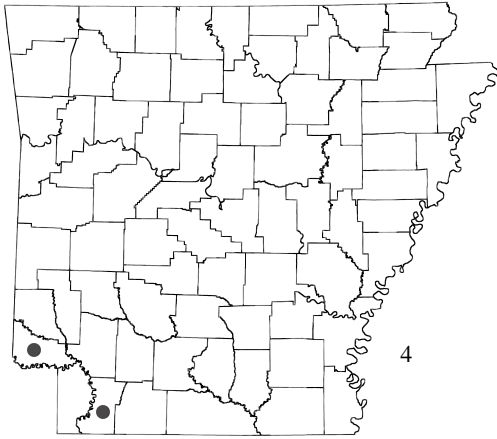
CYPERACEAE
Eleocharis lanceolata Fernald
 spike-rush



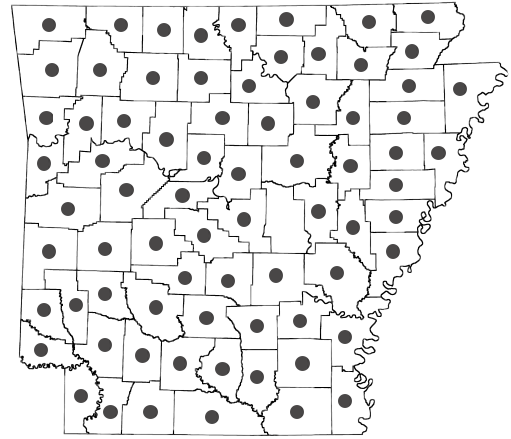
CYPERACEAE
Eleocharis macrostachya Britton in Small
 spike-rush



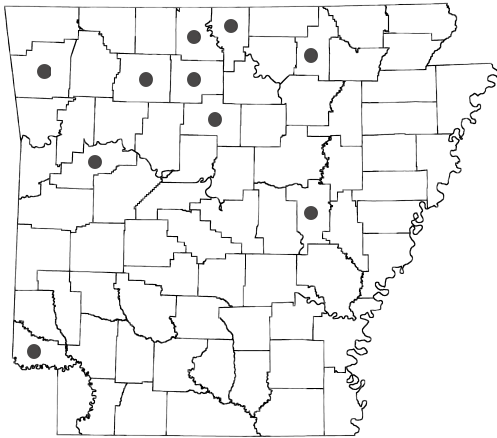
CYPERACEAE
Eleocharis microcarpa Torr.
var. filiculmis Torr.
 spike-rush



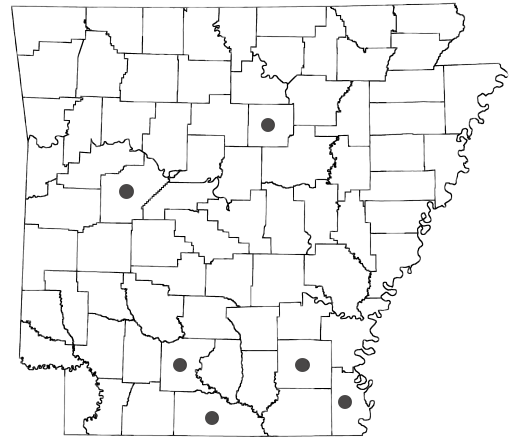
CYPERACEAE
Eleocharis montevidensis Kunth
 sand spike-rush



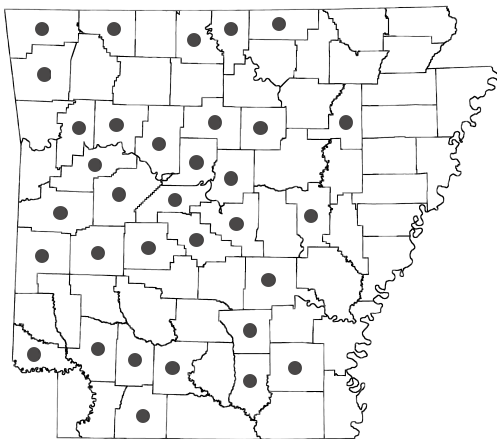
CYPERACEAE
Eleocharis obtusa (Willd.) Schult.
 blunt spike-rush



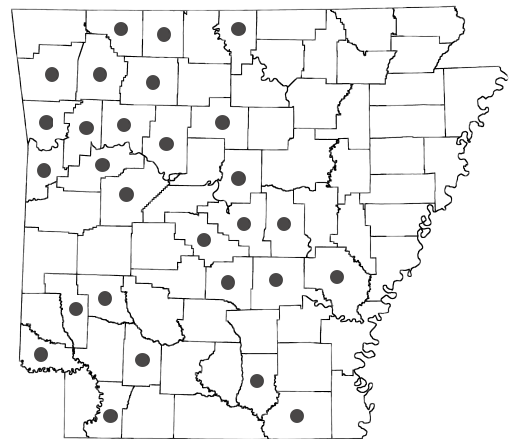
CYPERACEAE
Eleocharis palustris (L.) Roem. & Schult. in Roem. et al.
 spike-rush



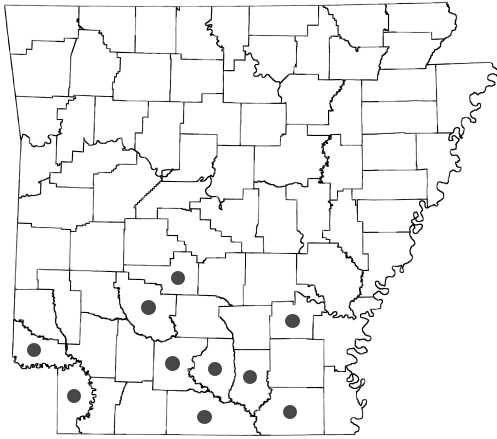
CYPERACEAE
Eleocharis parvula (Roem. & Schult.) Link ex Bluff, Nees & Schauer
 small spike-rush



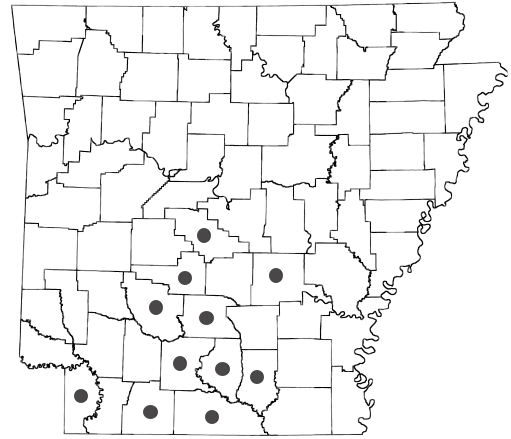
CYPERACEAE
Eleocharis quadrangulata (Michx.) Roem. & Schult. in Roem. et al.
 square-stem spike-rush



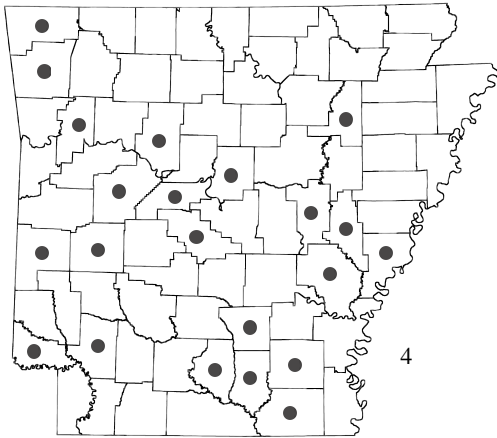
CYPERACEAE
Eleocharis tenuis (Willd.) Schult.
 var. **verrucosa** (Svenson) Svenson
 slender spike-rush



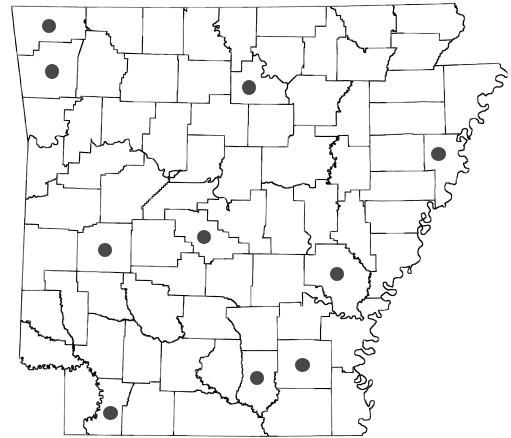
CYPERACEAE
Eleocharis tortilis (Link) Schult.
 twisted spike-rush



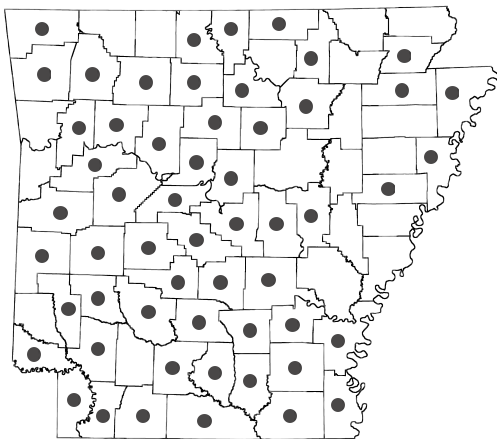
CYPERACEAE
Eleocharis tuberculosa (Michx.) Roem. & Schult. in Roem. et al.
 spike-rush



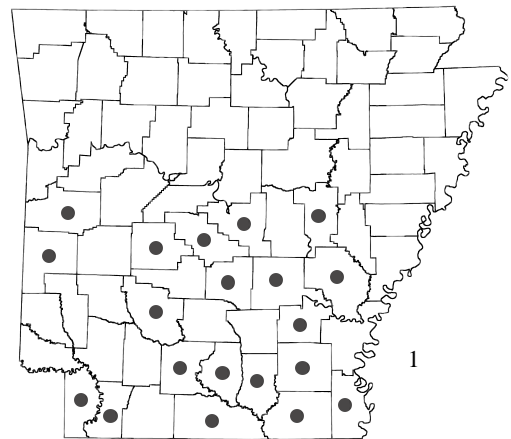
CYPERACEAE
Eleocharis wolffii (A.Gray) A.Gray ex Britton in Patt.
 Wolf's spike-rush



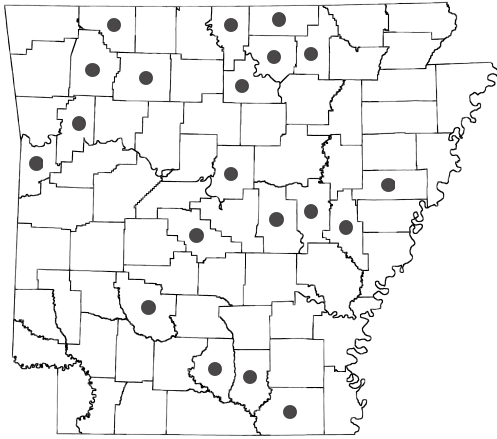
CYPERACEAE
Fimbristylis annua (All.) Roem. & Schult. in Roem. et al.
 fimbry, fimbristylis



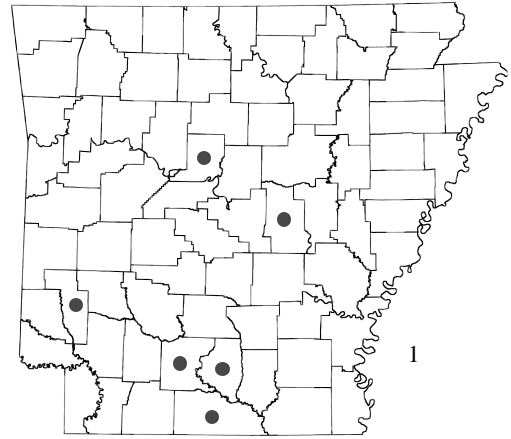
CYPERACEAE
Fimbristylis autumnalis (L.) Roem. & Schult. in Roem. et al.
 slender fimbry, slender fimbristylis



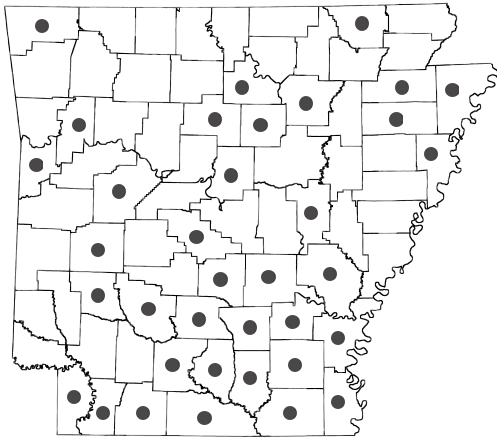
CYPERACEAE
Fimbristylis littoralis Gaudich.
 fimbry, fimbristylis



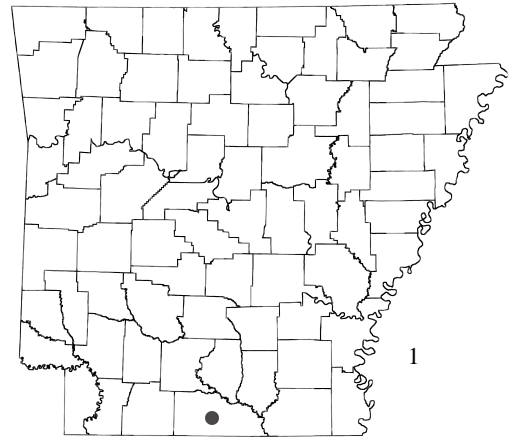
CYPERACEAE
Fimbristylis puberula (Michx.) Vahl
var. puberula
 fimbrly, fimbristylis



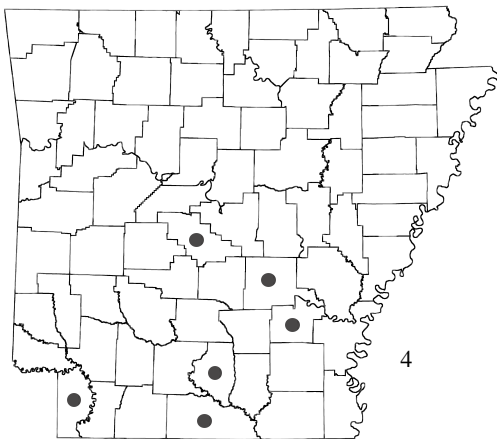
CYPERACEAE
Fimbristylis tomentosa Vahl
 fimbrly, fimbristylis



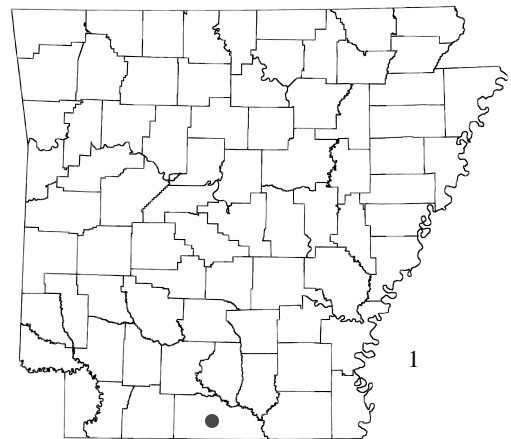
CYPERACEAE
Fimbristylis vahlii (Lam.) Link
 Vahl's fimbrly, Vahl's fimbristylis



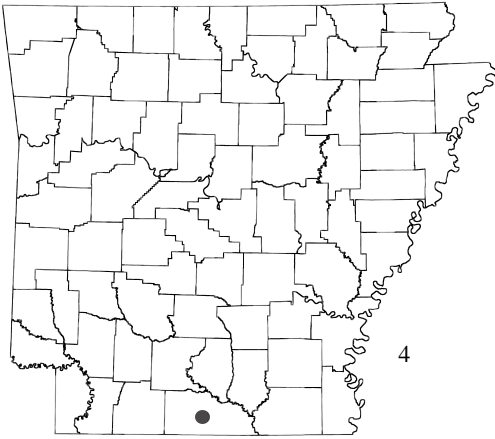
CYPERACEAE
Fuirena breviseta (Coville) Coville
 salt-marsh umbrella sedge, salt-marsh umbrella-grass



CYPERACEAE
Fuirena bushii Kral
 Bush's umbrella sedge, Bush's umbrella-grass



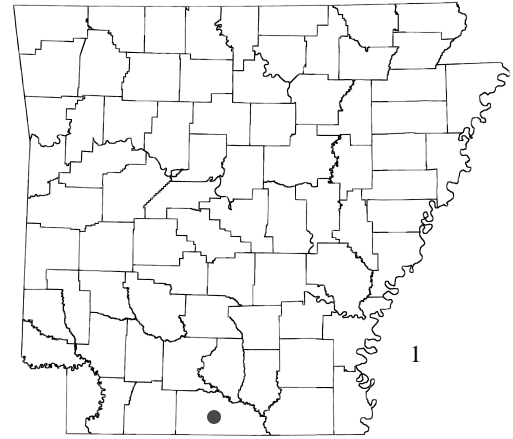
CYPERACEAE
Fuirena longa Chapm.
 Coastal Plain umbrella sedge, Coastal Plain umbrella-grass



CYPERACEAE

Fuirena pumila (Torr.) Spreng.

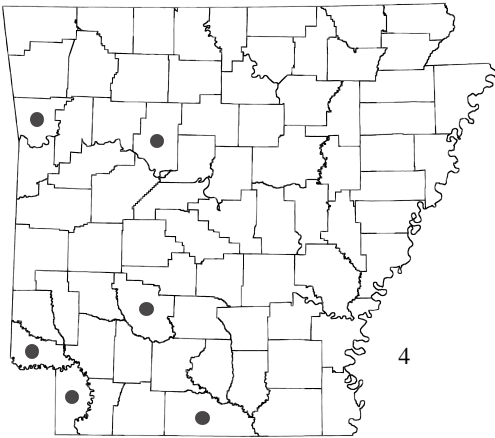
dwarf umbrella sedge, dwarf umbrella-grass



CYPERACEAE

Fuirena scirpoidea Michx.

southern umbrella sedge, southern umbrella-grass

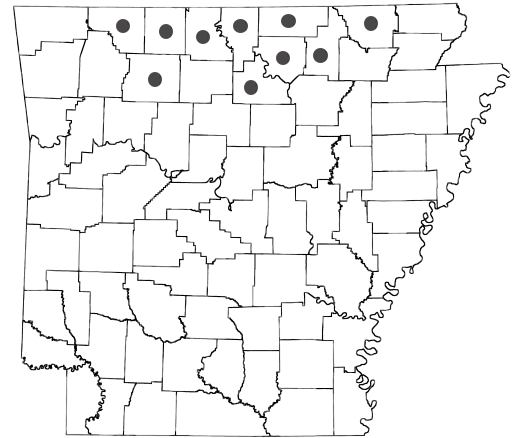


CYPERACEAE

Fuirena simplex Vahl

var. aristulata (Torr.) Kral

western umbrella sedge, western umbrella-grass



CYPERACEAE

Fuirena simplex Vahl

var. simplex

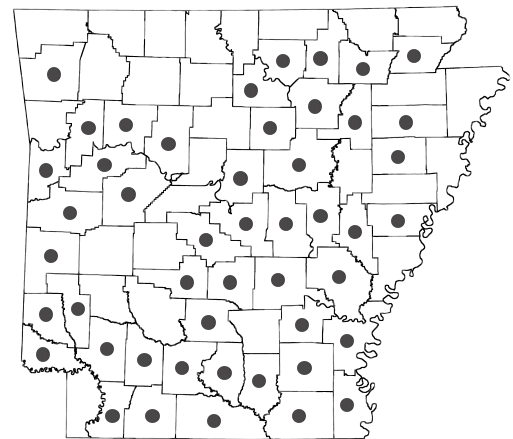
creeping western umbrella sedge, creeping western umbrella-grass



CYPERACEAE

Fuirena squarrosa Michx.

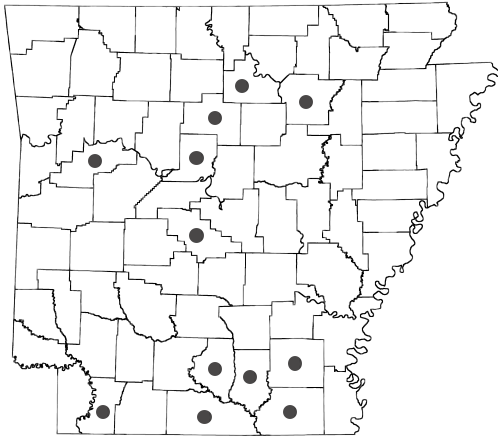
hairy umbrella sedge, hairy umbrella-grass



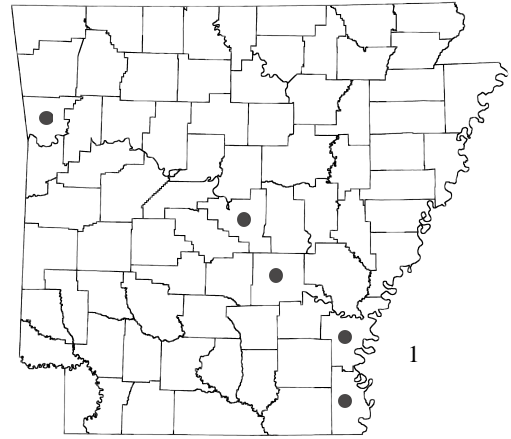
CYPERACEAE

Isolepis carinata Hook. & Arn. ex Torr.

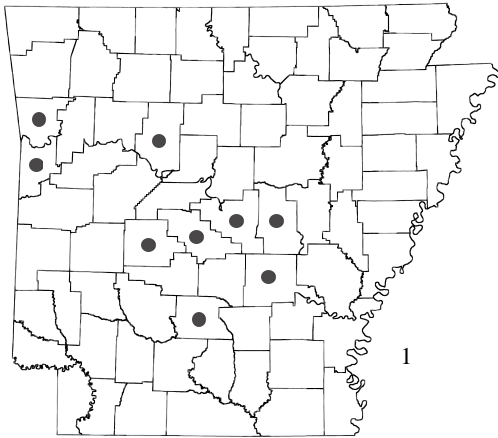
bulrush



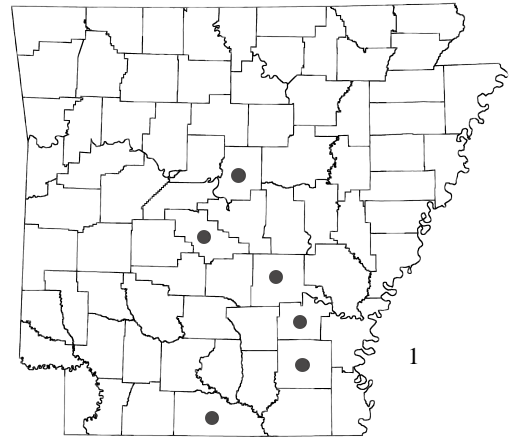
CYPERACEAE
***Isolepis pseudosetacea* (Daveau) Gand.**
bulrush



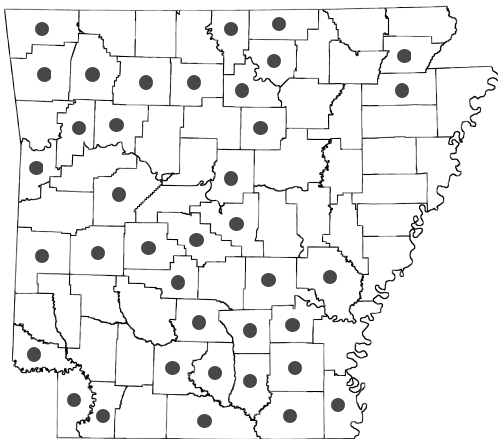
CYPERACEAE
***Kyllinga brevifolia* Rotth.**
spikesedge



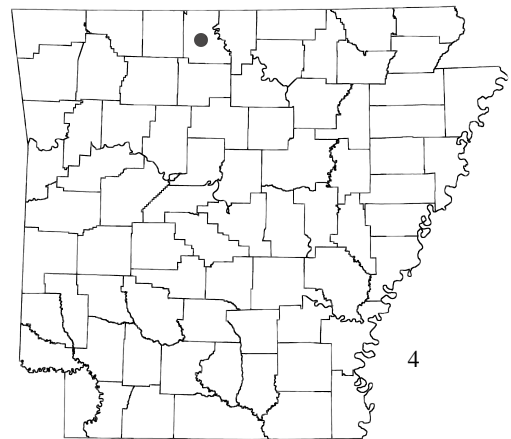
CYPERACEAE
***Kyllinga gracillima* Miq.**
spikesedge



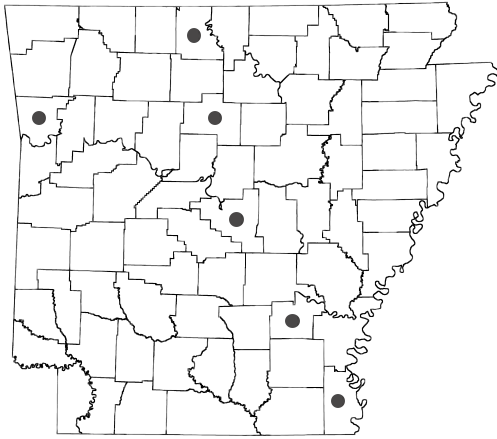
CYPERACEAE
***Kyllinga odorata* Vahl**
spikesedge



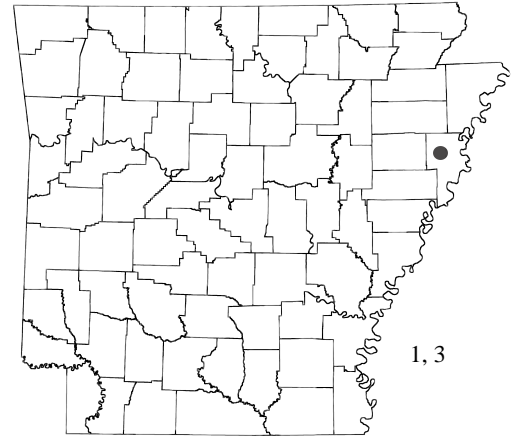
CYPERACEAE
***Kyllinga pumila* Michx.**
spikesedge



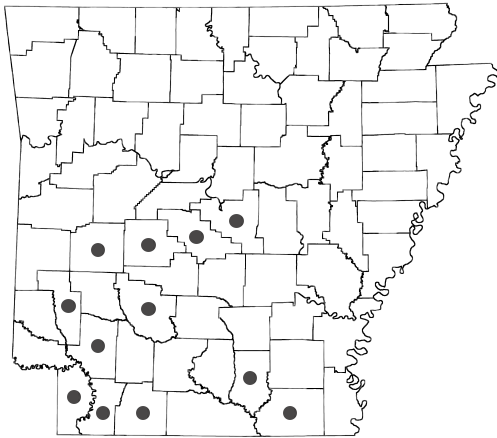
CYPERACEAE
***Lipocarpa drummondii* (Nees) G.C.Tucker**
Drummond's halfchaff sedge



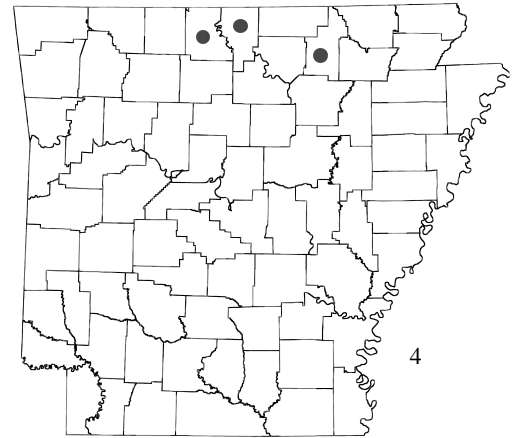
CYPERACEAE
Lipocarpha micrantha (Vahl) G.C.Tucker
 halfchaff sedge



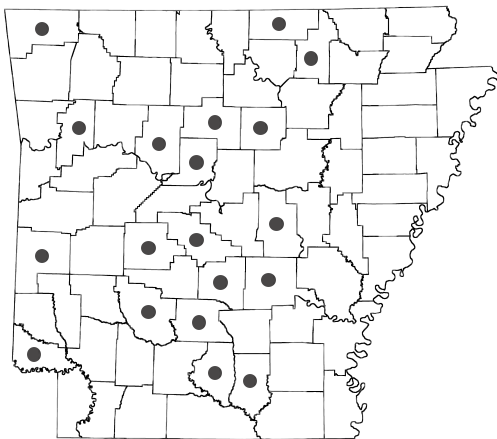
CYPERACEAE
Oxycaryum cubense (Poepp. & Kunth) Palla
 Cuban club-rush, Cuban-bulrush



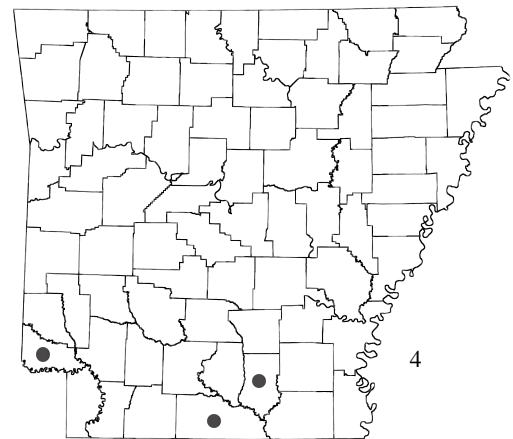
CYPERACEAE
Rhynchospora caduca Elliott
 beaksedge, beak-rush



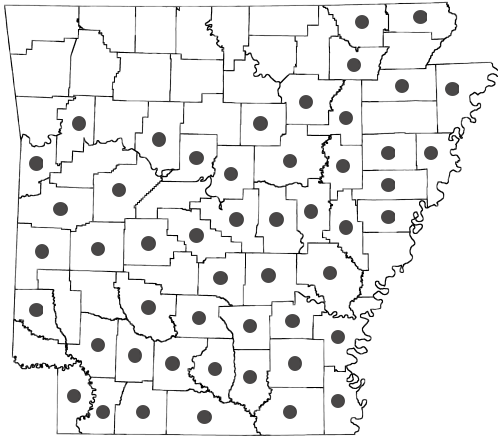
CYPERACEAE
Rhynchospora capillacea Torr.
 capillary beaksedge, needle beaksedge, capillary beak-rush



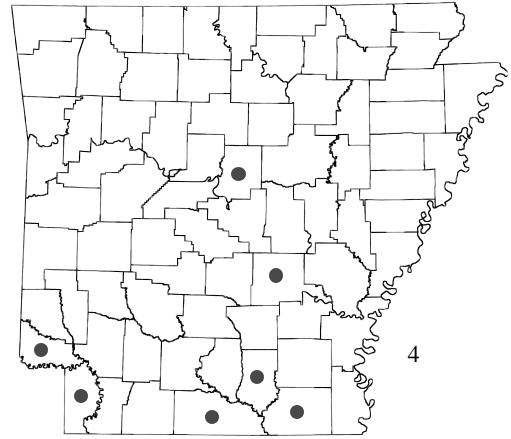
CYPERACEAE
Rhynchospora capitellata (Michx.) Vahl
 beaksedge, beak-rush



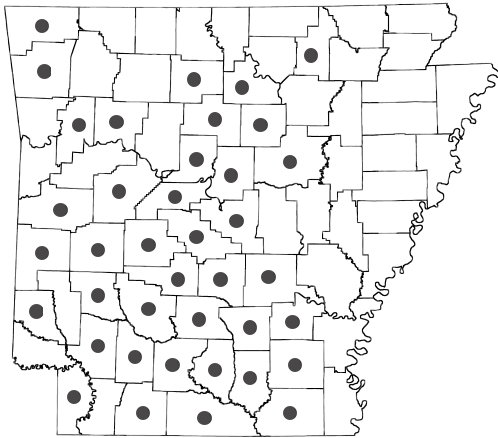
CYPERACEAE
Rhynchospora colorata (L.) H.Pfeiff.
 white-top sedge



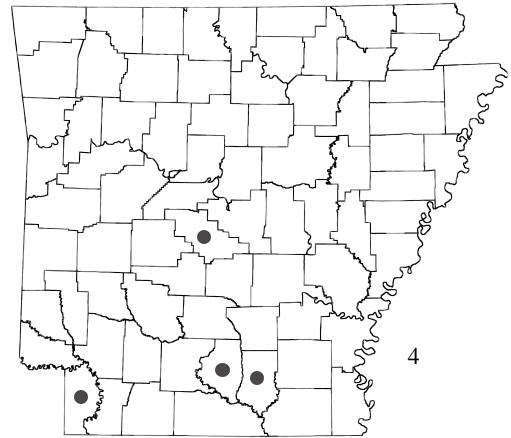
CYPERACEAE
Rhynchospora corniculata (Lam.) A.Gray
 horned beaksedge, horned beak-rush



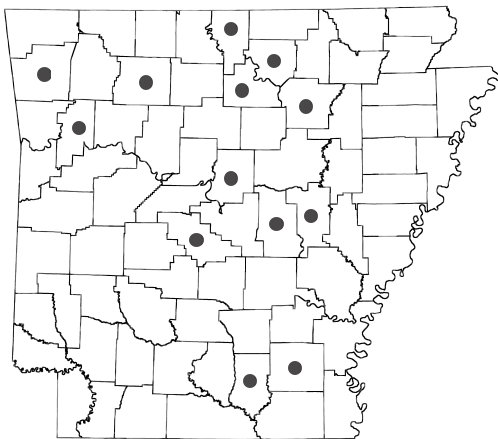
CYPERACEAE
Rhynchospora globularis (Chapm.) Small
var. globularis
 globe beaksedge, globe beak-rush



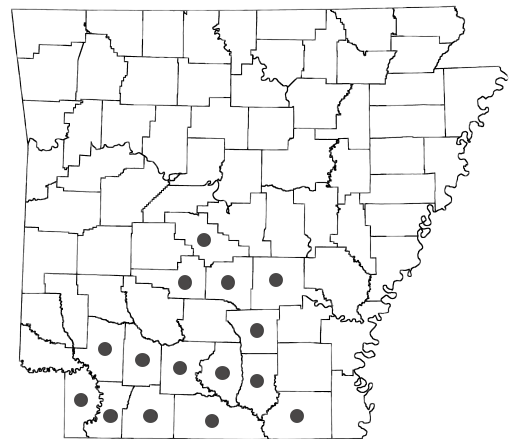
CYPERACEAE
Rhynchospora glomerata (L.) Vahl
 beaksedge, beak-rush



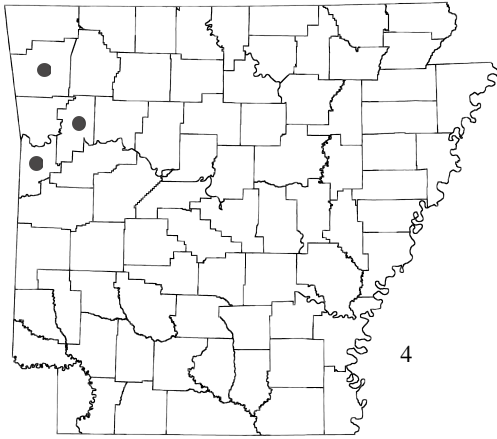
CYPERACEAE
Rhynchospora gracilentata A.Gray
 slender beaksedge, slender beak-rush



CYPERACEAE
Rhynchospora harveyi W.Boott
var. harveyi
 Harvey's beaksedge, Harvey's beak-rush

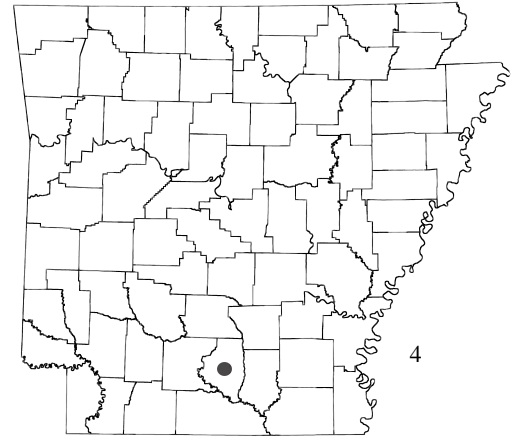


CYPERACEAE
Rhynchospora inexpansa (Michx.) Vahl
 nodding beaksedge, nodding beak-rush



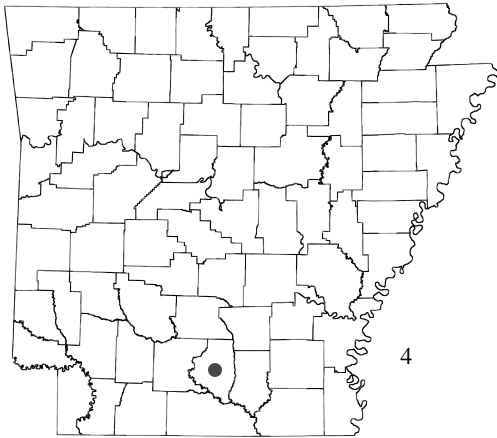
CYPERACEAE

Rhynchospora macrostachya Torr. ex A.Gray
prairie horned beaksedge, prairie horned beak-rush



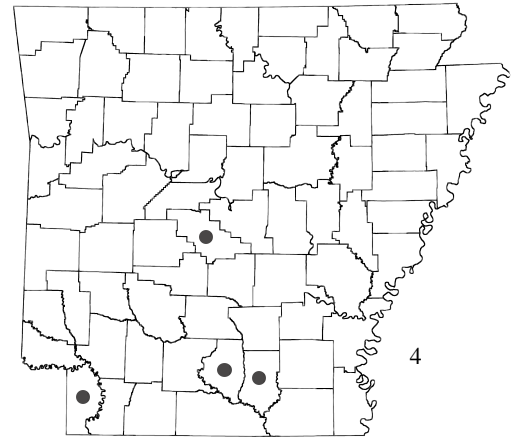
CYPERACEAE

Rhynchospora microcarpa Baldwin ex A.Gray
southern beaksedge, southern beak-rush



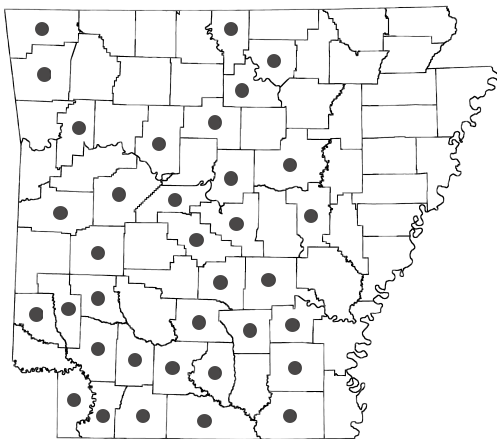
CYPERACEAE

Rhynchospora plumosa Elliott
plumed beaksedge, plumed beak-rush



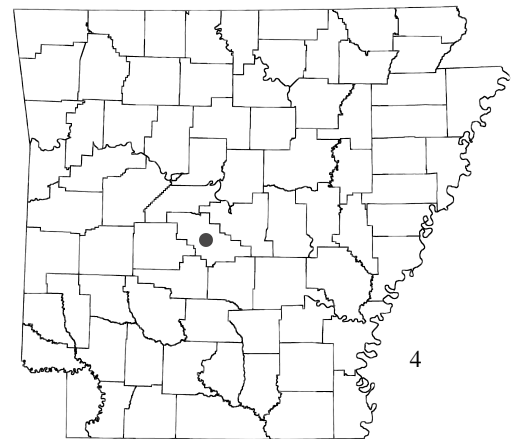
CYPERACEAE

Rhynchospora rariflora (Michx.) Elliott
few-flower beaksedge, few-flower beak-rush



CYPERACEAE

Rhynchospora recognita (Gale) Kral
beaksedge, beak-rush

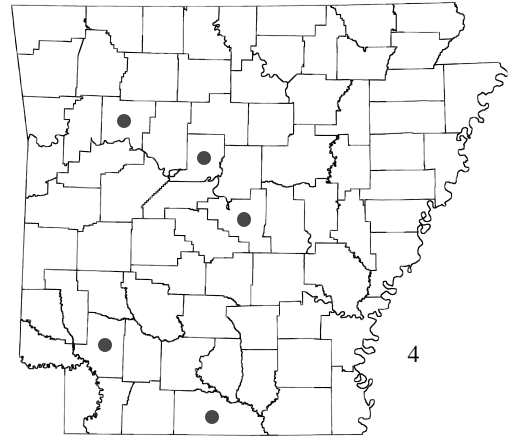


CYPERACEAE

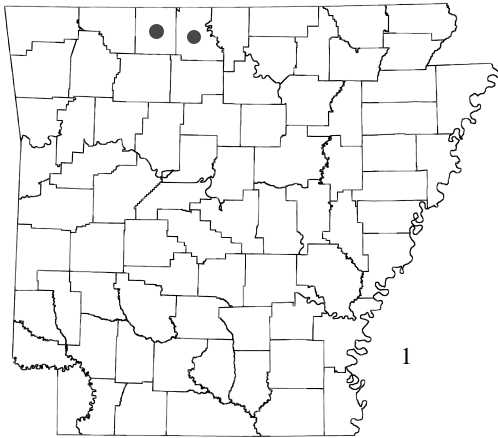
Rhynchospora scirpoides (Torr.) Griseb.
long-beak bald-rush, long-beak beaksedge



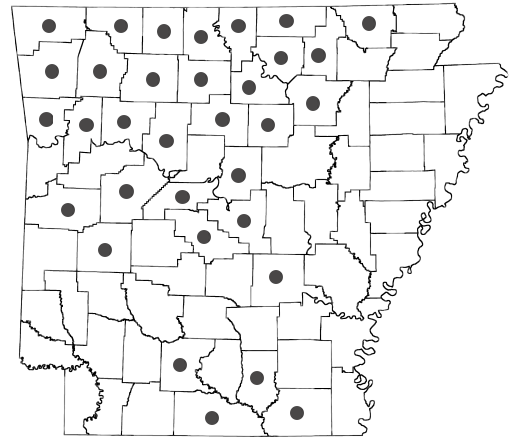
CYPERACEAE
***Schoenoplectus acutus* (Muhl. ex Bigelow) Á.Löve & D.Löve**
var. acutus
 hard-stem bulrush



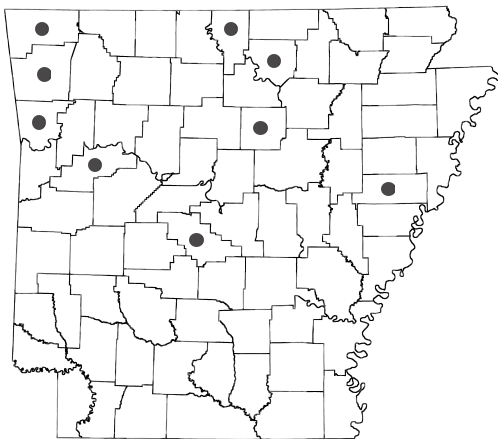
CYPERACEAE
***Schoenoplectus californicus* (C.A.Mey.) Soják**
 California bulrush



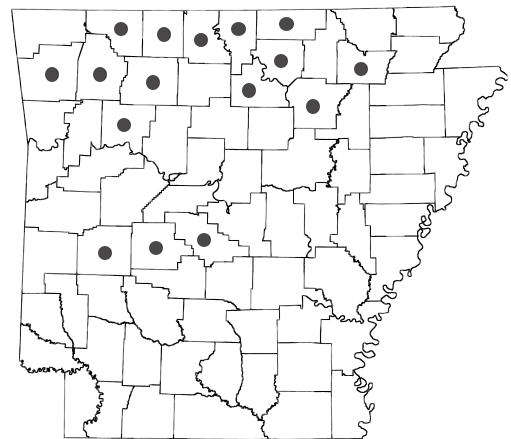
CYPERACEAE
***Schoenoplectus mucronatus* (L.) Palla**
 rough-seed bulrush, ricefield bulrush



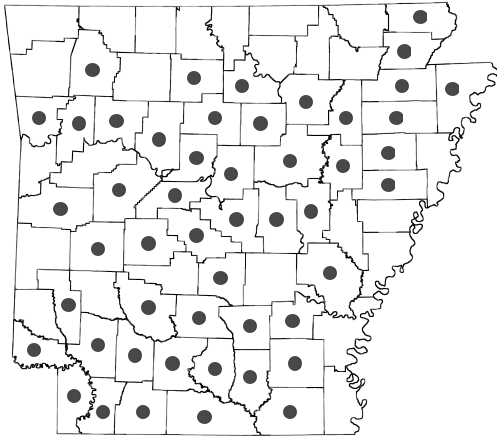
CYPERACEAE
***Schoenoplectus pungens* (Vahl) Palla**
 chair-maker's-rush, three-square bulrush



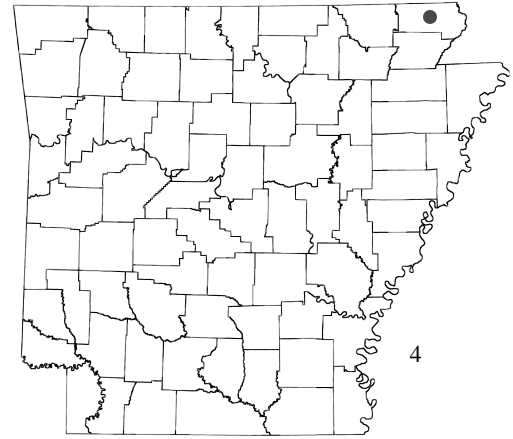
CYPERACEAE
***Schoenoplectus tabernaemontani* (C.C.Gmel.) Palla**
 soft-stem bulrush, great bulrush



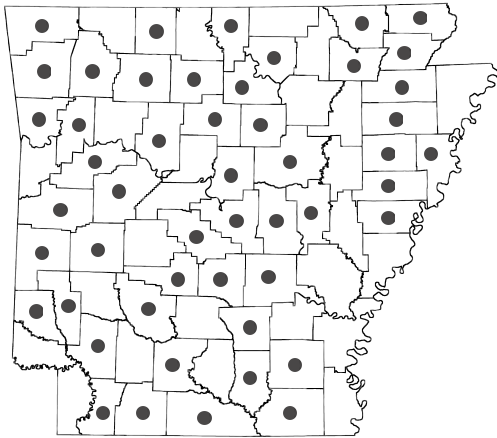
CYPERACEAE
***Scirpus atrovirens* Willd.**
 bulrush



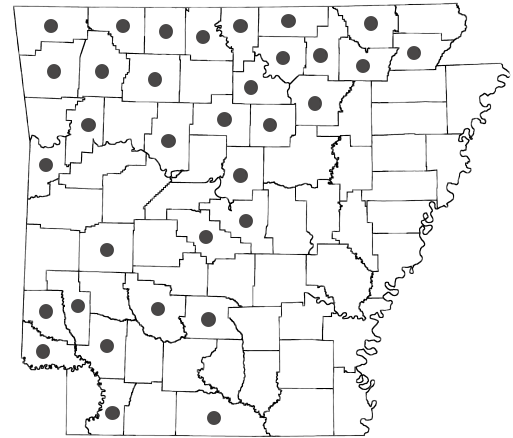
CYPERACEAE
Scirpus cyperinus (L.) Kunth
 wool-grass bulrush



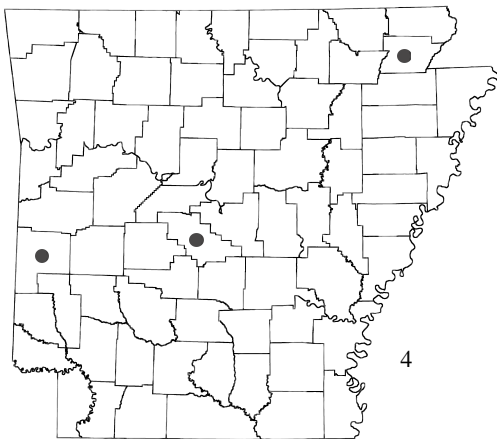
CYPERACEAE
Scirpus divaricatus Elliott
 spreading bulrush



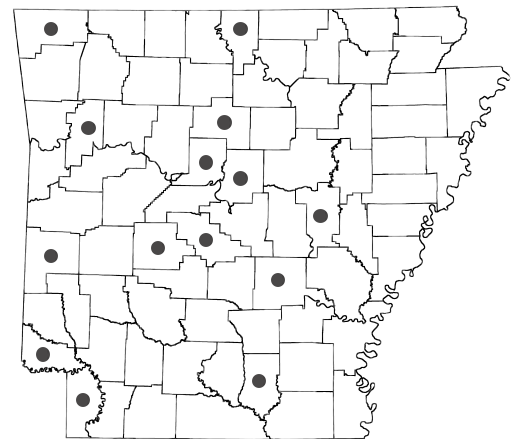
CYPERACEAE
Scirpus georgianus R.M.Harper
 bulrush



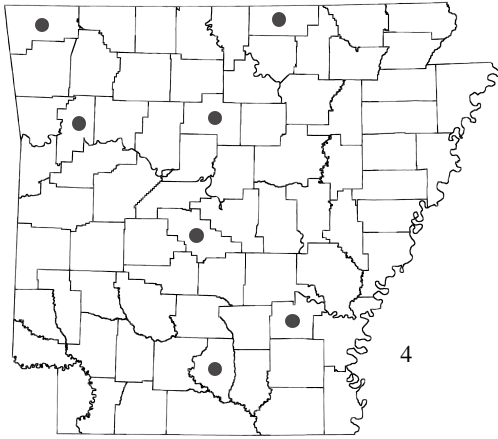
CYPERACEAE
Scirpus pendulus Muhl.
 bulrush



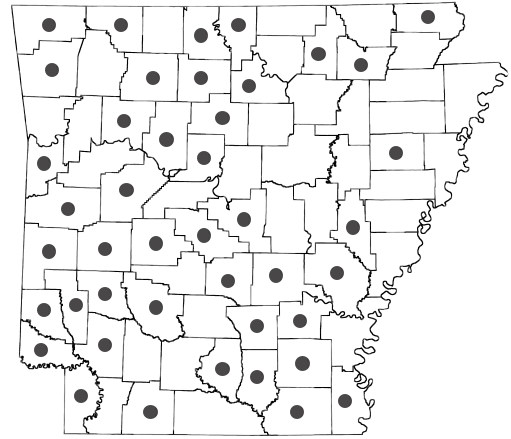
CYPERACEAE
Scirpus polyphyllus Vahl
 leafy bulrush



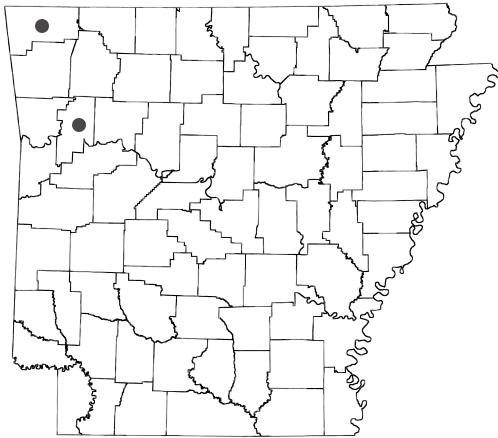
CYPERACEAE
Scleria ciliata Michx.
var. ciliata
 nut-rush



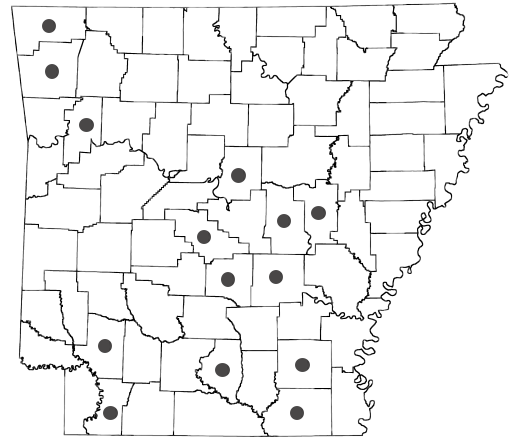
CYPERACEAE
Scleria muehlenbergii Steud.
Muhlenberg's nut-rush



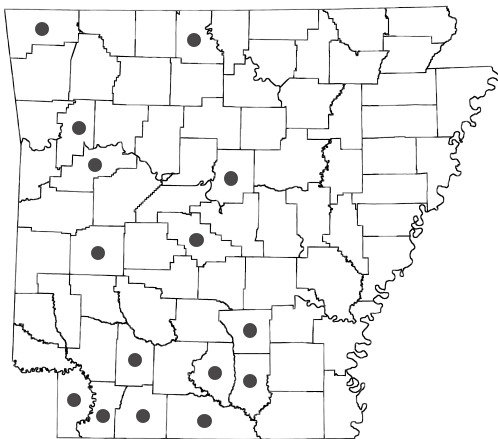
CYPERACEAE
Scleria oligantha Michx.
nut-rush



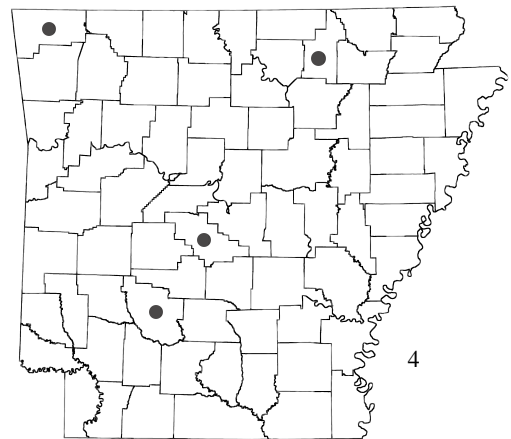
CYPERACEAE
Scleria pauciflora Muhl. ex Willd.
var. caroliniana A.W. Wood
nut-rush



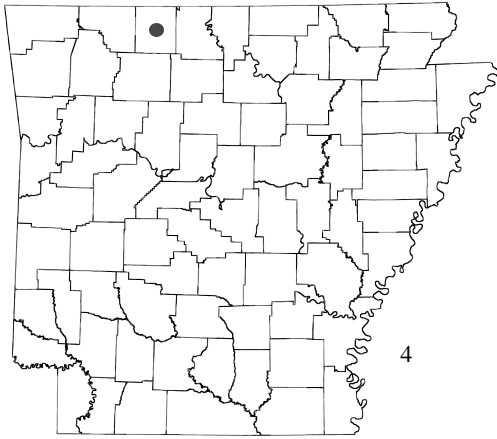
CYPERACEAE
Scleria pauciflora Muhl. ex Willd.
var. pauciflora
nut-rush



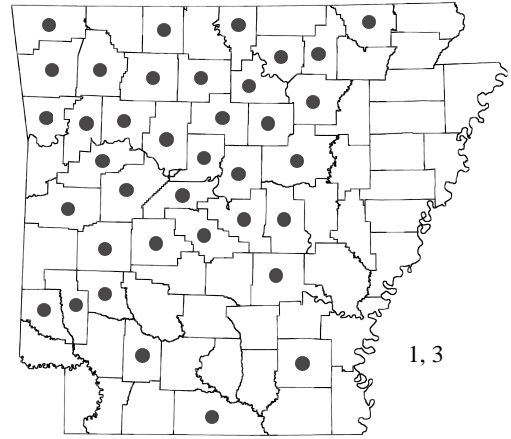
CYPERACEAE
Scleria triglomerata Michx.
nut-rush



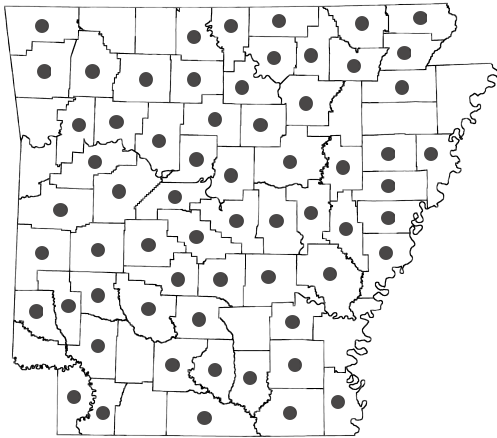
CYPERACEAE
Scleria verticillata Muhl. ex Willd.
whorled nut-rush



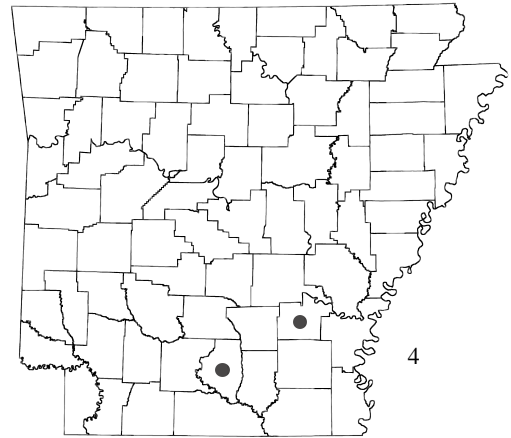
CYPERACEAE
Trichophorum planifolium (Spreng.) Palla
 bashful bulrush



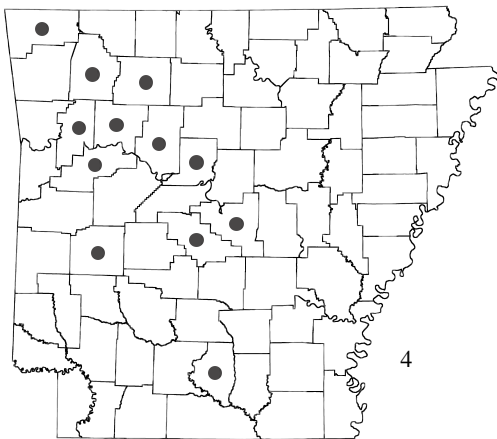
DIOSCOREACEAE
Dioscorea polystachya Turcz.
 cinnamon vine, Chinese yam



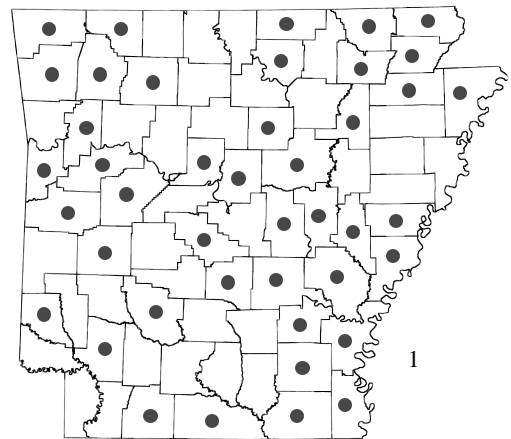
DIOSCOREACEAE
Dioscorea villosa L.
 wild yam



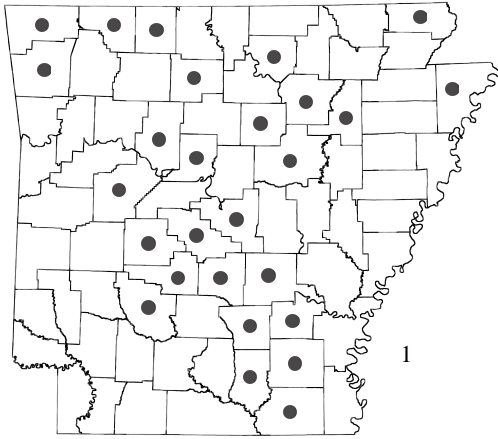
ERIOCAULACEAE
Eriocaulon decangulare L.
 large-head pipewort, hat-pins



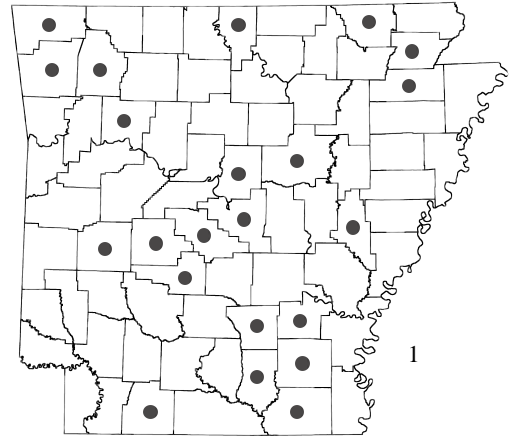
ERIOCAULACEAE
Eriocaulon koernickianum Van Heurck & Müll.Arg. in Van Heurck
 small-head pipewort



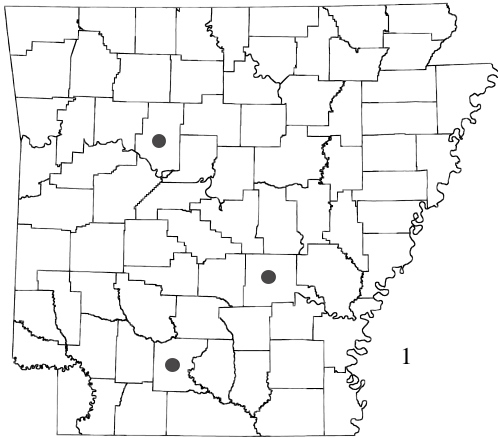
HEMEROCALLIDACEAE
Hemerocallis fulva (L.) L.
 orange day-lily



HYACINTHACEAE
Muscari botryoides (L.) Mill.
 grape-hyacinth



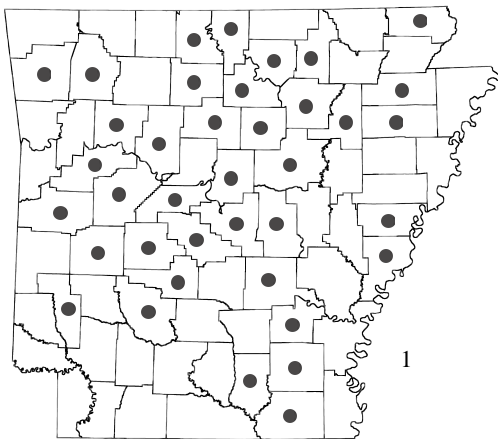
HYACINTHACEAE
Muscari neglectum Guss. ex Ten.
 grape-hyacinth, blue-bottles



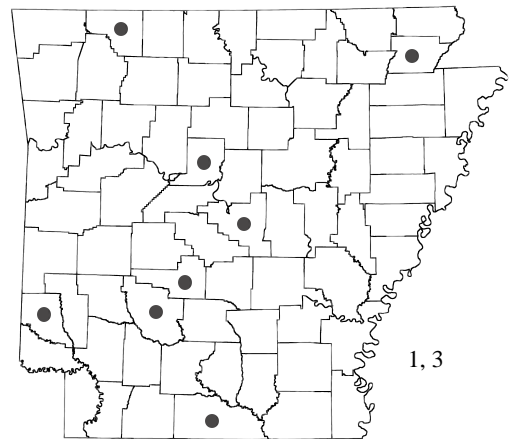
HYACINTHACEAE
Ornithogalum caudatum Aiton
 sea-onion



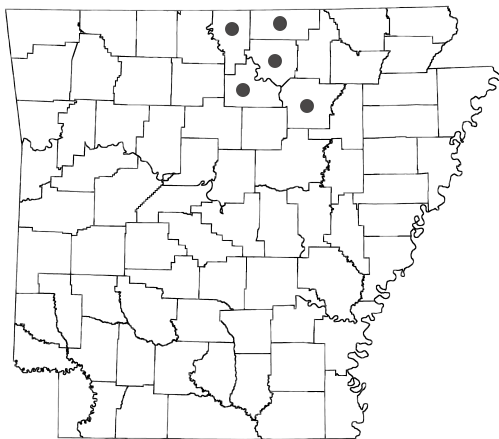
HYACINTHACEAE
Ornithogalum nutans L.
 nodding star-of-Bethlehem



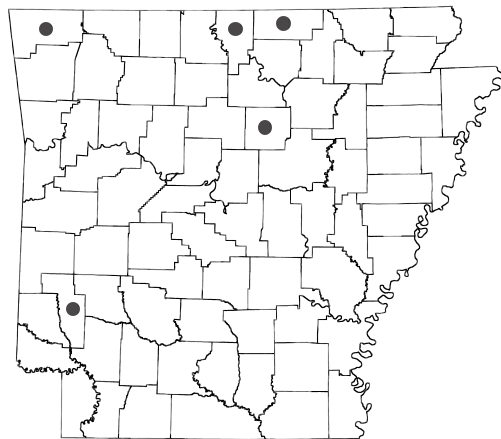
HYACINTHACEAE
Ornithogalum umbellatum L.
 star-of-Bethlehem



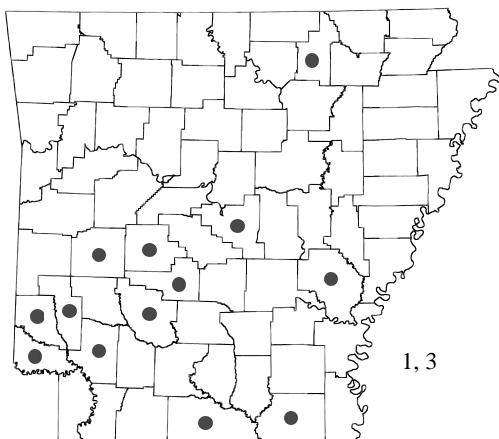
HYDROCHARITACEAE
Egeria densa Planch.
 Brazilian waterweed



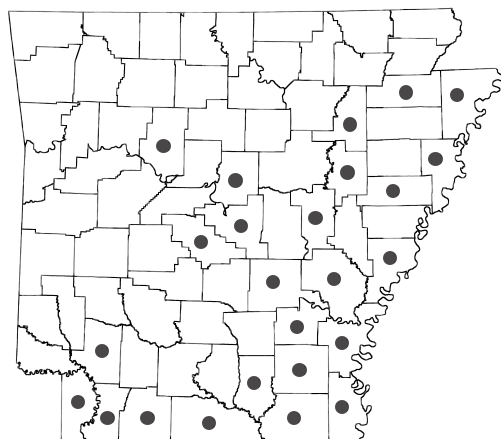
HYDROCHARITACEAE
Elodea canadensis Michx.
 Canadian waterweed



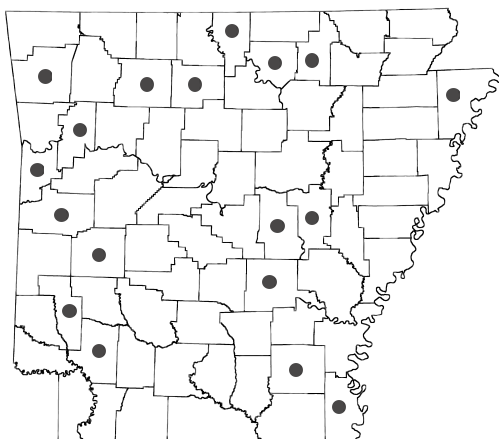
HYDROCHARITACEAE
Elodea nuttallii (Planch.) H.St.John
 Nuttall's waterweed



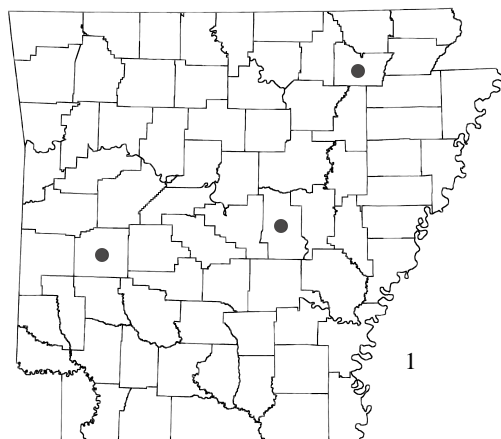
HYDROCHARITACEAE
Hydrilla verticillata (L.f.) Royle
 hydrilla



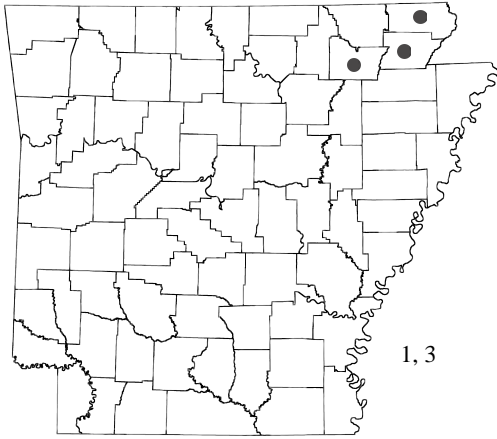
HYDROCHARITACEAE
Limnobium spongia (Bosc) Rich. ex Steud.
 American frog's-bit



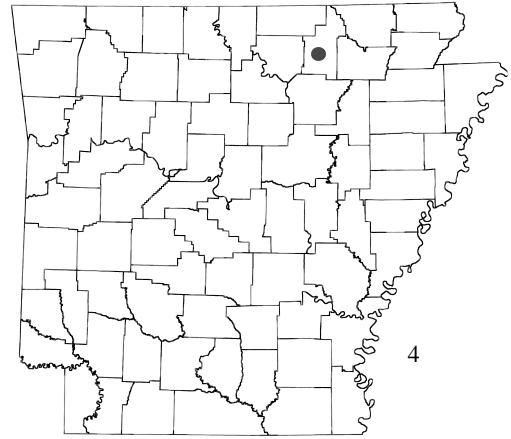
HYDROCHARITACEAE
Najas guadalupensis (Spreng.) Magnus
subsp. guadalupensis
 southern naiad, water-nymph



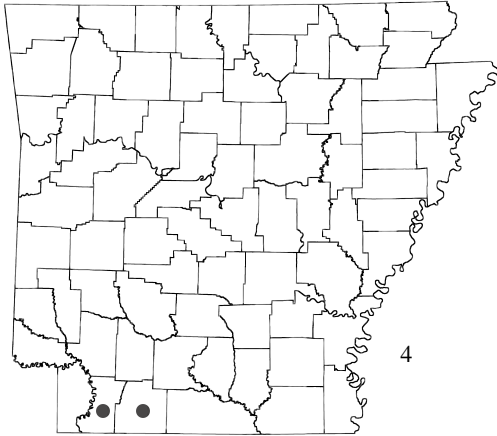
HYDROCHARITACEAE
Najas minor All.
 brittle naiad, brittle water-nymph



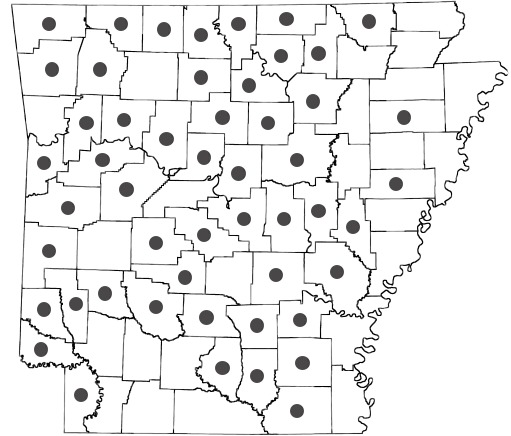
HYDROCHARITACEAE
***Ottelia alismoides* (L.) Pers.**
 duck-lettuce



HYDROCHARITACEAE
***Vallisneria americana* Michx.**
 eel-grass



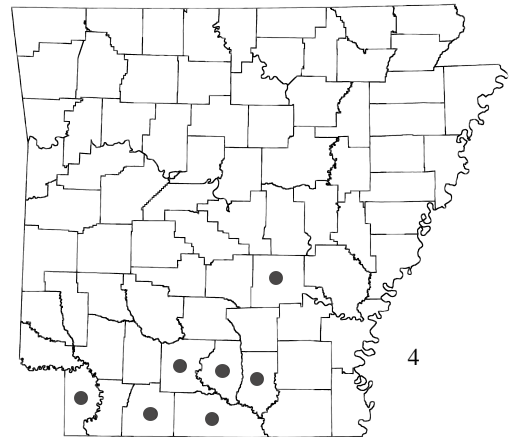
HYPOXIDACEAE
***Hypoxis curtissii* Rose in Small**
 Curtiss' star-grass, swamp star-grass



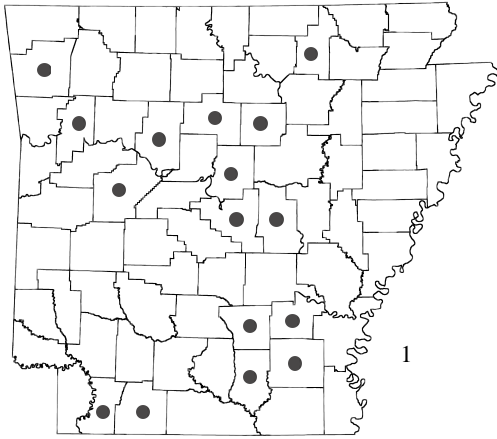
HYPOXIDACEAE
***Hypoxis hirsuta* (L.) Coville**
 yellow star-grass



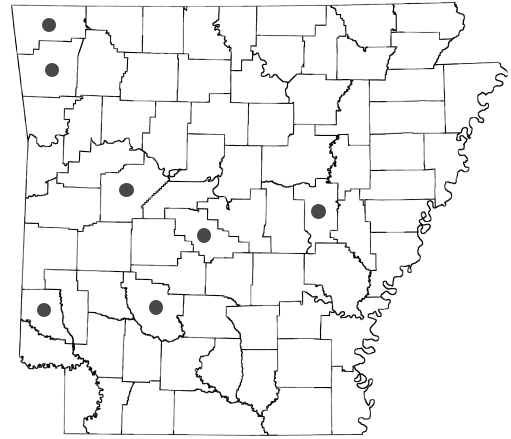
HYPOXIDACEAE
***Hypoxis sessilis* L.**
 glossy-seed star-grass



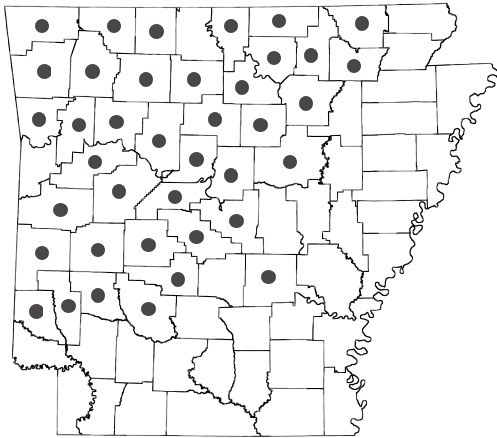
IRIDACEAE
***Alophia drummondii* (Graham) R.C.Foster**
 pinewoods-lily, purple pleat-leaf



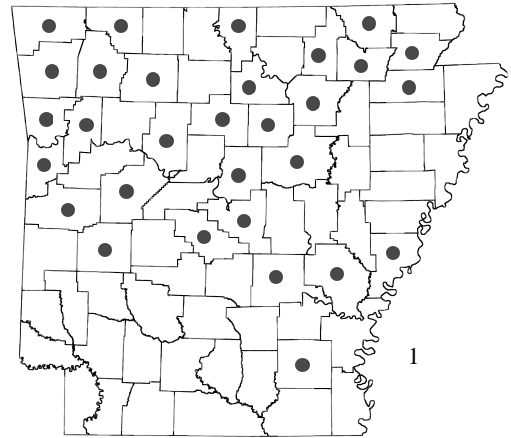
IRIDACEAE
Gladiolus communis L.
 gladiolus, corn-flag



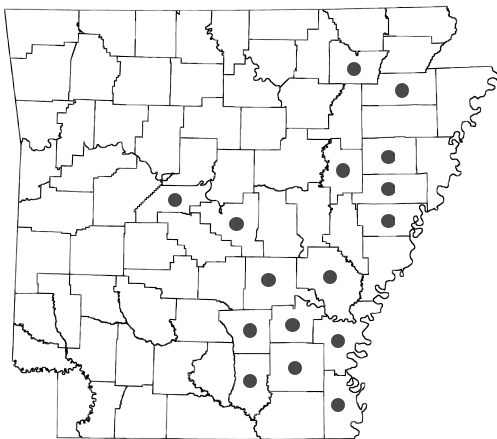
IRIDACEAE
Iris brevicaulis Raf.
 zigzag iris, short-stem iris



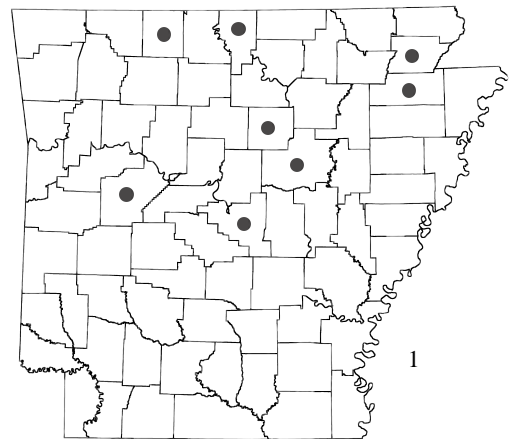
IRIDACEAE
Iris cristata Sol. ex Aiton
 dwarf crested iris



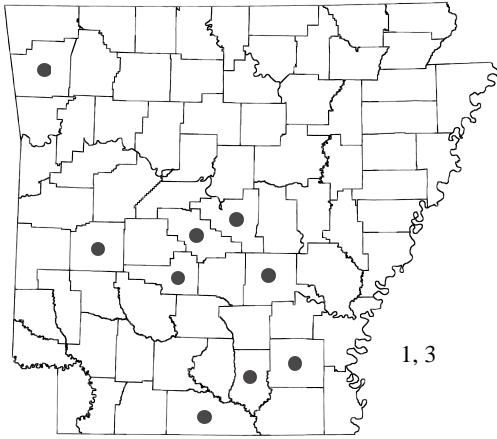
IRIDACEAE
Iris domestica (L.) Goldblatt & Mabb.
 blackberry-lily



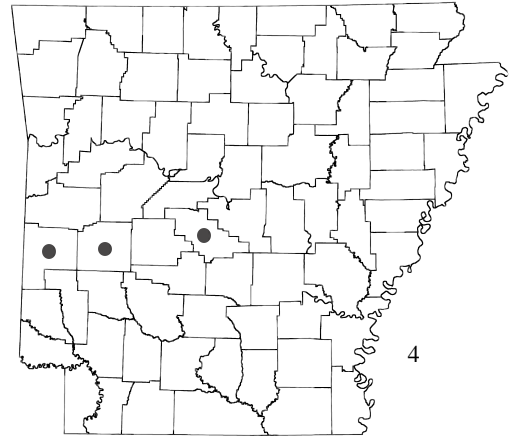
IRIDACEAE
Iris fulva Ker Gawl.
 copper iris, red iris



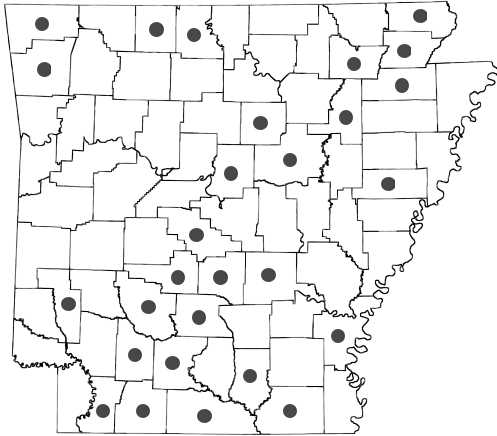
IRIDACEAE
Iris germanica L.
 garden iris



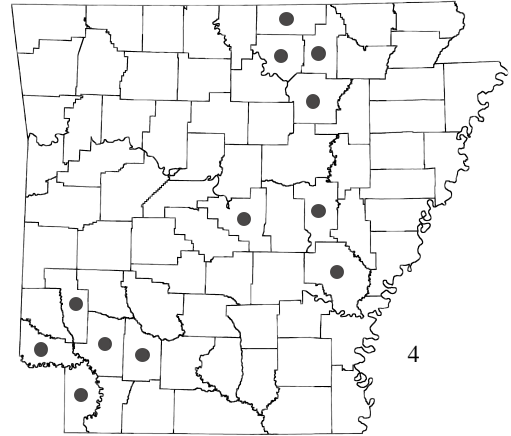
IRIDACEAE
Iris pseudacorus L.
 yellow iris, yellow flag



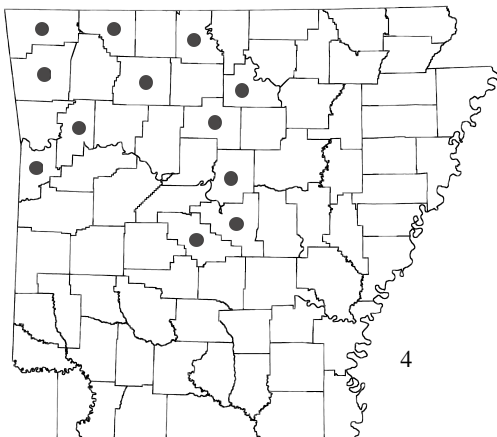
IRIDACEAE
Iris verna L.
var. smalliana Fernald
 dwarf iris



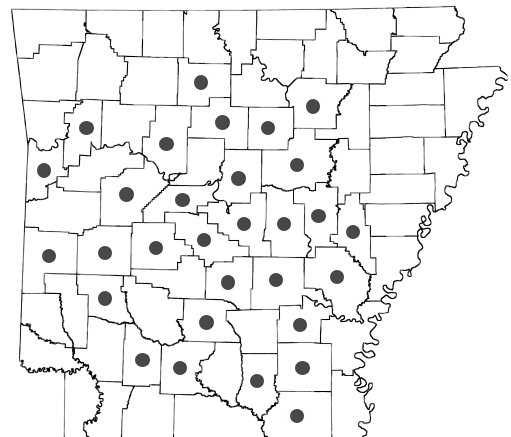
IRIDACEAE
Iris virginica L.
 southern blue flag



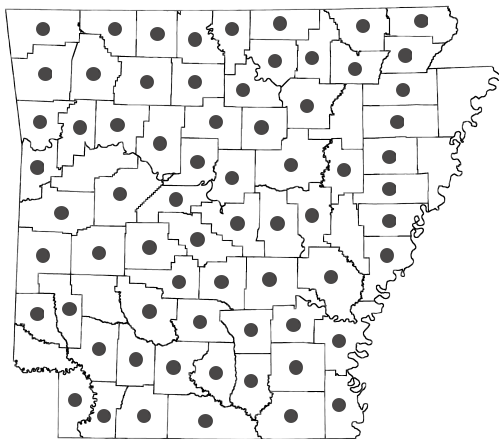
IRIDACEAE
Nemastylis geminiflora Nutt.
 celestial-lily, prairie pleat-leaf



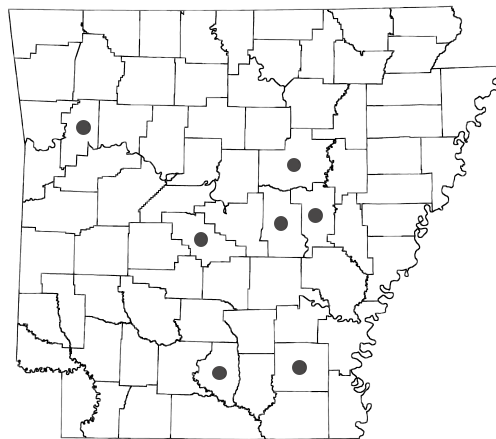
IRIDACEAE
Nemastylis nuttallii Pickering ex R.C.Foster
 Nuttall's pleat-leaf, Nuttall's celestial-lily



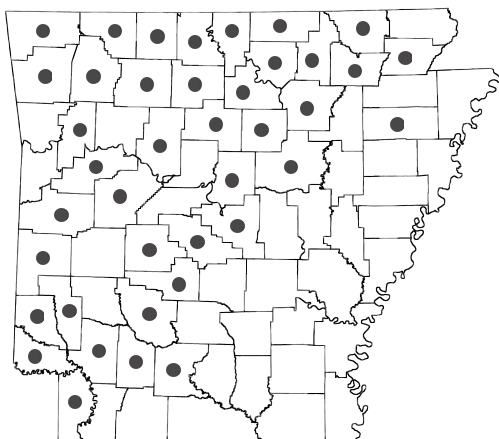
IRIDACEAE
Sisyrinchium albidum Raf.
 white blue-eyed-grass



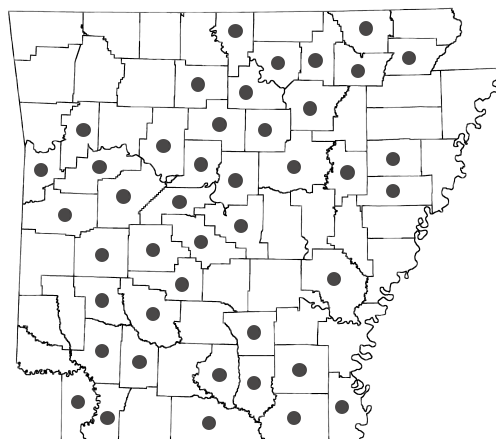
IRIDACEAE
Sisyrinchium angustifolium Mill.
blue-eyed-grass



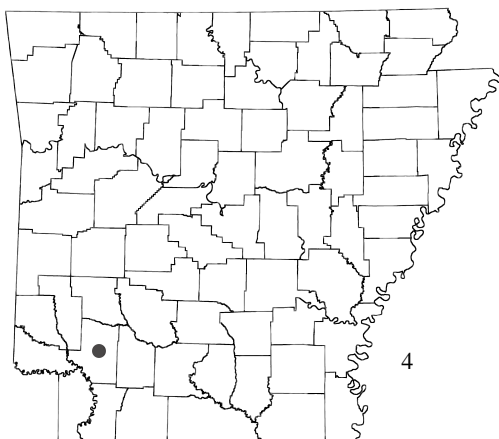
IRIDACEAE
Sisyrinchium atlanticum E.P.Bicknell
blue-eyed-grass



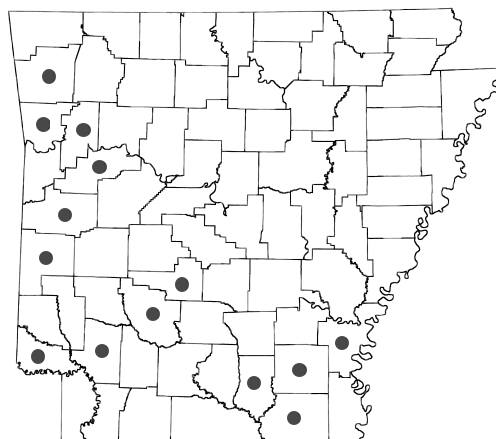
IRIDACEAE
Sisyrinchium campestre E.P.Bicknell
blue-eyed-grass



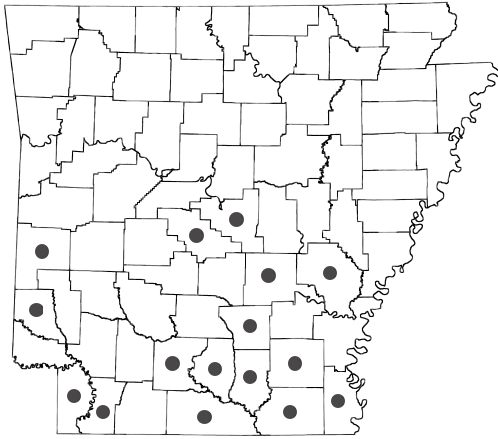
IRIDACEAE
Sisyrinchium langloisii Greene
blue-eyed-grass



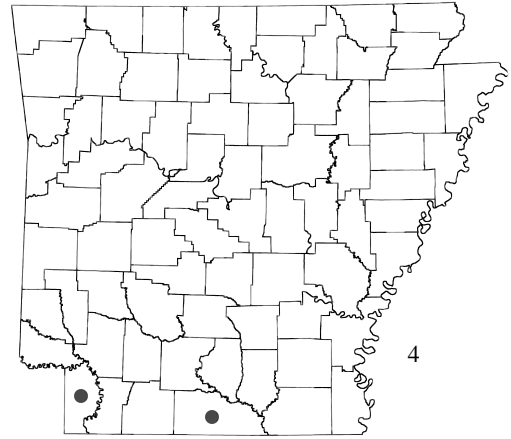
IRIDACEAE
Sisyrinchium minus Engelm. & A.Gray
dwarf blue-eyed-grass



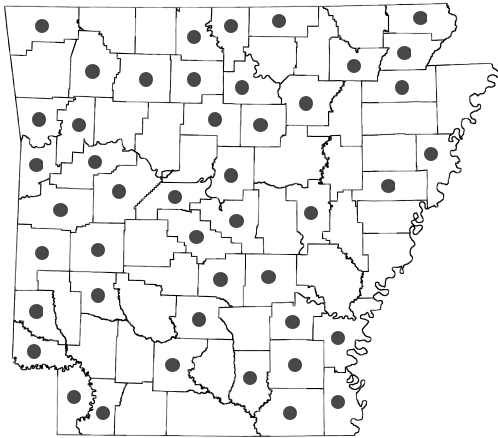
IRIDACEAE
Sisyrinchium pruinatum E.P.Bicknell
blue-eyed-grass



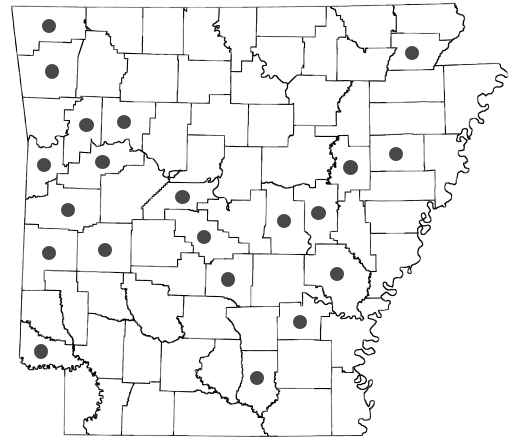
IRIDACEAE
***Sisyrinchium rosulatum* E.P.Bicknell**
annual blue-eyed-grass



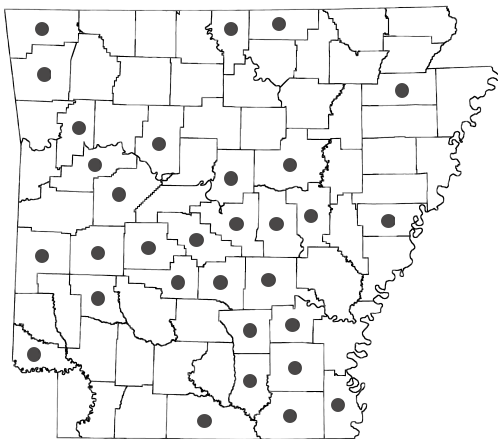
IRIDACEAE
***Sisyrinchium sagittiferum* E.P.Bicknell**
spear-bract blue-eyed-grass



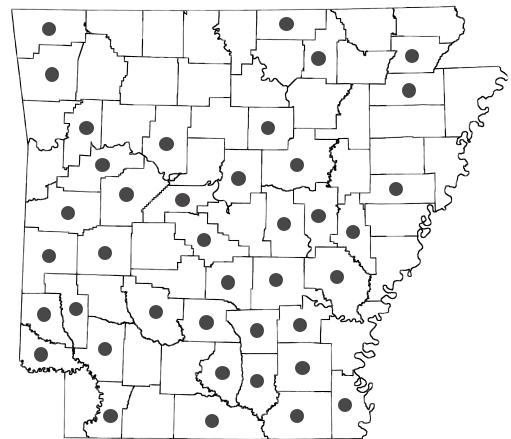
JUNCACEAE
***Juncus acuminatus* Michx.**
knotty-leaf rush



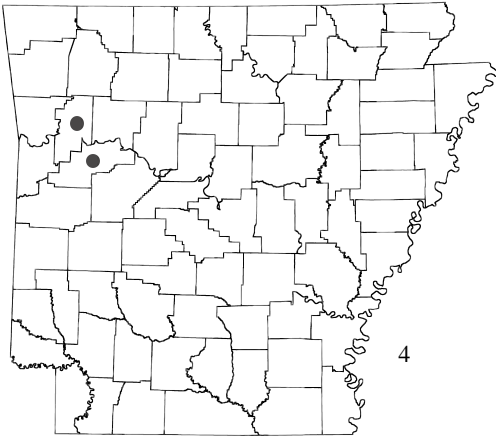
JUNCACEAE
***Juncus anhelatus* (Wiegand) R.E.Brooks**
poverty rush



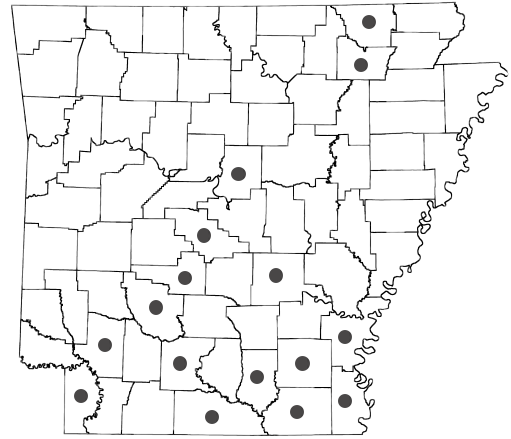
JUNCACEAE
***Juncus biflorus* Elliott**
rush



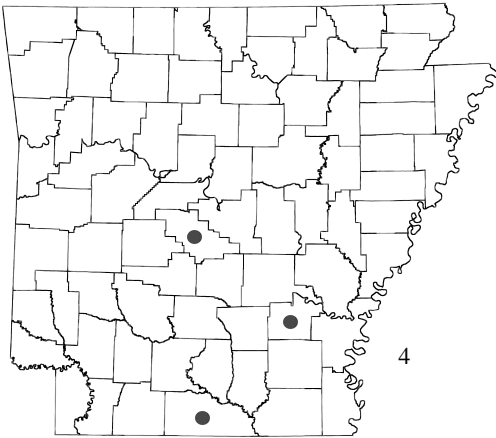
JUNCACEAE
***Juncus brachycarpus* Engelm. in A.Gray**
rush



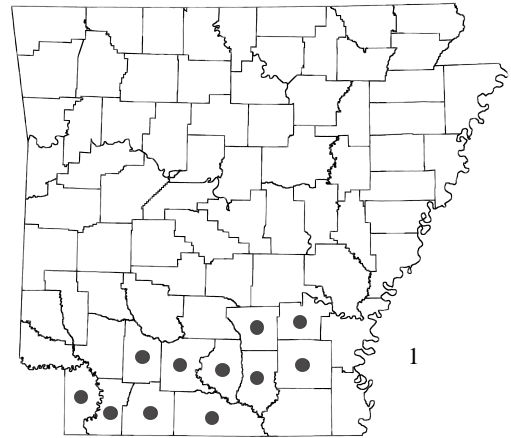
JUNCACEAE
Juncus brachyphyllus Wiegand
tufted-stem rush



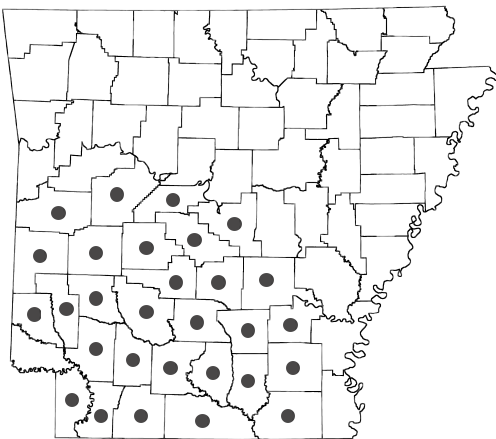
JUNCACEAE
Juncus bufonius L.
toad rush



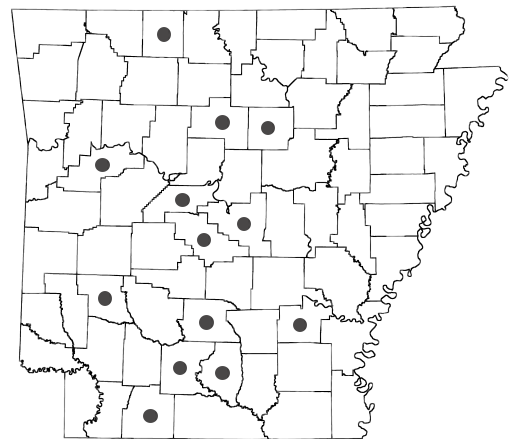
JUNCACEAE
Juncus canadensis J. Gay in Laharpe
Canadian rush



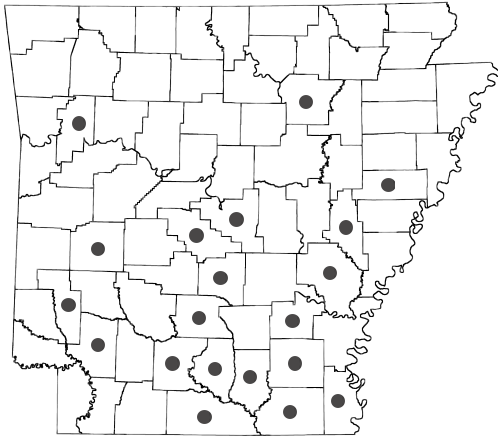
JUNCACEAE
Juncus capitatus Weigel
rush



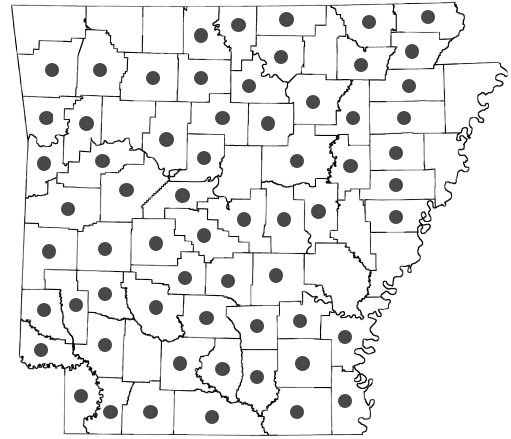
JUNCACEAE
Juncus coriaceus Mack.
rush



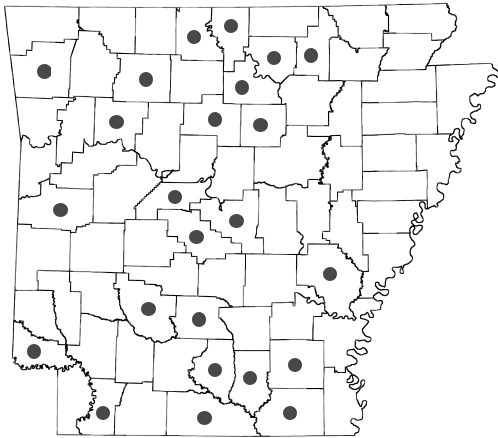
JUNCACEAE
Juncus debilis A. Gray
weak rush



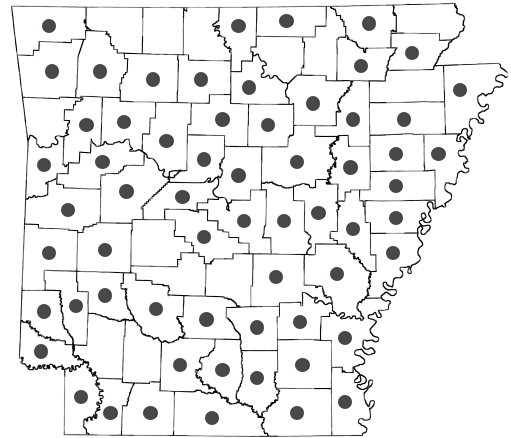
JUNCACEAE
Juncus dichotomus Elliott
rush



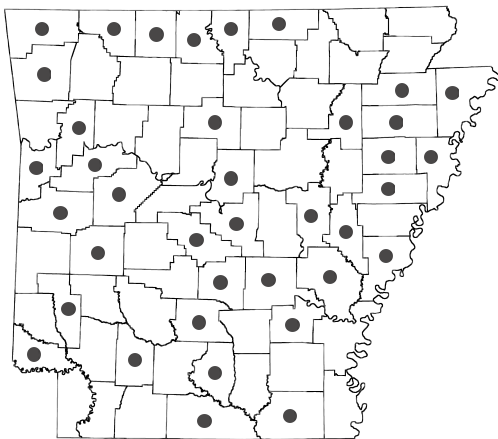
JUNCACEAE
Juncus diffusissimus Buckley
rush



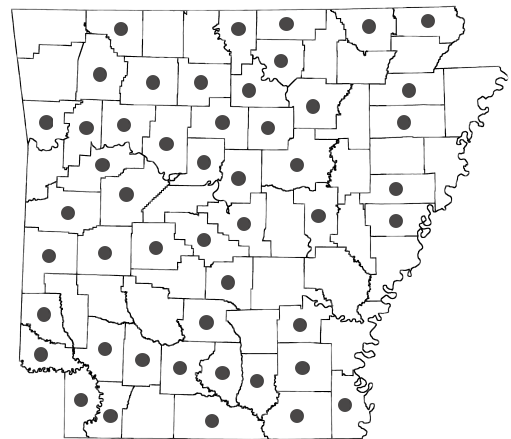
JUNCACEAE
Juncus dudleyi Wiegand
Dudley's rush



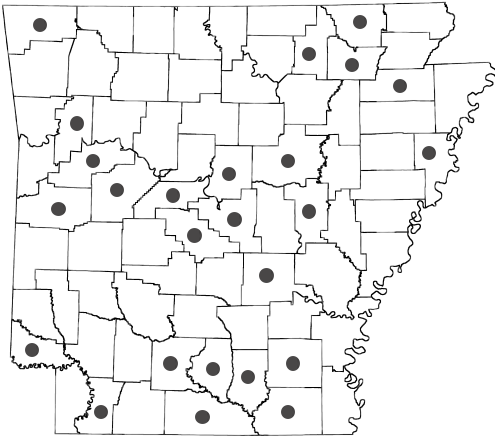
JUNCACEAE
Juncus effusus L.
soft rush



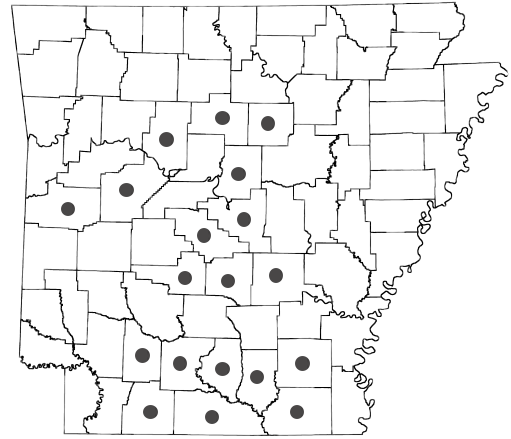
JUNCACEAE
Juncus interior Wiegand
inland rush



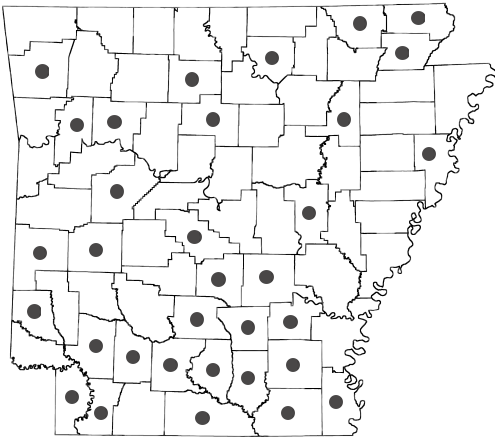
JUNCACEAE
Juncus marginatus Rostk.
grass-leaf rush



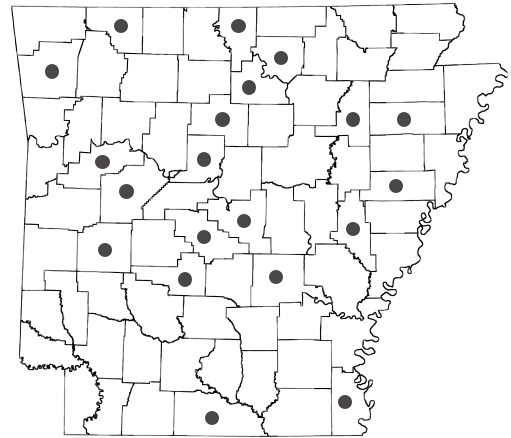
JUNCACEAE
Juncus nodatus Coville in Britton & A.Br.
 rush



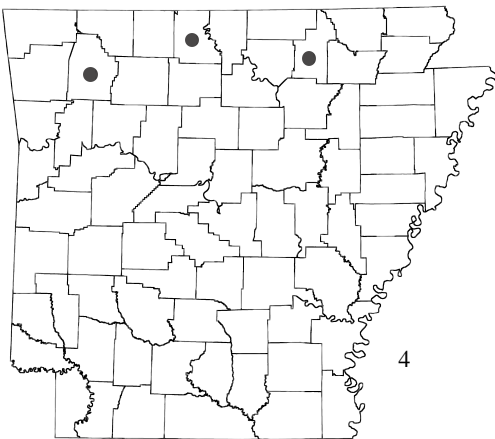
JUNCACEAE
Juncus repens Michx.
 creeping rush



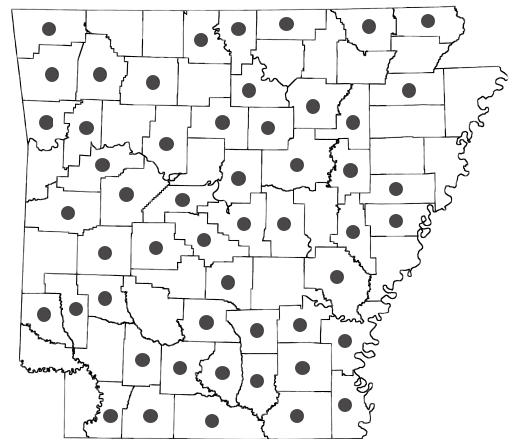
JUNCACEAE
Juncus scirpoides Lam. in Lam. et al.
 rush



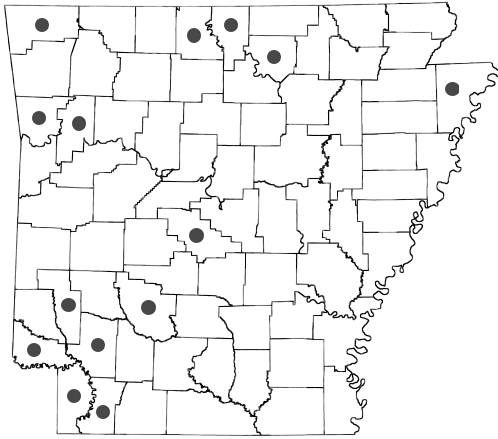
JUNCACEAE
Juncus secundus P.Beauv. ex Poir. in Lam. et al.
 rush



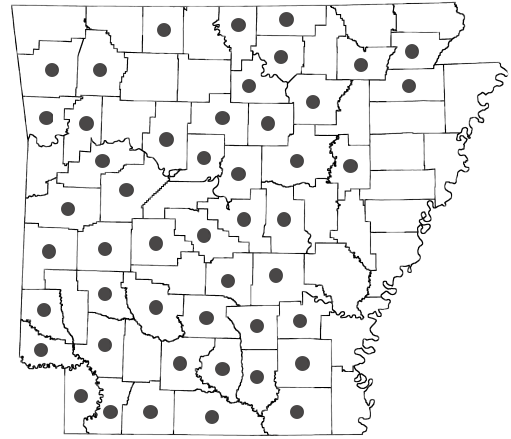
JUNCACEAE
Juncus subcaudatus (Engelm.) Coville & S.F.Blake
 fen rush, woodland rush



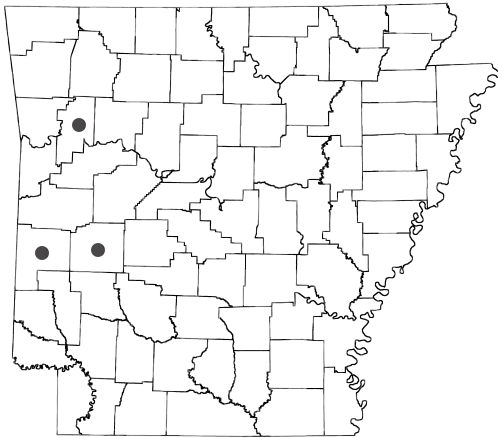
JUNCACEAE
Juncus tenuis Willd.
 path rush, slender rush



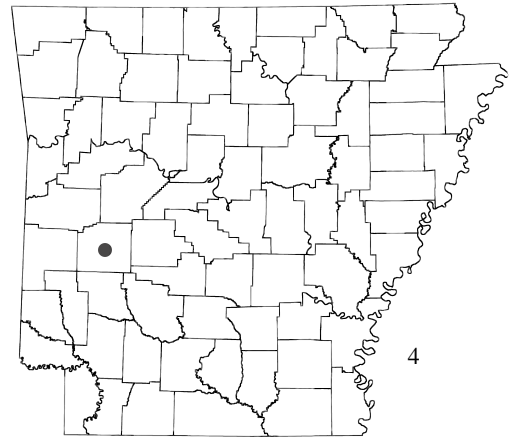
JUNCACEAE
Juncus torreyi Coville
 Torrey's rush



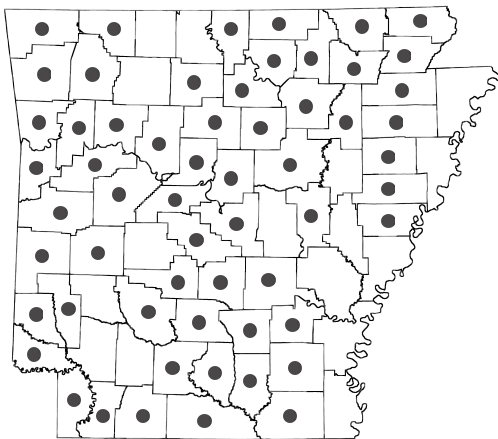
JUNCACEAE
Juncus validus Coville
var. validus
 rush



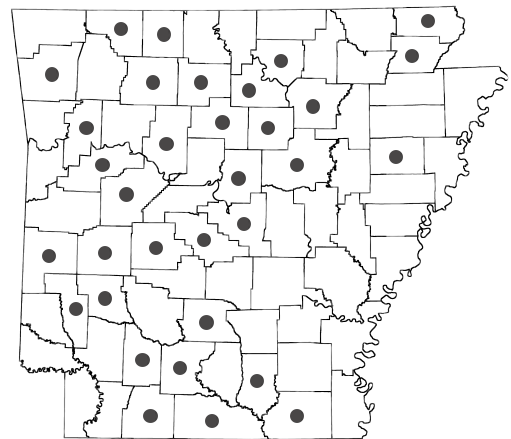
JUNCACEAE
Luzula acuminata Raf.
var. acuminata
 wood-rush



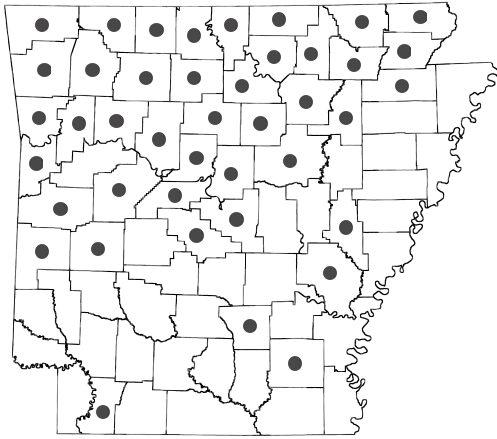
JUNCACEAE
Luzula acuminata Raf.
var. caroliniae (S.Watson) Fernald
 Carolina wood-rush



JUNCACEAE
Luzula bulbosa (A.Wood) Smyth & L.C.R.Smyth
 wood-rush



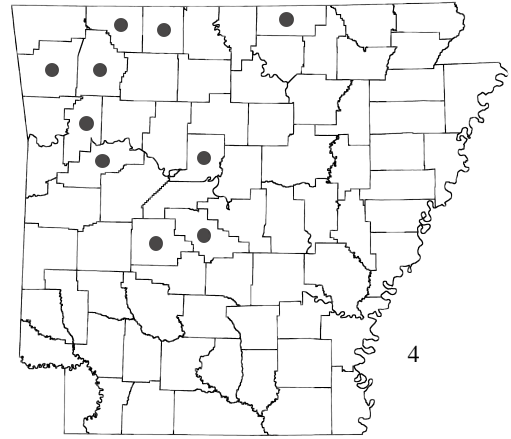
JUNCACEAE
Luzula echinata (Small) F.J.Herm.
 wood-rush



LILIACEAE

Erythronium albidum Nutt.

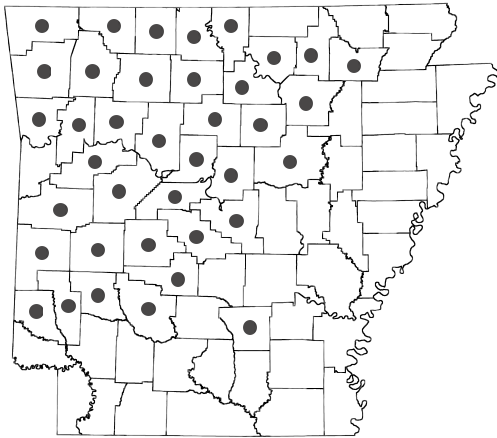
white trout-lily, white dog-tooth-violet



LILIACEAE

Erythronium mesochoreum Knerr

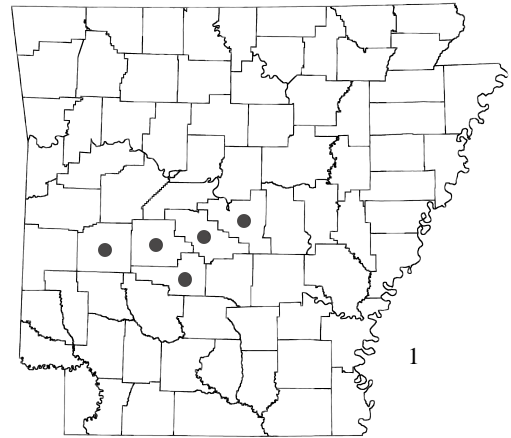
prairie trout-lily, prairie dog-tooth-violet



LILIACEAE

Erythronium rostratum W. Wolf

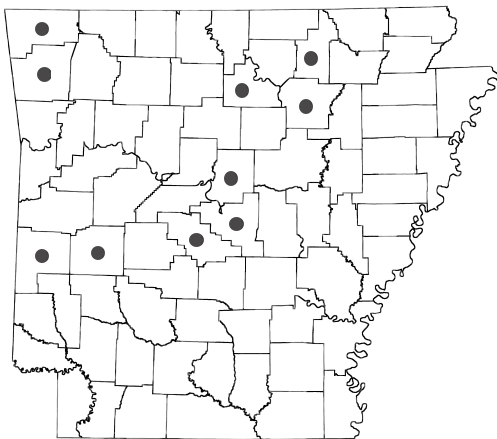
yellow trout-lily



LILIACEAE

Lilium lancifolium Thunb.

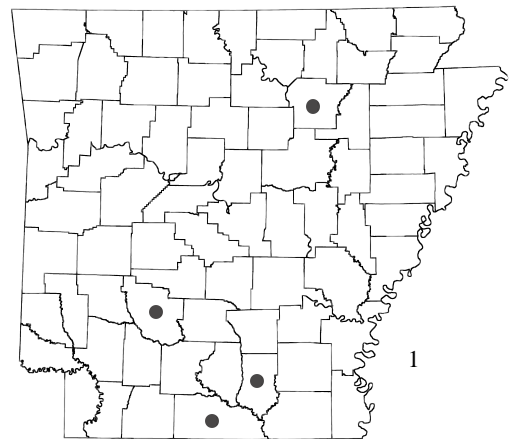
tiger lily



LILIACEAE

Lilium michiganense Farw.

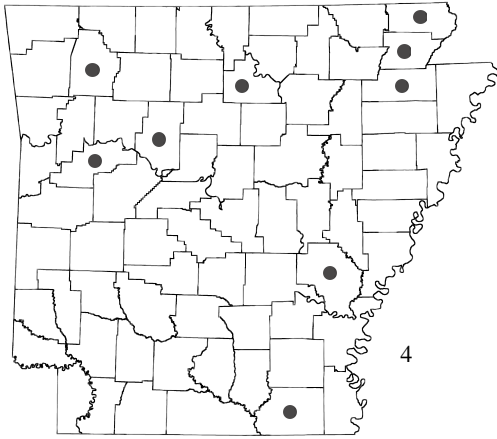
Michigan lily



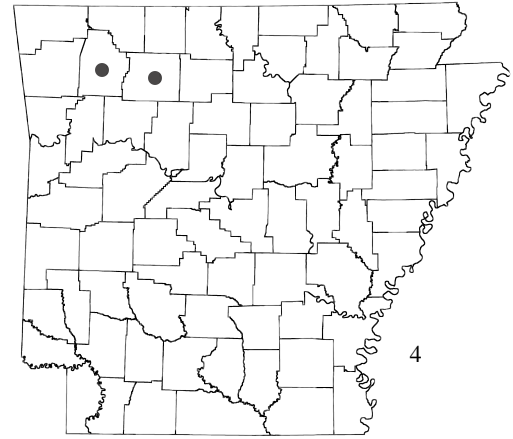
LILIACEAE

Lilium philippinense Baker

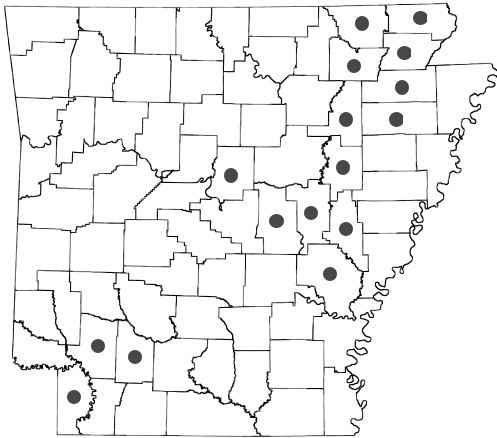
Philippine lily



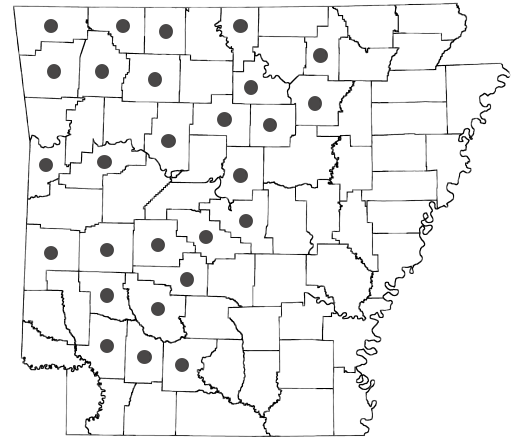
LILIACEAE
***Lilium superbum* L.**
 Turk's-cap lily



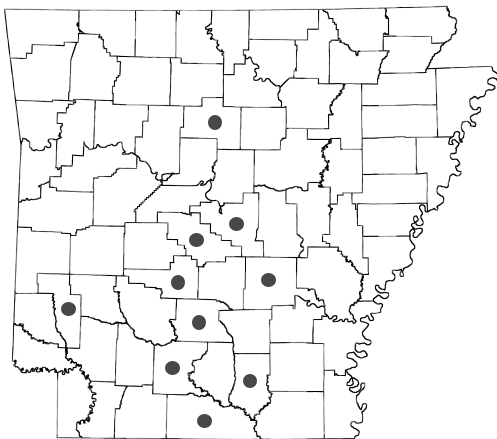
LILIACEAE
***Prostertes lanuginosa* (Michx.) D. Don**
 yellow mandarin



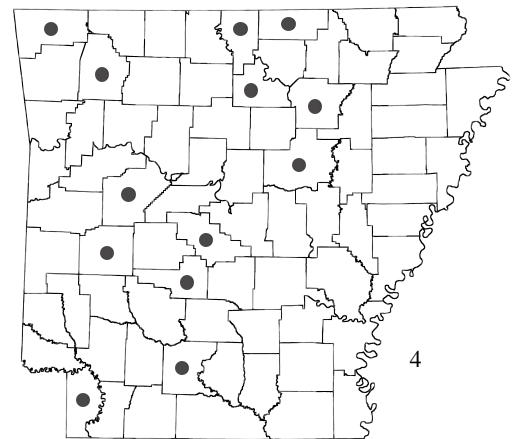
MARANTACEAE
***Thalia dealbata* Fraser ex Roscoe**
 powdery thalia, powdery alligator-flag



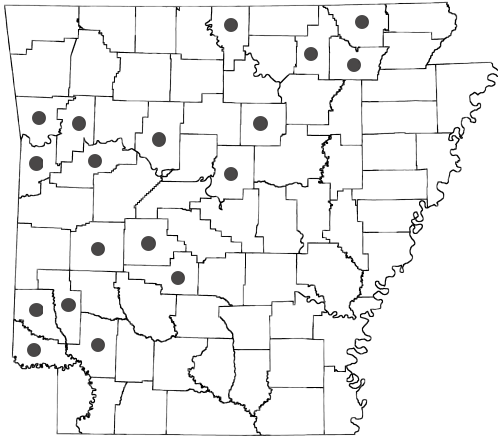
MELANTHIACEAE
***Amianthium muscitoxicum* (Walter) A. Gray**
 fly-poison



MELANTHIACEAE
***Chamaelirium luteum* (L.) A. Gray**
 devil's-bit, fairy-wand



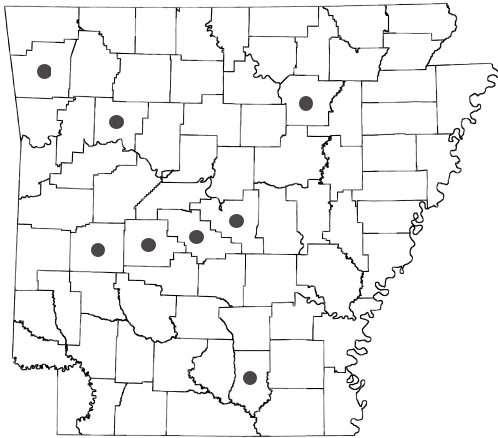
MELANTHIACEAE
***Stenanthium gramineum* (Ker Gawl.) Morong**
 featherbells



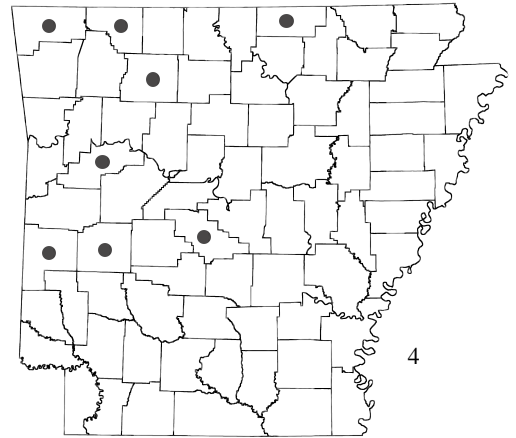
MELANTHIACEAE
Toxicoscordion nuttallii (A.Gray) Rydb.
death-camas



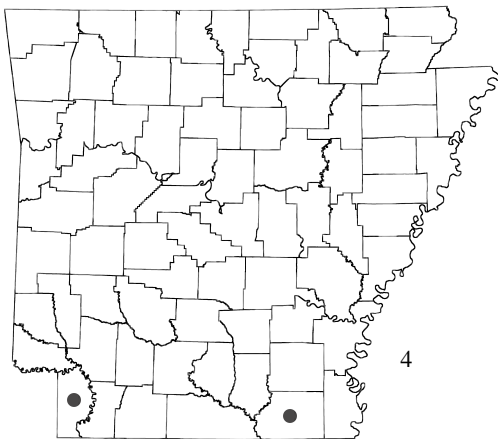
MELANTHIACEAE
Veratrum latifolium (Desr. in Lam. et al.) Zomlefer
bunchflower



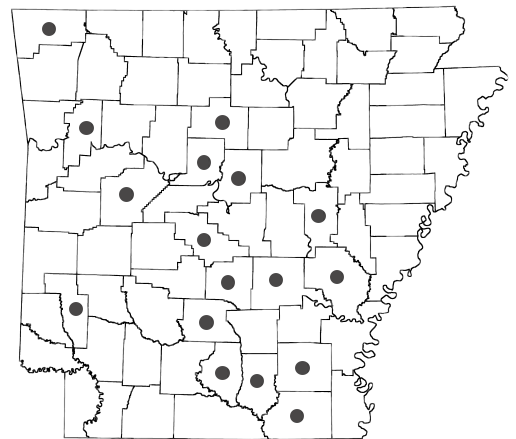
MELANTHIACEAE
Veratrum virginicum (L.) W.T.Aiton
bunchflower



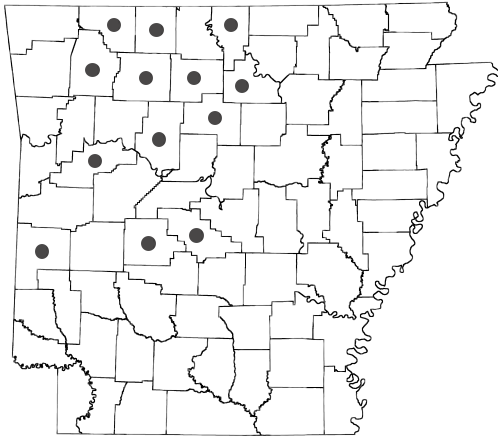
MELANTHIACEAE
Veratrum woodii J.W.Robbins ex A.W.Wood
Wood's false hellebore



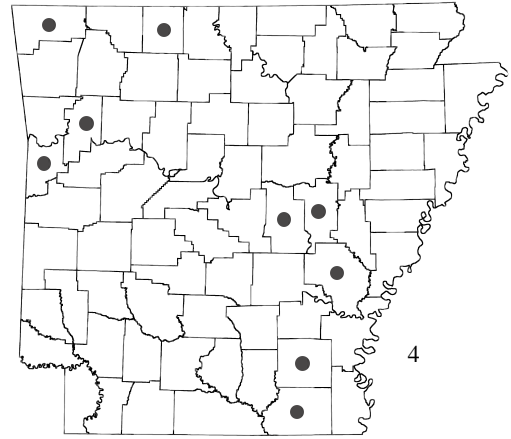
NARTHECIACEAE
Aletris aurea Walter
golden colicroot, yellow star-grass



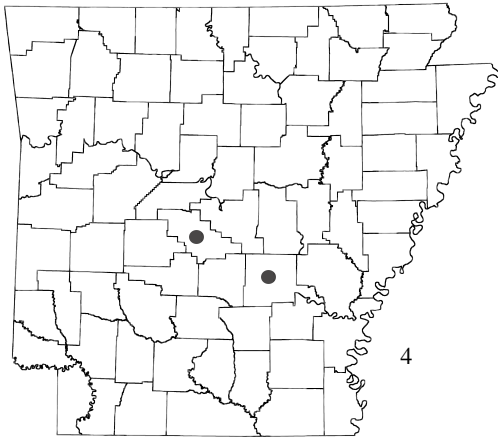
NARTHECIACEAE
Aletris farinosa L.
white colicroot, unicorn-root, white star-grass



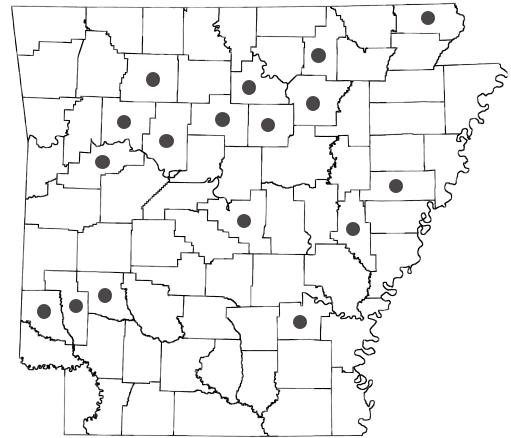
ORCHIDACEAE
Aplectrum hyemale (Muhl. ex Willd.) Nutt.
 Adam-and-Eve, putty-root



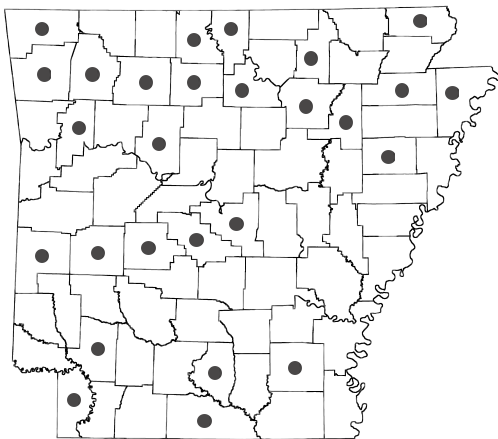
ORCHIDACEAE
Calopogon oklahomensis D.H.Goldman
 Oklahoma grass-pink



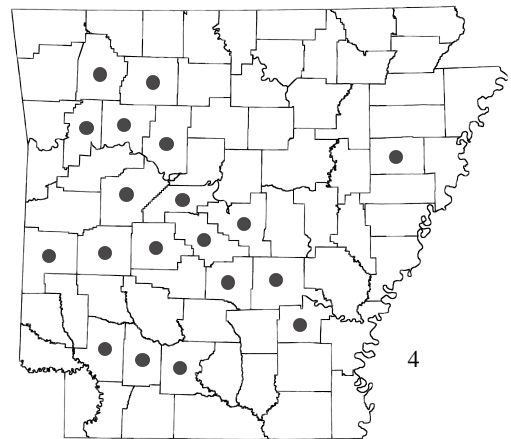
ORCHIDACEAE
Calopogon tuberosus (L.) Britton, Sterns & Poggenb.
var. tuberosus
 tuberosus grass-pink



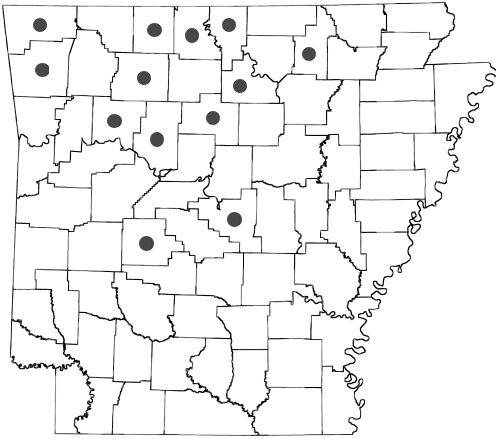
ORCHIDACEAE
Corallorhiza odorhiza (Willd.) Poir. in F.Cuvier
var. odorhiza
 autumn coralroot, late coralroot



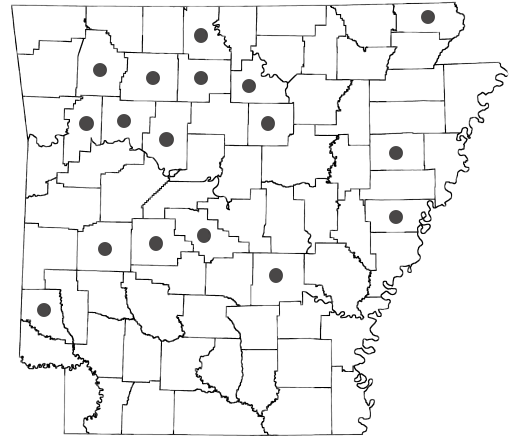
ORCHIDACEAE
Corallorhiza wisteriana Conrad
 spring coralroot



ORCHIDACEAE
Cypripedium kentuckiense C.F.Reed
 Kentucky lady's-slipper



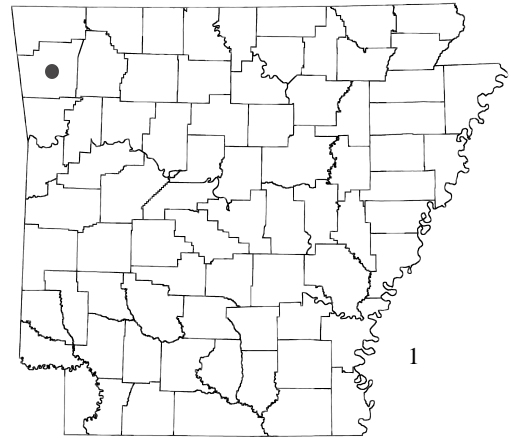
ORCHIDACEAE
Cypripedium parviflorum Salisb.
 var. **parviflorum**
 small yellow lady's-slipper



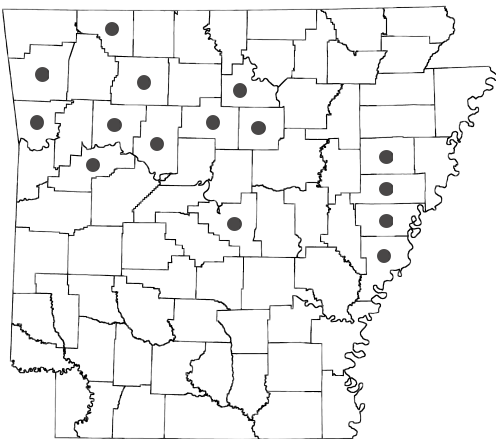
ORCHIDACEAE
Cypripedium parviflorum Salisb.
 var. **pubescens** (Willd.) O.W.Knight
 large yellow lady's-slipper



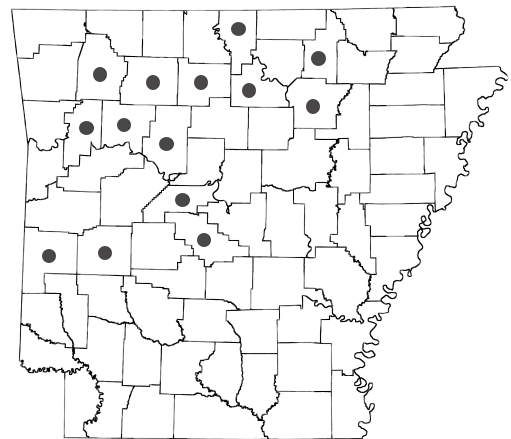
ORCHIDACEAE
Cypripedium reginae Walter
 showy lady's-slipper



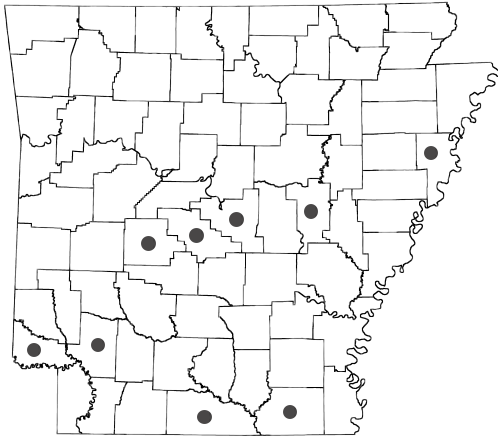
ORCHIDACEAE
Epipactis helleborine (L.) Crantz
 helleborine



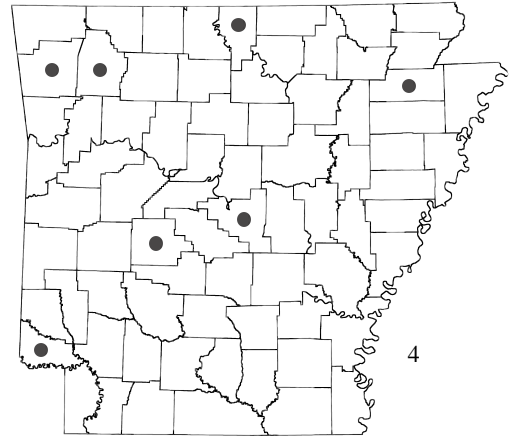
ORCHIDACEAE
Galearis spectabilis (L.) Raf.
 showy orchis



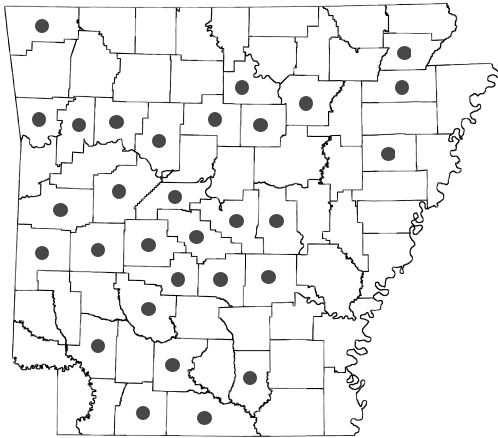
ORCHIDACEAE
Goodyera pubescens (Willd.) R.Br. in Aiton & W.T.Aiton
 downy rattlesnake-plantain



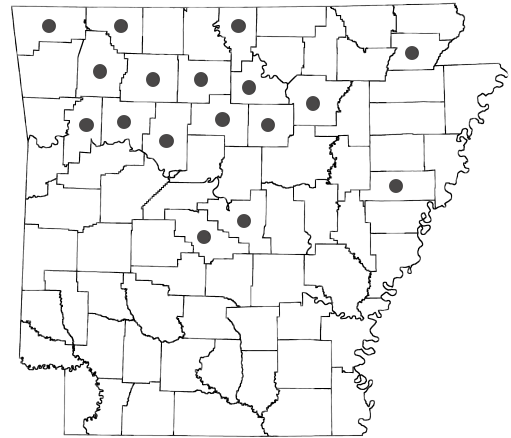
ORCHIDACEAE
***Habenaria repens* Nutt.**
 water-spider orchid



ORCHIDACEAE
***Hexalectris spicata* (Walter) Barnhart**
var. *spicata*
 crested-coralroot



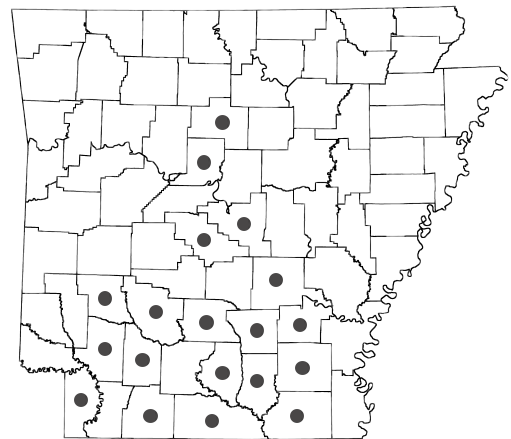
ORCHIDACEAE
***Isotria verticillata* (Muhl. ex Willd.) Raf.**
 large whorled-pogonia



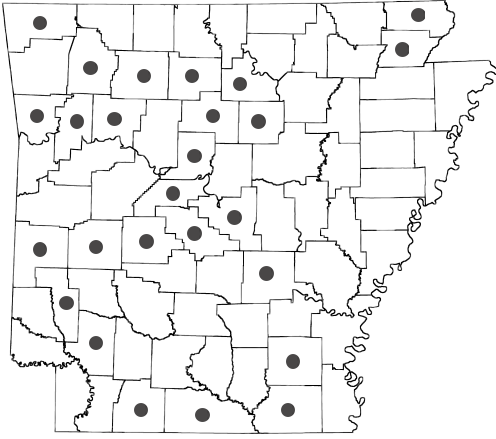
ORCHIDACEAE
***Liparis liliifolia* (L.) Rich. ex Lindl.**
 lily-leaf twayblade, large twayblade



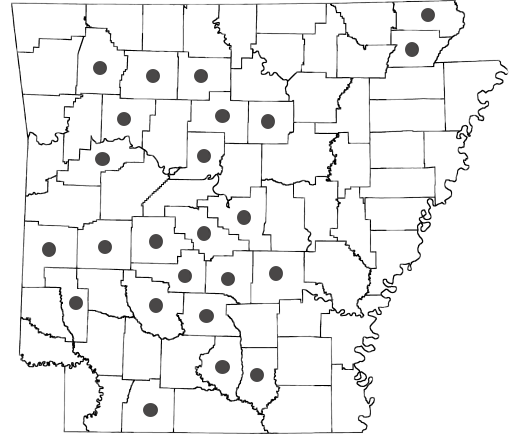
ORCHIDACEAE
***Liparis loeselii* (L.) Rich.**
 Loesel's twayblade, fen orchid



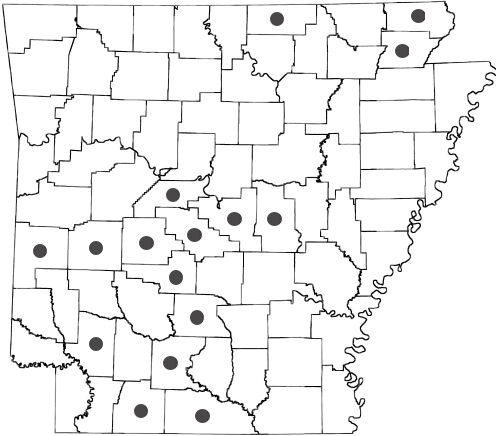
ORCHIDACEAE
***Listera australis* Lindl.**
 southern twayblade



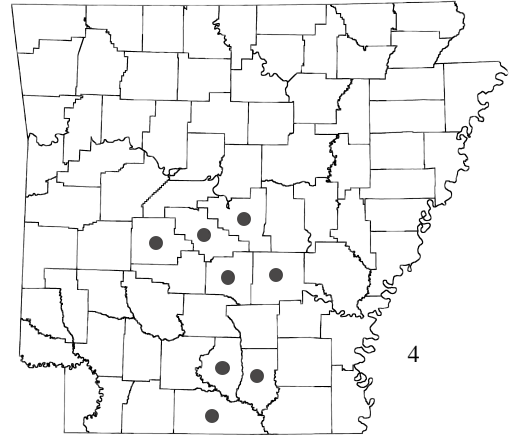
ORCHIDACEAE
Malaxis unifolia Michx.
 green adder's-mouth



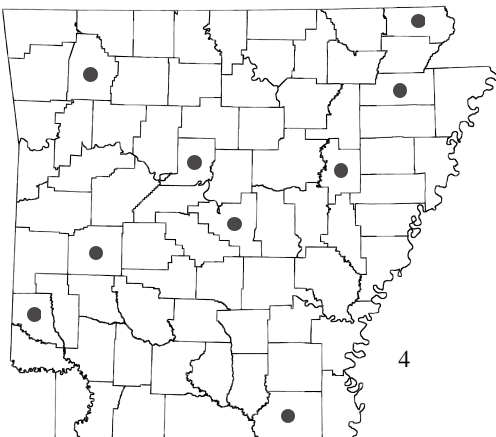
ORCHIDACEAE
Platanthera ciliaris (L.) Lindl.
 yellow fringed orchid



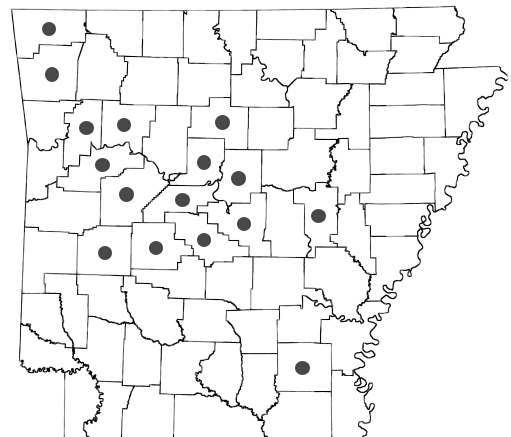
ORCHIDACEAE
Platanthera clavellata (Michx.) Luer
 small green wood orchid



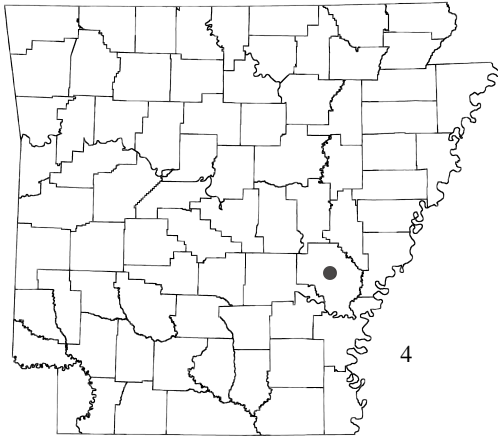
ORCHIDACEAE
Platanthera cristata (Michx.) Lindl.
 crested fringed orchid, crested yellow orchid



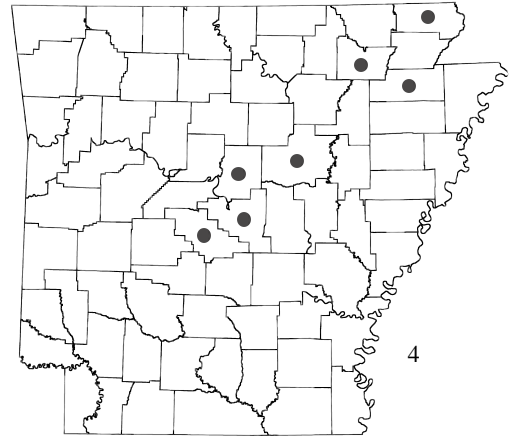
ORCHIDACEAE
Platanthera flava (L.) Lindl.
var. flava
 southern rein orchid, southern tubercled orchid, pale-green orchid



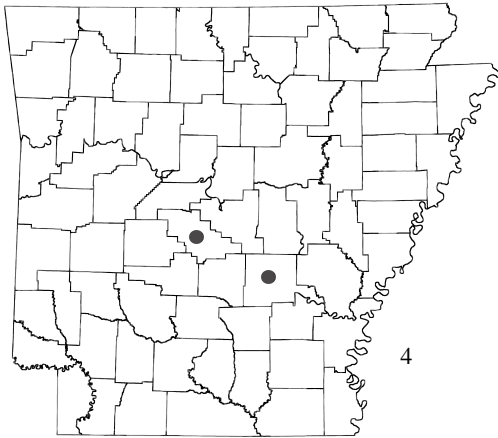
ORCHIDACEAE
Platanthera lacera (Michx.) G. Don in Sweet
 green fringed orchid, ragged fringed orchid



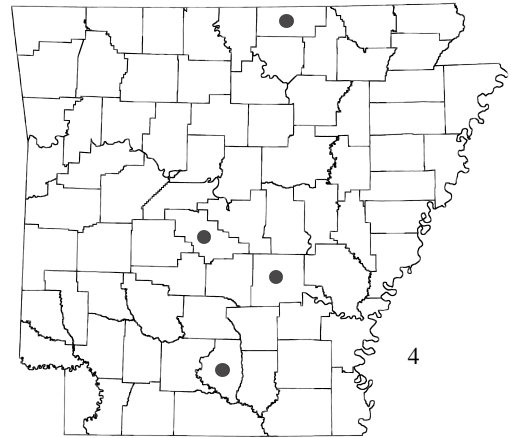
ORCHIDACEAE
***Platanthera nivea* (Nutt.) Luer**
 snowy orchid



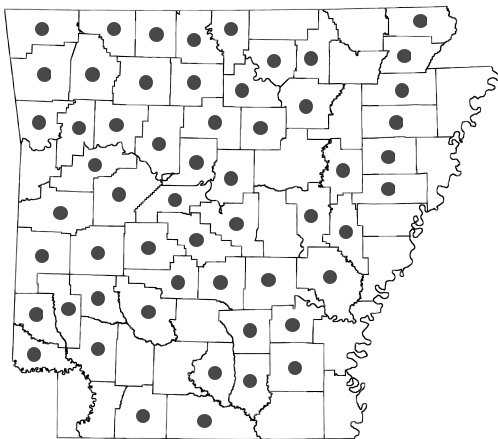
ORCHIDACEAE
***Platanthera peramoena* (A.Gray) A.Gray**
 purple fringeless orchid



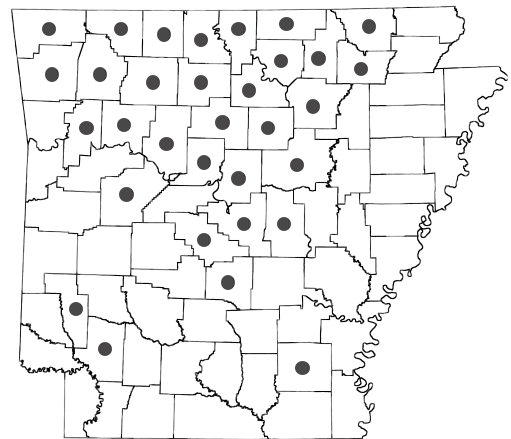
ORCHIDACEAE
***Platanthera* × *channellii* Folsom**
 Channell's fringed orchid



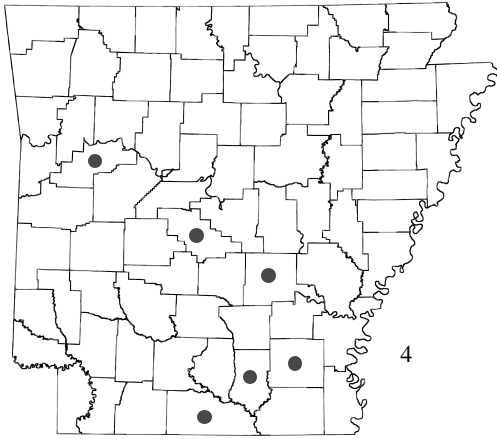
ORCHIDACEAE
***Pogonia ophioglossoides* (L.) Ker Gawl.**
 rose pogonia, snake-mouth



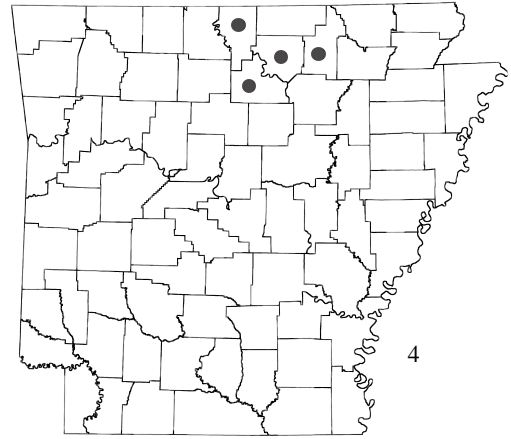
ORCHIDACEAE
***Spiranthes cernua* (L.) Rich.**
 nodding ladies'-tresses



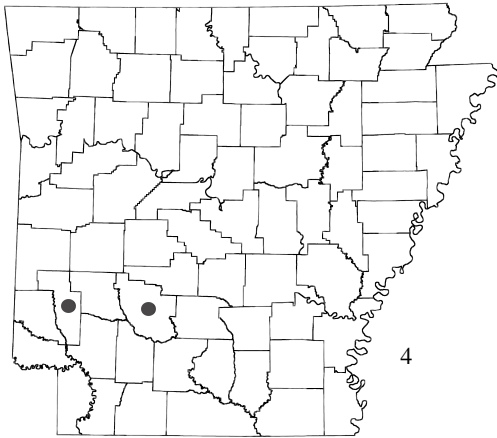
ORCHIDACEAE
***Spiranthes lacera* (Raf.) Raf.**
var. *gracilis* (Bigelow) Luer
 southern slender ladies'-tresses



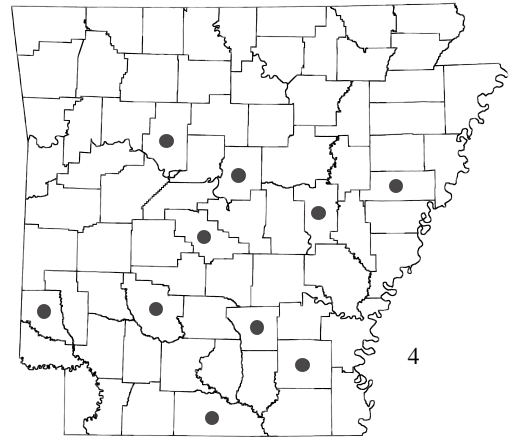
ORCHIDACEAE
Spiranthes lacera (Raf.) Raf.
var. lacera
 northern slender ladies'-tresses



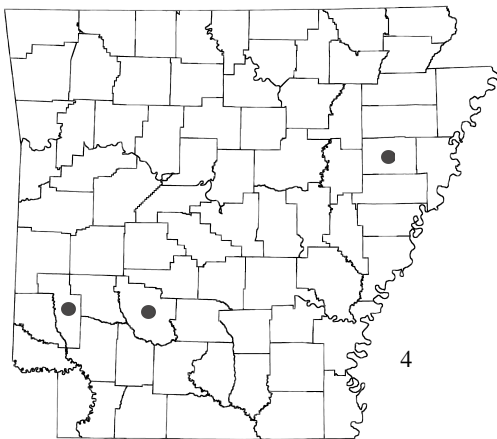
ORCHIDACEAE
Spiranthes lucida (H.H.Eaton) Ames
 shining ladies'-tresses



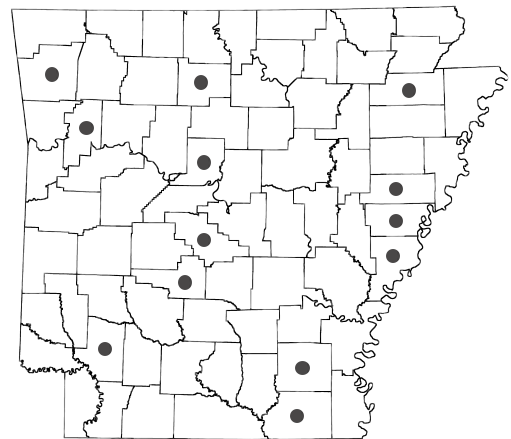
ORCHIDACEAE
Spiranthes magnicamporum Sheviak
 Great Plains ladies'-tresses



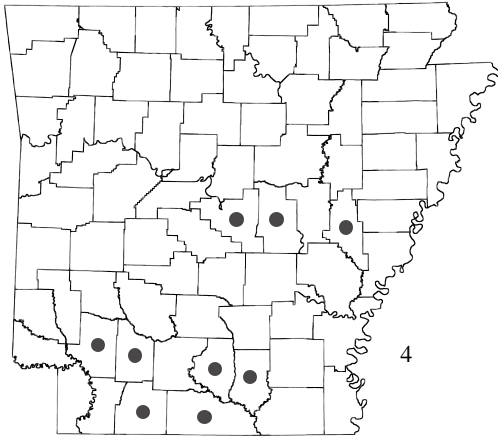
ORCHIDACEAE
Spiranthes odorata (Nutt.) Lindl.
 fragrant ladies'-tresses, marsh ladies'-tresses



ORCHIDACEAE
Spiranthes ovalis Lindl.
var. erostellata Catling
 northern oval ladies'-tresses



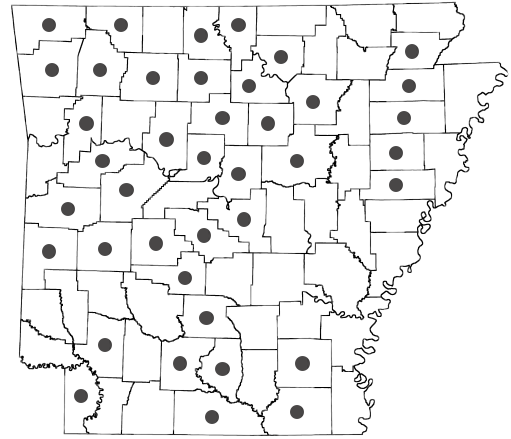
ORCHIDACEAE
Spiranthes ovalis Lindl.
var. ovalis
 southern oval ladies'-tresses



ORCHIDACEAE

***Spiranthes praecox* (Walter) S.Watson in A.Gray et al.**

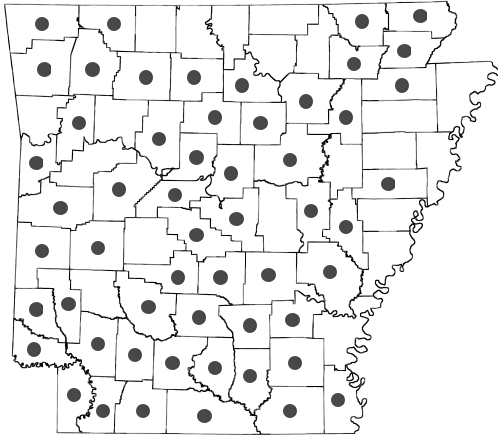
giant ladies'-tresses, grass-leaf ladies'-tresses



ORCHIDACEAE

***Spiranthes tuberosa* Raf.**

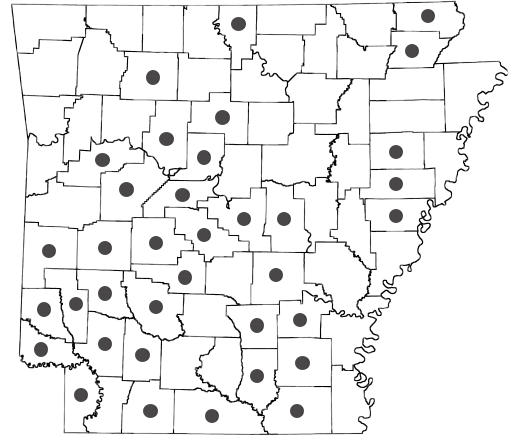
little ladies'-tresses



ORCHIDACEAE

***Spiranthes vernalis* Engelm. & A.Gray**

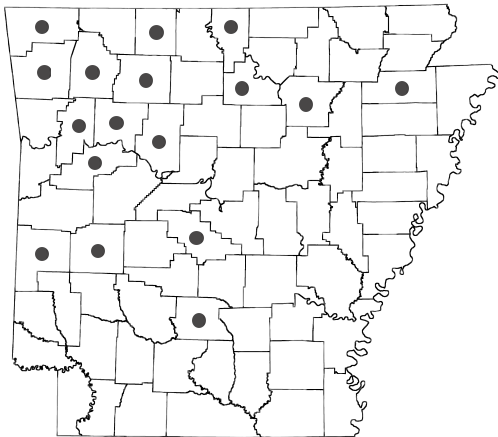
spring ladies'-tresses



ORCHIDACEAE

***Tipularia discolor* (Pursh) Nutt.**

crane-fly orchid

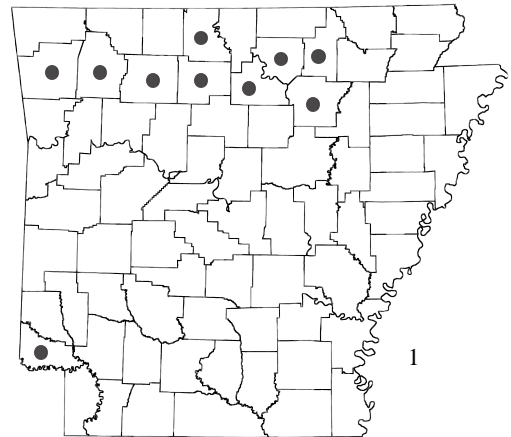


ORCHIDACEAE

***Triphora trianthophora* (Sw.) Rydb. in Britton**

subsp. *trianthophora*

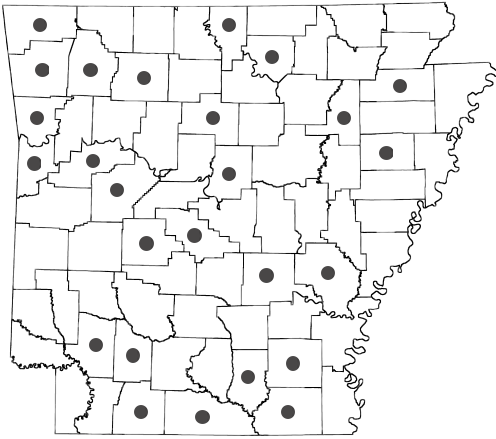
three-birds orchid, nodding-pogonia



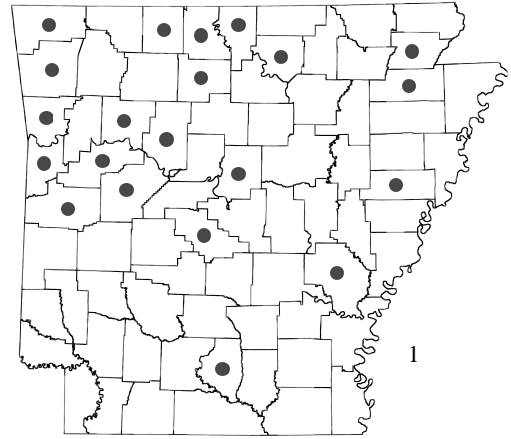
POACEAE

***Aegilops cylindrica* Host**

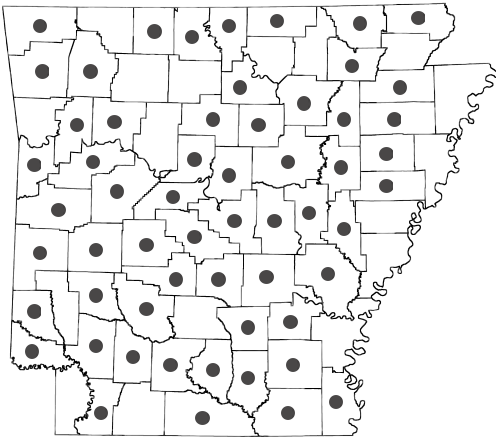
jointed goat grass



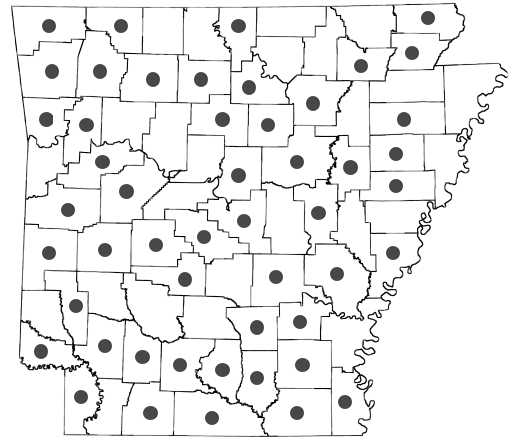
POACEAE
Agrostis eliottiana Schult.
 Elliott's bent grass



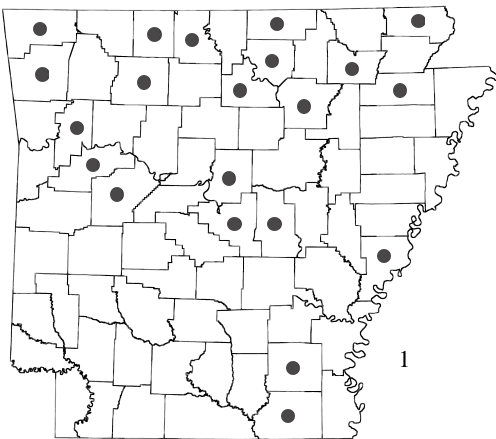
POACEAE
Agrostis gigantea Roth
 redbtop



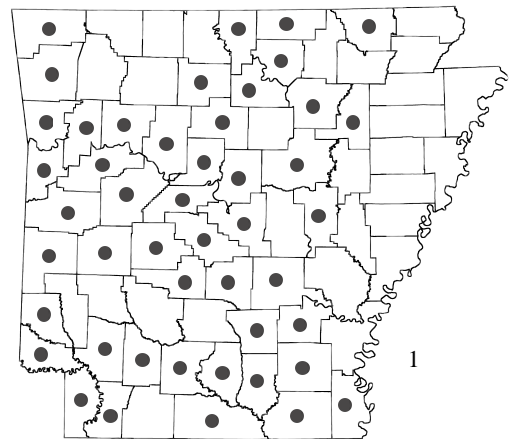
POACEAE
Agrostis hyemalis (Walter) Britton, Sterns & Poggenb.
 winter bent grass, tickle grass



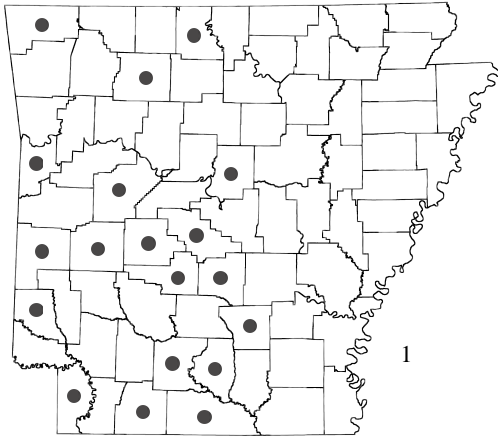
POACEAE
Agrostis perennans (Walter) Tuck.
 autumn bent grass, upland bent grass



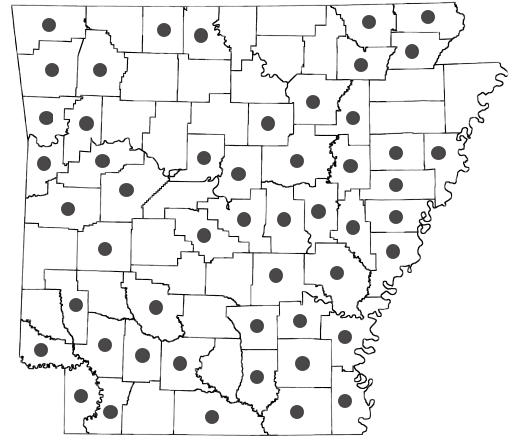
POACEAE
Agrostis stolonifera L.
 creeping bent grass



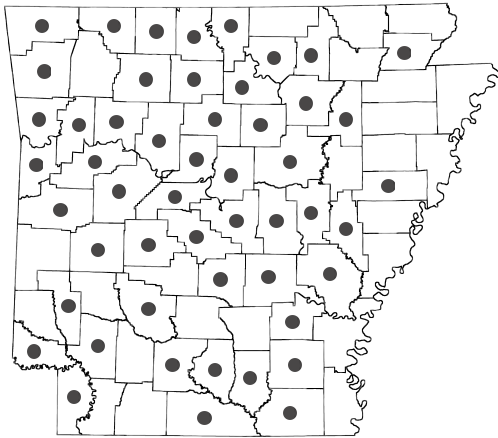
POACEAE
Aira caryophylla L.
var. capillaris (Mert. & W.D.J.Koch) Mutel
 annual hair grass



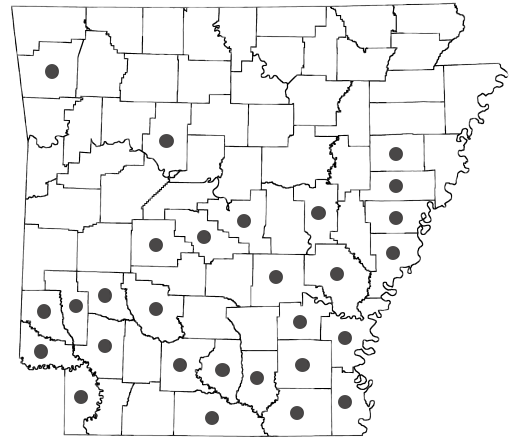
POACEAE
Aira caryophyllea L.
var. caryophyllea
 silver hair grass



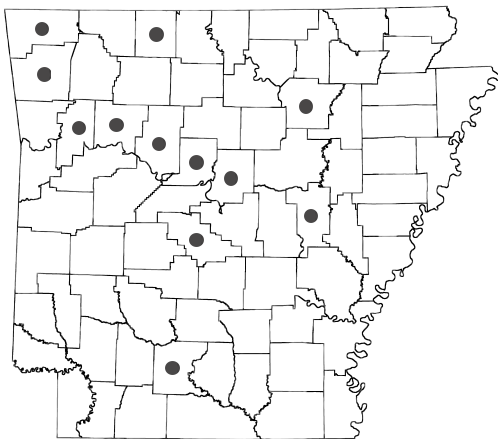
POACEAE
Alopecurus carolinianus Walter
 Carolina foxtail



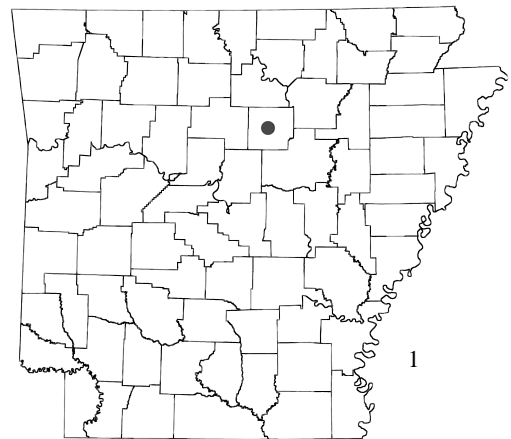
POACEAE
Andropogon gerardii Vitman
 big bluestem, turkey-foot



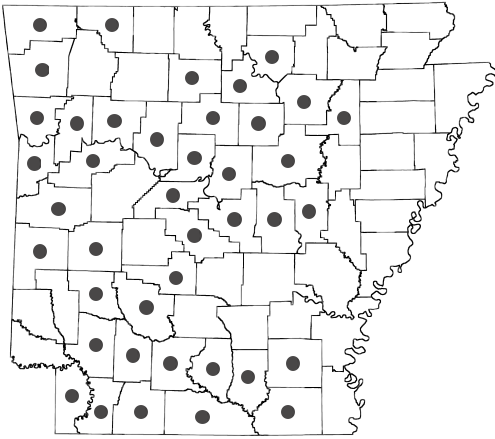
POACEAE
Andropogon glomeratus (Walter) Britton, Sterns & Poggenb.
 bushy bluestem, bushy beard grass



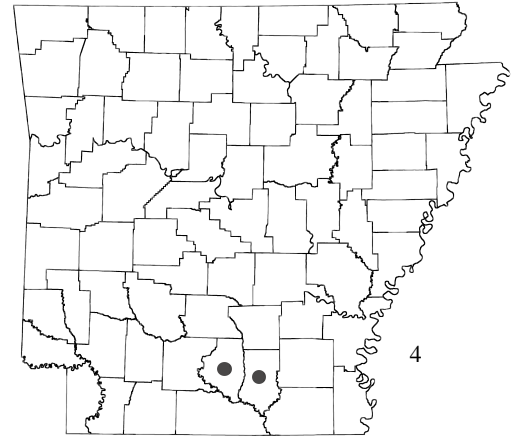
POACEAE
Andropogon gyrans Ashe
var. gyrans
 Elliott's bluestem, Elliott's beard grass



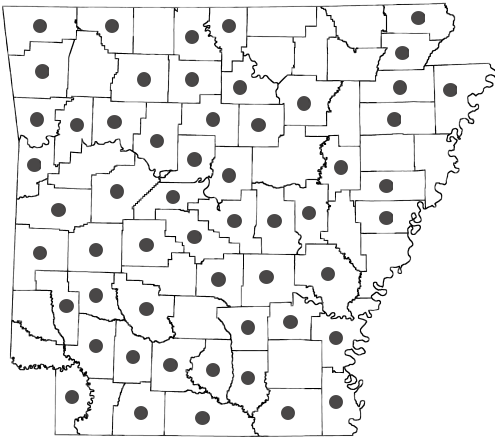
POACEAE
Andropogon hallii Hack.
 sand bluestem



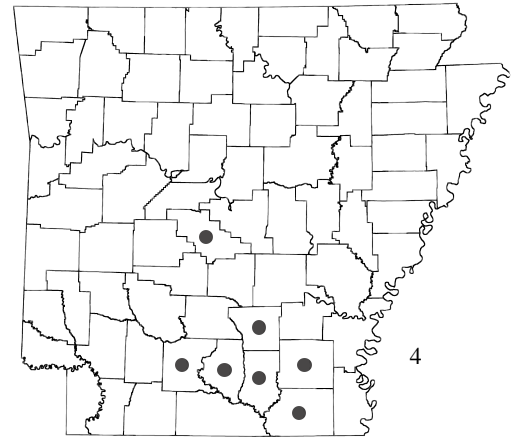
POACEAE
Andropogon ternarius Michx.
var. ternarius
 split-beard bluestem



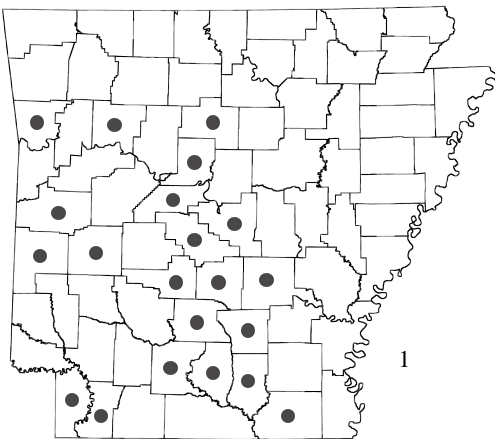
POACEAE
Andropogon virginicus L.
var. glaucus Hack.
 chalky bluestem



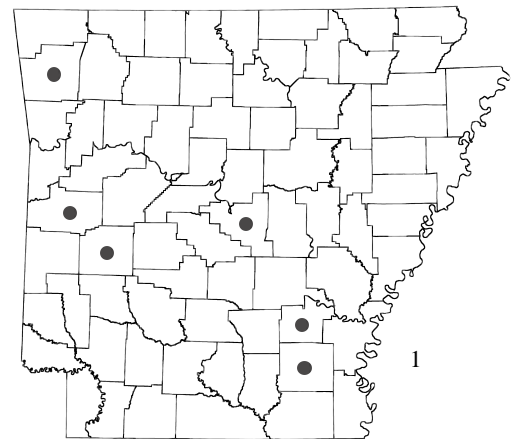
POACEAE
Andropogon virginicus L.
var. virginicus
 broomsedge, broomsedge bluestem



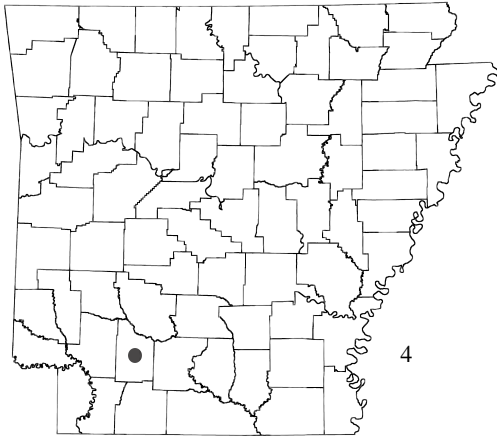
POACEAE
Anthenantia texana R.Kral
 Kral's silkscale, purple silkscale



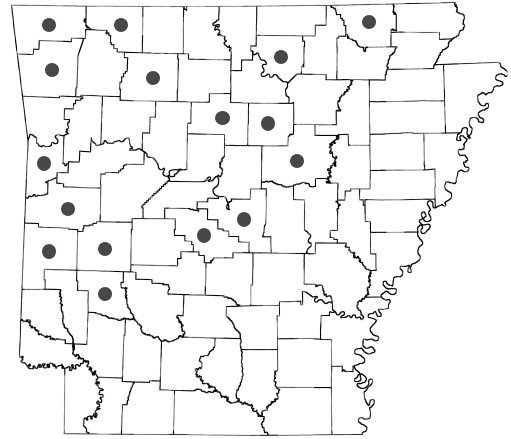
POACEAE
Anthoxanthum aristatum Boiss.
 annual vernal grass



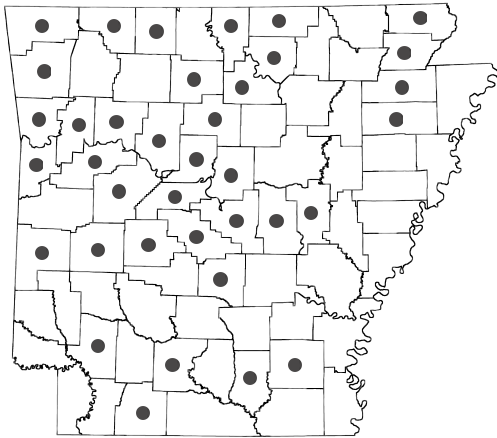
POACEAE
Anthoxanthum odoratum L.
 sweet vernal grass



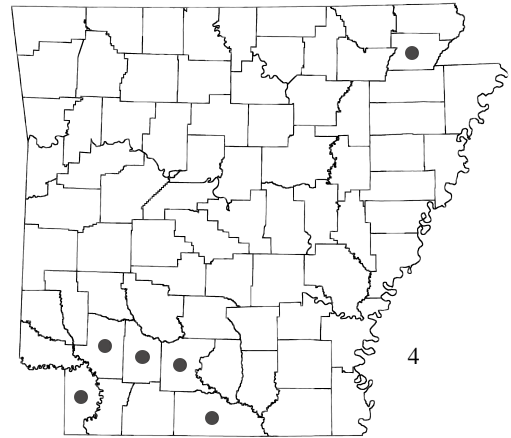
POACEAE
***Aristida desmantha* Trin. & Rupr.**
 curly three-awn



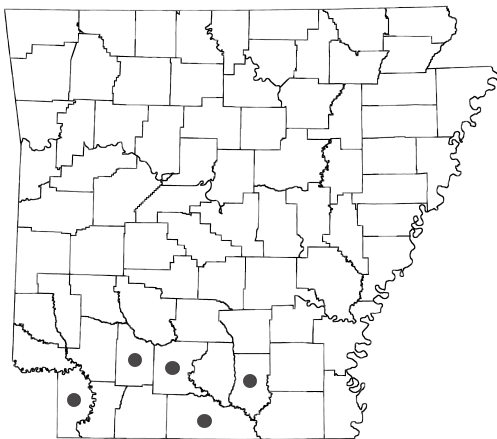
POACEAE
***Aristida dichotoma* Michx.**
var. *curtissii* A.Gray
 church-mouse three-awn



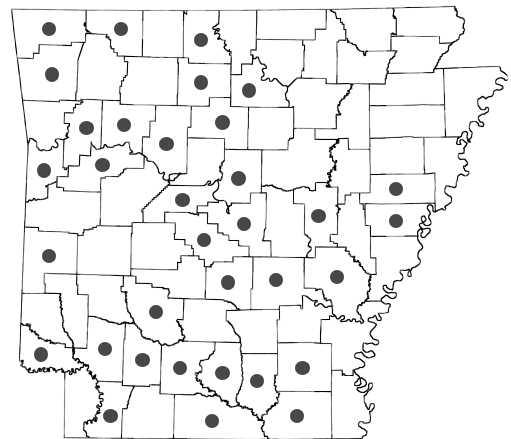
POACEAE
***Aristida dichotoma* Michx.**
var. *dichotoma*
 church-mouse three-awn



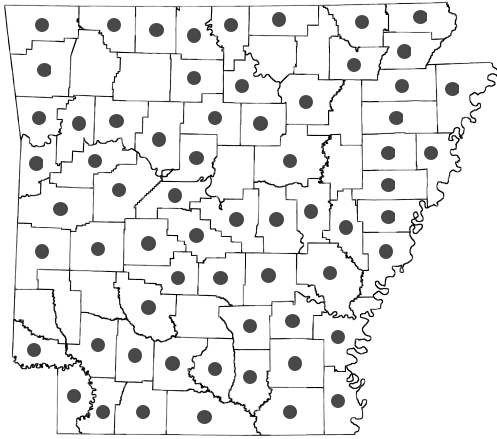
POACEAE
***Aristida lanosa* Muhl. ex Elliott**
 woolly three-awn



POACEAE
***Aristida longespica* Poir.**
var. *geniculata* (Raf.) Fernald
 slim-spike three-awn



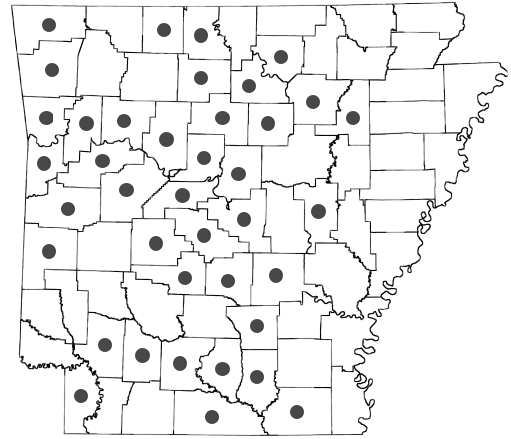
POACEAE
***Aristida longespica* Poir.**
var. *longespica*
 slim-spike three-awn



POACEAE

***Aristida oligantha* Michx.**

oldfield three-awn, prairie three-awn

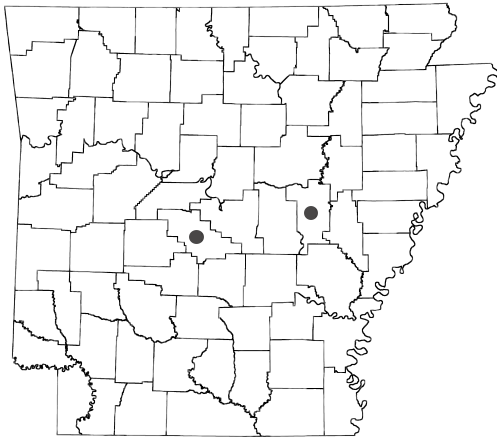


POACEAE

***Aristida purpurascens* Poir.**

var. *purpurascens*

arrow-feather three-awn

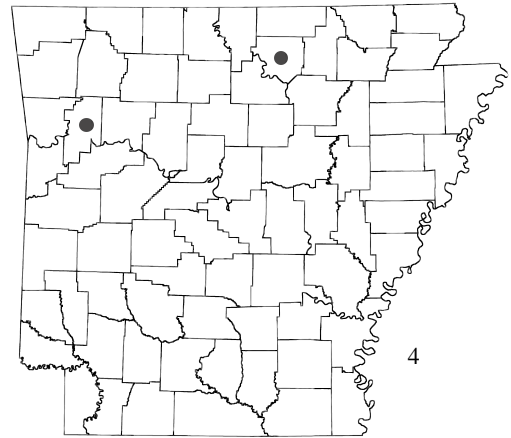


POACEAE

***Aristida purpurascens* Poir.**

var. *virgata* (Trin.) Allred

arrow-feather three-awn

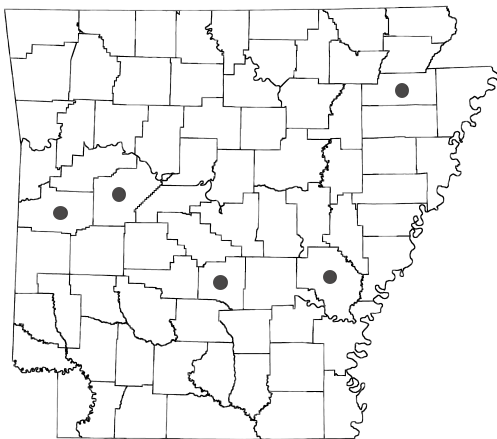


POACEAE

***Aristida purpurea* Nutt.**

var. *purpurea*

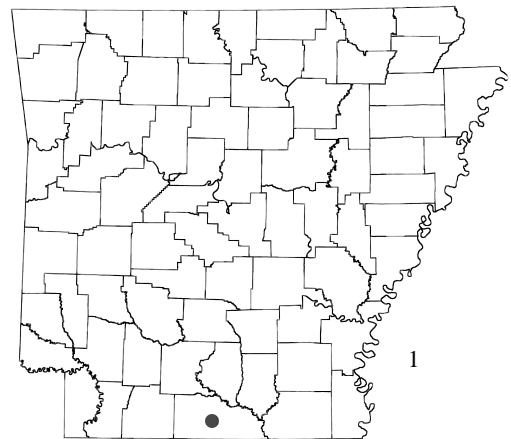
purple three-awn



POACEAE

***Aristida ramosissima* Engelm. ex A.Gray**

s-curve three-awn

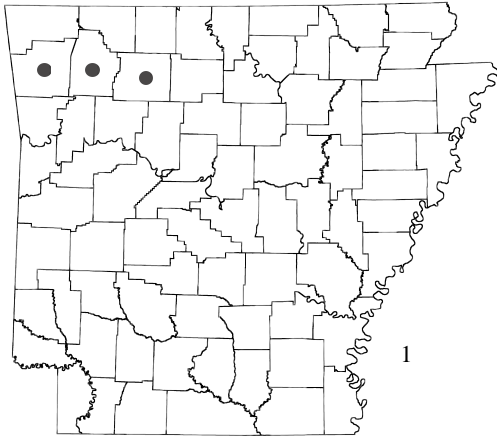


POACEAE

***Arrhenatherum elatius* (L.) P.Beauv. ex J.Presl & C.Presl**

var. *bulbosum* (Willd.) Spenn.

tall oat grass

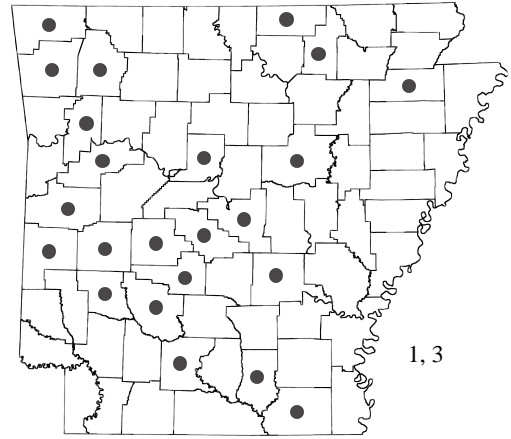


POACEAE

Arrhenatherum elatius (L.) P.Beauv. ex J.Presl & C.Presl

var. elatius

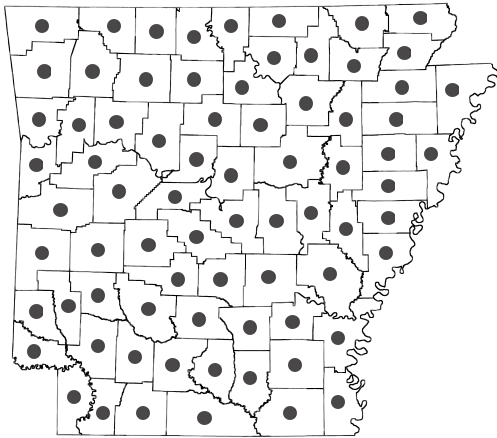
tall oat grass



POACEAE

Arthraxon hispidus (Thunb.) Makino

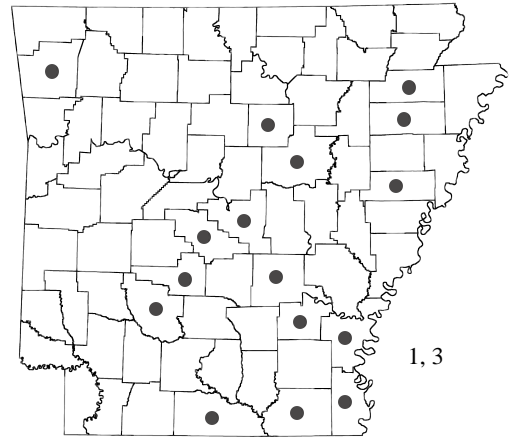
small carp grass



POACEAE

Arundinaria gigantea (Walter) Muhl.

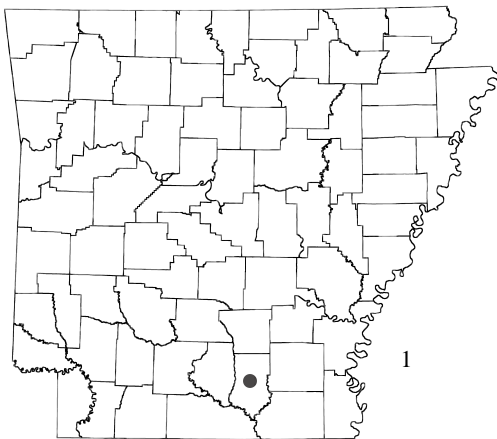
river cane, giant cane, switch cane



POACEAE

Arundo donax L.

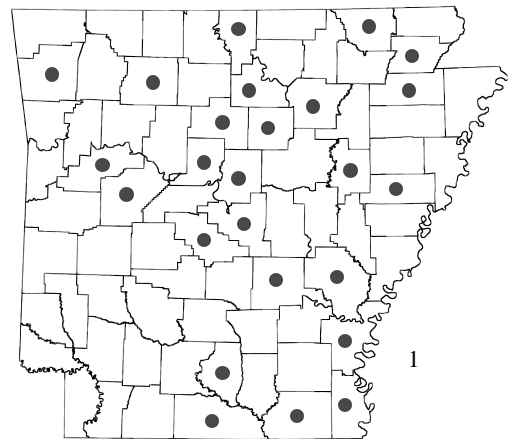
giant reed



POACEAE

Avena fatua L.

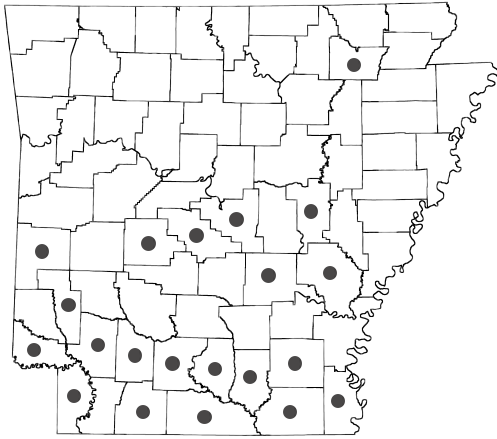
wild oats



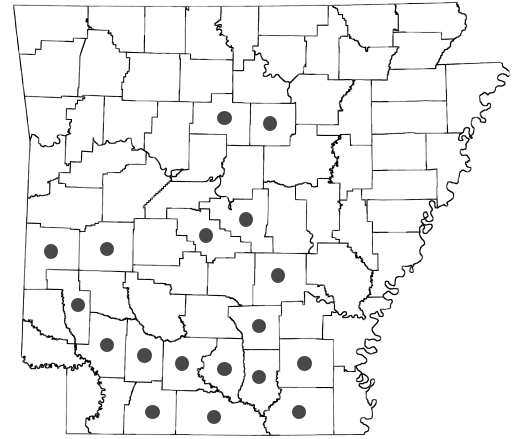
POACEAE

Avena sativa L.

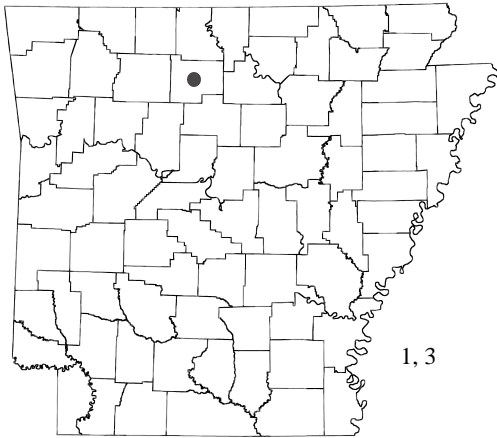
oats



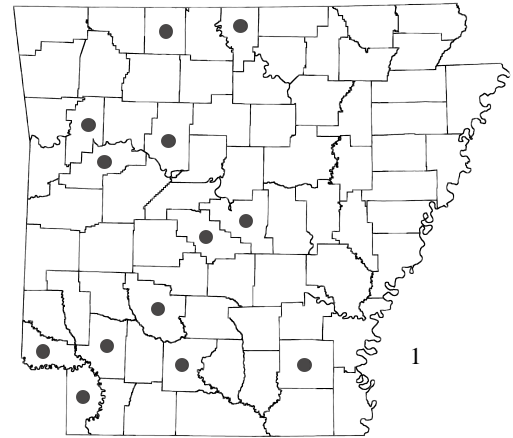
POACEAE
Axonopus fissifolius (Raddi) Kuhl.
 common carpet grass



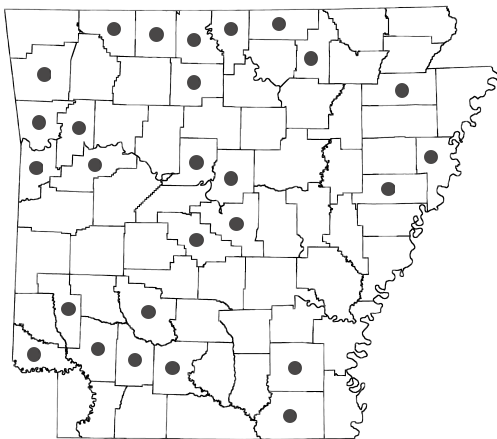
POACEAE
Axonopus furcatus (Flüggé) Hitchc.
 big carpet grass



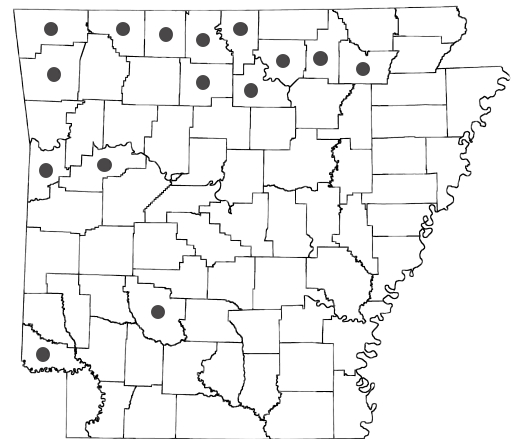
POACEAE
Bothriochloa bladhii (Retz.) S.T.Blake
 Australian bluestem, Caucasian bluestem



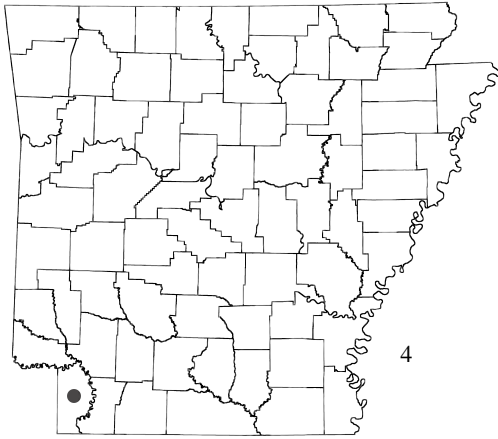
POACEAE
Bothriochloa ischaemum (L.) Keng
 yellow bluestem



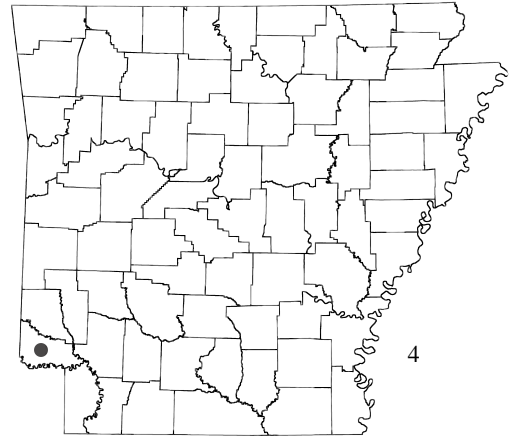
POACEAE
Bothriochloa laguroides (DC.) Herter
subsp. torreyana (Steud.) Allred & Gould
 silver beard grass, silver bluestem



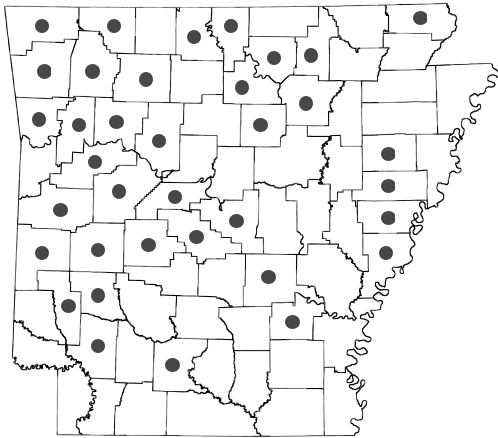
POACEAE
Bouteloua curtipendula (Michx.) Torr.
var. curtipendula
 side-oats grama



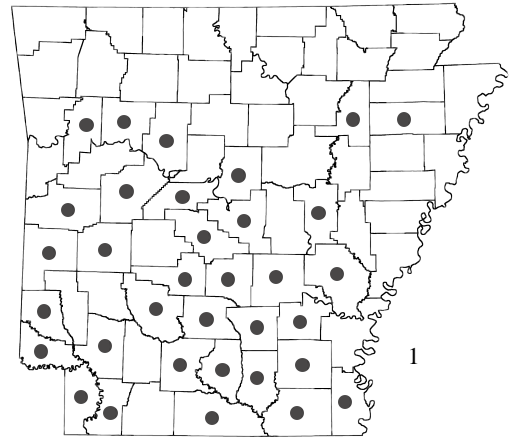
POACEAE
Bouteloua hirsuta Lag.
 subsp. *hirsuta*
 hairy grama



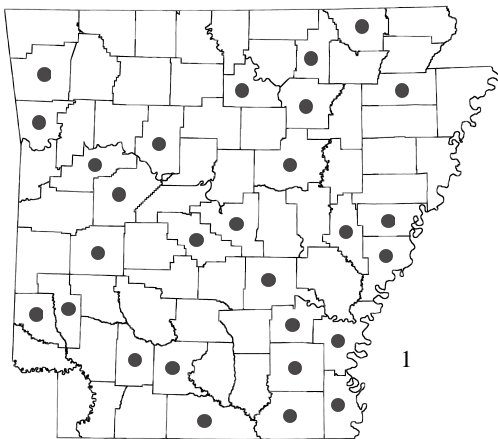
POACEAE
Bouteloua rigidiseta (Steud.) Hitchc.
 Texas grama



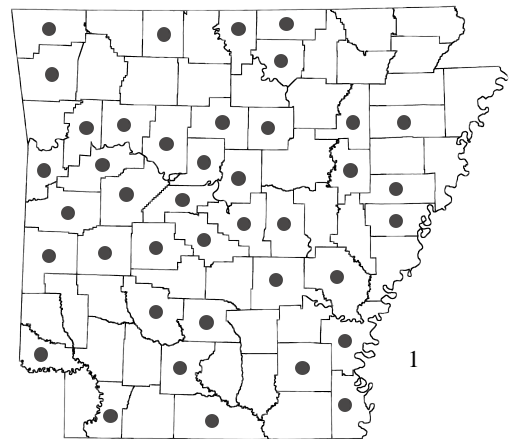
POACEAE
Brachyelytrum erectum (Schreb.) P.Beauv.
 bearded shorthusk



POACEAE
Briza minor L.
 little quaking grass



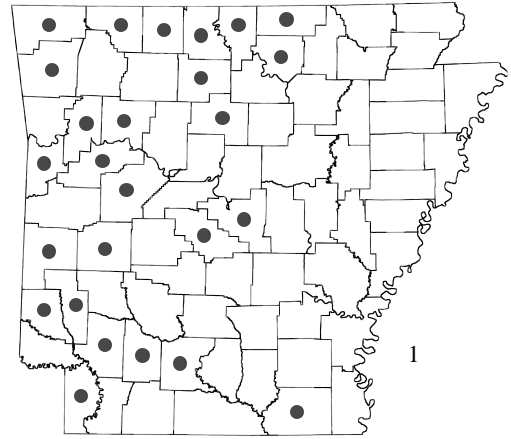
POACEAE
Bromus catharticus Vahl
 rescue grass



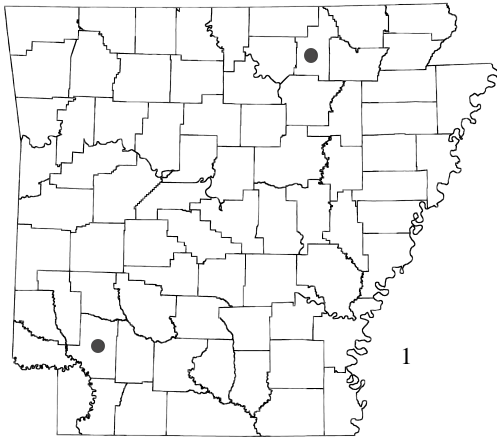
POACEAE
Bromus commutatus Schrad.
 meadow brome, hairy chess



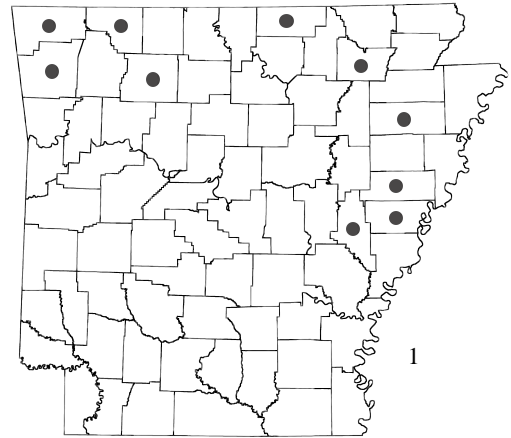
POACEAE
Bromus diandrus Roth
 ripgut grass



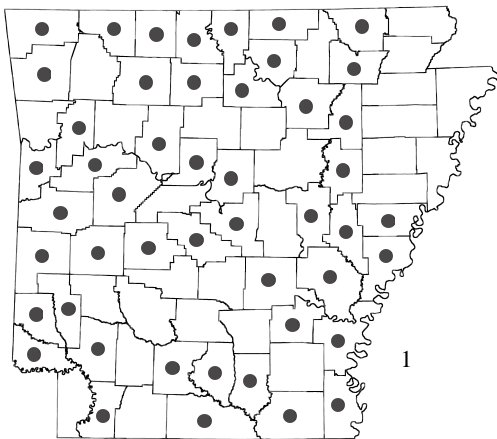
POACEAE
Bromus hordeaceus L.
subsp. hordeaceus
 soft chess



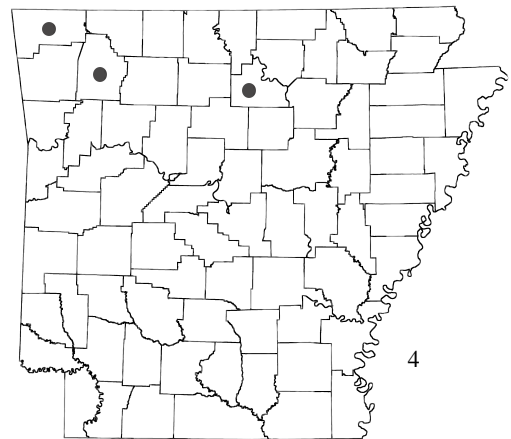
POACEAE
Bromus hordeaceus L.
subsp. pseudothominei (P.M.Sm.) H.Scholz
 soft chess



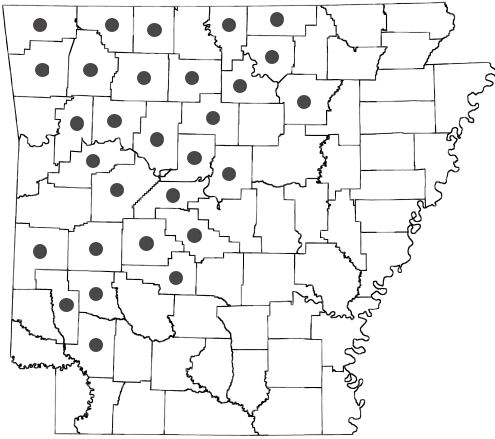
POACEAE
Bromus inermis Leys.
 smooth brome



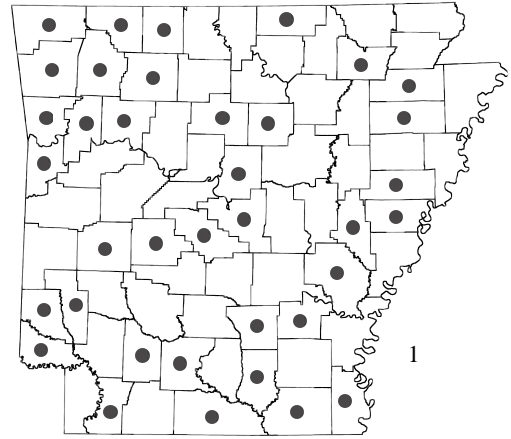
POACEAE
Bromus japonicus Thunb. ex Murray
 Japanese brome, Japanese chess



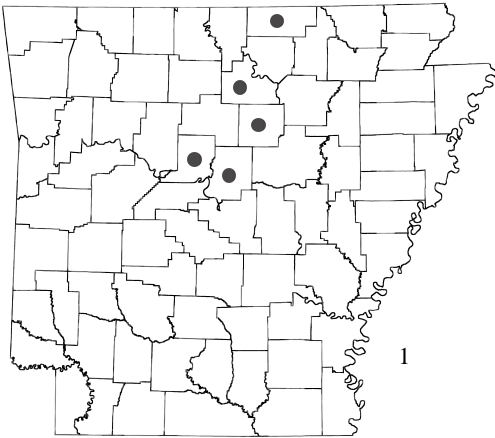
POACEAE
Bromus nottowayanus Fernald
 satin brome, Virginia brome



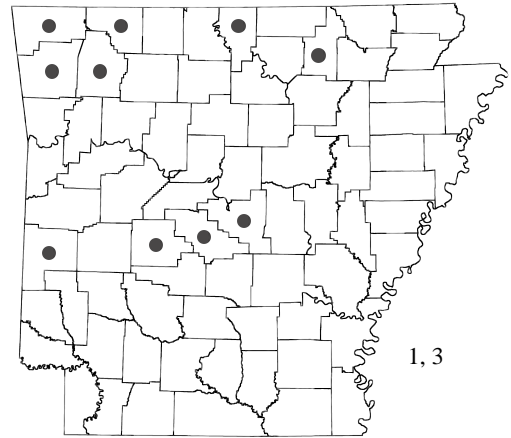
POACEAE
Bromus pubescens Muhl. ex Willd.
 hairy woodland brome



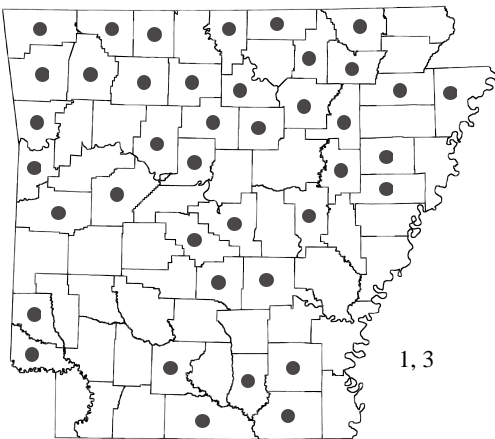
POACEAE
Bromus racemosus L.
 bald brome, smooth brome



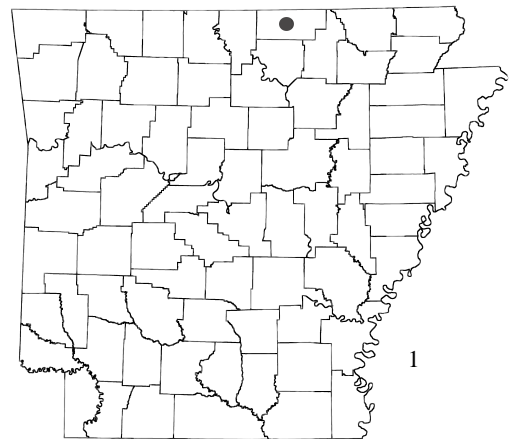
POACEAE
Bromus secalinus L.
 rye brome, cheat



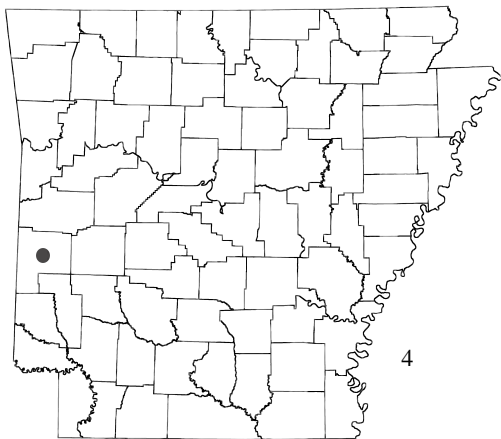
POACEAE
Bromus sterilis L.
 poverty brome, barren brome



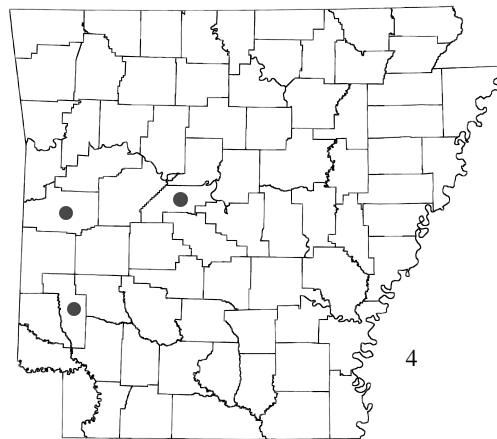
POACEAE
Bromus tectorum L.
 cheat grass, downy chess



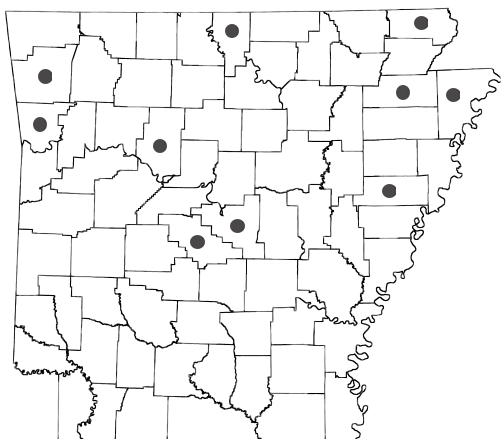
POACEAE
Buchloë dactyloides (Nutt.) Engelm.
 buffalo grass



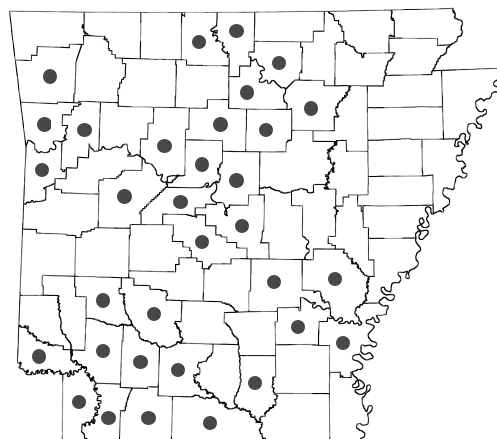
POACEAE
Calamagrostis porteri A.Gray
 subsp. *insperata* (Swallen) C.W.Greene
 Porter's reed grass, Ofer Hollow reed grass



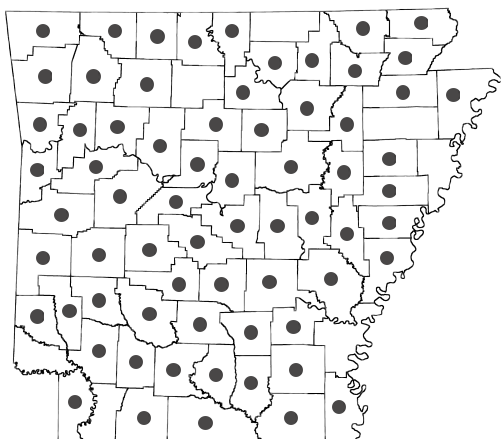
POACEAE
Calamovilfa arcuata K.E.Rogers
 Cumberland sand-reed



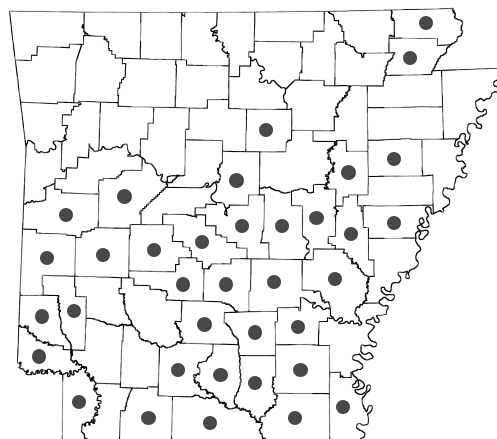
POACEAE
Cenchrus longispinus (Hack.) Fernald
 long-spine sandbur, matted sandbur



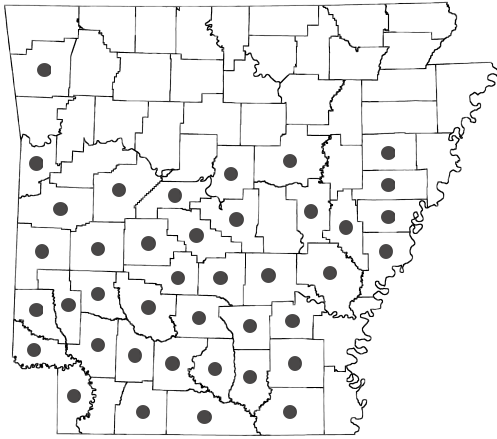
POACEAE
Cenchrus spinifex Cav.
 coastal sandbur



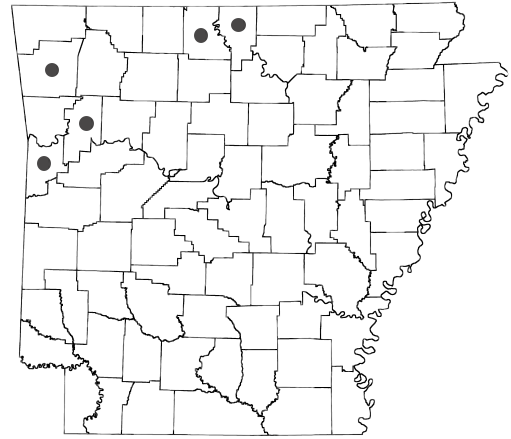
POACEAE
Chasmanthium latifolium (Michx.) H.O.Yates
 river-oats, inland sea-oats



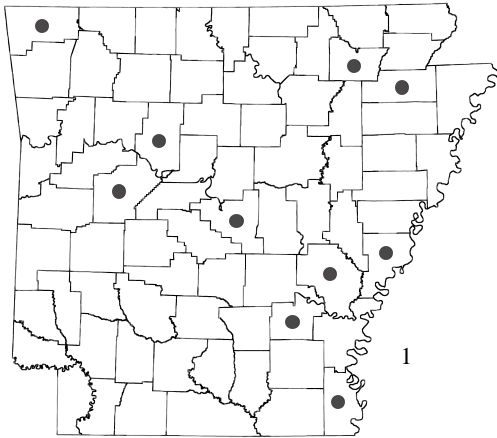
POACEAE
Chasmanthium laxum (L.) H.O.Yates
 slender wood-oats



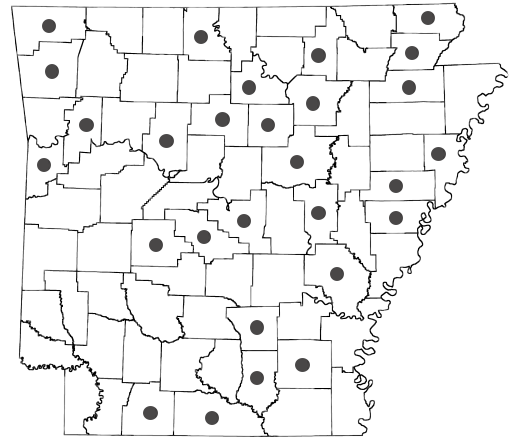
POACEAE
Chasmanthium sessiliflorum (Poir.) H.O. Yates
long-leaf wood-oats



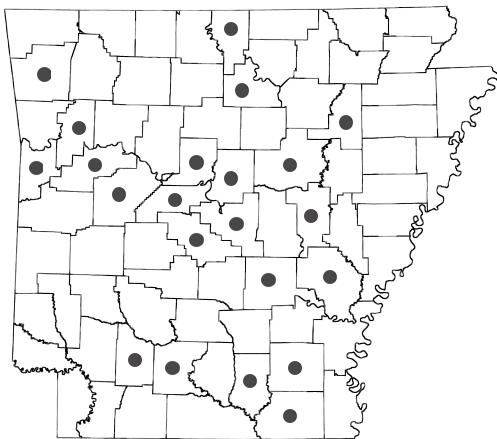
POACEAE
Chloris verticillata Nutt.
windmill grass



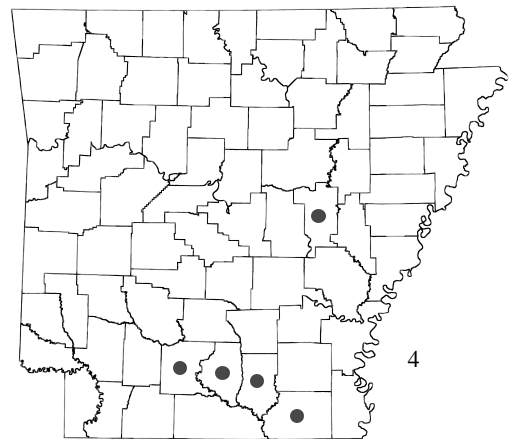
POACEAE
Chloris virgata Sw.
feather finger grass, showy chloris



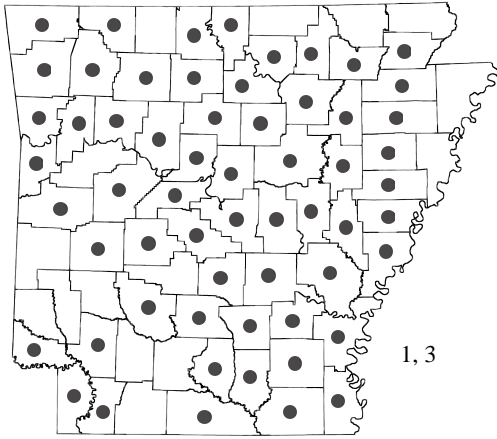
POACEAE
Cinna arundinacea L.
stout wood-reed



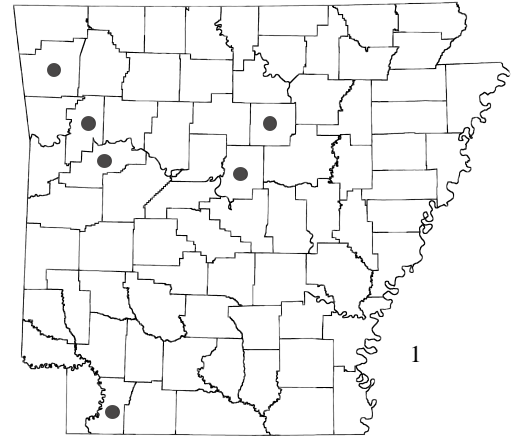
POACEAE
Coelorachis cylindrica (Michx.) Nash
Carolina joint-tail, Carolina joint grass



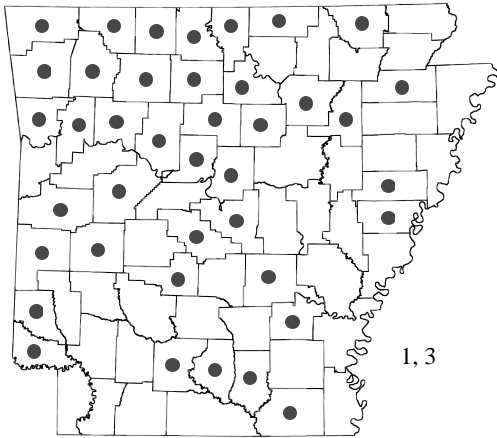
POACEAE
Coelorachis rugosa (Nutt.) Nash
wrinkled joint-tail, wrinkled joint grass



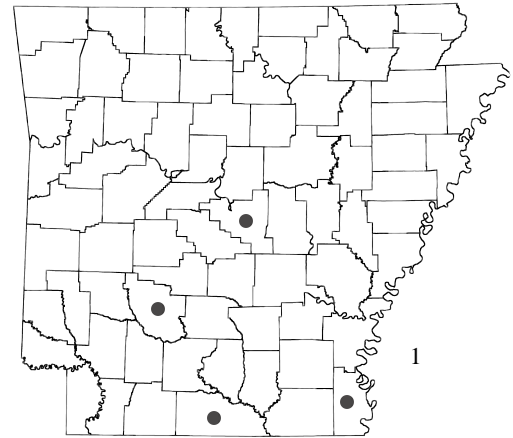
POACEAE
Cynodon dactylon (L.) Pers.
 Bermuda grass



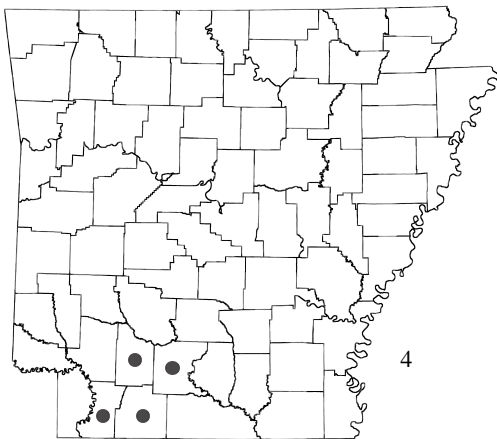
POACEAE
Cynosurus echinatus L.
 bristly dog's-tail



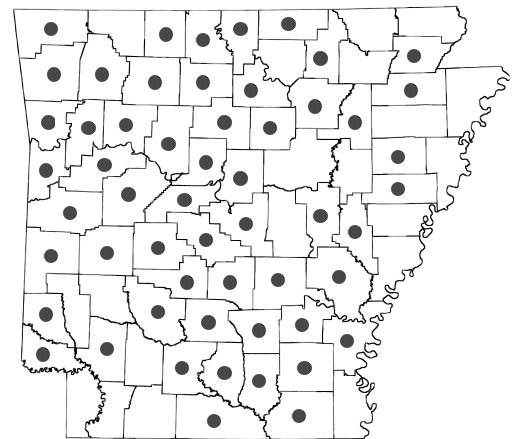
POACEAE
Dactylis glomerata L.
 orchard grass



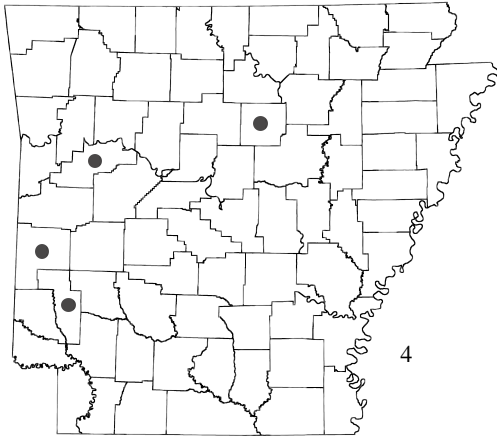
POACEAE
Dactyloctenium aegyptium (L.) Willd.
 Durban crowfoot



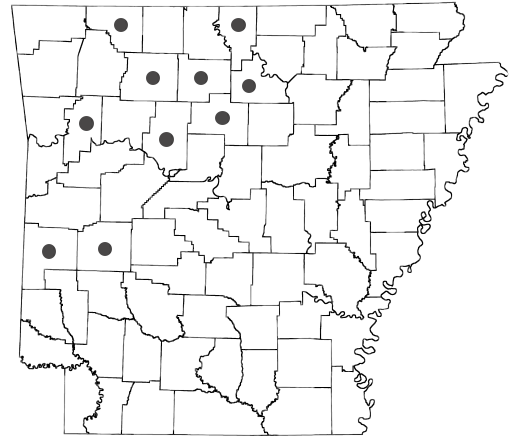
POACEAE
Danthonia sericea Nutt.
 downy oat grass



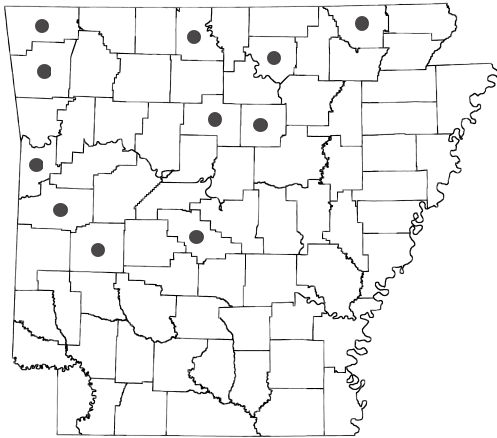
POACEAE
Danthonia spicata (L.) P.Beauv. ex Roem. & Schult.
 poverty oat grass



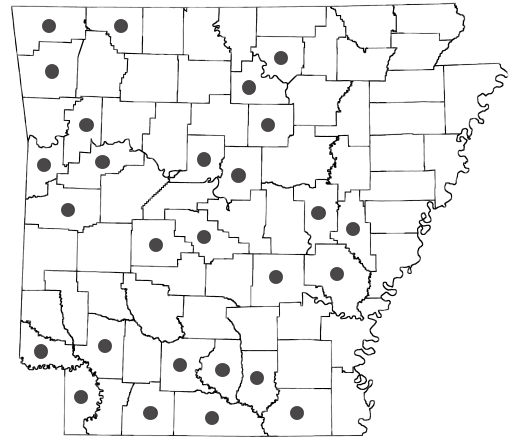
POACEAE
Deschampsia flexuosa (L.) Trin.
 wavy hair grass, crinkled hair grass



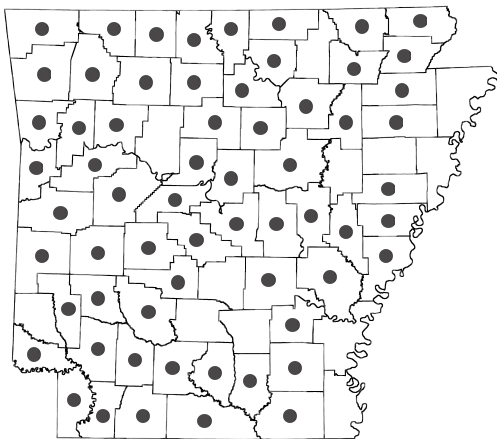
POACEAE
Diarrhena americana P.Beauv.
 American beakgrass, American beak grass



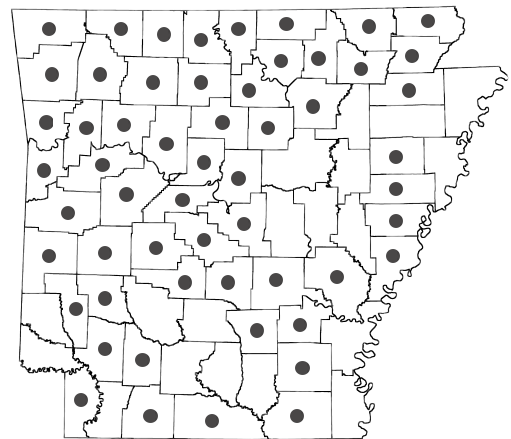
POACEAE
Diarrhena obovata (Gleason) Brandenburg
 beakgrass, beak grass



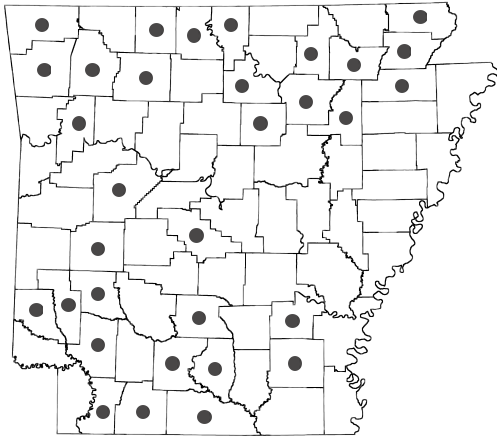
POACEAE
Dichanthelium aciculare (Desv. ex Poir.) Gould & C.A.Clark
 narrow-leaf rosette grass, narrow-leaf panic grass
 See *Appendix I* for infraspecific taxa and species status.



POACEAE
Dichanthelium acuminatum (Sw.) Gould & C.A.Clark
 hairy rosette grass, hairy panic grass
 See *Appendix I* for infraspecific taxa and species status.



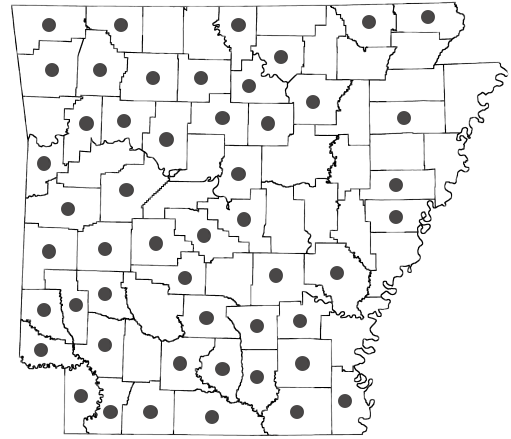
POACEAE
Dichanthelium boscii (Poir.) Gould & C.A.Clark
 Bosc's rosette grass, Bosc's panic grass



POACEAE

Dichanthelium clandestinum (L.) Gould

deer-tongue rosette grass, deer-tongue panic grass

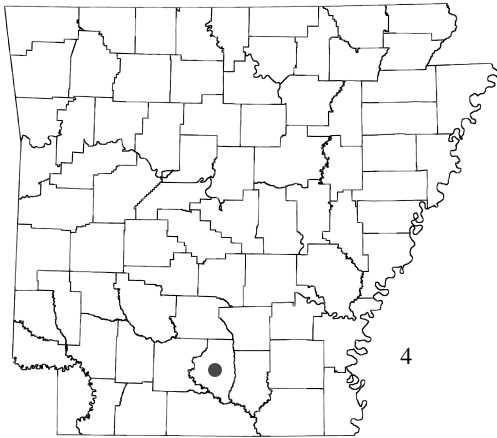


POACEAE

Dichanthelium commutatum (Schult.) Gould

variable rosette grass, variable panic grass

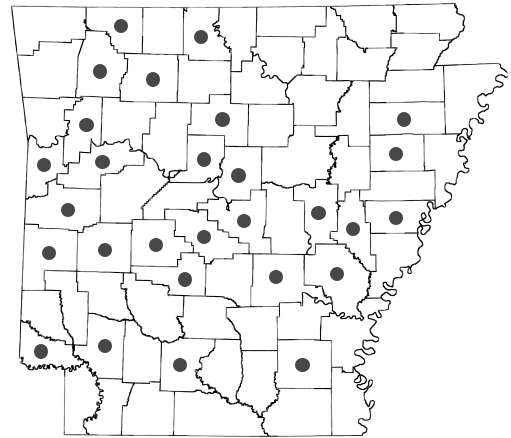
See Appendix I for infraspecific taxa and species status.



POACEAE

Dichanthelium consanguineum (Kunth) Gould & C.A.Clark

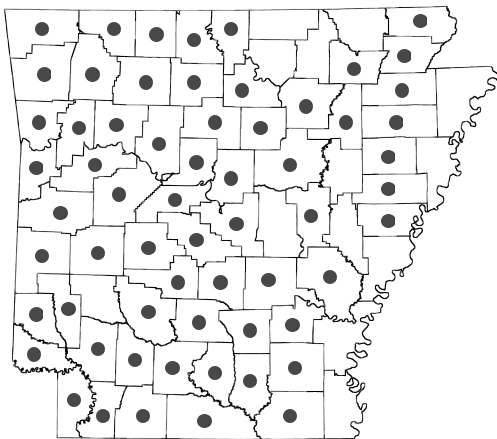
blood rosette grass, blood panic grass



POACEAE

Dichanthelium depauperatum (Muhl.) Gould

starved rosette grass, starved panic grass

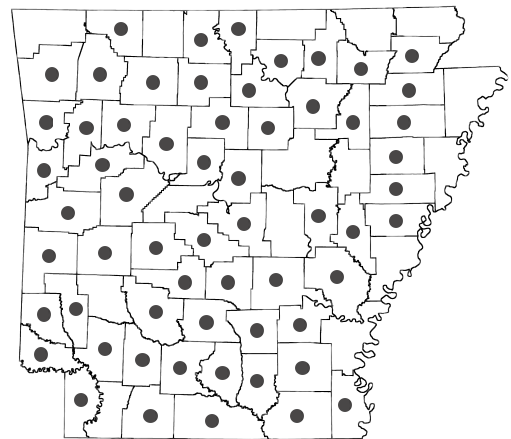


POACEAE

Dichanthelium dichotomum (L.) Gould

forked rosette grass, forked panic grass

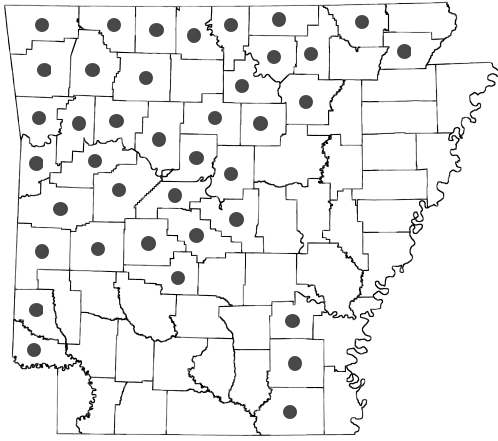
See Appendix I for infraspecific taxa and species status.



POACEAE

Dichanthelium laxiflorum (Lam.) Gould

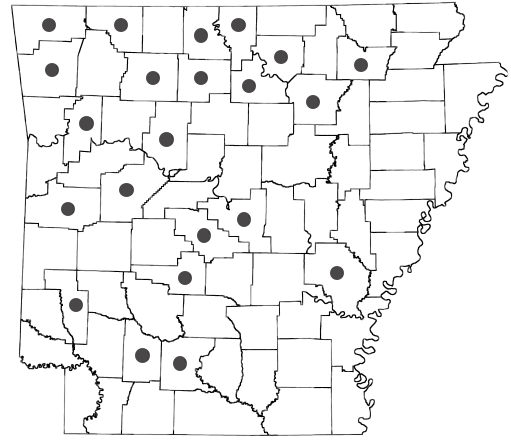
open-flower rosette grass, open-flower panic grass



POACEAE

***Dichanthelium linearifolium* (Scribn. ex Nash) Gould**

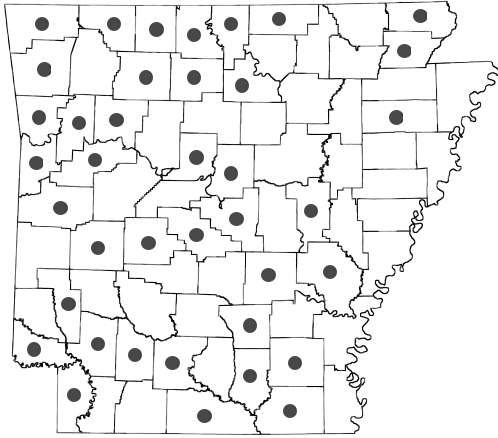
slim-leaf rosette grass, slim-leaf panic grass



POACEAE

***Dichanthelium malacophyllum* (Nash) Gould**

soft-leaf rosette grass, soft-leaf panic grass

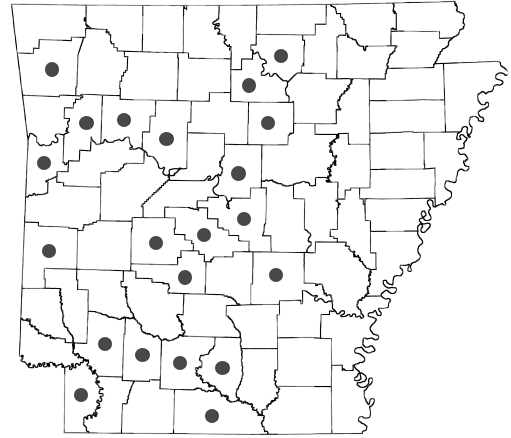


POACEAE

***Dichanthelium oligosanthes* (Schult.) Gould**

few-flower rosette grass, few-flower panic grass

See *Appendix I* for infraspecific taxa and species status.

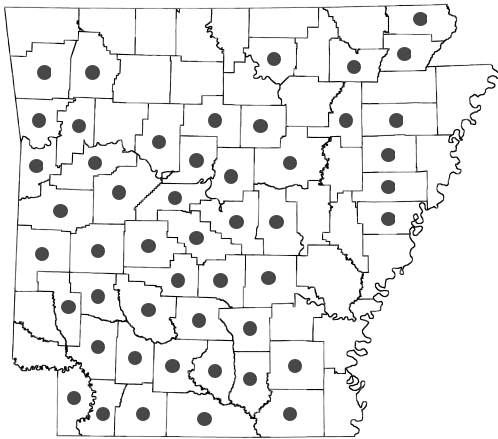


POACEAE

***Dichanthelium ovale* (Elliott) Gould & C.A.Clark**

stiff-leaf rosette grass, stiff-leaf panic grass

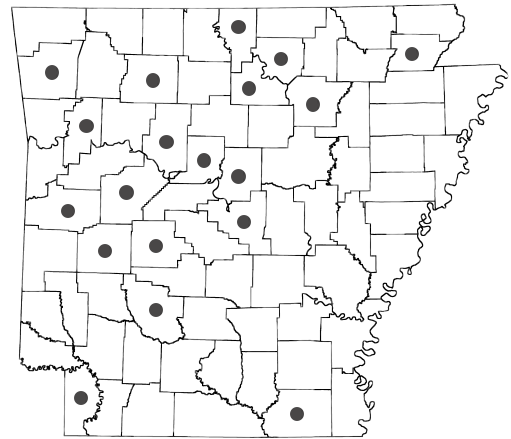
See *Appendix I* for infraspecific taxa and species status.



POACEAE

***Dichanthelium polyanthes* (Schult.) Mohlenbr.**

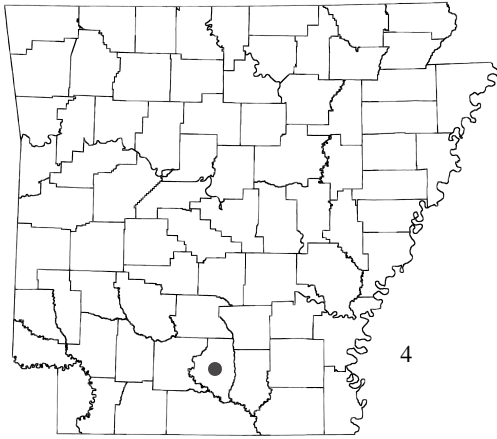
many-flower rosette grass, many-flower panic grass



POACEAE

***Dichanthelium ravenelii* (Scribn. & Merr.) Gould**

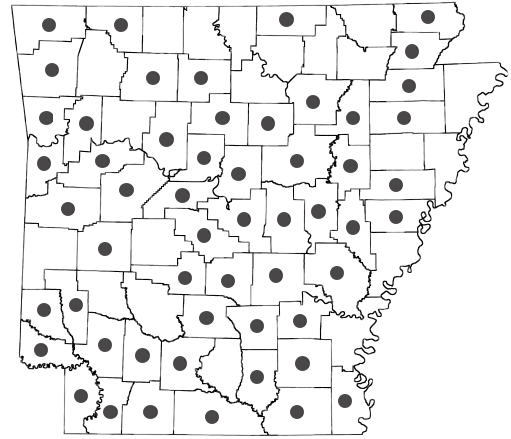
Ravenel's rosette grass, Ravenel's panic grass



POACEAE

Dichanthelium scabriusculum (Elliott) Gould & C.A.Clark

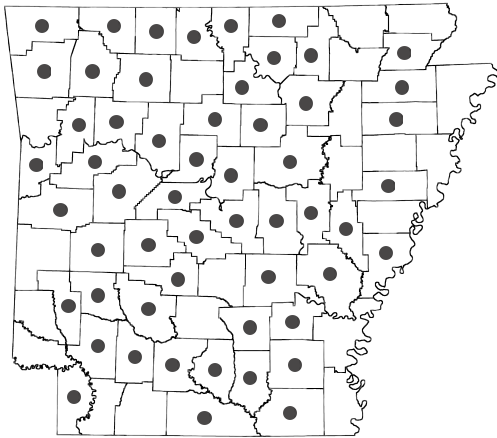
tall swamp rosette grass, tall swamp panic grass



POACEAE

Dichanthelium scoparium (Lam.) Gould

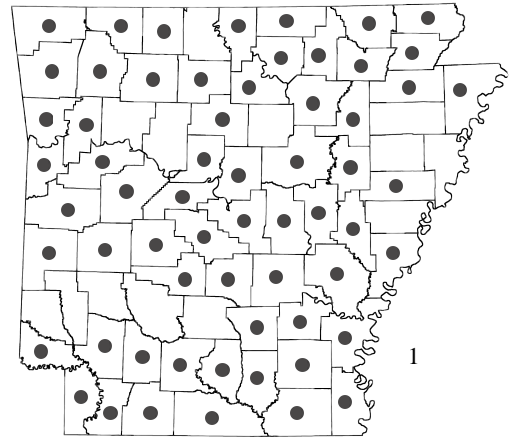
velvet rosette grass, velvet panic grass



POACEAE

Dichanthelium sphaerocarpon (Elliott) Gould

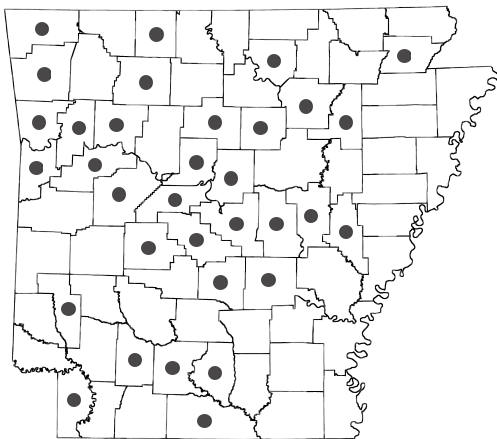
round-seed rosette grass, round-seed panic grass



POACEAE

Digitaria ciliaris (Retz.) Koeler

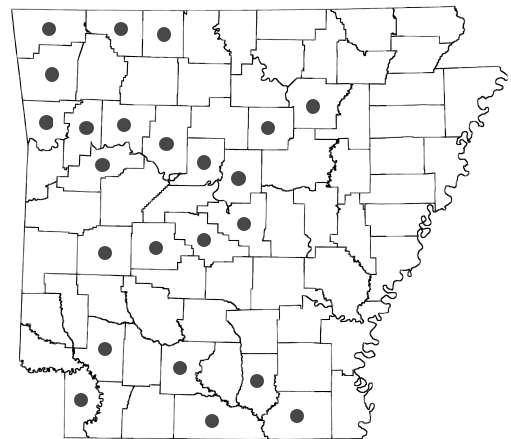
southern crab grass



POACEAE

Digitaria cognata (Schult.) Pilg.

fall witch grass

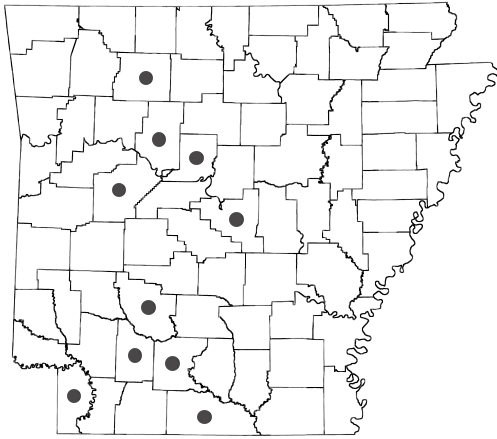


POACEAE

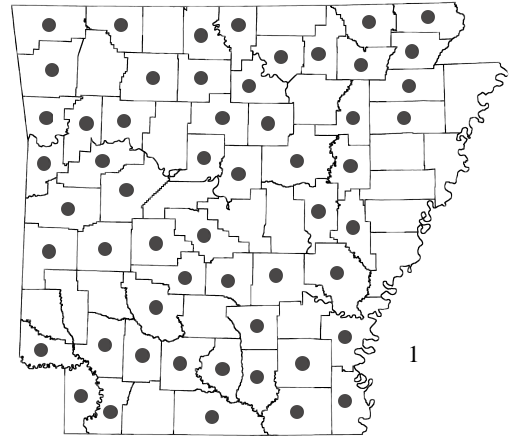
Digitaria filiformis (L.) Koeler

var. filiformis

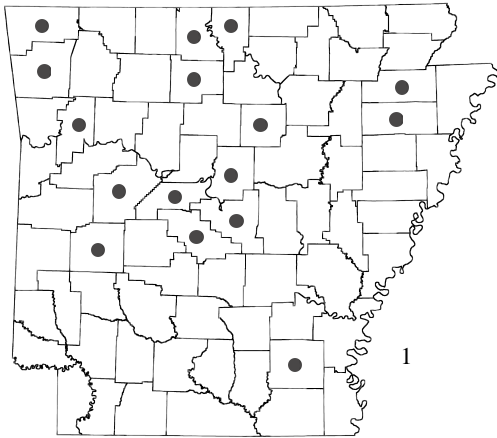
slender crab grass



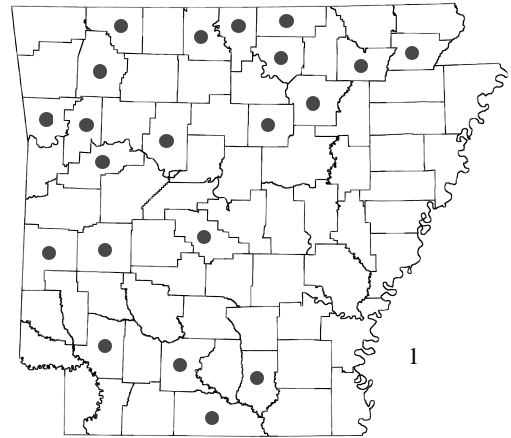
POACEAE
Digitaria filiformis (L.) Koeler
var. villosa (Walter) Fernald
shaggy crab grass



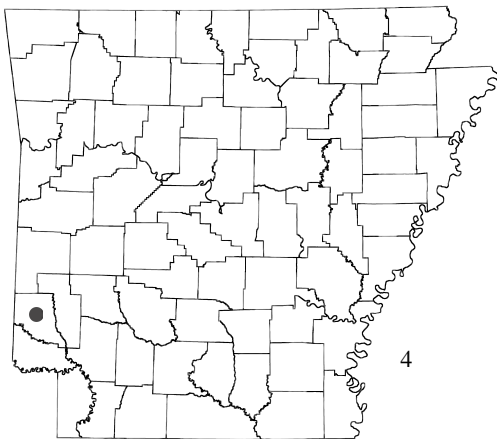
POACEAE
Digitaria ischaemum (Schreb.) Muhl.
smooth crab grass



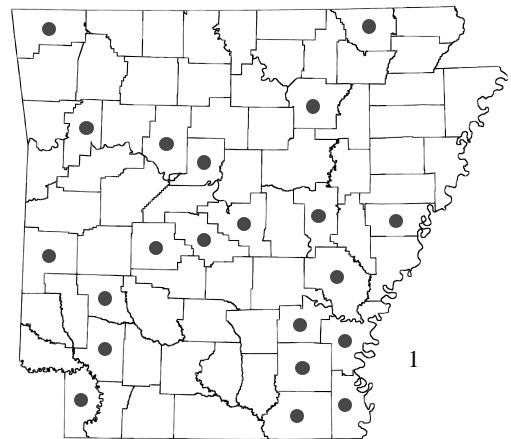
POACEAE
Digitaria sanguinalis (L.) Scop.
hairy crab grass



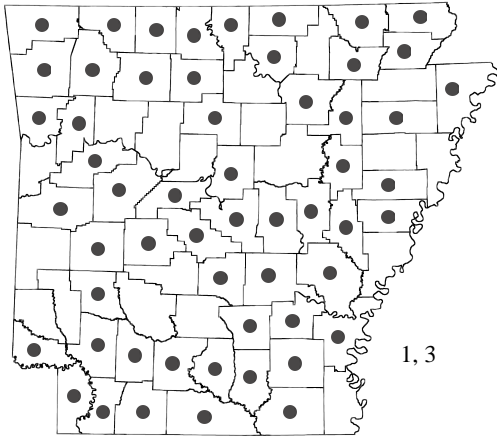
POACEAE
Digitaria violascens Link
violet crab grass



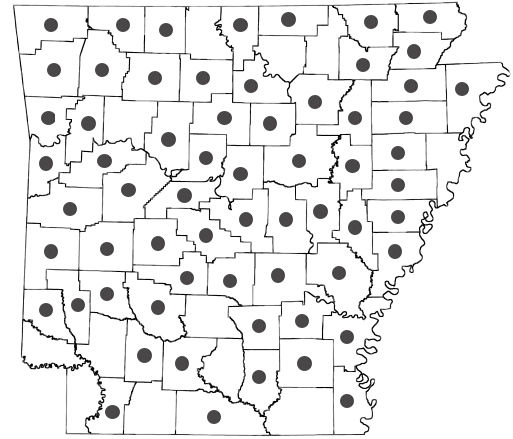
POACEAE
Distichlis spicata (L.) Greene
salt grass



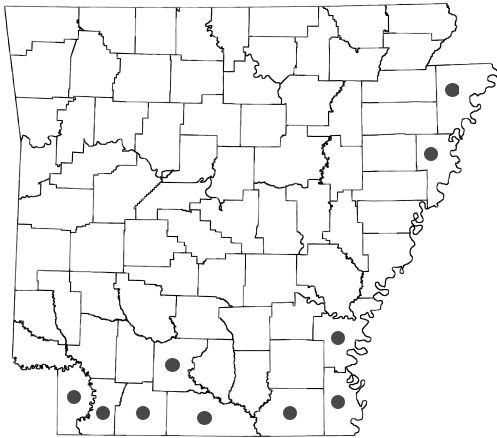
POACEAE
Echinochloa colona (L.) Link
jungle-rice



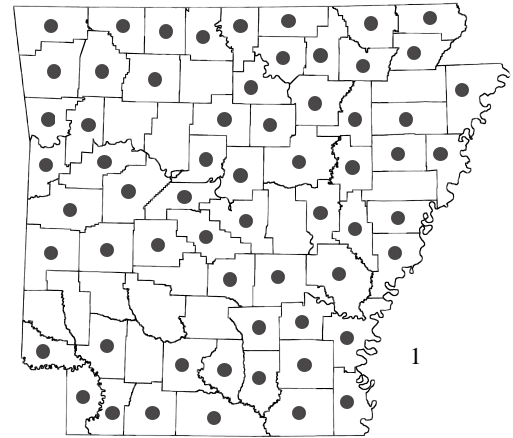
POACEAE
Echinochloa crusgalli (L.) P.Beauv.
 barnyard grass



POACEAE
Echinochloa muricata (P.Beauv.) Fernald
 American barnyard grass
 See Appendix I for infraspecific taxa and species status.



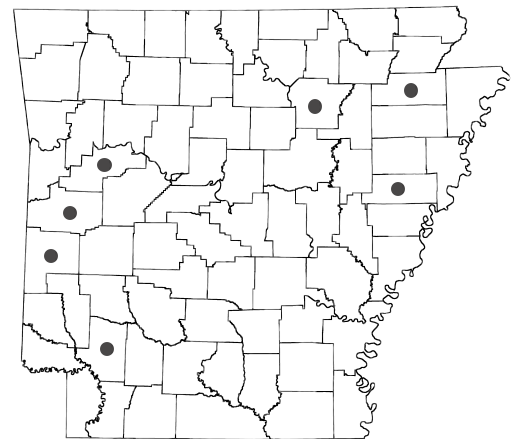
POACEAE
Echinochloa walteri (Pursh) A.Heller
 coast barnyard grass



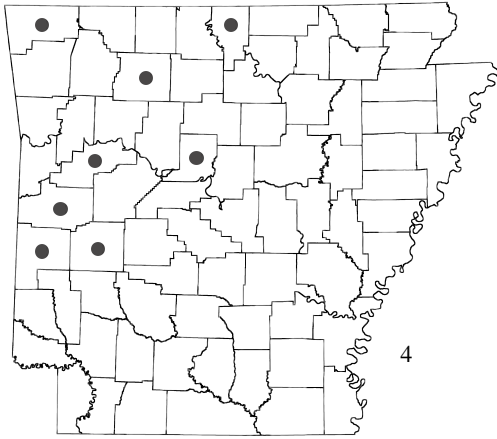
POACEAE
Eleusine indica (L.) Gaertn.
 goose grass



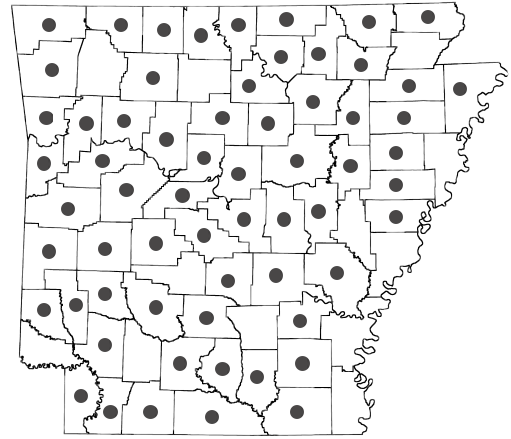
POACEAE
Eleusine tristachya (Lam.) Lam.
 three-spike goose grass



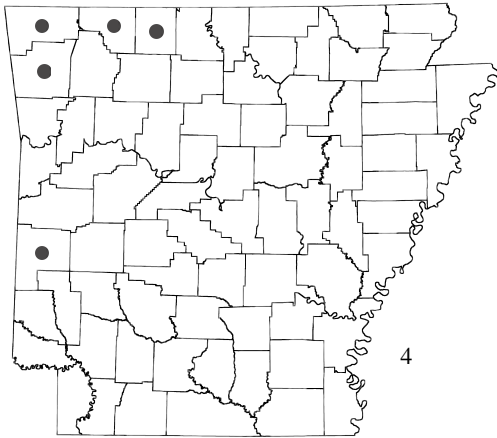
POACEAE
Elymus canadensis L.
 Canadian wild rye, Great Plains wild rye



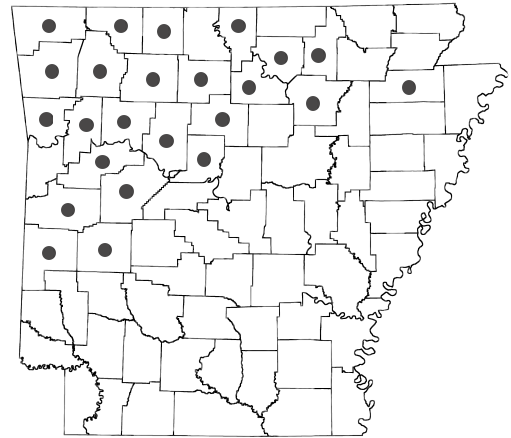
POACEAE
Elymus churchii J.J.N.Campb.
 Church's wild rye



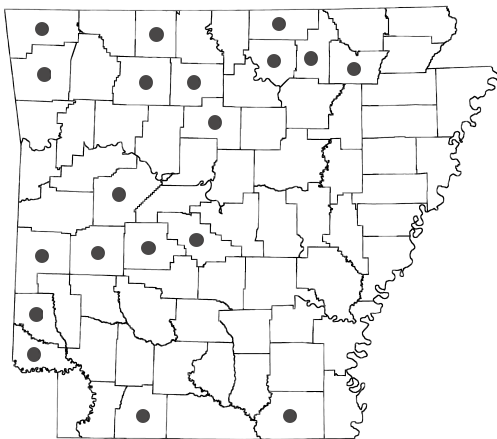
POACEAE
Elymus glabriflorus (Vasey ex L.H.Dewey) Scribn. & C.R.Ball
 southeastern wild rye



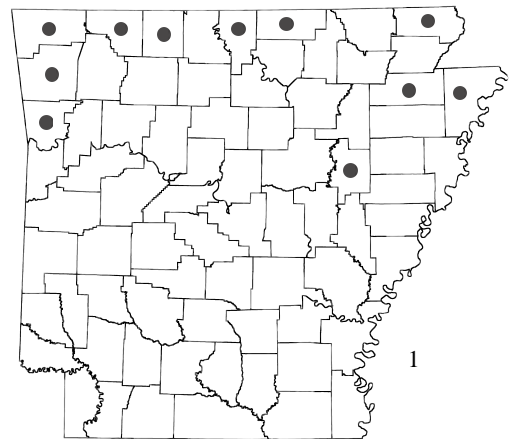
POACEAE
Elymus glaucus Buckley
subsp. mackenzii (Bush) J.J.N.Campb.
 Mackenzie's blue wild rye



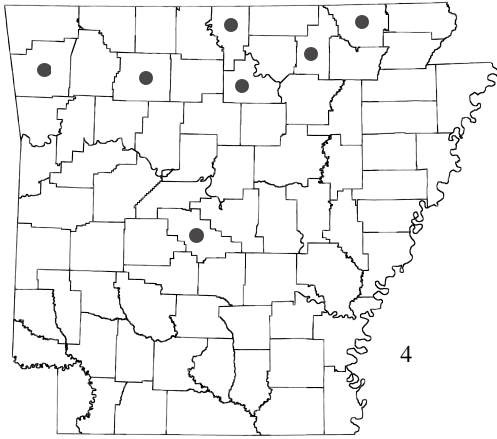
POACEAE
Elymus hystrix L.
 bottle-brush grass



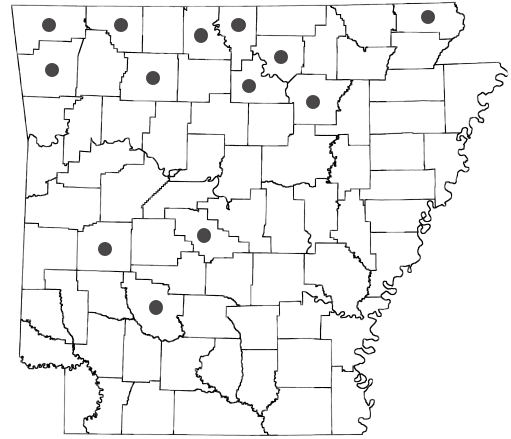
POACEAE
Elymus macgregorii R.Brooks & J.J.N.Campb.
 early wild rye



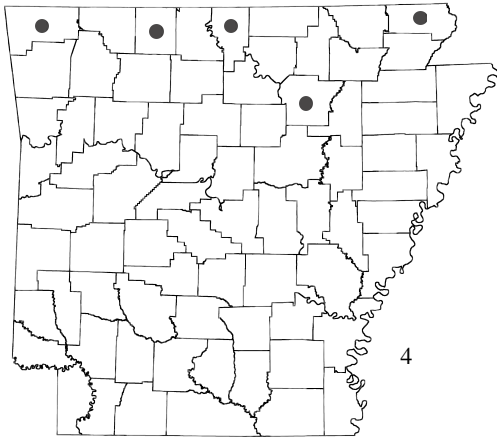
POACEAE
Elymus repens (L.) Gould
 quack grass



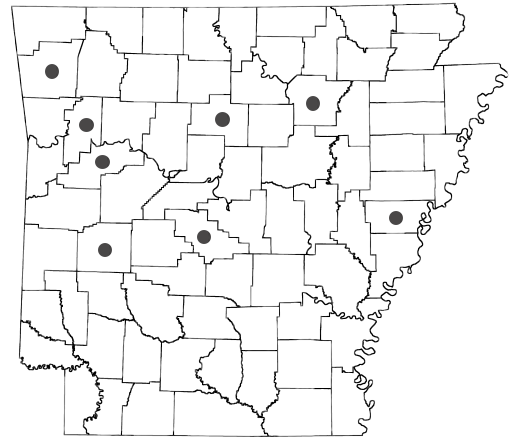
POACEAE
Elymus riparius Wiegand
 river-bank wild rye



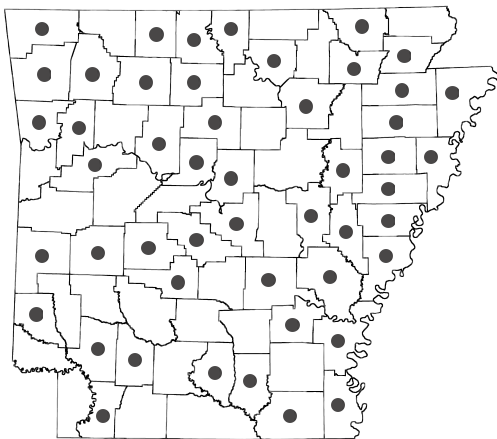
POACEAE
Elymus villosus Muhl. ex Willd.
 hairy wild rye, downy wild rye



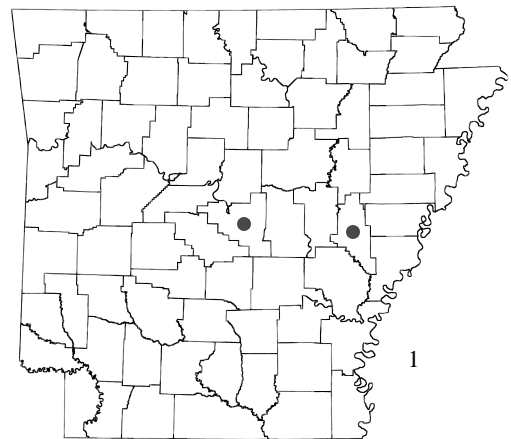
POACEAE
Elymus virginicus L.
var. intermedius (Vasey ex A.Gray) Bush
 intermediate wild rye



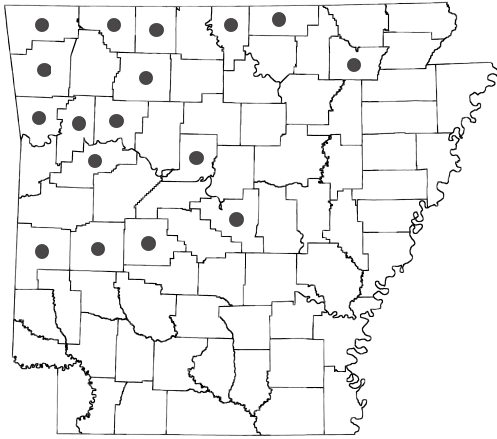
POACEAE
Elymus virginicus L.
var. jejunus (Ramaley) Bush
 Virginia wild rye



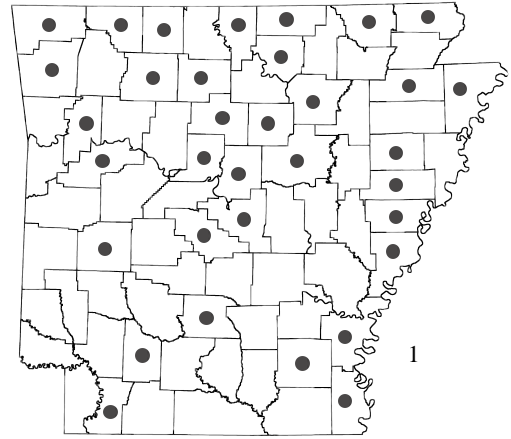
POACEAE
Elymus virginicus L.
var. virginicus
 Virginia wild rye



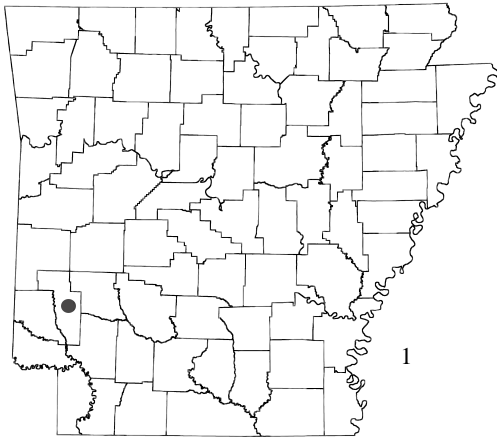
POACEAE
Eragrostis barrelieri Daveau
 Mediterranean love grass



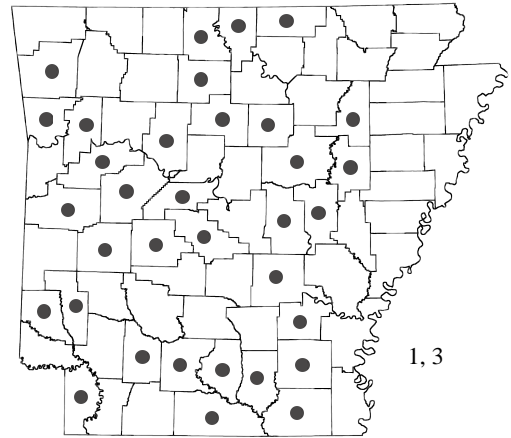
POACEAE
Eragrostis capillaris (L.) Nees
lace grass



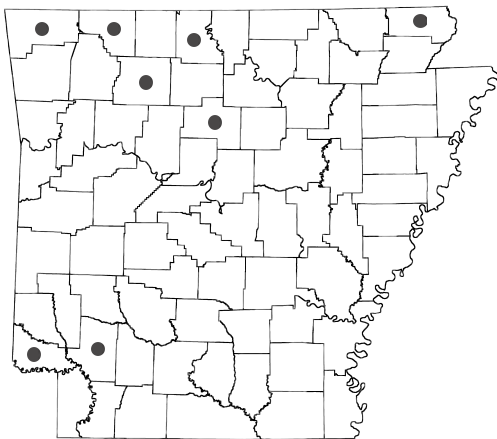
POACEAE
Eragrostis cilianensis (All.) Vignolo ex Janch.
stink grass



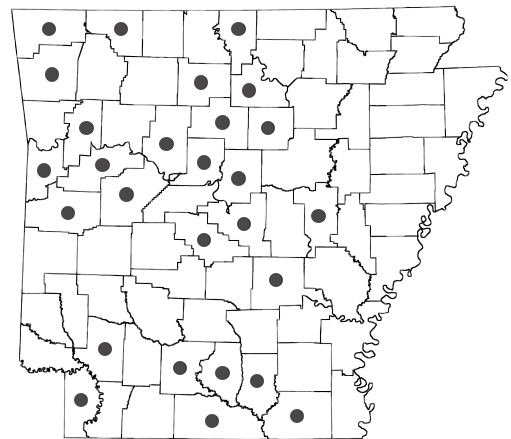
POACEAE
Eragrostis curtipedicellata Buckley
gummy love grass



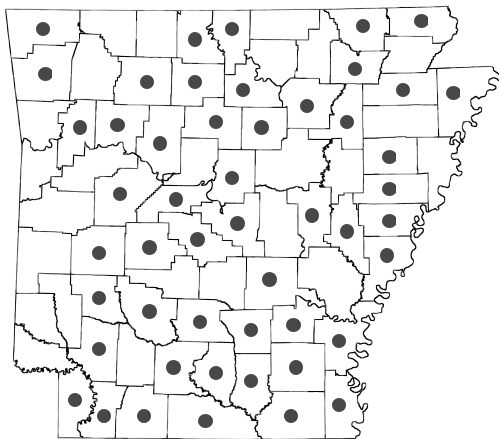
POACEAE
Eragrostis curvula (Schrad.) Nees
weeping love grass



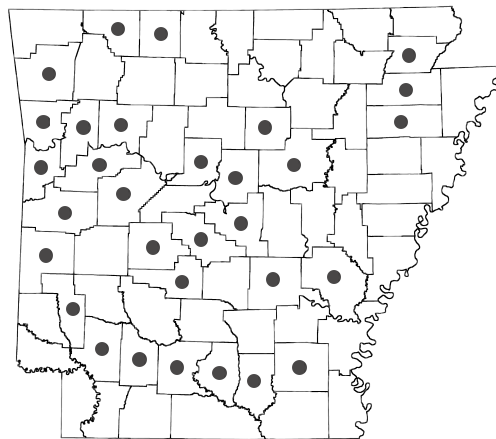
POACEAE
Eragrostis frankii C.A.Mey. ex Steud.
sandbar love grass



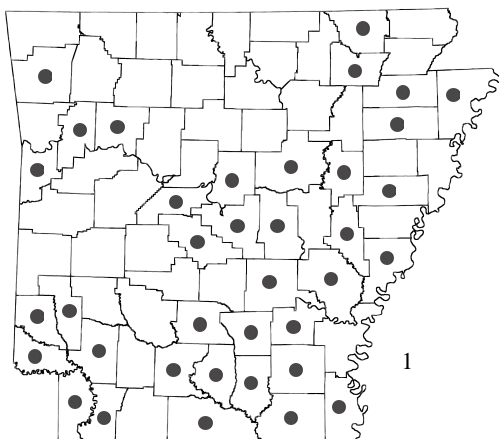
POACEAE
Eragrostis hirsuta (Michx.) Nees
big-top love grass



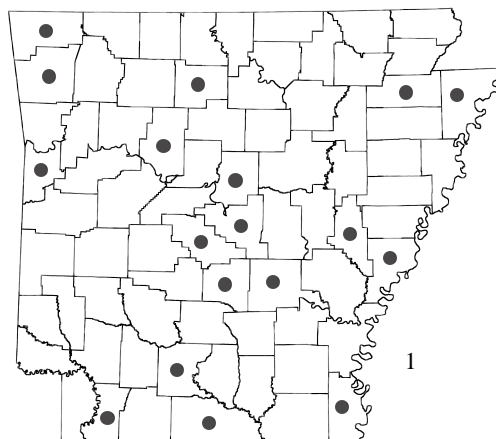
POACEAE
Eragrostis hypnoides (Lam.) Britton, Sterns & Poggenb.
 teal love grass



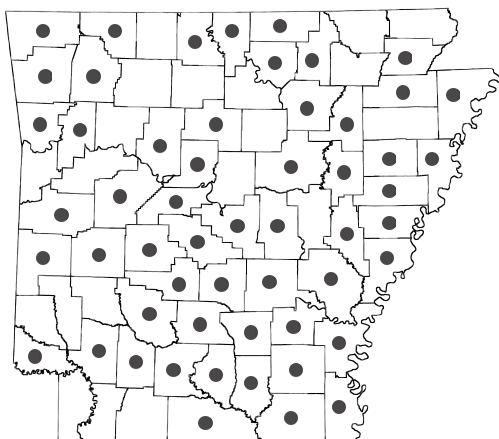
POACEAE
Eragrostis intermedia Hitchc.
 plains love grass



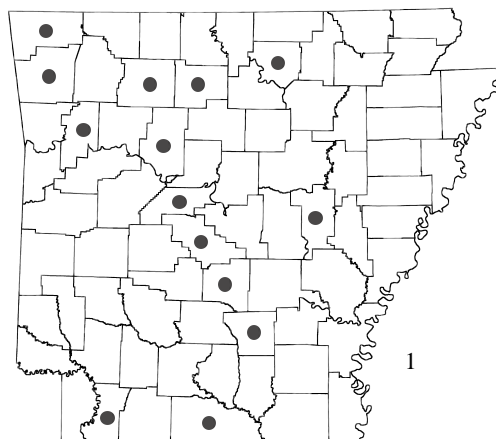
POACEAE
Eragrostis japonica (Thunb.) Trin.
 pond love grass



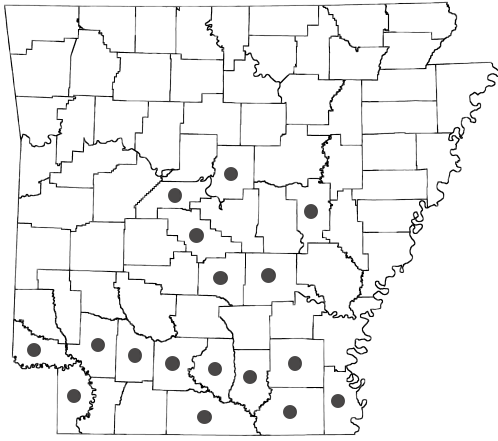
POACEAE
Eragrostis minor Host
 little love grass



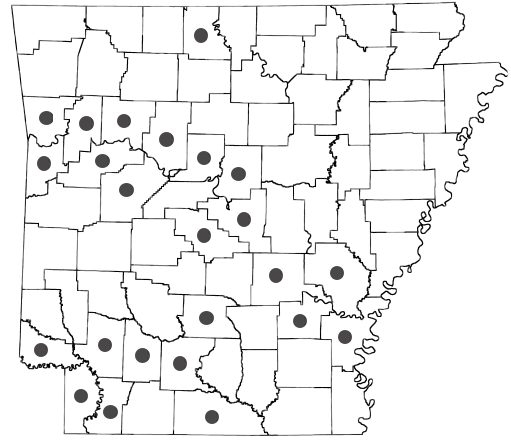
POACEAE
Eragrostis pectinacea (Michx.) Nees
var. pectinacea
 tufted love grass



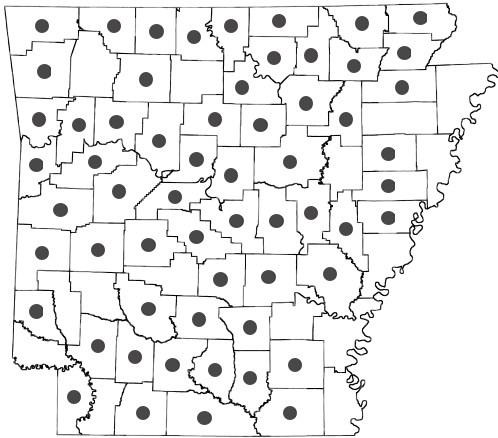
POACEAE
Eragrostis pilosa (L.) P.Beauv.
var. pilosa
 Indian love grass



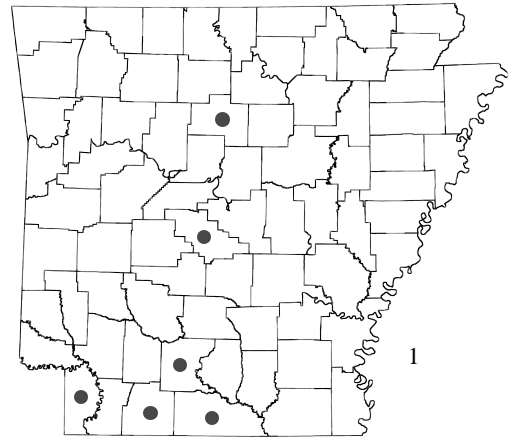
POACEAE
Eragrostis refracta (Muhl.) Scribn.
 coastal love grass



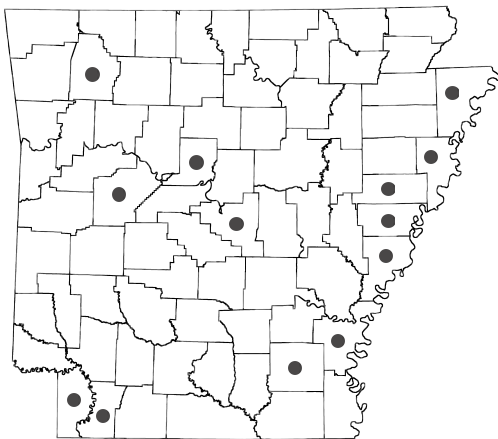
POACEAE
Eragrostis secundiflora J.Presl
subsp. oxylepis (Torr.) S.D.Koch
 red love grass



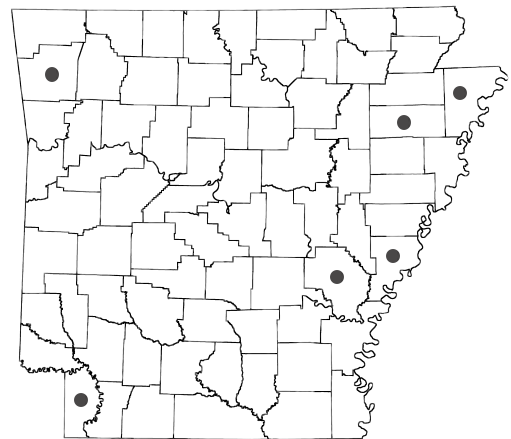
POACEAE
Eragrostis spectabilis (Pursh) Steud.
 purple love grass



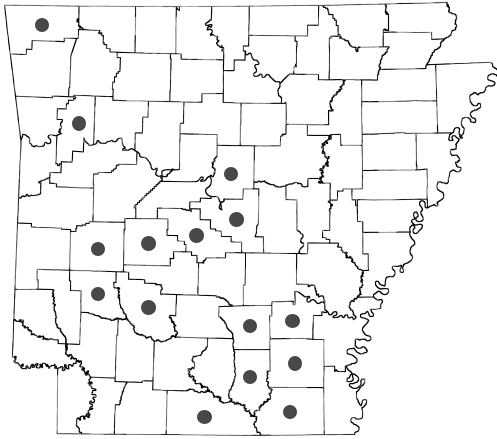
POACEAE
Eremochloa ophiuroides (Munro) Hack.
 centipede grass



POACEAE
Eriochloa acuminata (J.Presl) Kunth
var. acuminata
 southwestern cup grass



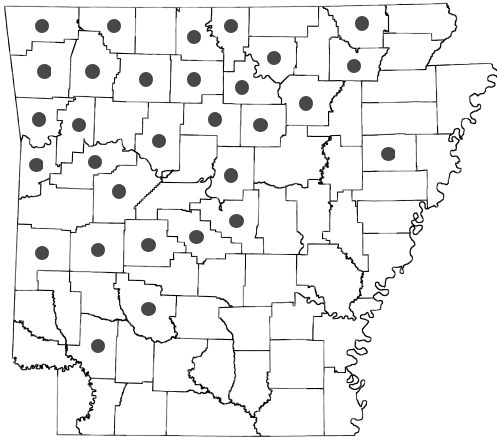
POACEAE
Eriochloa contracta Hitchc.
 prairie cup grass



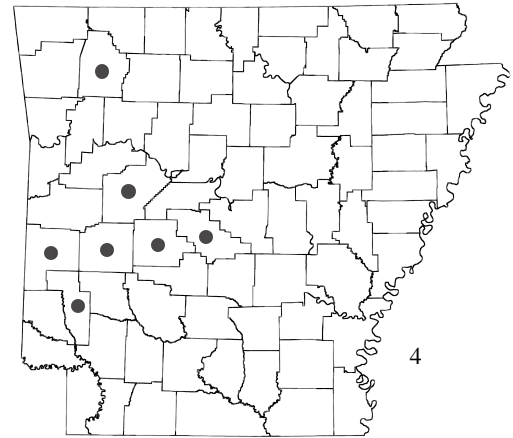
POACEAE
Festuca paradoxa Desv.
clustered fescue



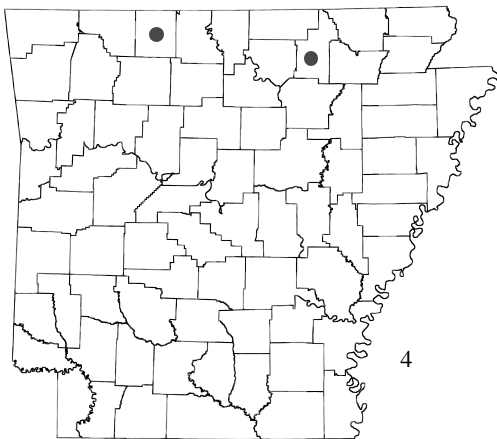
POACEAE
Festuca rubra L.
red fescue



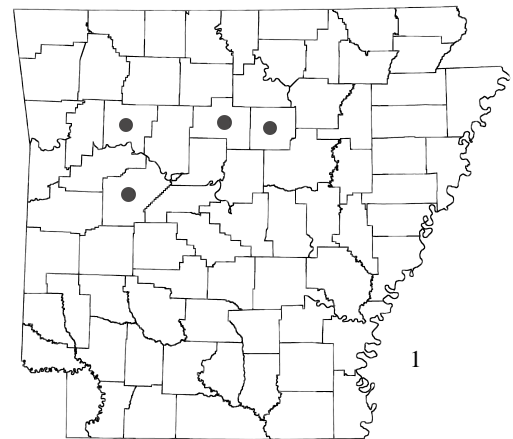
POACEAE
Festuca subverticillata (Pers.) E.B.Alexeev
nodding fescue



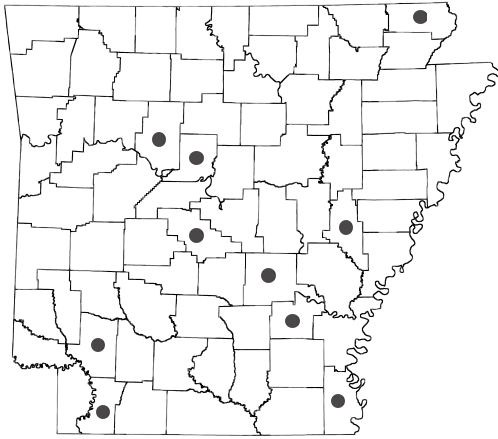
POACEAE
Festuca versuta Beal
Texas fescue



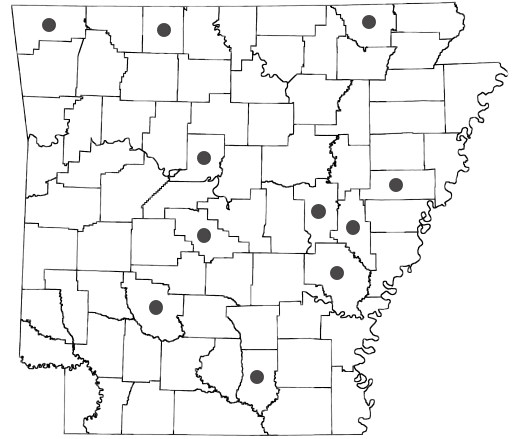
POACEAE
Glyceria acutiflora Torr.
creeping manna grass, sharp-glume manna grass



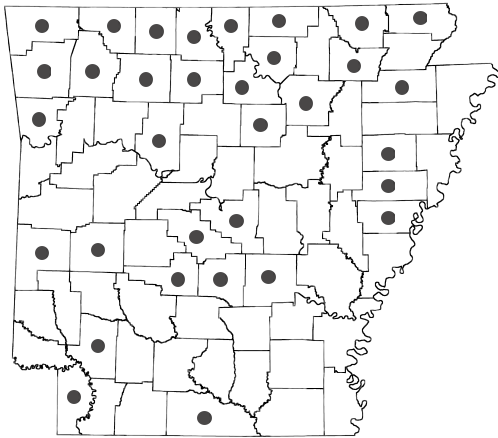
POACEAE
Glyceria declinata Bréb.
waxy manna grass



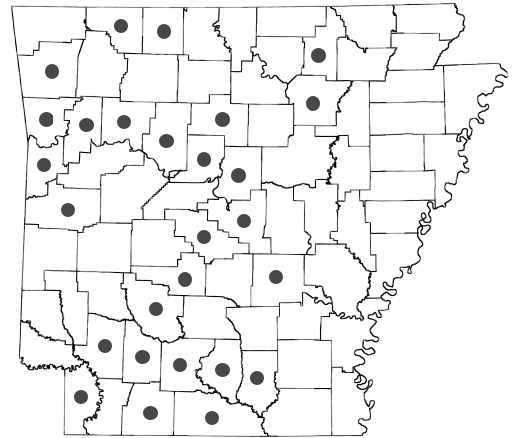
POACEAE
Glyceria septentrionalis Hitchc.
var. arkansana (Fernald) Steyer. & Kučera
 Arkansas manna grass



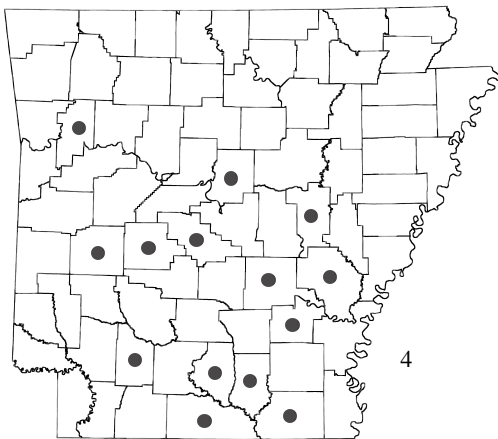
POACEAE
Glyceria septentrionalis Hitchc.
var. septentrionalis
 floating manna grass



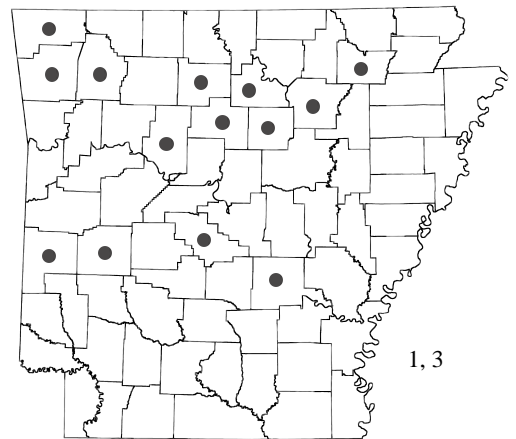
POACEAE
Glyceria striata (Lam.) Hitchc.
 fowl manna grass



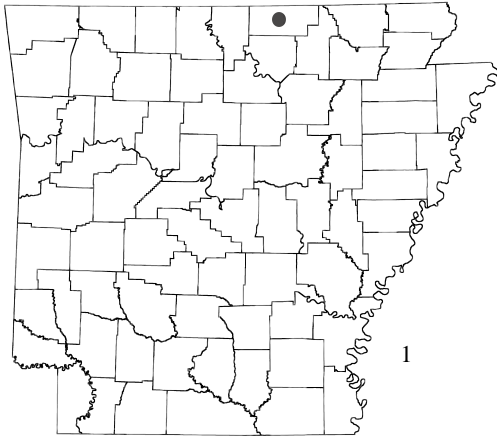
POACEAE
Gymnopogon ambiguus (Michx.) Britton, Sterns & Poggenb.
 bearded skeleton grass



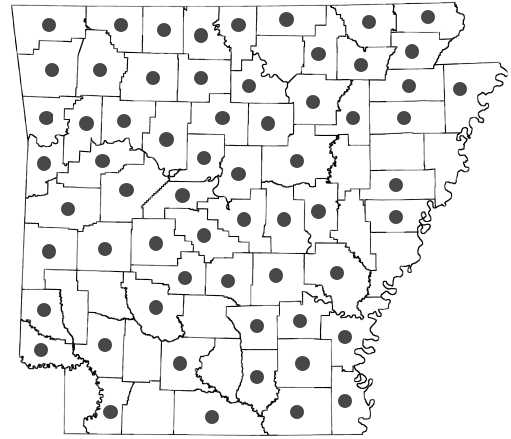
POACEAE
Gymnopogon brevisfolius Trin.
 short-leaf skeleton grass



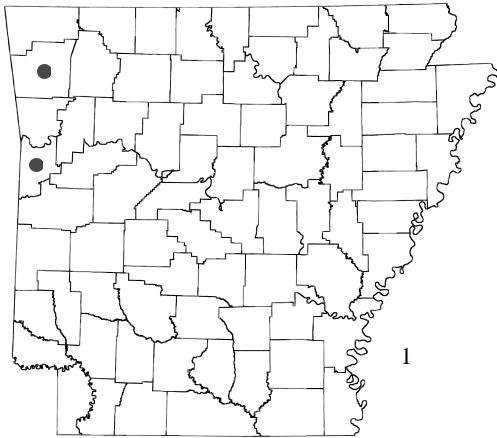
POACEAE
Holcus lanatus L.
 velvet grass



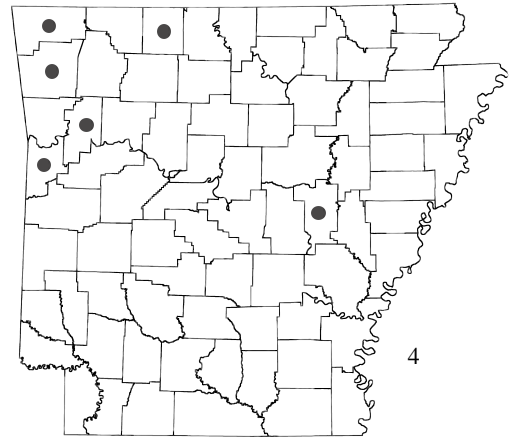
POACEAE
Hordeum jubatum L.
subsp. jubatum
 fox-tail barley, squirrel-tail barley



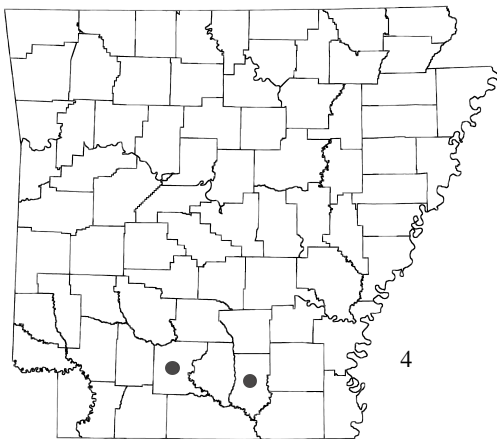
POACEAE
Hordeum pusillum Nutt.
 little barley



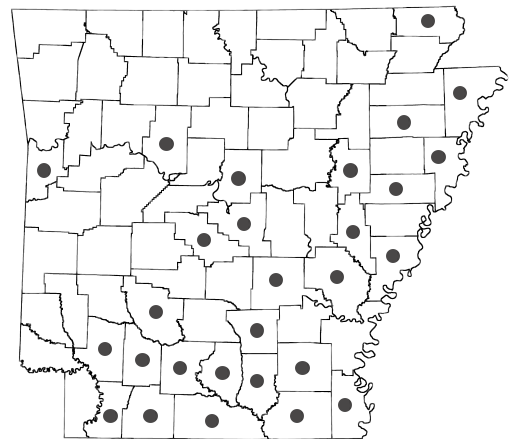
POACEAE
Hordeum vulgare L.
 barley



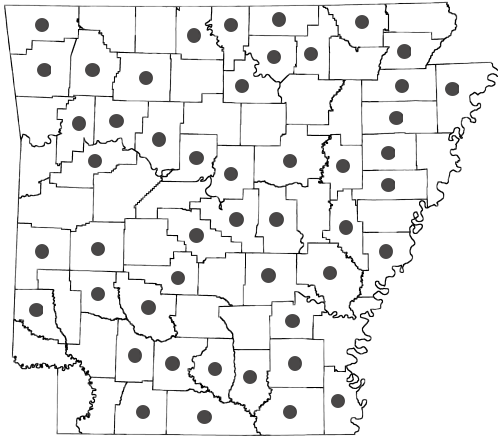
POACEAE
Koeleria macrantha (Ledeb.) Schult.
 prairie June grass



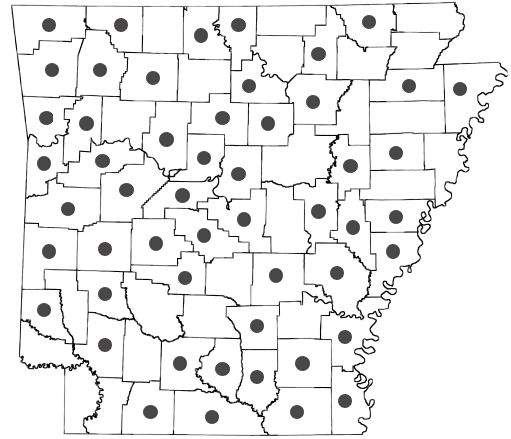
POACEAE
Leersia hexandra Sw.
 southern cut grass



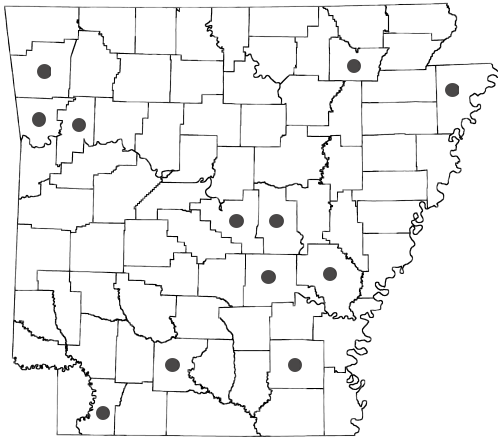
POACEAE
Leersia lenticularis Michx.
 catchfly grass



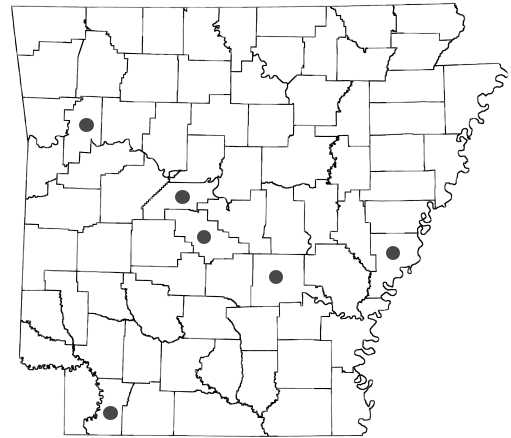
POACEAE
Leersia oryzoides (L.) Sw.
 rice cut grass



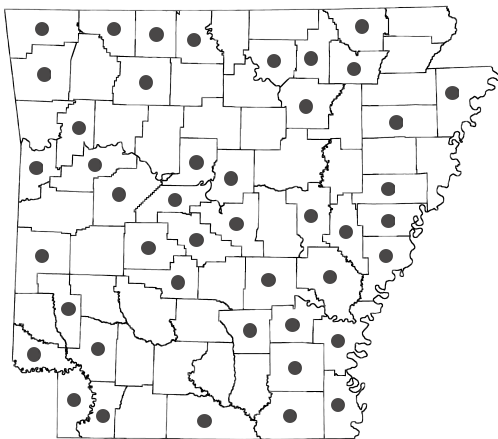
POACEAE
Leersia virginica Willd.
 white grass



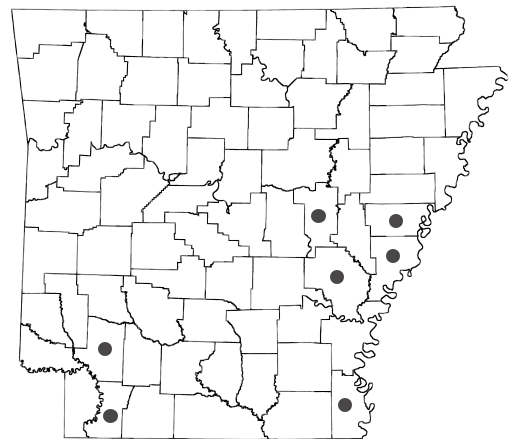
POACEAE
Leptochloa fusca (L.) Kunth
subsp. fascicularis (Lam.) N.Snow
 bearded sprangletop



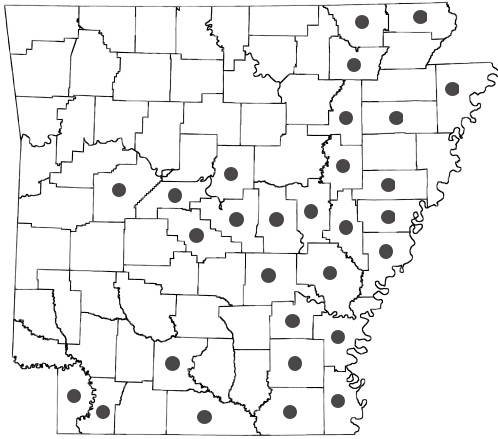
POACEAE
Leptochloa fusca (L.) Kunth
subsp. uninervia (J.Presl) N.Snow
 Mexican sprangletop



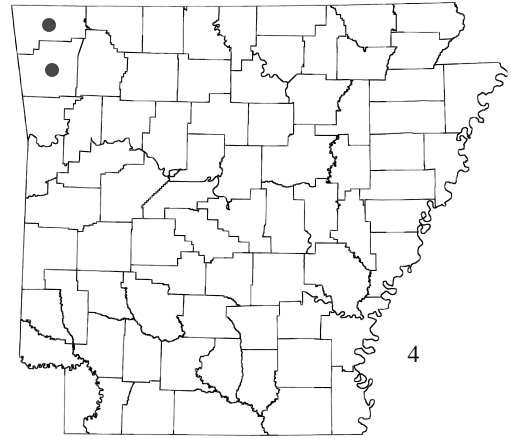
POACEAE
Leptochloa panicea (Retz.) Ohwi
subsp. brachiata (Steud.) N.Snow
 red sprangletop



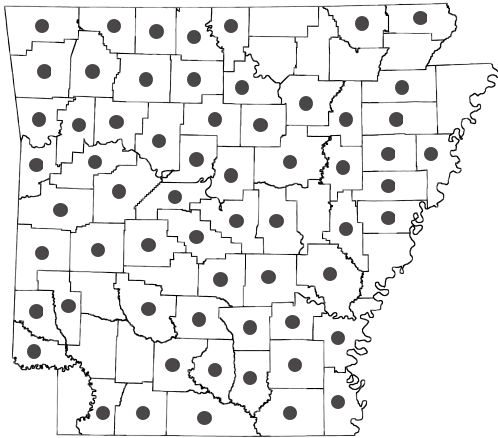
POACEAE
Leptochloa panicea (Retz.) Ohwi
subsp. mucronata (Michx.) Nowack
 Mississippi sprangletop



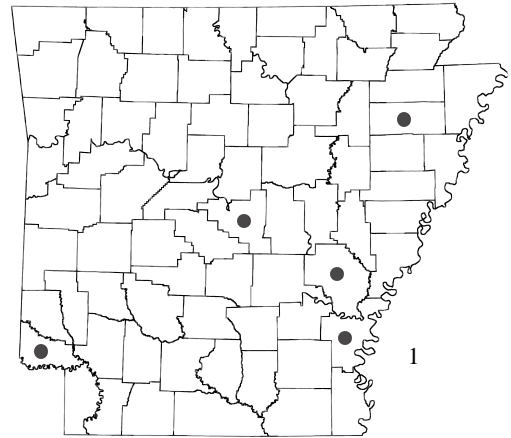
POACEAE
Leptochloa panicoides (J.Presl) Hitchc.
 Amazon sprangletop



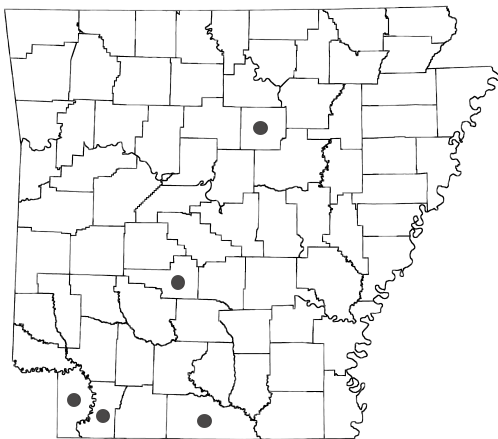
POACEAE
Limnodea arkansana (Nutt.) L.H.Dewey
 Ozark grass



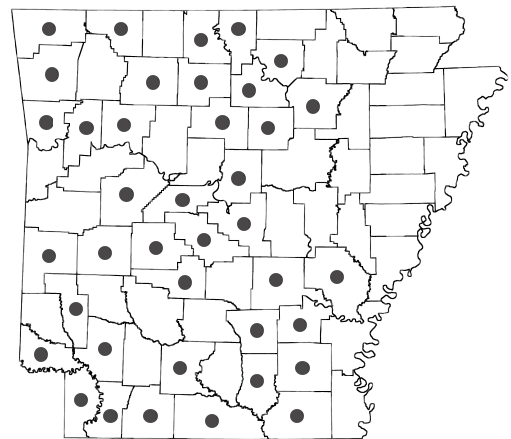
POACEAE
Lolium perenne L.
 perennial rye grass
 See *Appendix I* for infraspecific taxa and species status.



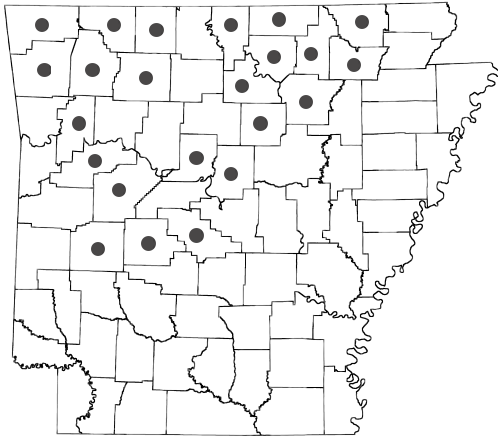
POACEAE
Lolium temulentum L.
subsp. temulentum
 darnel rye grass



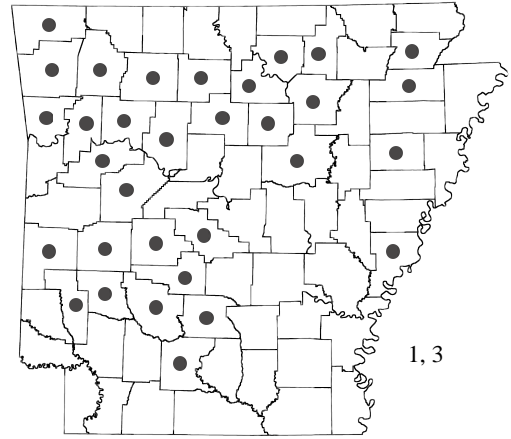
POACEAE
Luziola fluitans (Michx.) Terrell & H.Rob.
 water grass



POACEAE
Melica mutica Walter
 two-flower melic



POACEAE
Melica nitens (Scribn.) Nutt. ex Piper
 three-flower melic



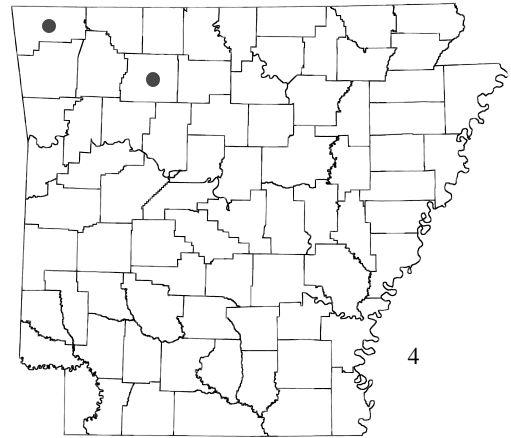
POACEAE
Microstegium vimineum (Trin.) A. Camus
 Japanese stilt grass, Nepalese brown-top

1, 3



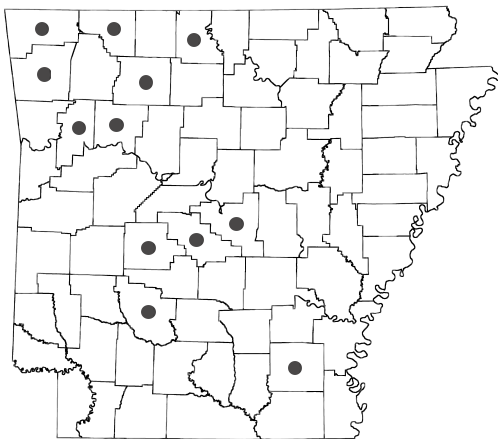
POACEAE
Miscanthus sacchariflorus (Maxim.) Benth.
 Amur silver grass, silver plume grass

1

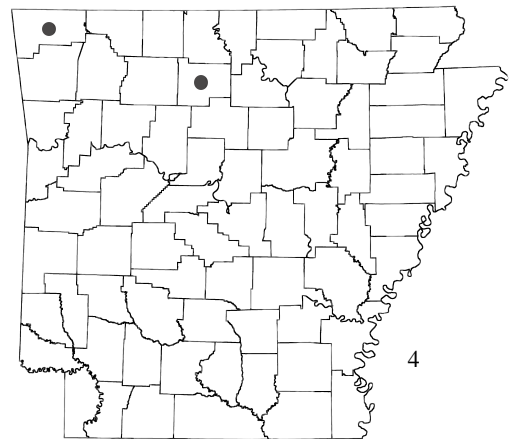


POACEAE
Muhlenbergia bushii R.W. Pohl
 nodding muhly

4

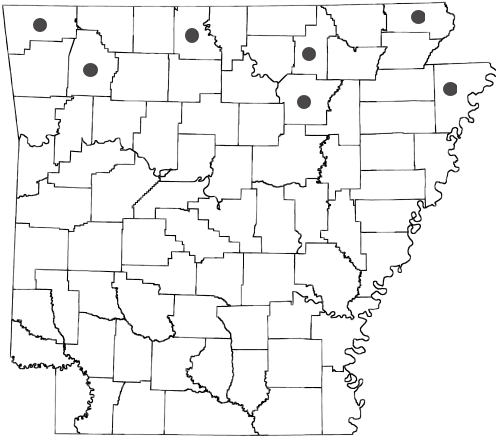


POACEAE
Muhlenbergia capillaris (Lam.) Trin.
 hair-awn muhly

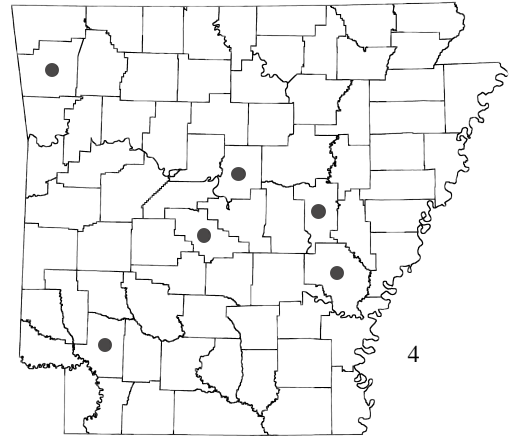


POACEAE
Muhlenbergia cuspidata (Torr. ex Hook.) Rydb.
 plains muhly

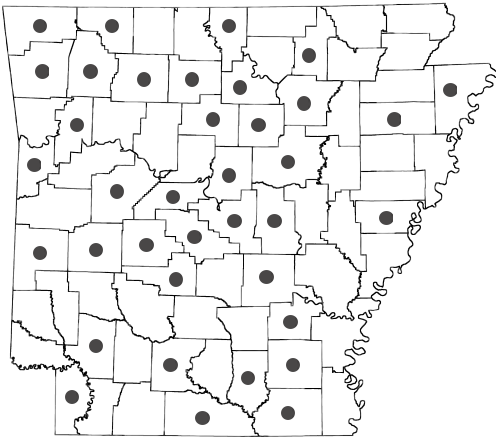
4



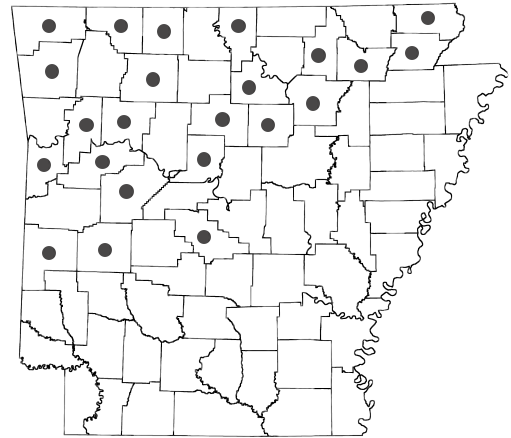
POACEAE
Muhlenbergia frondosa (Poir.) Fernald
 wire-stem muhly



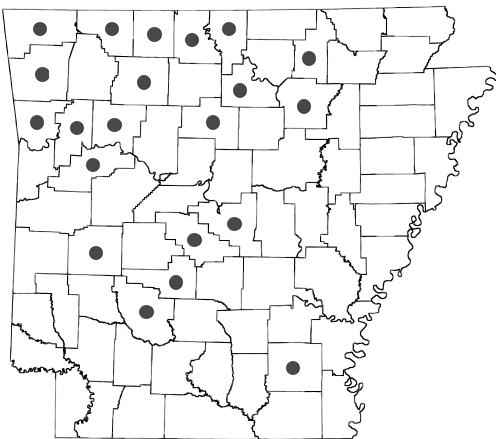
POACEAE
Muhlenbergia glabriflora Scribn.
 inland muhly



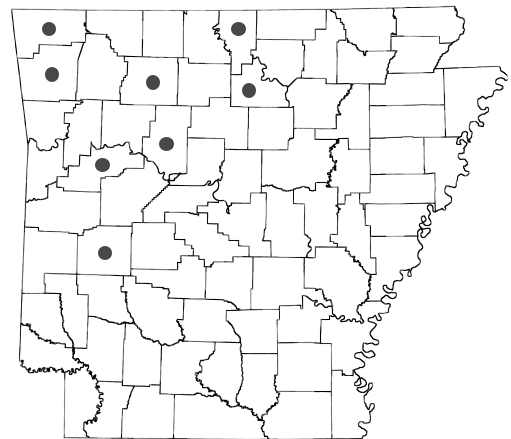
POACEAE
Muhlenbergia schreberi J.F.Gmel.
 nimblewill



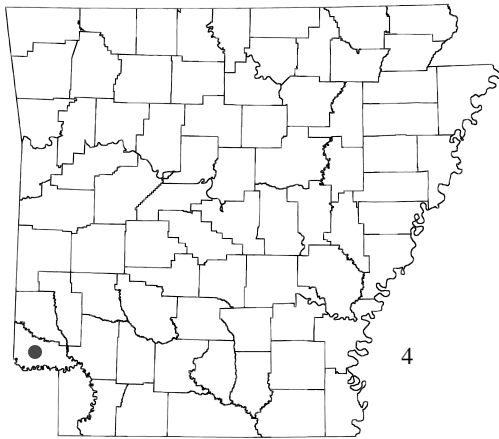
POACEAE
Muhlenbergia sobolifera (Muhl. ex Willd.) Trin.
 rock muhly



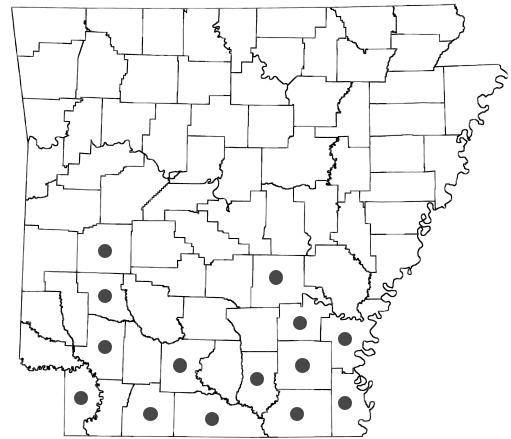
POACEAE
Muhlenbergia sylvatica (Torr.) Torr. ex A.Gray
 woodland muhly



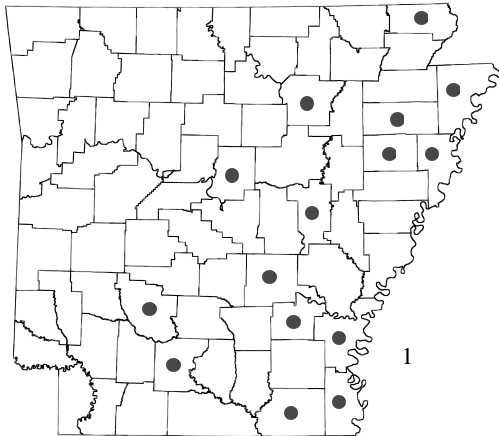
POACEAE
Muhlenbergia tenuiflora (Willd.) Britton, Sterns & Poggenb.
 slim-flower muhly



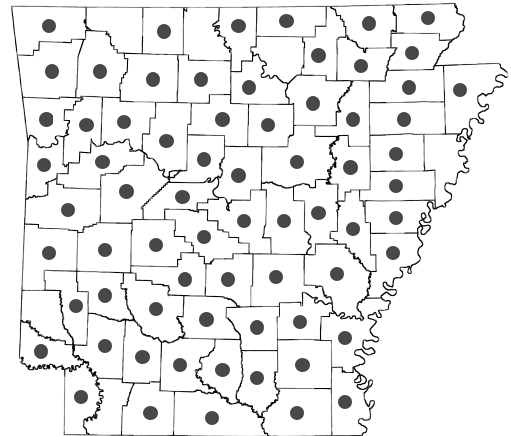
POACEAE
***Nassella leucotricha* (Trin. & Rupr.) R.W.Pohl**
 Texas winter grass, Texas needle grass



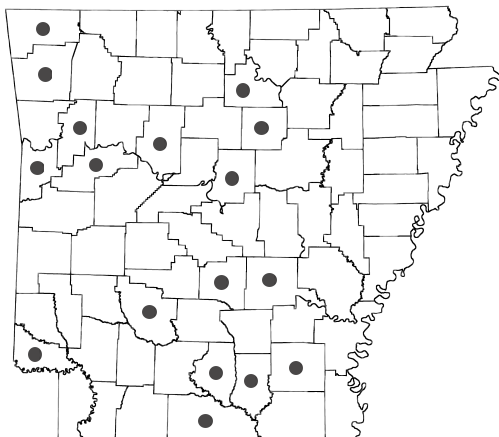
POACEAE
***Oplismenus hirtellus* (L.) P.Beauv.**
 basket grass



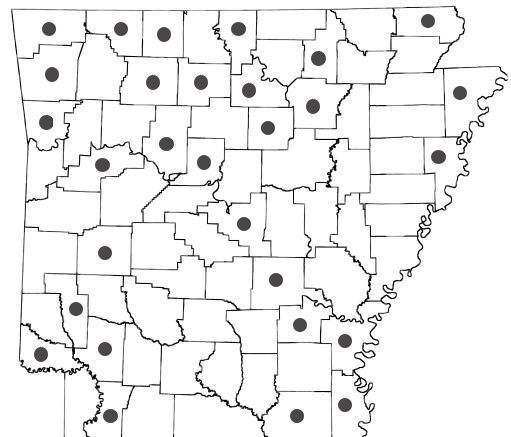
POACEAE
***Oryza sativa* L.**
 rice



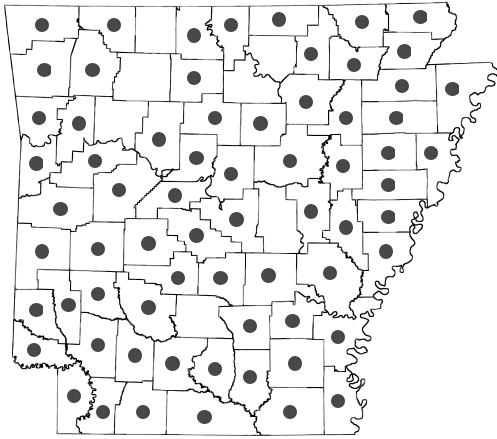
POACEAE
***Panicum anceps* Michx.**
subsp. anceps
 beaked panic grass



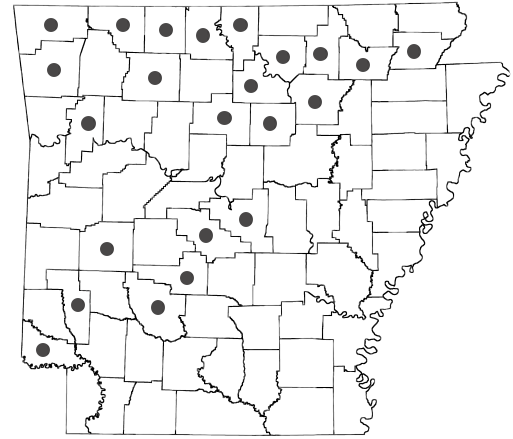
POACEAE
***Panicum brachyanthum* Steud.**
 prairie panic grass



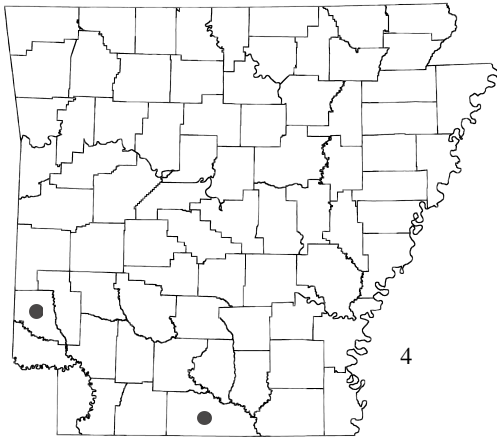
POACEAE
***Panicum capillare* L.**
subsp. capillare
 witch grass



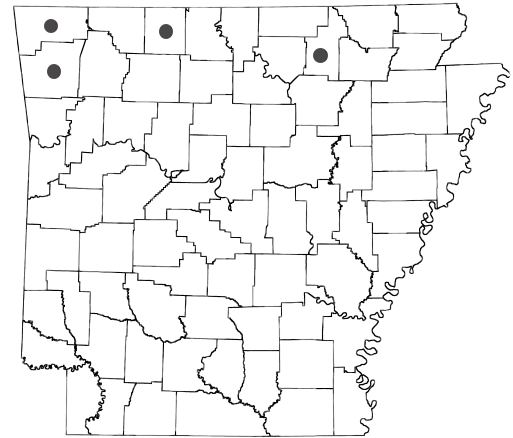
POACEAE
Panicum dichotomiflorum Michx.
subsp. dichotomiflorum
 fall panic grass



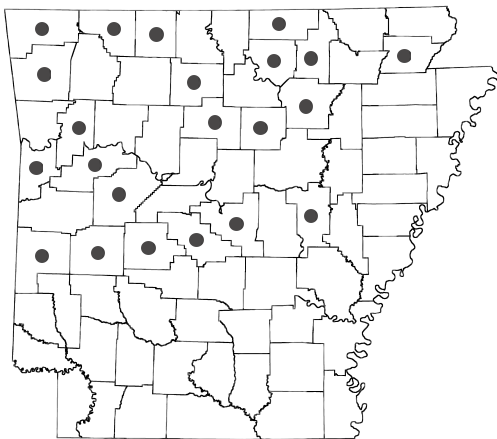
POACEAE
Panicum flexile (Gatt.) Scribn.
 wiry witch grass



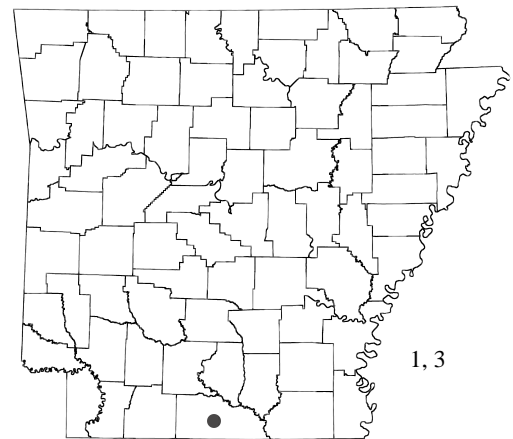
POACEAE
Panicum hemitomon Schult.
 maiden-cane



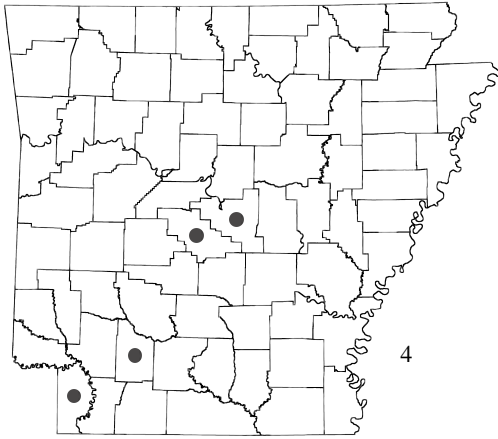
POACEAE
Panicum philadelphicum Bernh. ex Trin.
subsp. gattingeri (Nash) Freckmann & Lelong
 Gattinger's witch grass



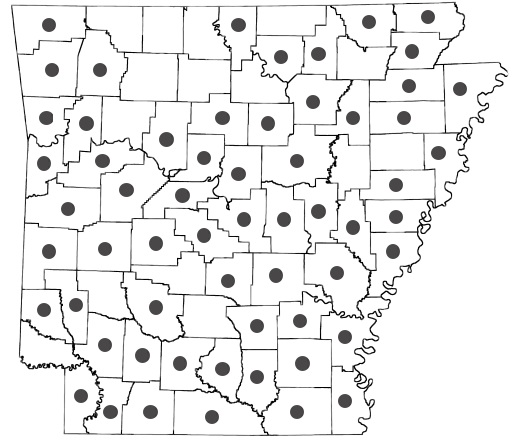
POACEAE
Panicum philadelphicum Bernh. ex Trin.
subsp. philadelphicum
 Philadelphia witch grass



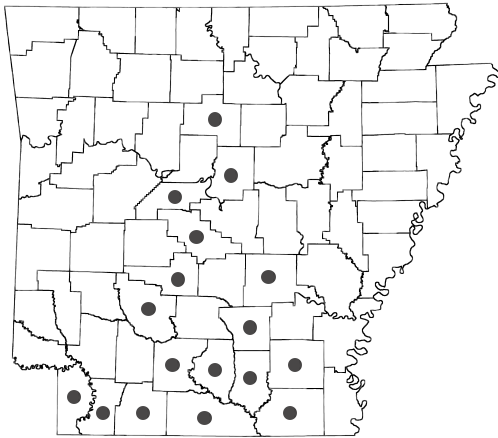
POACEAE
Panicum repens L.
 torpedo grass



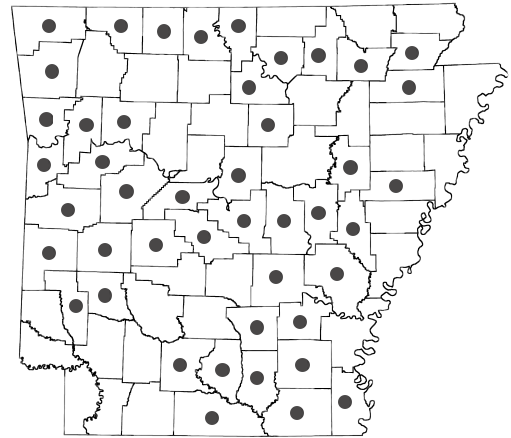
POACEAE
Panicum rigidulum Bosc ex Nees
subsp. pubescens (Vasey) Freckmann & Lelong
 red-top panic grass



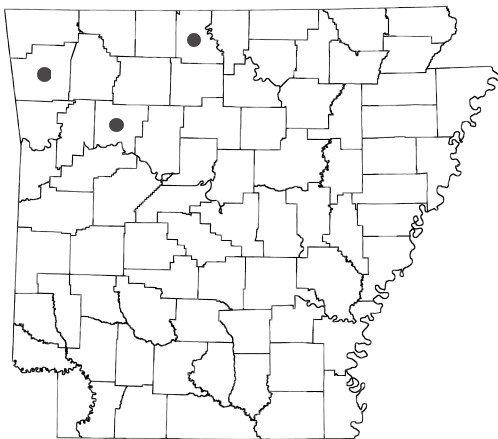
POACEAE
Panicum rigidulum Bosc ex Nees
subsp. rigidulum
 red-top panic grass



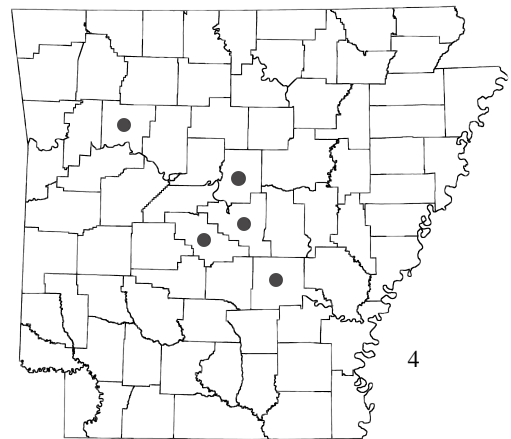
POACEAE
Panicum verrucosum Muhl.
 warty panic grass



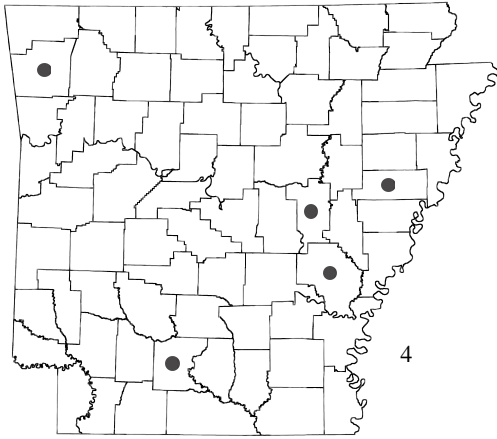
POACEAE
Panicum virgatum L.
 switch grass



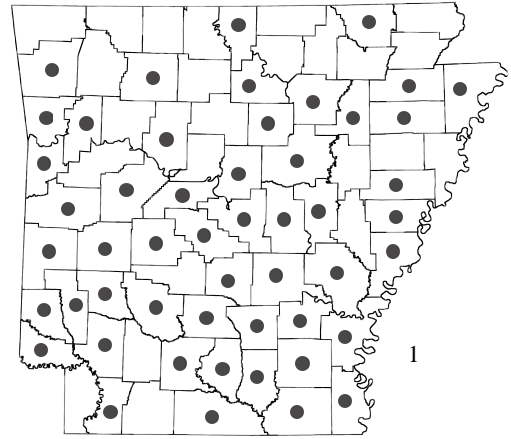
POACEAE
Pascopyrum smithii (Rydb.) Barkworth & D.R.Dewey
 western wheat grass



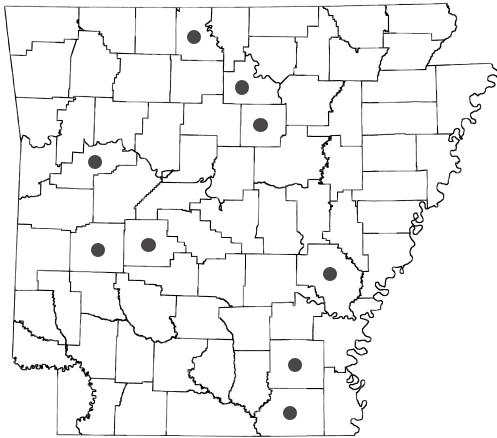
POACEAE
Paspalum bifidum (Bertol.) Nash
 pitchfork paspalum



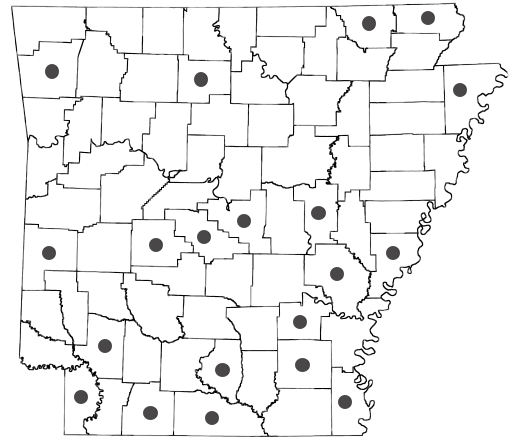
POACEAE
Paspalum boscianum Flügge
bull paspalum



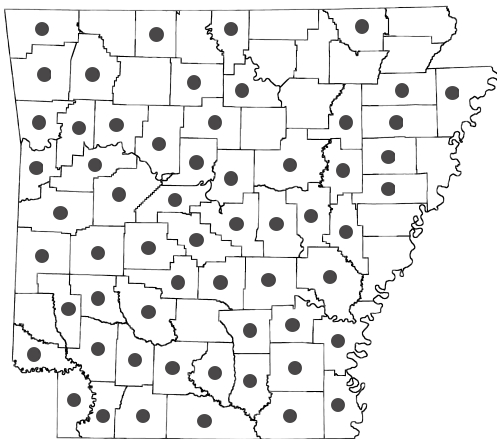
POACEAE
Paspalum dilatatum Poir.
Dallis grass



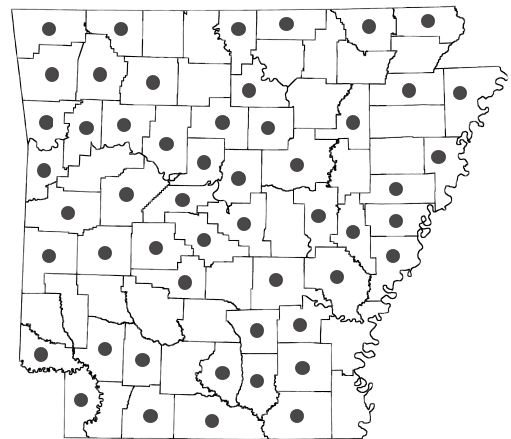
POACEAE
Paspalum dissectum (L.) L.
mudbank paspalum



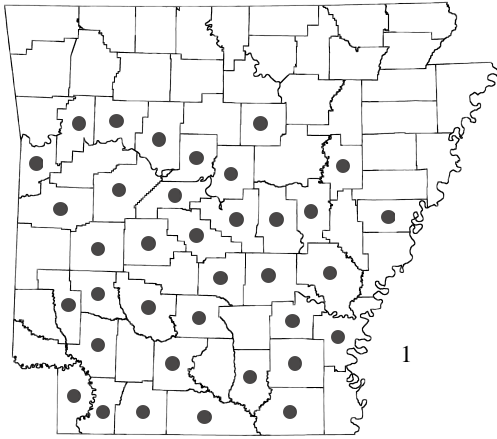
POACEAE
Paspalum distichum L.
knot grass



POACEAE
Paspalum floridanum Michx.
Florida paspalum



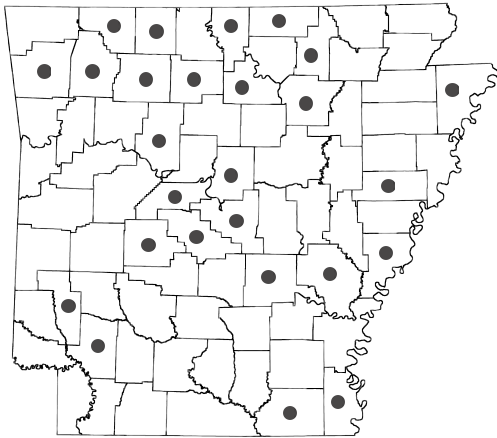
POACEAE
Paspalum laeve Michx.
field paspalum



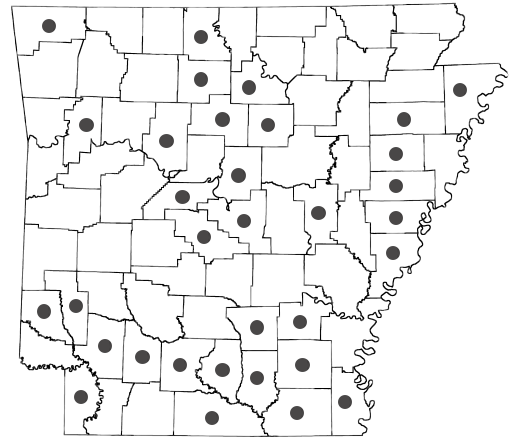
POACEAE
***Paspalum notatum* Flüggé**
 Bahia grass



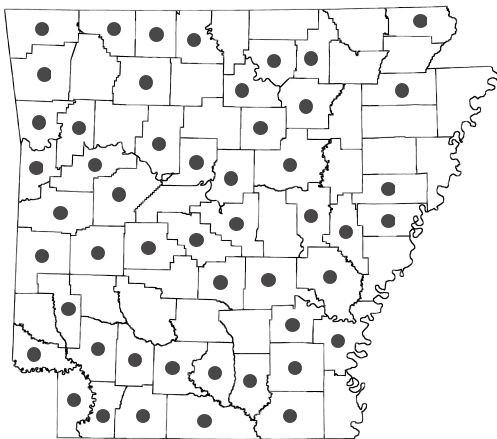
POACEAE
***Paspalum praecox* Walter**
 early paspalum



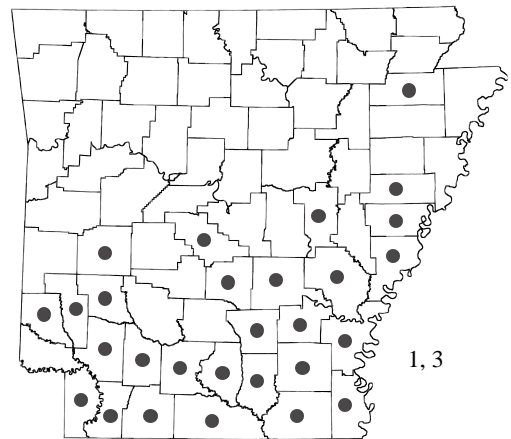
POACEAE
***Paspalum pubiflorum* Rupr. ex E.Fourn.**
 hairy-seed paspalum



POACEAE
***Paspalum repens* P.J.Bergius**
 water paspalum, horse-tail paspalum

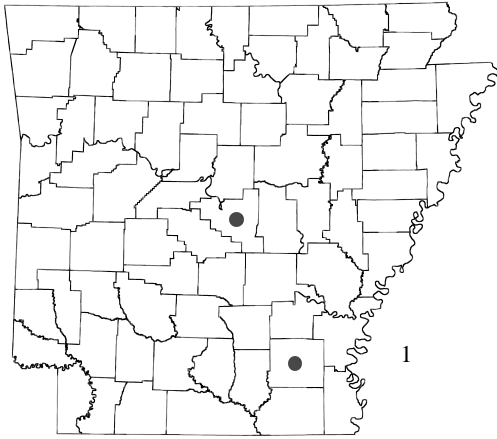


POACEAE
***Paspalum setaceum* Michx.**
 hurrah grass

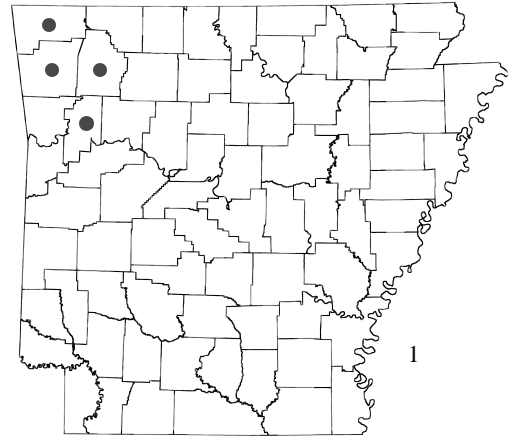


POACEAE
***Paspalum urvillei* Steud.**
 Vasey's grass

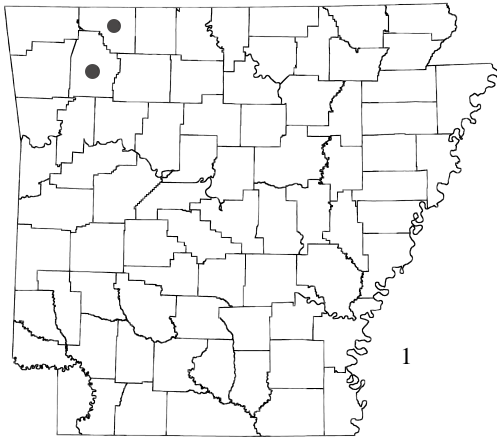
See *Appendix I* for infraspecific taxa and species status.



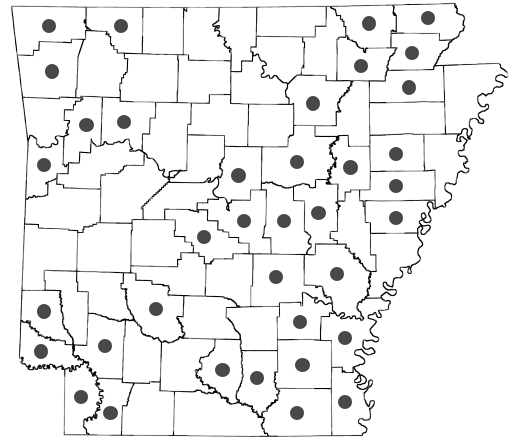
POACEAE
Pennisetum alopecuroides (L.) Spreng.
 Chinese fountain grass



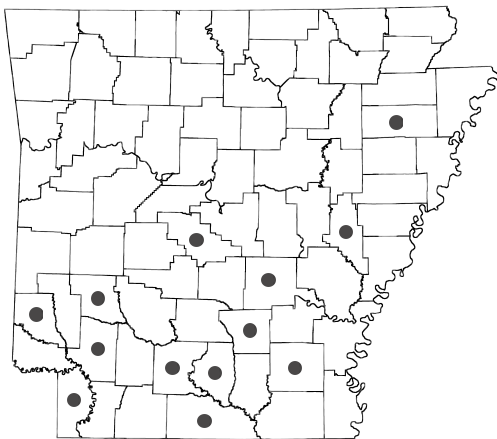
POACEAE
Phalaris arundinacea L.
 reed canary grass



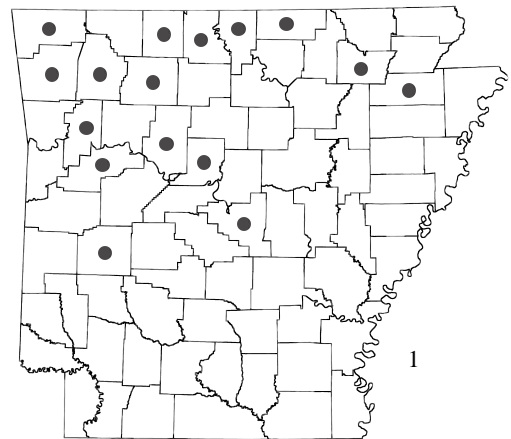
POACEAE
Phalaris canariensis L.
 annual canary grass



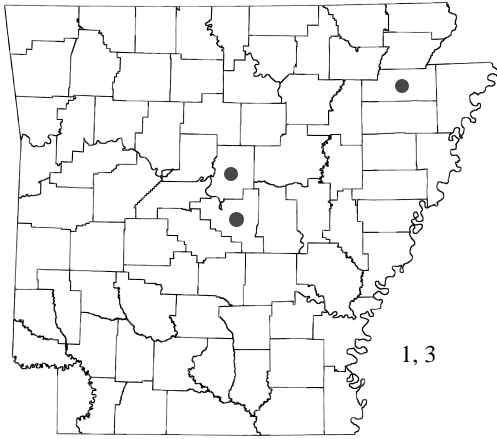
POACEAE
Phalaris caroliniana Walter
 Carolina canary grass, May grass



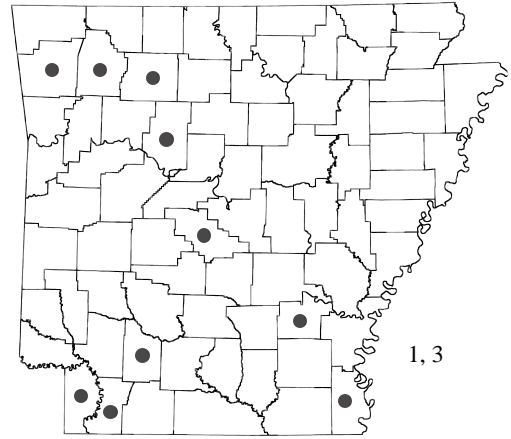
POACEAE
Phanopyrum gymnocarpon (Elliott) Nash
 savannah panic grass



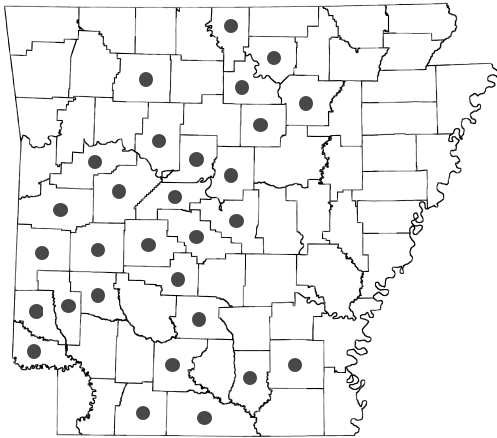
POACEAE
Phleum pratense L.
subsp. pratense
 Timothy



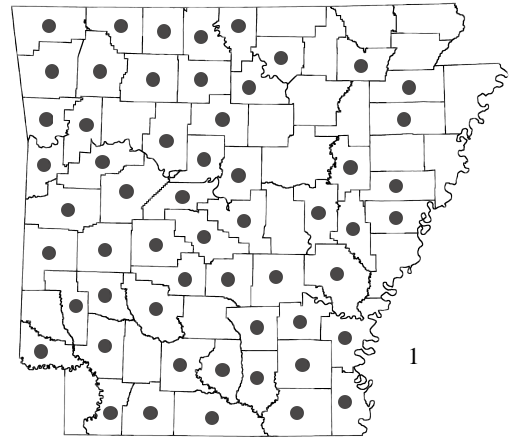
POACEAE
***Phragmites australis* (Cav.) Trin. ex Steud.**
 subsp. *australis*
 common reed



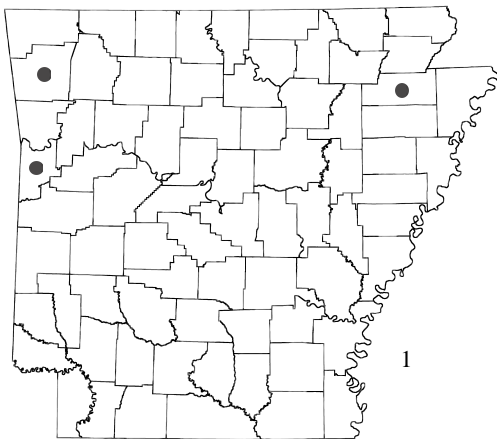
POACEAE
***Phyllostachys aurea* Carrière ex Rivière & C.Rivière**
 golden bamboo



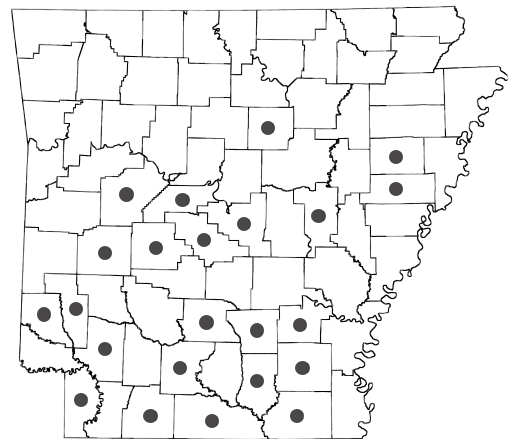
POACEAE
***Piptochaetium avenaceum* (L.) Parodi**
 black-seed needle grass, black-seed spear grass



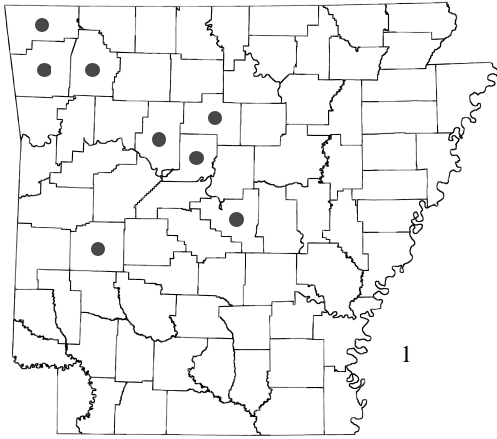
POACEAE
***Poa annua* L.**
 annual blue grass



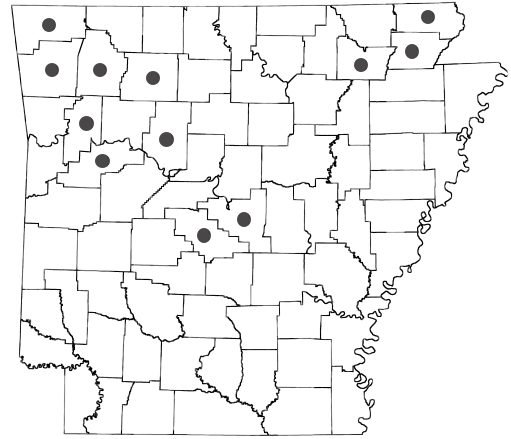
POACEAE
***Poa arachnifera* Torr.**
 Texas blue grass



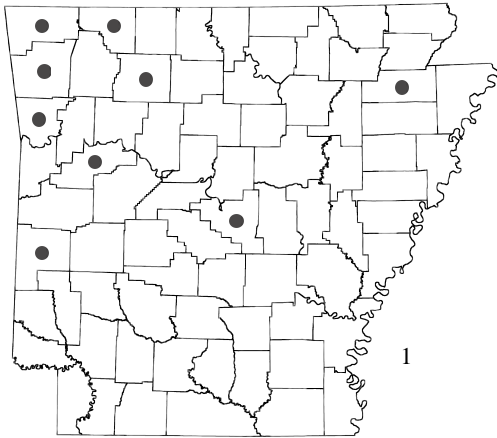
POACEAE
***Poa autumnalis* Muhl. ex Elliott**
 autumn blue grass



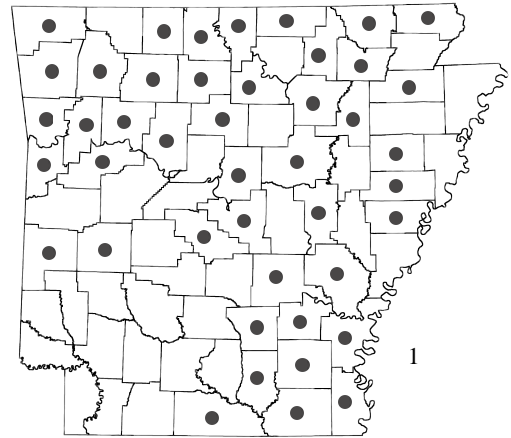
POACEAE
Poa bulbosa L.
 bulbous blue grass



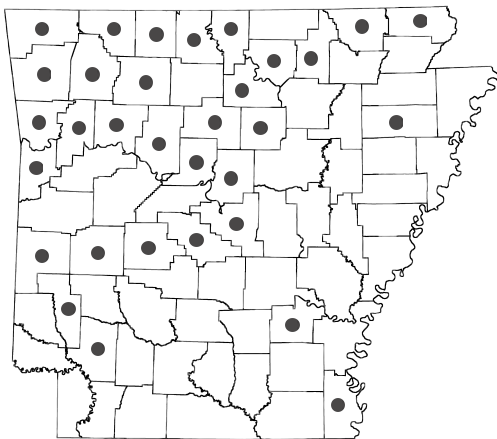
POACEAE
Poa chapmaniana Scribn.
 Chapman's blue grass



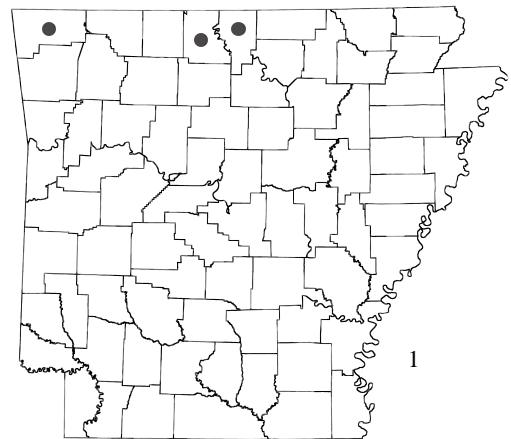
POACEAE
Poa compressa L.
 Canadian blue grass



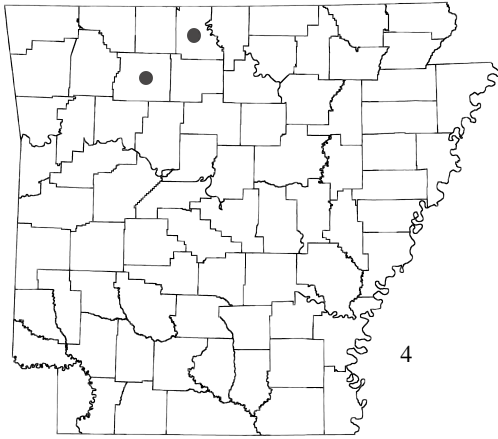
POACEAE
Poa pratensis L.
subsp. pratensis
 Kentucky blue grass



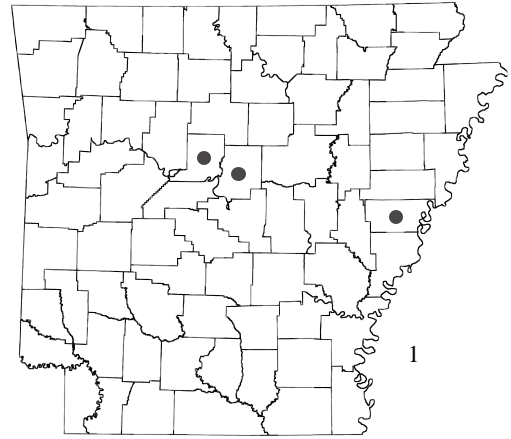
POACEAE
Poa sylvestris A.Gray
 woodland blue grass



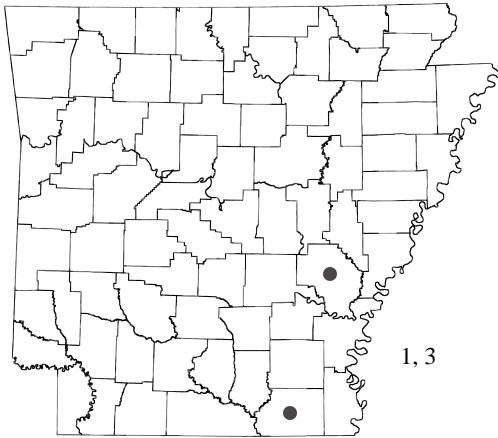
POACEAE
Poa trivialis L.
 rough blue grass



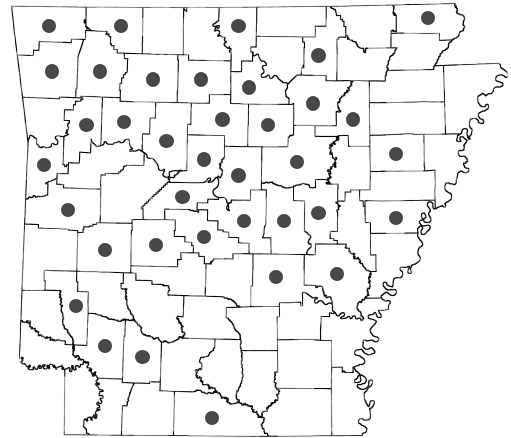
POACEAE
Poa wolffii Scribn.
Wolf's blue grass



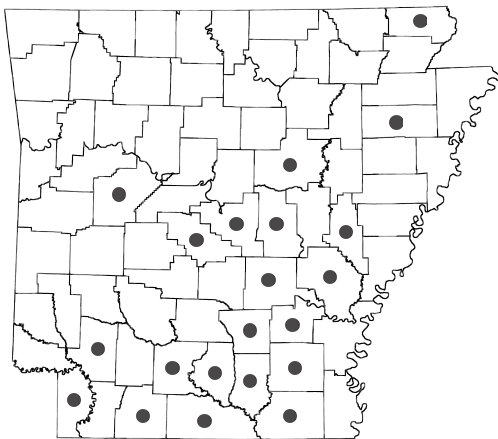
POACEAE
Polygomon monspeliensis (L.) Desf.
rabbit's-foot grass



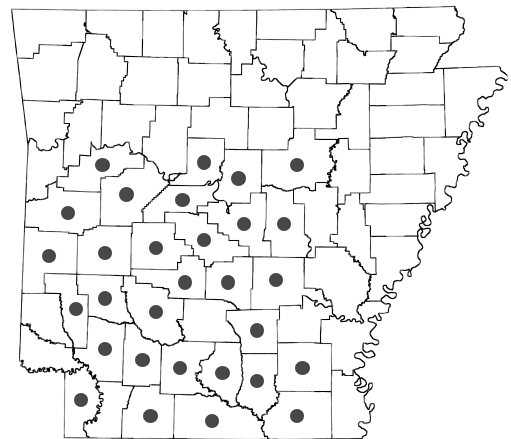
POACEAE
Rottboellia cochinchinensis (Lour.) Clayton
itch grass



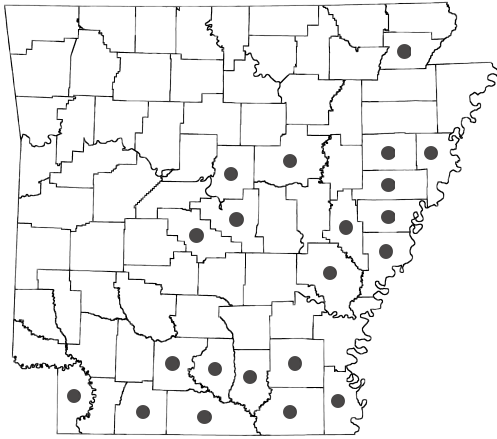
POACEAE
Saccharum alopecuroides (L.) Nutt.
silver plume grass



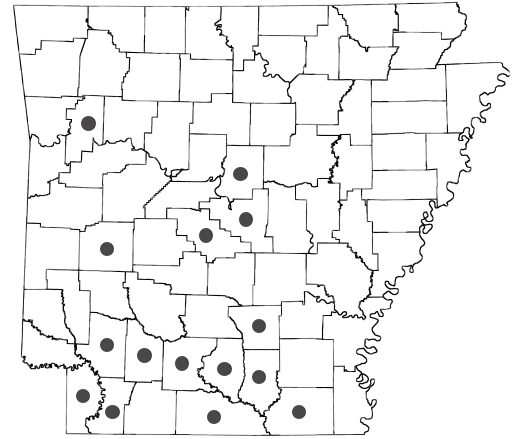
POACEAE
Saccharum baldwinii Spreng.
narrow plume grass



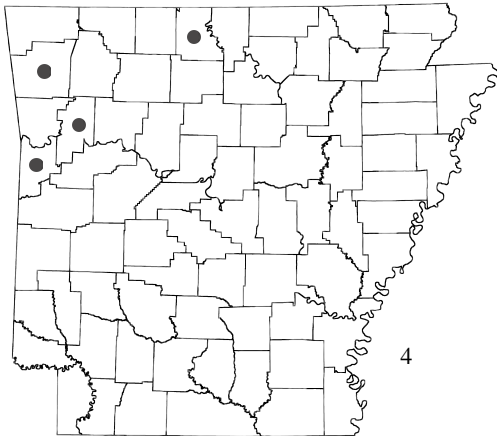
POACEAE
Saccharum brevibarbe (Michx.) Pers.
var. contortum (Elliott) R.D. Webster
short-beard plume grass, bent-awn plume grass



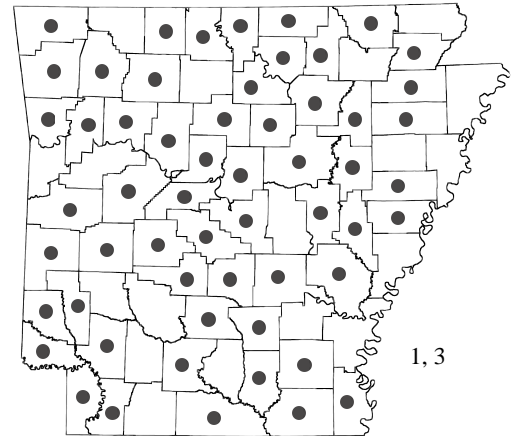
POACEAE
Saccharum giganteum (Walter) Pers.
 sugarcane plume grass, giant plume grass



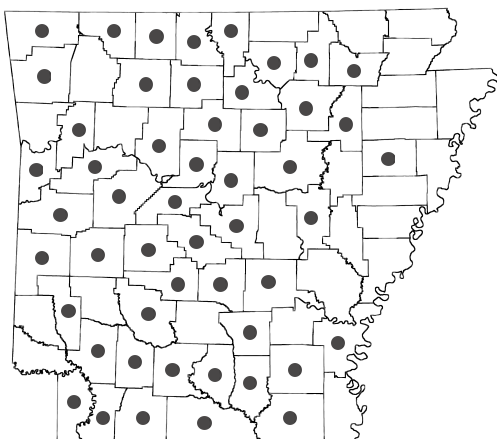
POACEAE
Sacciolepis striata (L.) Nash
 American cupscale



POACEAE
Schedonnardus paniculatus (Nutt.) Trel.
 tumble grass

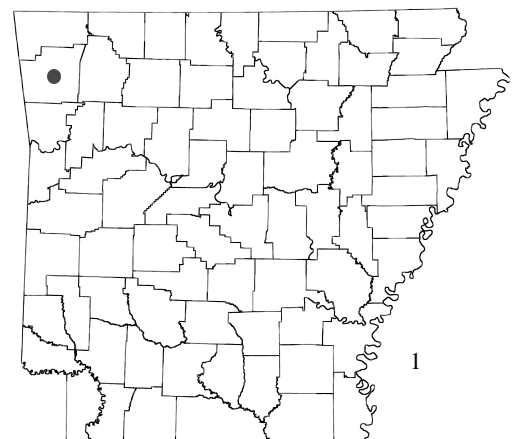


POACEAE
Schedonorus arundinaceus (Schreb.) Dumort.
 tall fescue

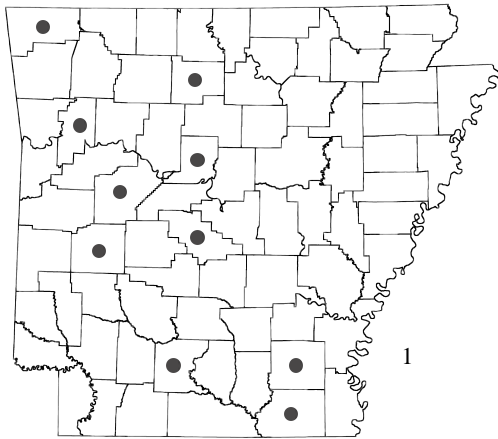


POACEAE
Schizachyrium scoparium (Michx.) Nash
 little bluestem

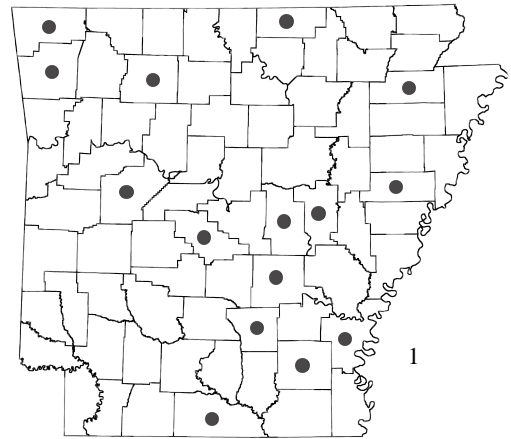
See Appendix I for infraspecific taxa and species status.



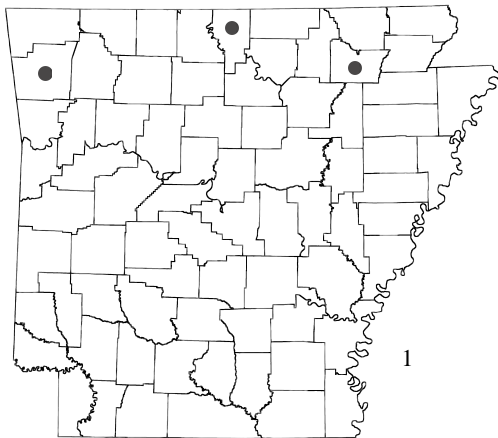
POACEAE
Sclerochloa dura (L.) P.Beauv.
 hard grass



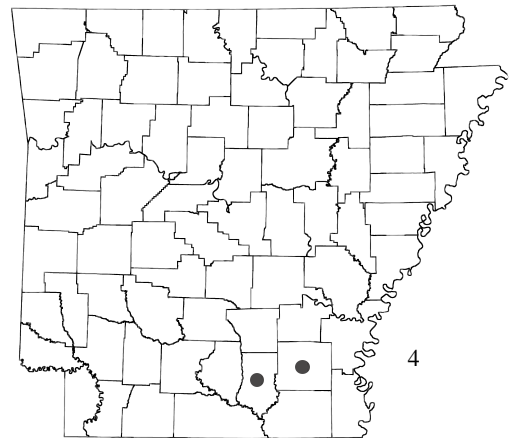
POACEAE
Secale cereale L.
 rye



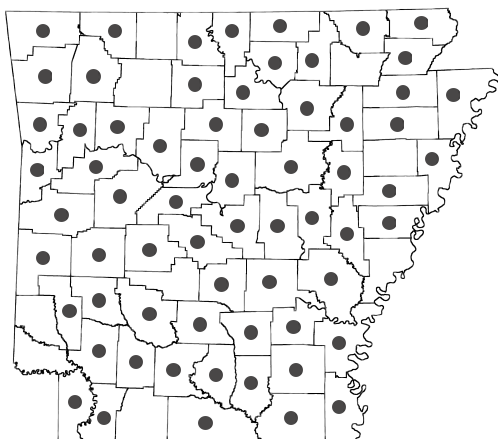
POACEAE
Setaria faberi R.A.W.Herrm.
 Chinese foxtail, nodding foxtail



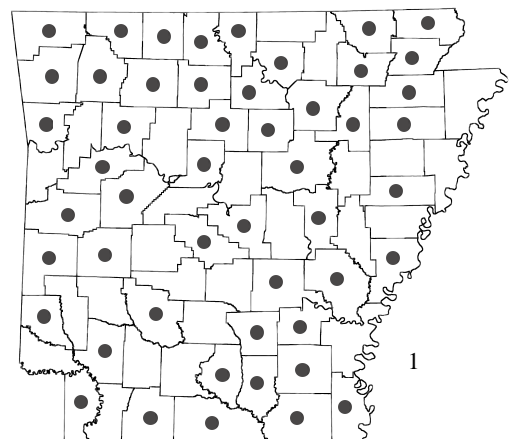
POACEAE
Setaria italica (L.) P.Beauv.
 fox-tail millet



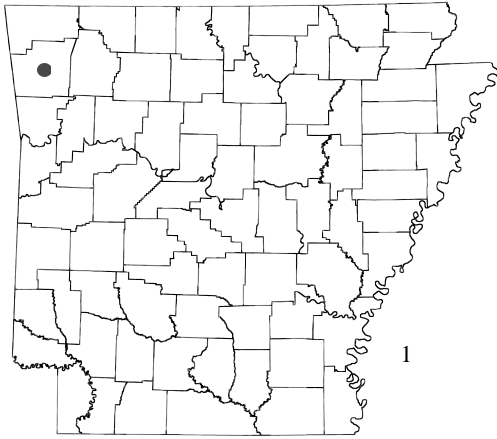
POACEAE
Setaria magna Griseb.
 giant bristle grass, giant foxtail



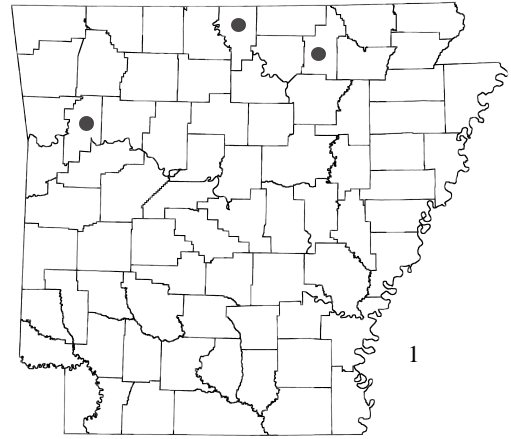
POACEAE
Setaria parviflora (Poir.) Kerguelen
 knot-root bristle grass, knot-root foxtail



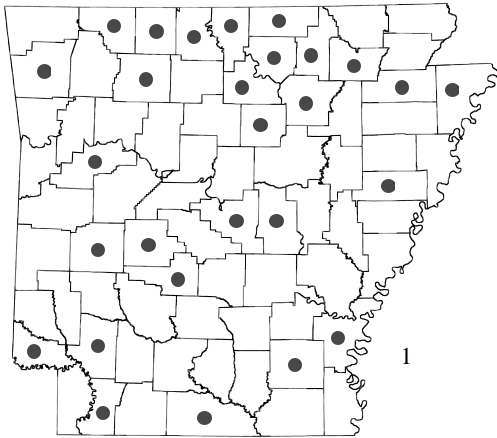
POACEAE
Setaria pumila (Poir.) Roem. & Schult.
subsp. pumila
 yellow bristle grass, yellow foxtail



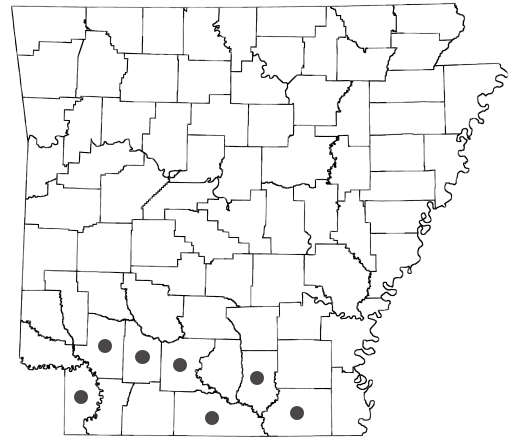
POACEAE
Setaria verticillata (L.) P.Beauv.
 bristly foxtail, hooked bristle grass



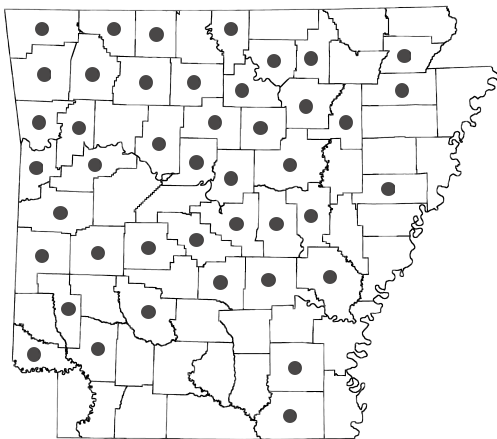
POACEAE
Setaria viridis (L.) P.Beauv.
var. major (Gaudin) Peterm.
 giant green bristle grass, giant green foxtail



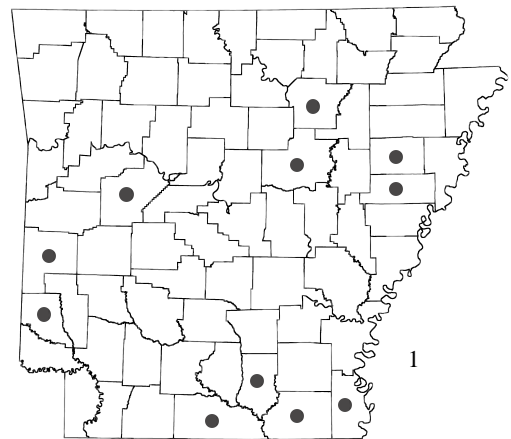
POACEAE
Setaria viridis (L.) P.Beauv.
var. viridis
 green bristle grass, green foxtail



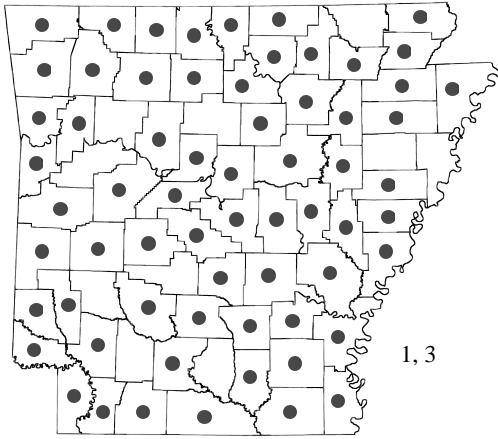
POACEAE
Sorghastrum eliottii (C.Mohr) Nash
 slender Indian grass



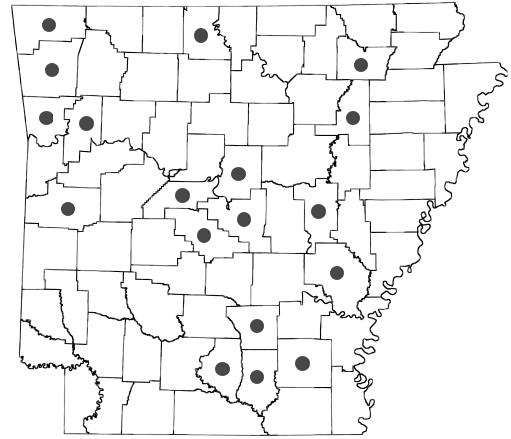
POACEAE
Sorghastrum nutans (L.) Nash
 Indian grass



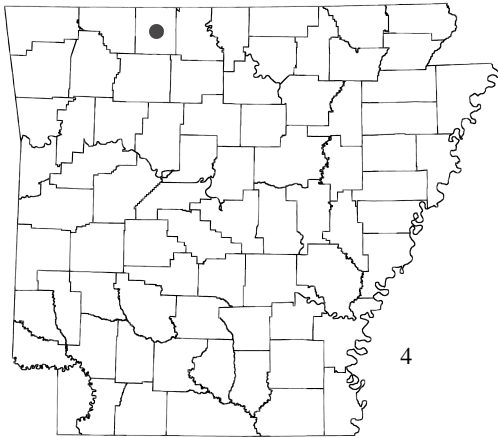
POACEAE
Sorghum bicolor (L.) Moench
subsp. bicolor
 sorghum, broom-corn



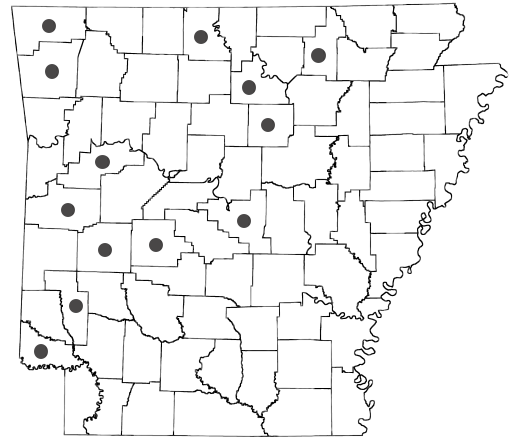
POACEAE
***Sorghum halepense* (L.) Pers.**
 Johnson grass



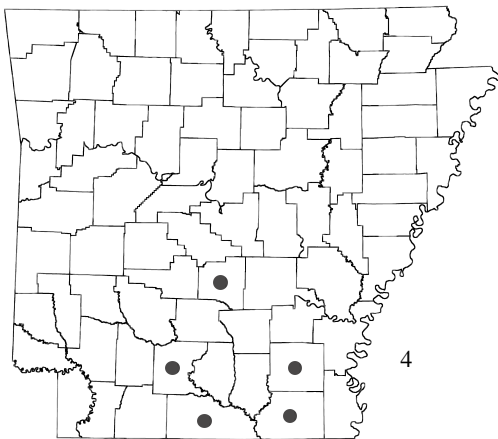
POACEAE
***Spartina pectinata* Link**
 prairie cord grass



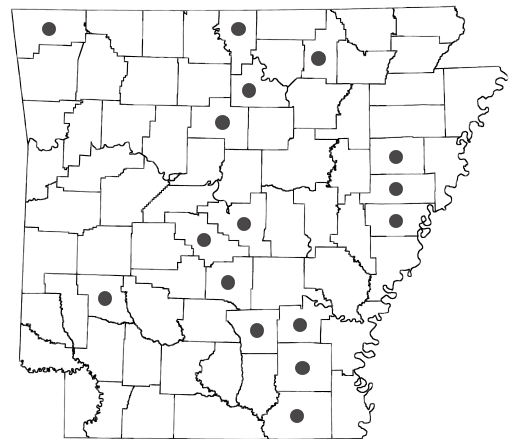
POACEAE
***Sphenopholis filiformis* (Chapm.) Scribn.**
 long-leaf wedgescale



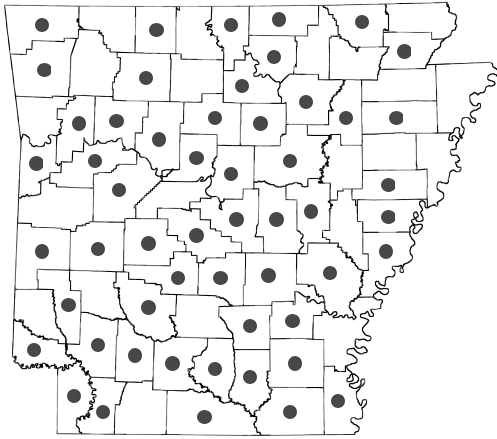
POACEAE
***Sphenopholis intermedia* (Rydb.) Rydb.**
 slender wedgescale



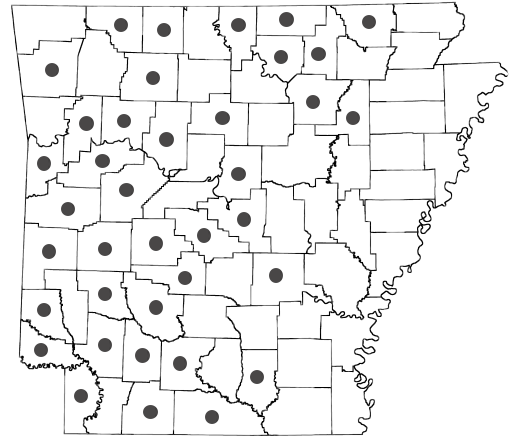
POACEAE
***Sphenopholis longiflora* (Vasey ex L.H.Dewey) Hitchc.**
 Texas wedgescale



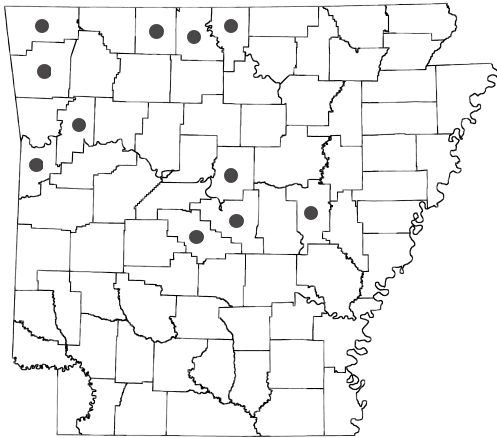
POACEAE
***Sphenopholis nitida* (Biehler) Scribn.**
 shiny wedgescale



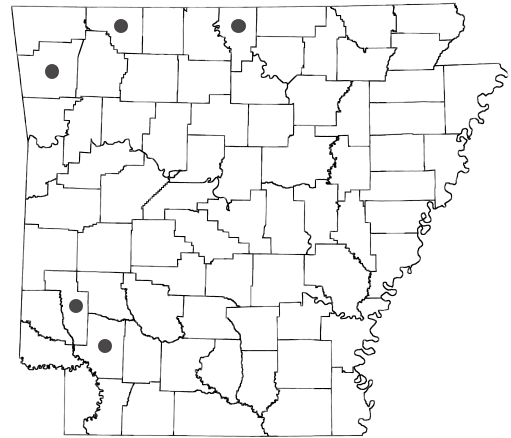
POACEAE
Sphenopholis obtusata (Michx.) Scribn.
 prairie wedgescale



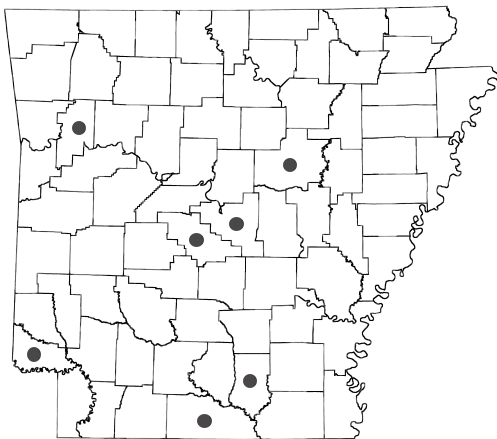
POACEAE
Sporobolus clandestinus (Biehler) Hitchc.
 hidden dropseed, rough dropseed



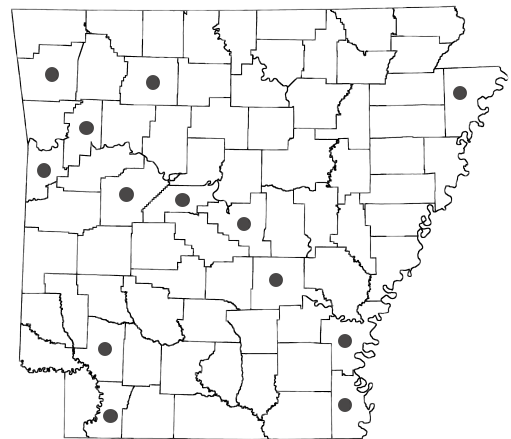
POACEAE
Sporobolus compositus (Poir.) Merr.
var. compositus
 tall dropseed, rough dropseed



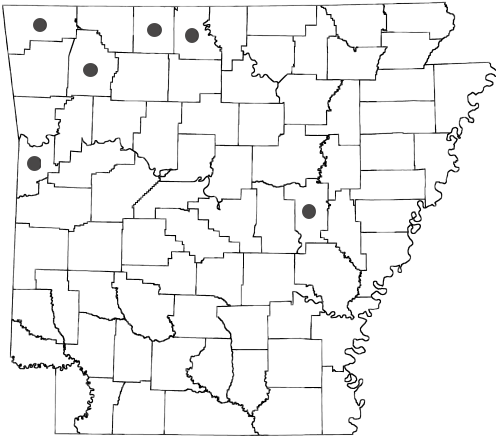
POACEAE
Sporobolus compositus (Poir.) Merr.
var. drummondii (Trin.) Kartesz & Gandhi
 tall dropseed, rough dropseed



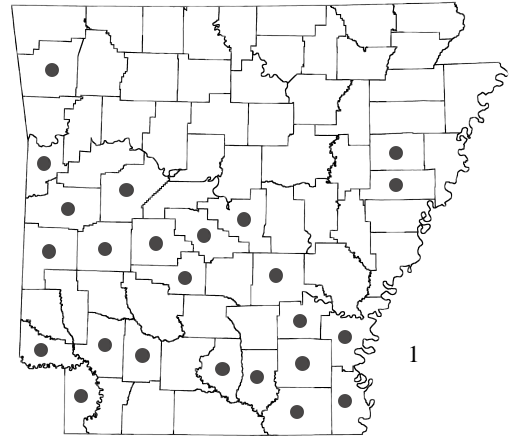
POACEAE
Sporobolus compositus (Poir.) Merr.
var. macer (Trin.) Kartesz & Gandhi
 tall dropseed, rough dropseed



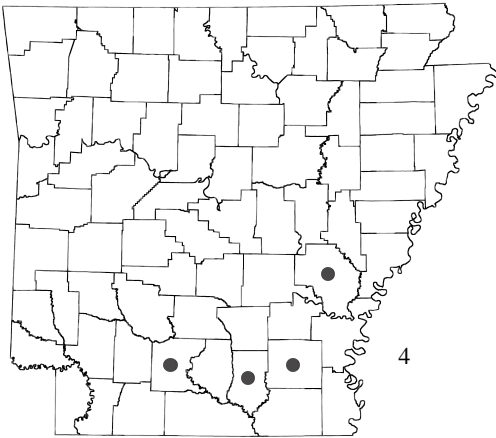
POACEAE
Sporobolus cryptandrus (Torr.) A.Gray
 sand dropseed



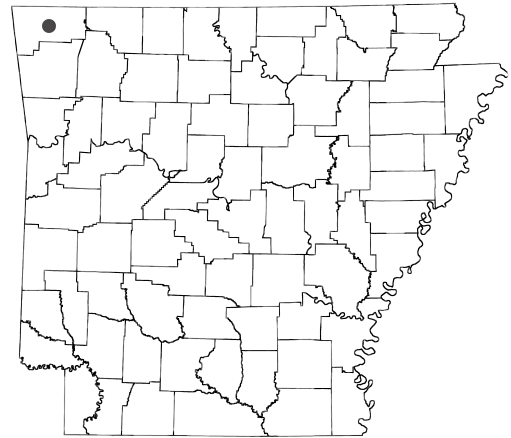
POACEAE
Sporobolus heterolepis (A.Gray) A.Gray
prairie dropseed



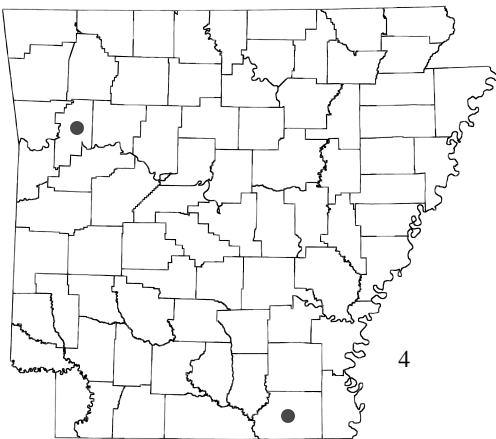
POACEAE
Sporobolus indicus (L.) R.Br.
smut grass



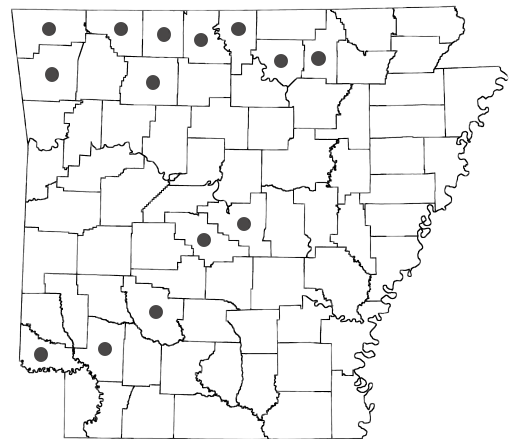
POACEAE
Sporobolus junceus (P.Beauv.) Kunth
pineywoods dropseed



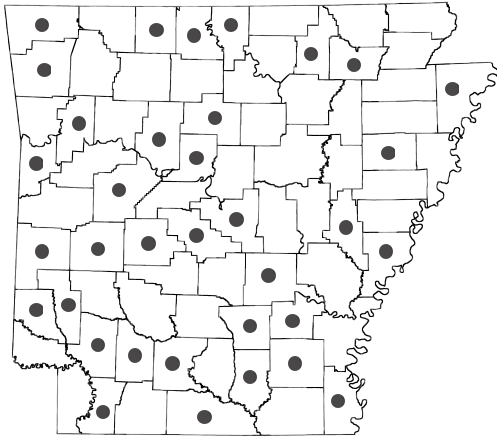
POACEAE
Sporobolus neglectus Nash
small dropseed, puff-sheath dropseed



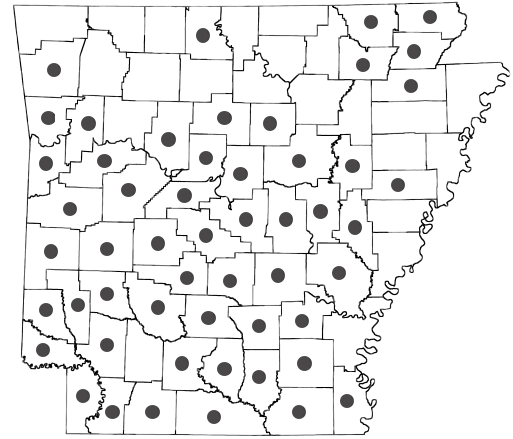
POACEAE
Sporobolus pyramidatus (Lam.) Hitchc.
whorled dropseed



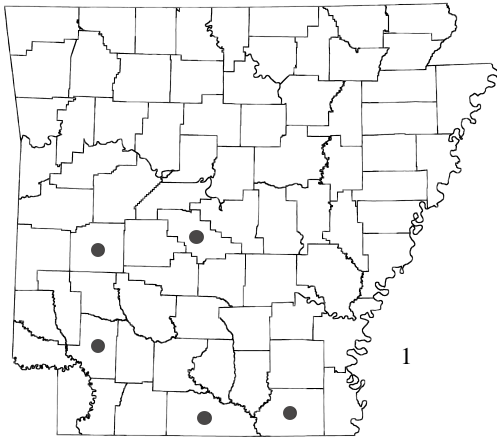
POACEAE
Sporobolus vaginiflorus (Torr. ex A.Gray) A.W.Wood
var. ozarkanus (Fernald) Shinnery
Ozark dropseed



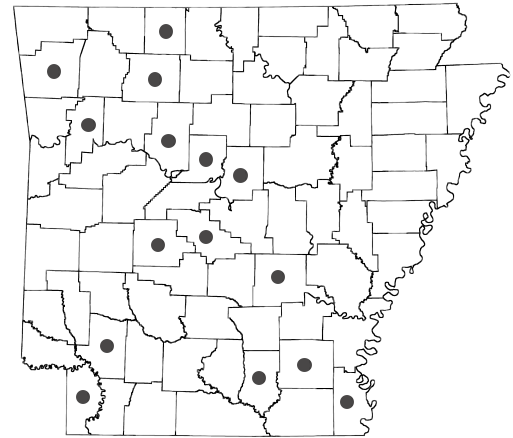
POACEAE
Sporobolus vaginiflorus (Torr. ex A.Gray) A.W.Wood
var. vaginiflorus
 poverty grass, poverty dropseed



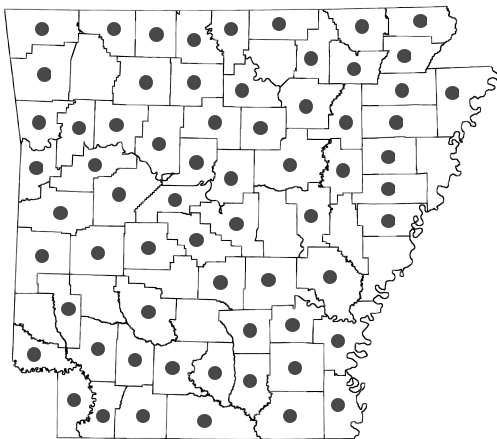
POACEAE
Steinchisma hians (Elliott) Nash
 gaping grass, gaping panic grass



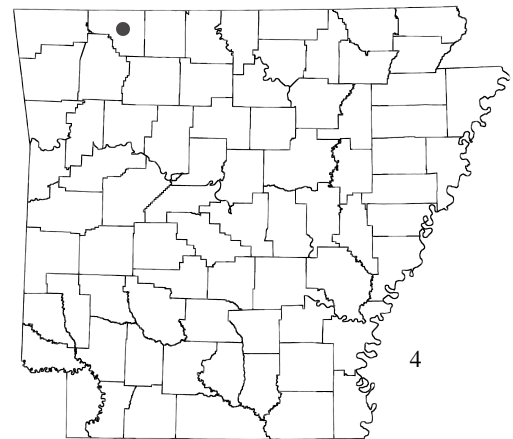
POACEAE
Stenotaphrum secundatum (Walter) Kuntze
 St. Augustine grass



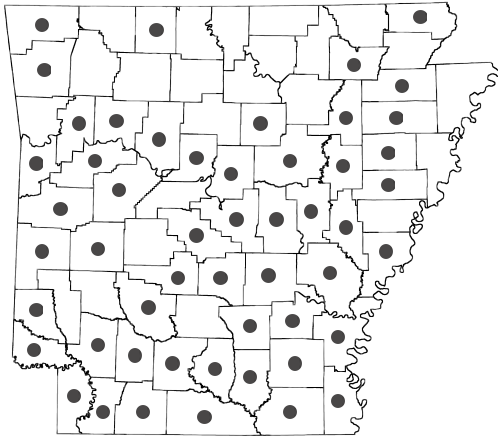
POACEAE
Tridens flavus (L.) Hitchc.
var. chapmanii (Small) Shinnery
 Chapman's tridens, purple-top tridens



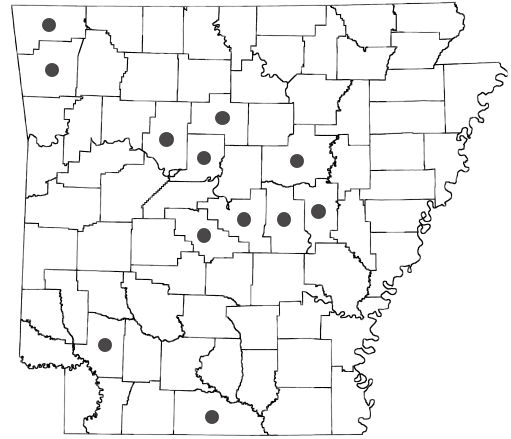
POACEAE
Tridens flavus (L.) Hitchc.
var. flavus
 purple-top tridens, grease grass



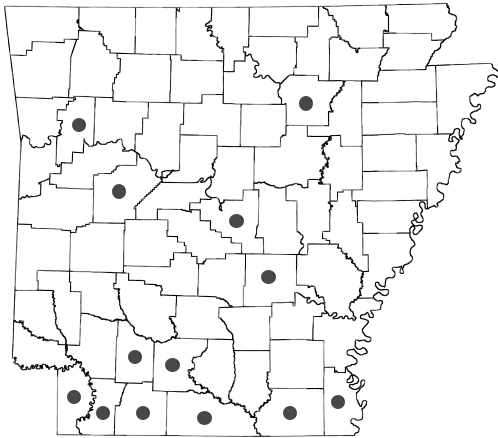
POACEAE
Tridens muticus (Torr.) Nash
var. elongatus (Buckley) Shinnery
 slim tridens



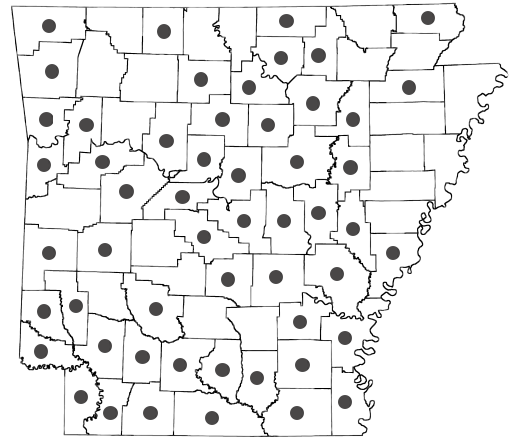
POACEAE
***Tridens strictus* (Nutt.) Nash**
 long-spike tridens



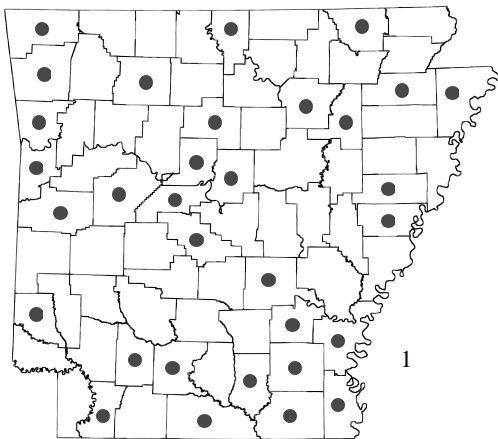
POACEAE
***Tridens* × *oklahomensis* (Feath.) Feath.**
 hybrid tridens



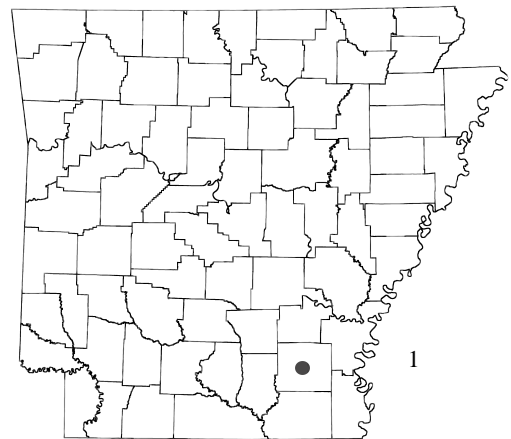
POACEAE
***Triplasis purpurea* (Walter) Chapm.**
var. *purpurea*
 purple sand grass



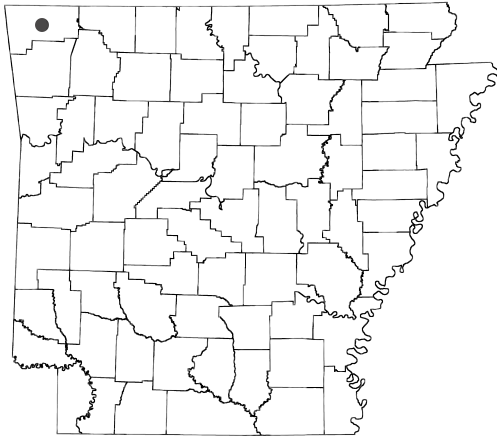
POACEAE
***Tripsacum dactyloides* (L.) L.**
 eastern gama grass



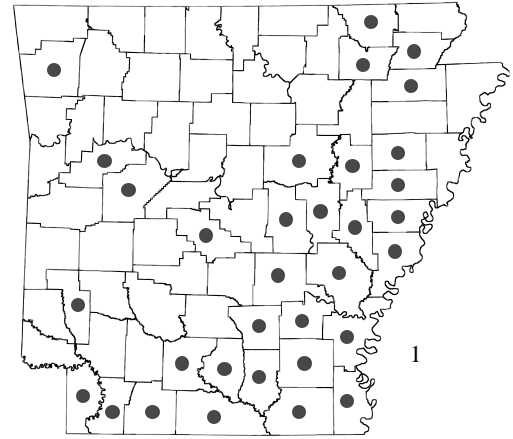
POACEAE
***Triticum aestivum* L.**
 wheat



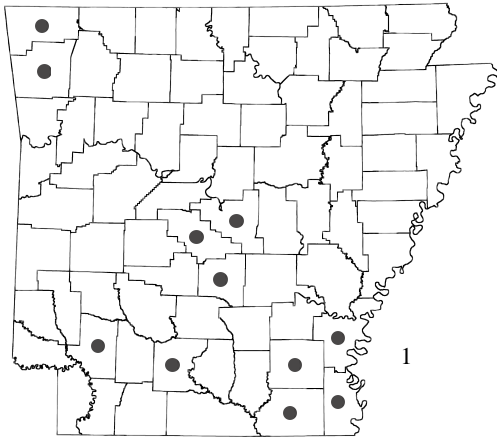
POACEAE
***Urochloa arizonica* (Scribn. & Merr.) Morrone & Zuloaga**
 Arizona signal grass



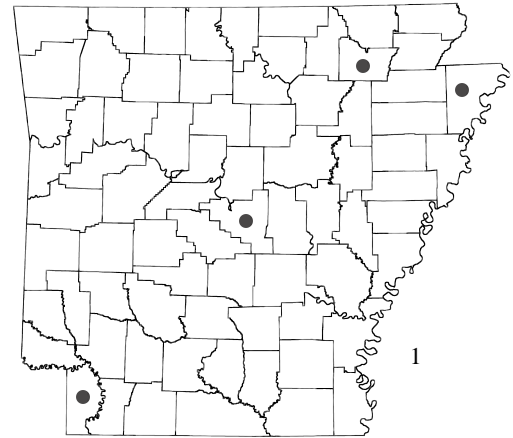
POACEAE
***Urochloa ciliatissima* (Buckley) R.D.Webster**
 fringed signal grass



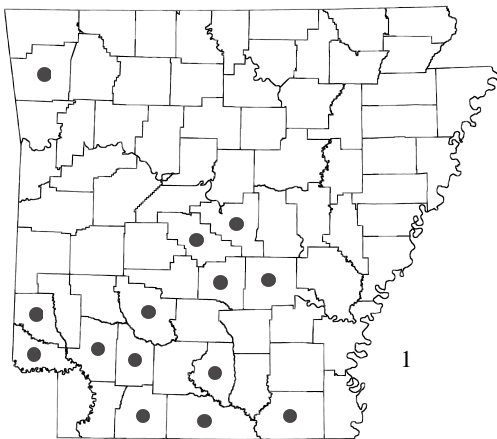
POACEAE
***Urochloa platyphylla* (Munro ex C.Wright) R.D.Webster**
 broad-leaf signal grass



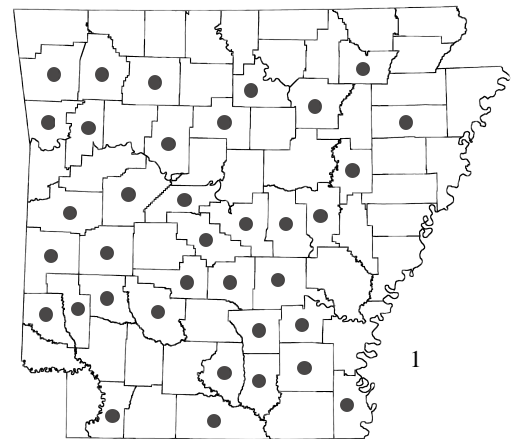
POACEAE
***Urochloa ramosa* (L.) T.Q.Nguyen**
 brown-top millet



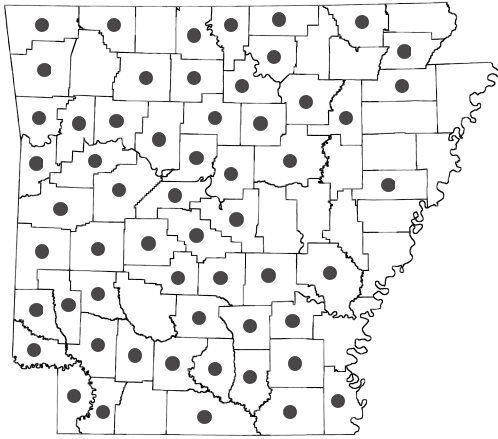
POACEAE
***Urochloa texana* (Buckley) R.D.Webster**
 Texas signal grass, Texas millet



POACEAE
***Vulpia bromoides* (L.) Gray**
 brome six-weeks grass, brome fescue



POACEAE
***Vulpia myuros* (L.) C.C.Gmel.**
 rat-tail six-weeks grass, rat-tail fescue

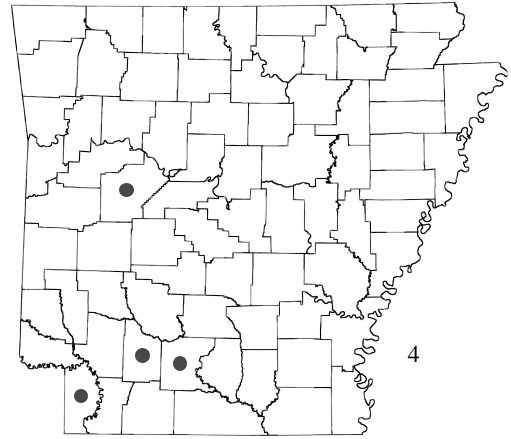


POACEAE

Vulpia octoflora (Walter) Rydb.

common six-weeks grass, six-weeks fescue

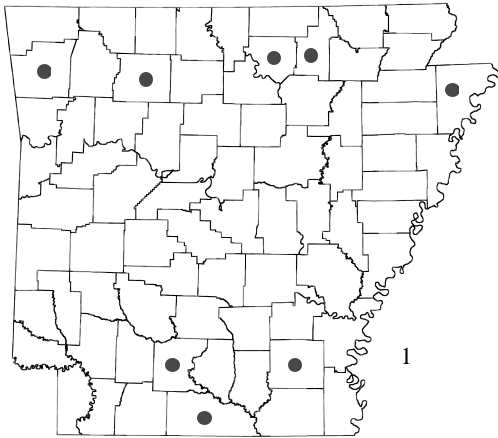
See *Appendix I* for infraspecific taxa and species status.



POACEAE

Vulpia sciurea (Nutt.) Henrard

squirrel-tail six-weeks grass, squirrel-tail fescue

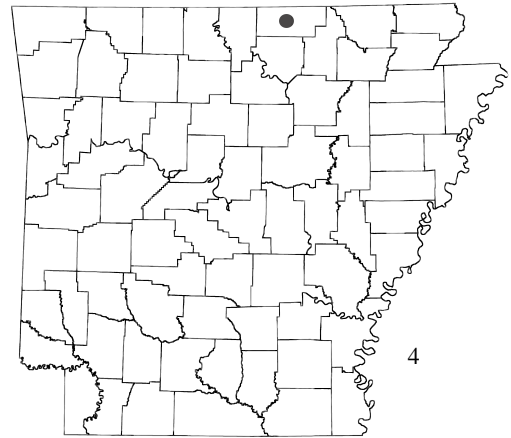


POACEAE

Zea mays L.

subsp. mays

corn, maize

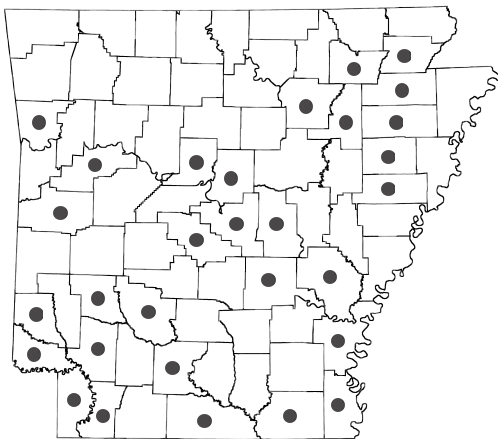


POACEAE

Zizania palustris L.

var. interior (Fassett) Dore

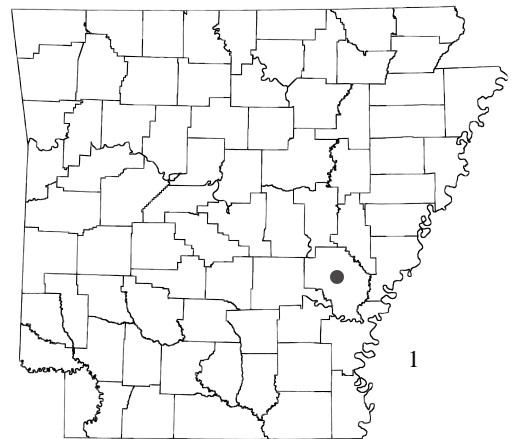
interior wild rice



POACEAE

Zizaniopsis miliacea (Michx.) Döll. & Asch.

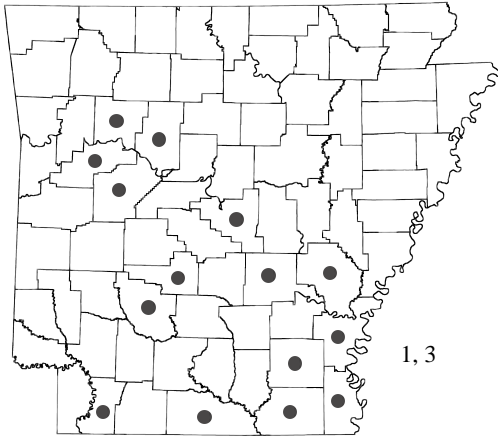
southern wild rice, giant cut grass, water-millet



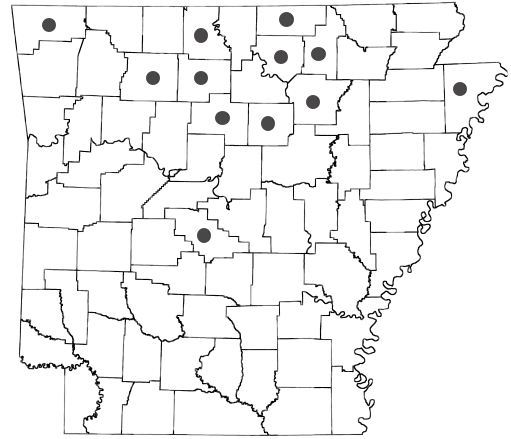
POACEAE

Zoysia japonica Steud.

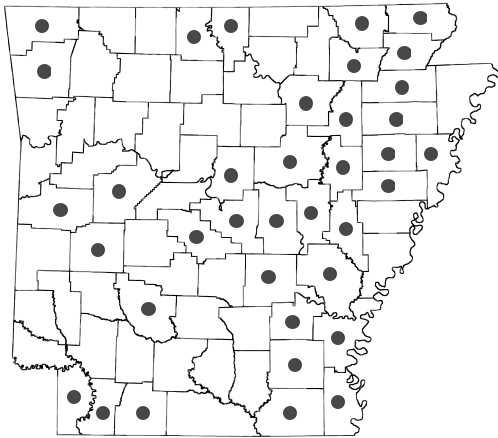
Korean lawn grass, zoysia grass



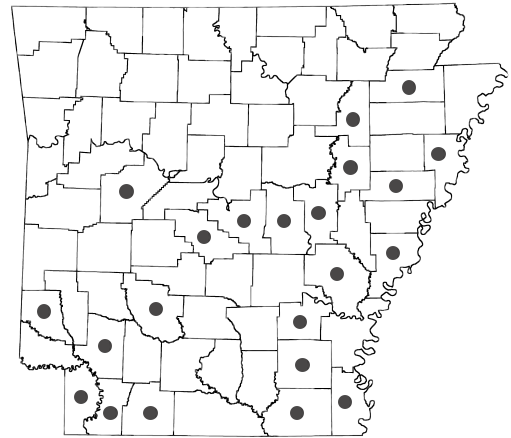
PONTEDERIACEAE
Eichhornia crassipes (Mart.) Solms in A.D.C. & C.D.C.
 water-hyacinth



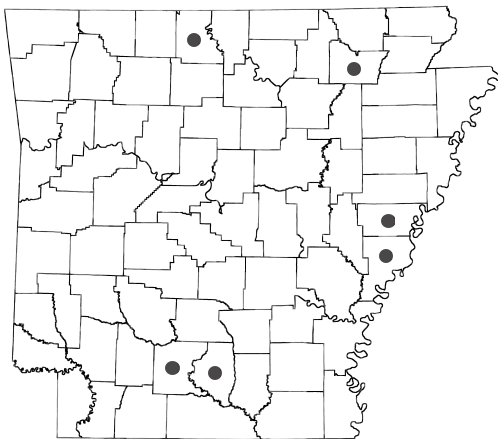
PONTEDERIACEAE
Heteranthera dubia (Jacq.) MacMill.
 water star-grass



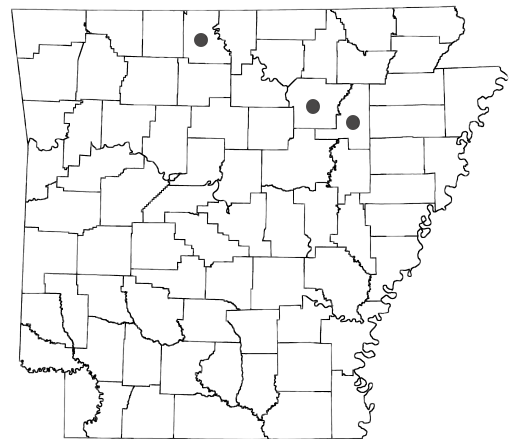
PONTEDERIACEAE
Heteranthera limosa (Sw.) Willd.
 mud-plantain



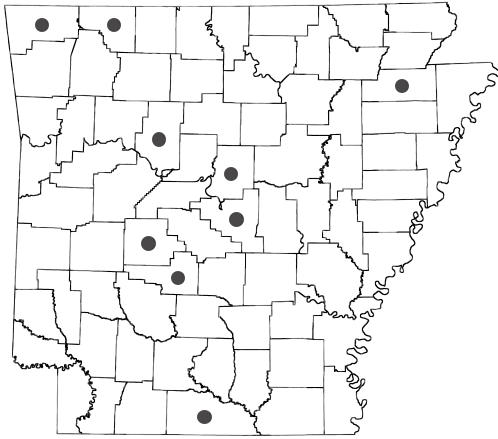
PONTEDERIACEAE
Heteranthera multiflora (Griseb.) C.N.Horn
 mud-plantain



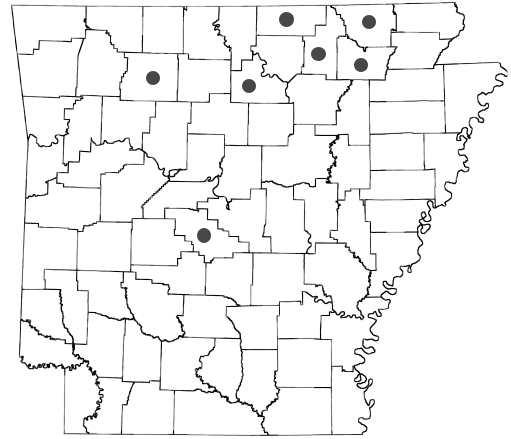
PONTEDERIACEAE
Heteranthera reniformis Ruiz & Pav.
 mud-plantain



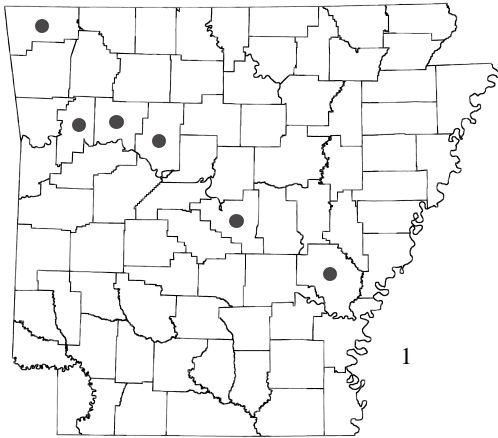
PONTEDERIACEAE
Heteranthera rotundifolia (Kunth) Griseb.
 mud-plantain



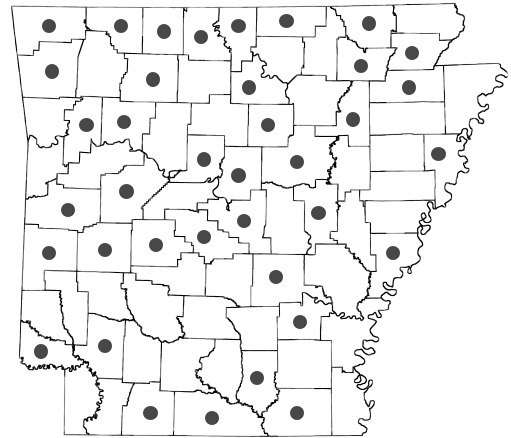
PONTEDERIACEAE
Pontederia cordata L.
 pickerel-weed



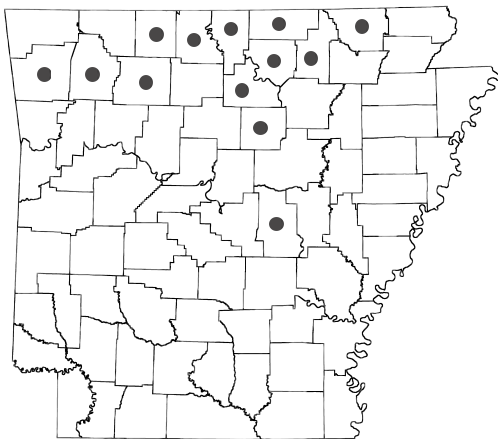
POTAMOGETONACEAE
Potamogeton amplifolius Tuck.
 large-leaf pondweed



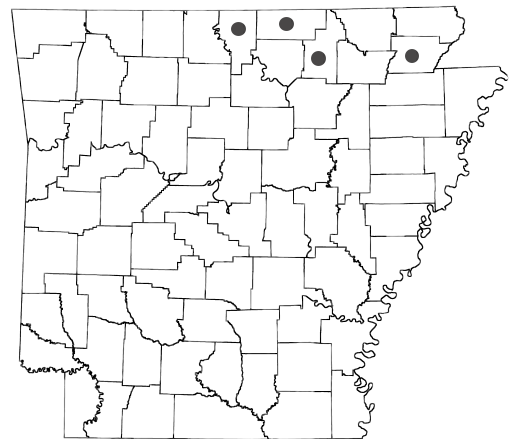
POTAMOGETONACEAE
Potamogeton crispus L.
 curly pondweed, curly muckweed



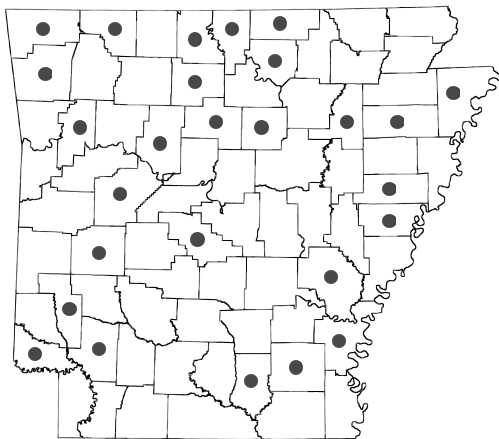
POTAMOGETONACEAE
Potamogeton diversifolius Raf.
 pondweed, water-thread pondweed



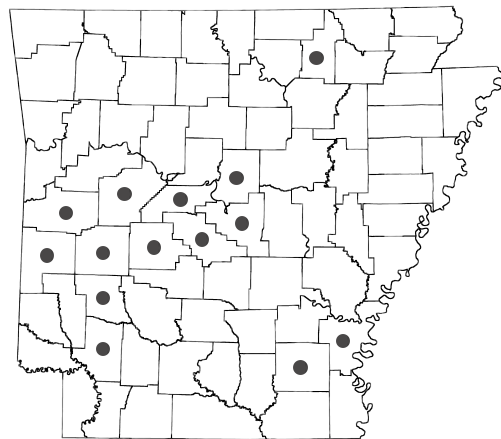
POTAMOGETONACEAE
Potamogeton foliosus Raf.
subsp. foliosus
 leafy pondweed



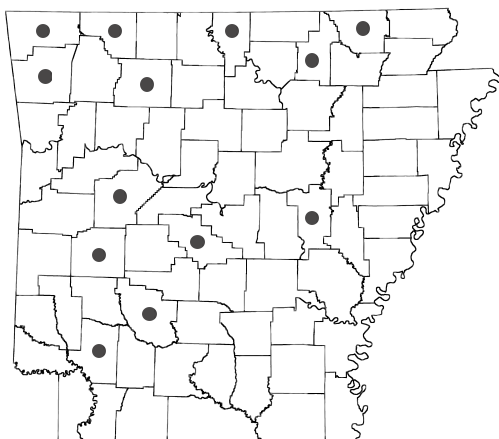
POTAMOGETONACEAE
Potamogeton illinoensis Morong
 Illinois pondweed



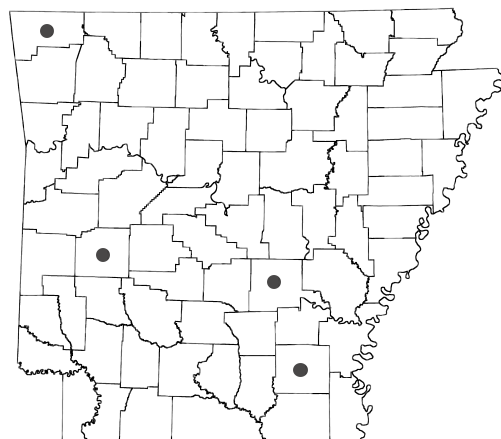
POTAMOGETONACEAE
Potamogeton nodosus Poir. in Lam. et al.
 long-leaf pondweed, American pondweed



POTAMOGETONACEAE
Potamogeton pulcher Tuck.
 spotted pondweed



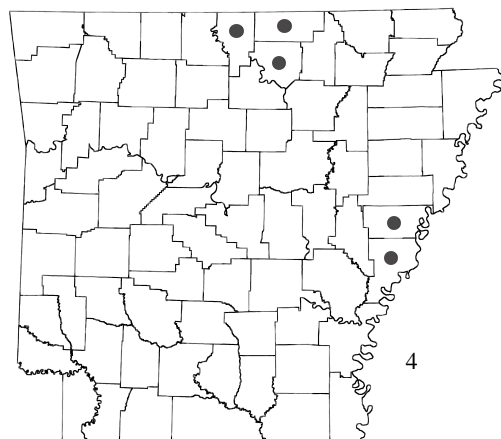
POTAMOGETONACEAE
Potamogeton pusillus L.
 subsp. **pusillus**
 small pondweed



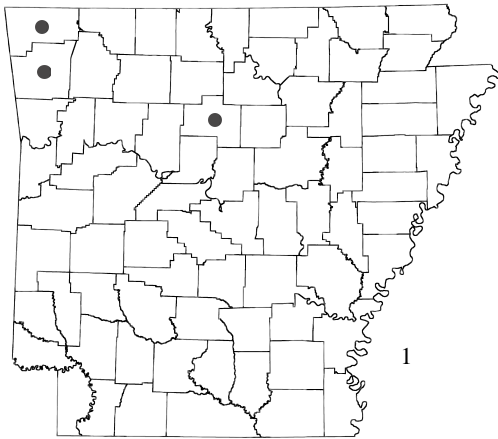
POTAMOGETONACEAE
Potamogeton pusillus L.
 subsp. **tenuissimus (Mert. & W.D.J.Koch) R.R.Haynes & Hellq.**
 small pondweed



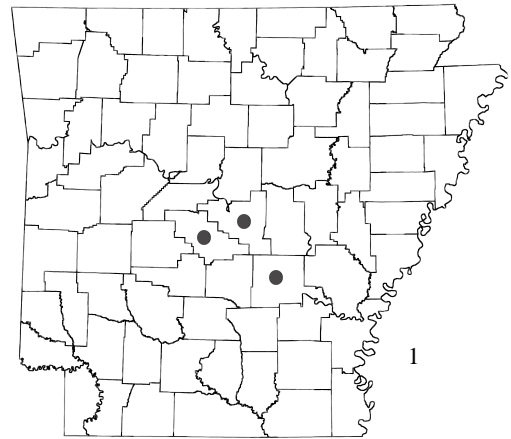
POTAMOGETONACEAE
Stuckenia pectinata (L.) Börner
 sago pondweed, fennel-leaf pondweed



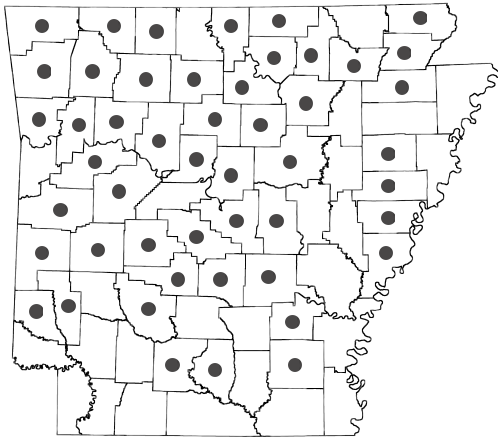
POTAMOGETONACEAE
Zannichellia palustris L.
 horned-pondweed



RUSCACEAE
Convallaria majalis L.
 lily-of-the-valley



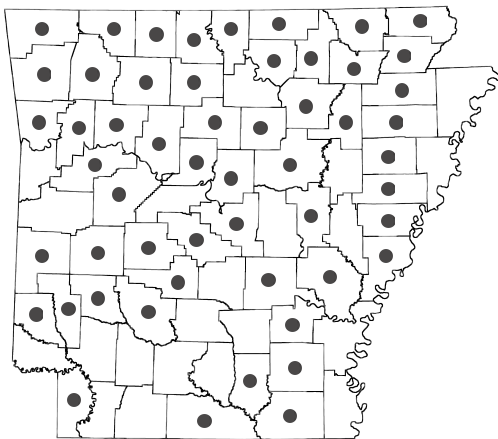
RUSCACEAE
Liriope spicata (Thunb.) Lour.
 creeping lily-turf, monkey-grass



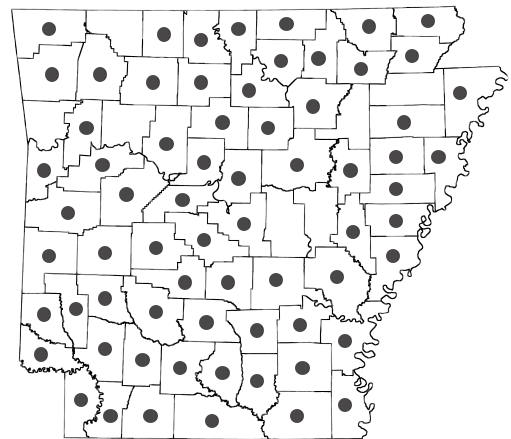
RUSCACEAE
Maianthemum racemosum (L.) Link
subsp. racemosum
 false Solomon's-seal, false spikenard



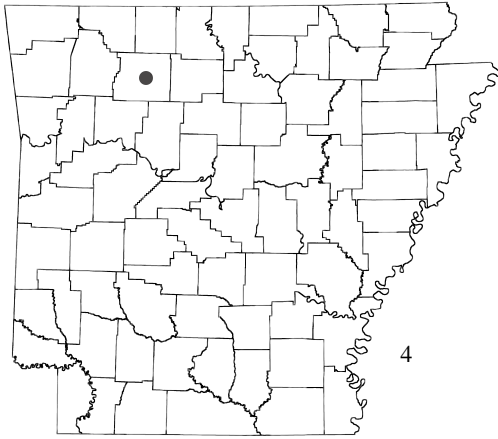
RUSCACEAE
Maianthemum stellatum (L.) Link
 starry false Solomon's-seal



RUSCACEAE
Polygonatum biflorum (Walter) Elliott
 Solomon's-seal



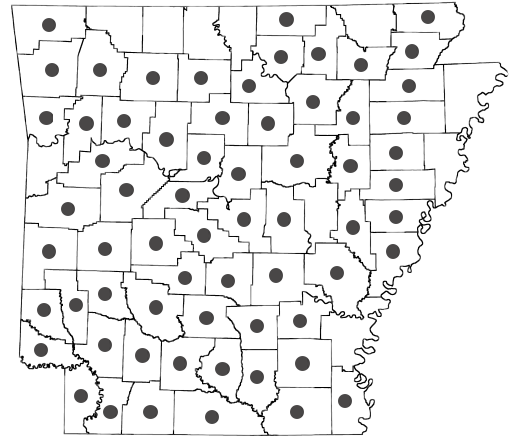
SMILACACEAE
Smilax bona-nox L.
 saw greenbrier, catbrier



SMILACACEAE

Smilax ecirrhata (Engelm. ex Kunth) S.Watson in A.Gray et al.

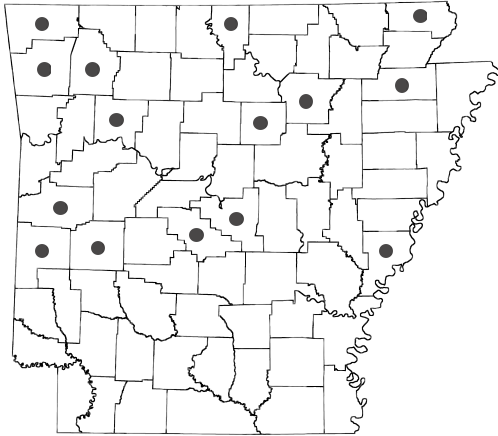
carrion-flower



SMILACACEAE

Smilax glauca Walter

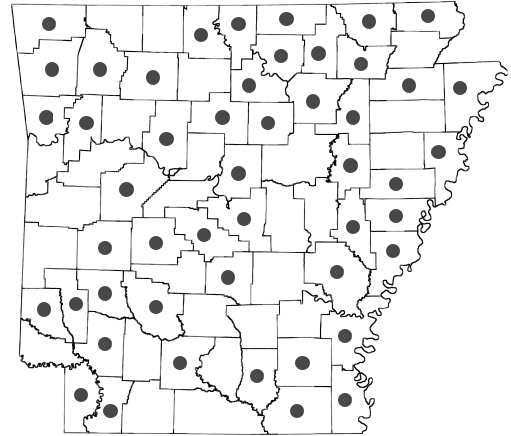
cat greenbrier, sawbrier



SMILACACEAE

Smilax herbacea L.

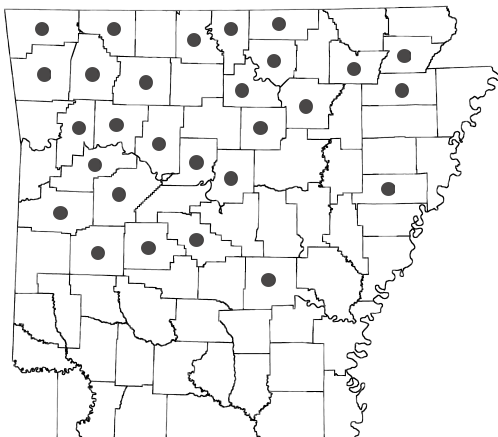
carrion-flower



SMILACACEAE

Smilax hispida Raf.

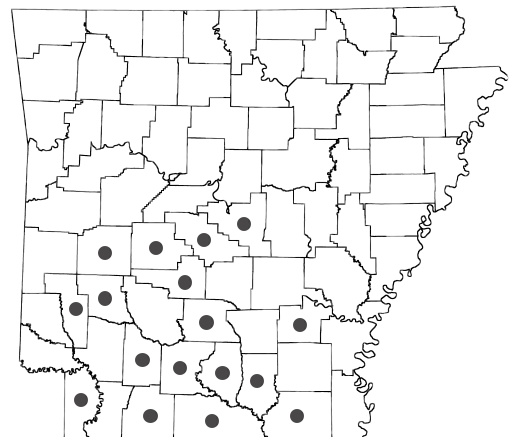
bristly greenbrier



SMILACACEAE

Smilax lasioneura Hook.

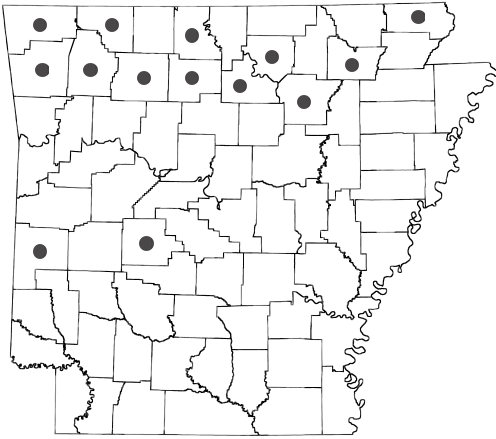
carrion-flower



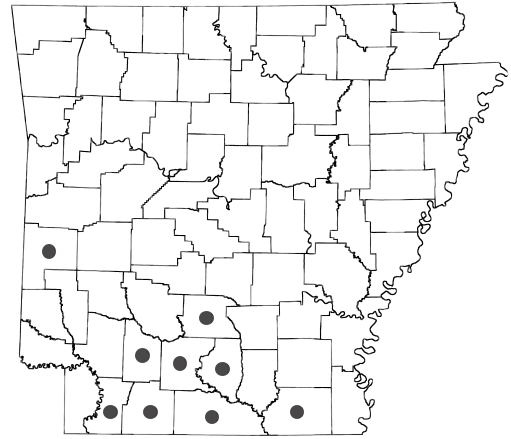
SMILACACEAE

Smilax laurifolia L.

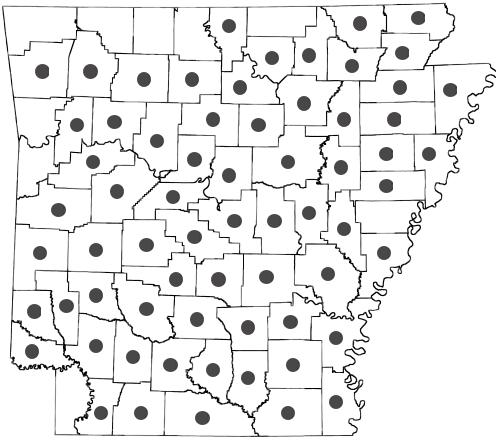
laurel greenbrier, bamboo-vine



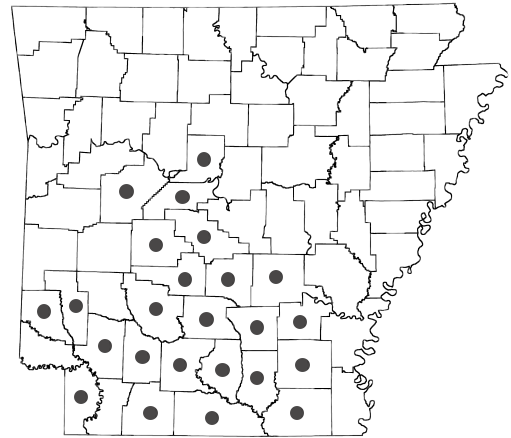
SMILACACEAE
Smilax pulverulenta Michx.
 carrion-flower



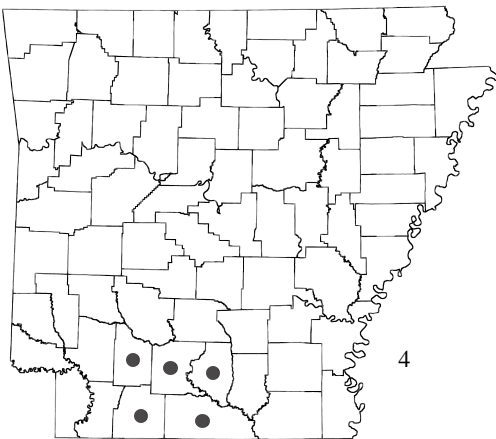
SMILACACEAE
Smilax pumila Walter
 sarsaparilla-vine, dwarf greenbrier



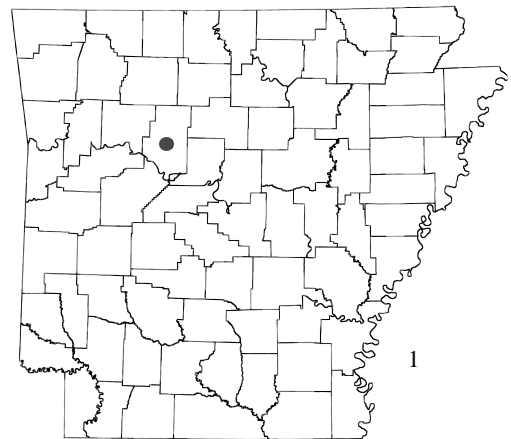
SMILACACEAE
Smilax rotundifolia L.
 common greenbrier, horsebrier



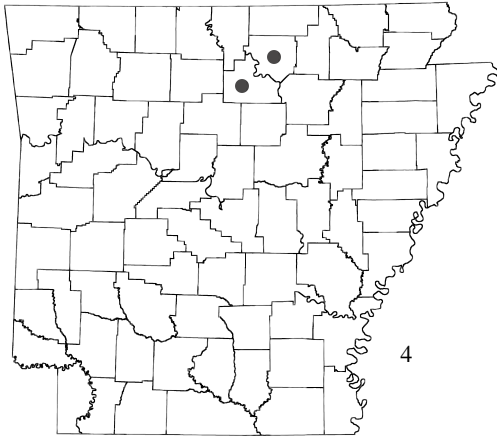
SMILACACEAE
Smilax smallii Morong
 lance-leaf greenbrier



SMILACACEAE
Smilax walteri Pursh
 red-berried greenbrier, coral greenbrier

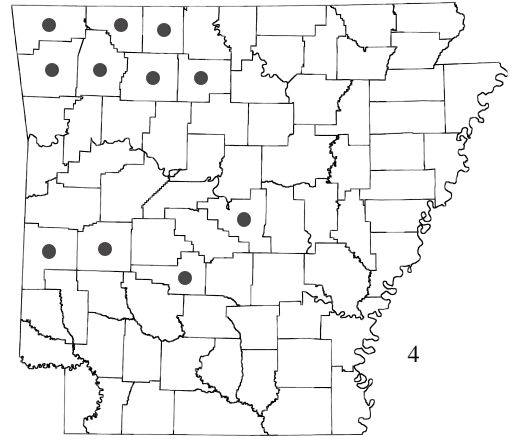


THEMIDACEAE
Dichelostemma congestum (Sm.) Kunth
 ookow



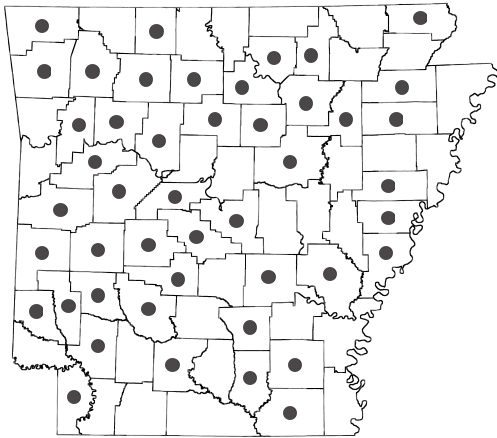
TRILLIACEAE
Trillium flexipes Raf.

white trillium, white wakerobin



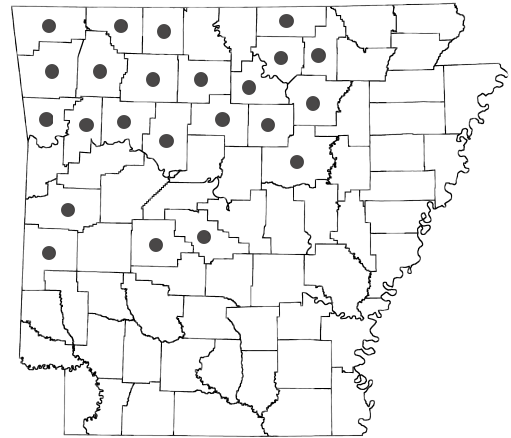
TRILLIACEAE
Trillium ozarkanum E.J.Palmer & Steyerl.

Ozark trillium, Ozark wakerobin



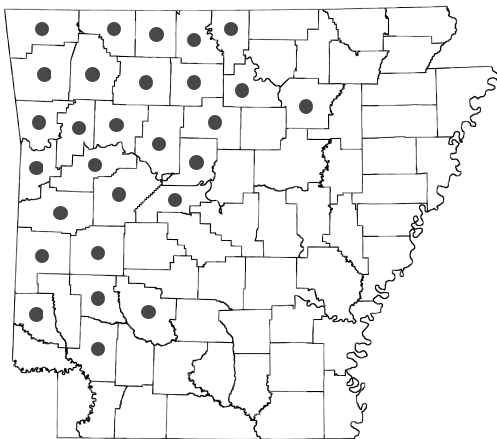
TRILLIACEAE
Trillium recurvatum L.C.Beck

purple trillium



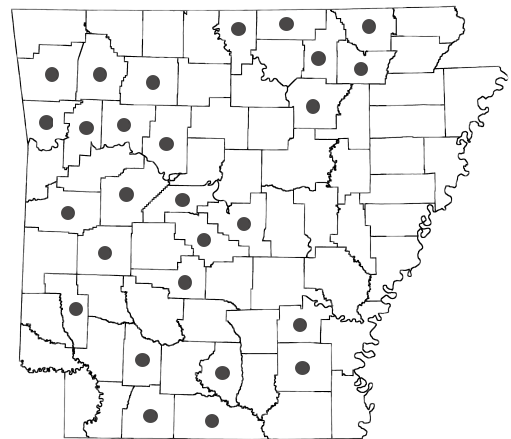
TRILLIACEAE
Trillium sessile L.

wakerobin, toadshade



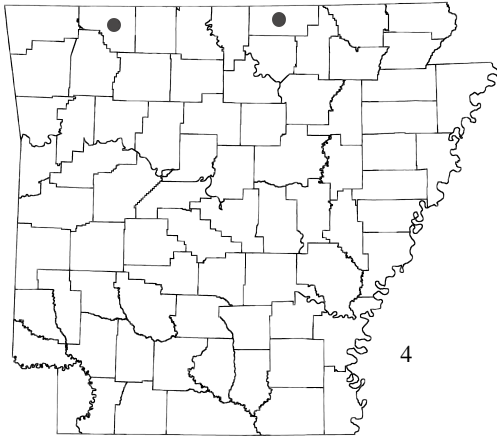
TRILLIACEAE
Trillium viridescens Nutt.

green trillium

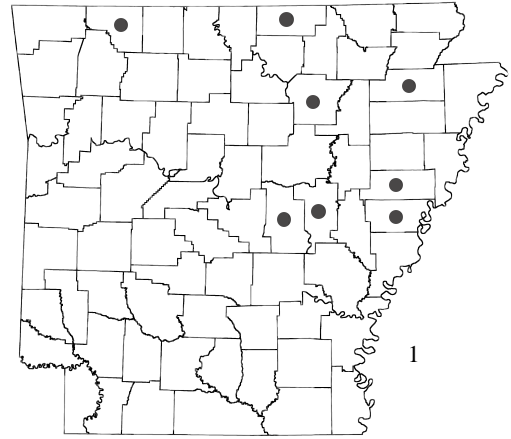


TYPHACEAE
Sparganium americanum Nutt.

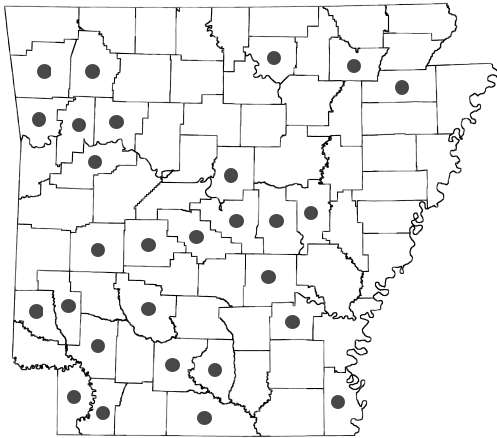
American bur-reed



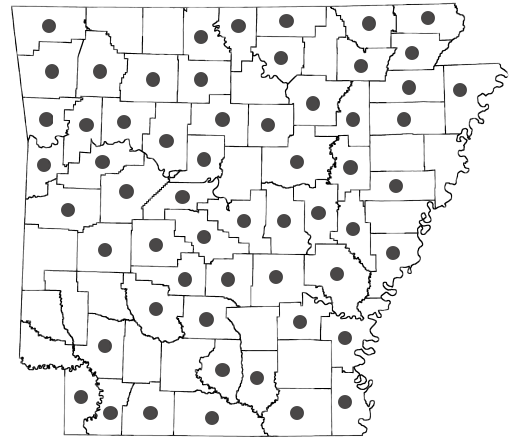
TYPHACEAE
Sparganium androcladum (Engelm.) Morong
 branched bur-reed



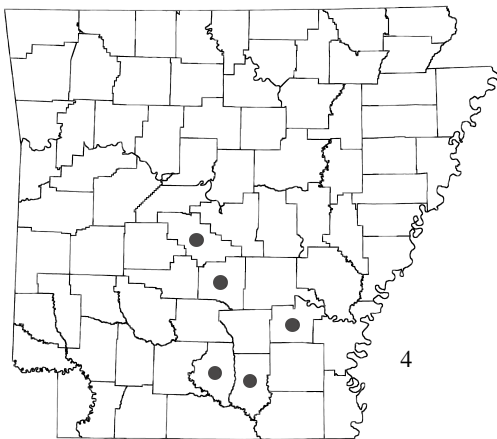
TYPHACEAE
Typha angustifolia L.
 narrow-leaf cat-tail



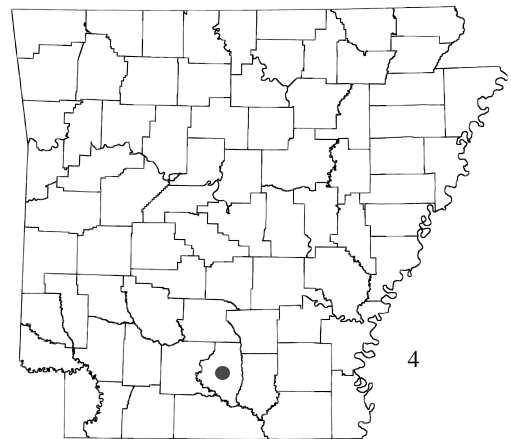
TYPHACEAE
Typha domingensis Pers.
 southern cat-tail



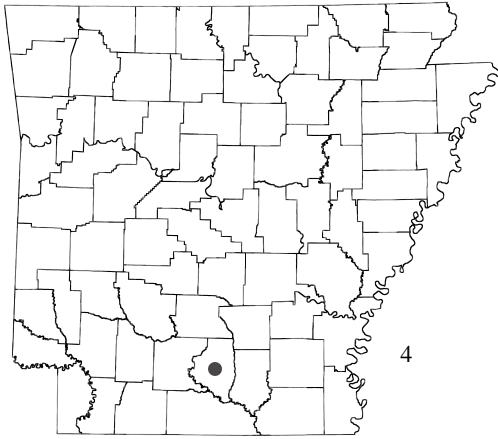
TYPHACEAE
Typha latifolia L.
 common cat-tail



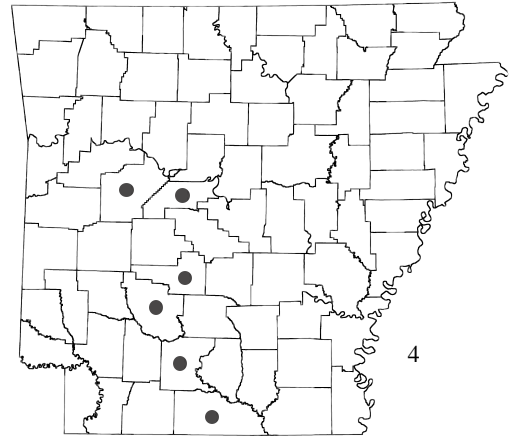
XYRIDACEAE
Xyris ambigua Beyr. ex Kunth
 Coastal Plain yellow-eyed-grass



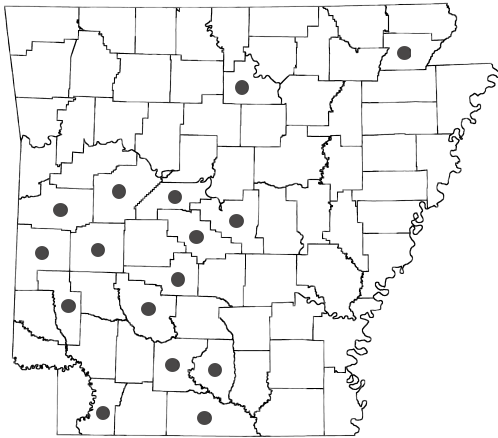
XYRIDACEAE
Xyris baldwiniana Schult. in Schult. & Schult.f.
 Baldwin's yellow-eyed-grass



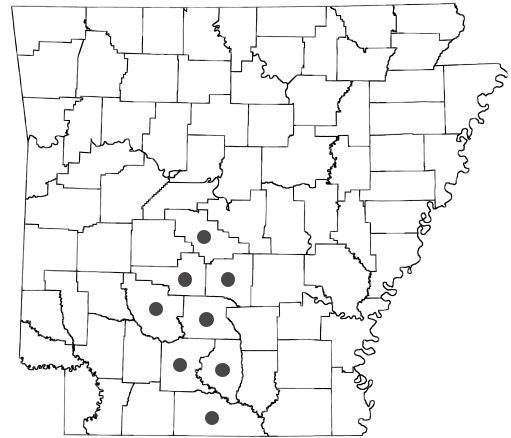
XYRIDACEAE
Xyris difformis Chapm.
var. curtissii (Malme) Kral
 Curtiss' yellow-eyed-grass



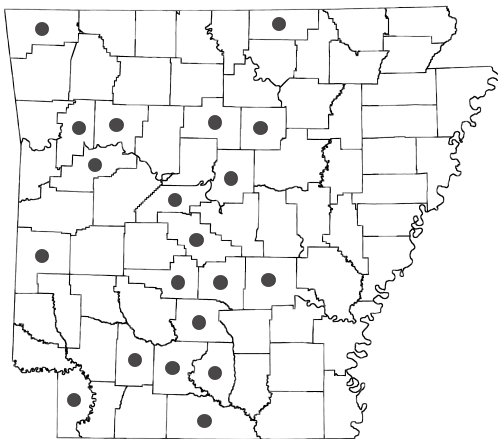
XYRIDACEAE
Xyris difformis Chapm.
var. difformis
 bog yellow-eyed-grass



XYRIDACEAE
Xyris jupicai Rich.
 yellow-eyed-grass



XYRIDACEAE
Xyris laxifolia Mart.
var. iridifolia (Chapm.) Kral
 yellow-eyed-grass



XYRIDACEAE
Xyris torta Sm. in Rees
 yellow-eyed-grass



Appendices



APPENDIX I
SPECIES WITH COMBINED INFRASPECIFIC TAXA IN MAPS

Due to uncertainty of the exact distributions of infraspecific taxa within Arkansas for some species, it was necessary to combine such taxa for mapping purposes. Because of formatting restrictions, the amount of space available for information beneath a map was limited. Therefore, complete scientific names, authorities, common names, and status codes for the infraspecific taxa of the combined maps are provided below. The organization follows that of the main body of the *Atlas*.

PTERIDOPHYTES

WOODSIACEAE

Lady Fern Family

Woodsia obtusa (Spreng.) Torr.
 subsp. *obtusa*
 subsp. *occidentalis* Windham

eastern blunt-lobe cliff fern
 western blunt-lobe cliff fern

ANGIOSPERMS (DICOTS)

ASTERACEAE

Sunflower Family

Boltonia asteroides (L.) L'Hér.
 var. *asteroides*
 var. *latisquama* (A.Gray) Cronquist
 var. *recognita* (Fernald & Griscom) Cronquist

white doll's daisy
 white doll's daisy
 white doll's daisy

Boltonia diffusa Elliott
 var. *diffusa*
 var. *interior* Fernald & Griscom

small-head doll's daisy
 small-head doll's daisy

Brickellia eupatorioides (L.) Shinnery
 var. *eupatorioides*
 var. *texana* (Shinnery) Shinnery

false boneset
 false boneset

Erigeron strigosus Muhl. ex Willd.
 var. *septentrionalis* (Fernald & Wiegand) Fernald
 var. *strigosus*

daisy fleabane
 daisy fleabane

Eupatorium hyssopifolium L.
 var. *hyssopifolium*
 var. *laciniatum* A.Gray in A.Gray et al.

hyssop-leaf boneset
 hyssop-leaf boneset

Eupatorium rotundifolium L.
 var. *ovatum* (Bigelow) Torr. ex DC. in DC. & A.DC.
 var. *rotundifolium*
 var. *scabridum* (Elliott) A.Gray

round-leaf boneset
 round-leaf boneset
 round-leaf boneset

Eutrochium purpureum (L.) E.E.Lamont
 var. *holzingeri* (Rydb.) E.E.Lamont
 var. *purpureum*

Joe-pye-weed
 Joe-pye-weed

Rudbeckia fulgida Aiton
 var. *palustris* (Eggert ex C.L.Boynton & Beadle) Perdue
 var. *speciosa* (Wenderoth) Perdue
 var. *umbrosa* (C.L.Boynton & Beadle) Cronquist

orange coneflower
 orange coneflower
 orange coneflower

Rudbeckia hirta L.
 var. *hirta*
 var. *pulcherrima* Farw.

black-eyed Susan
 black-eyed Susan

<i>Solidago caesia</i> L. var. <i>caesia</i> var. <i>zedia</i> R.E.Cook & Semple	wreath goldenrod, blue-stem goldenrod wreath goldenrod, blue-stem goldenrod
<i>Solidago nemoralis</i> Aiton subsp. <i>decemflora</i> (DC.) Brammall ex Semple subsp. <i>nemoralis</i>	oldfield goldenrod, gray goldenrod oldfield goldenrod, gray goldenrod
<i>Solidago rugosa</i> Mill. subsp. <i>aspera</i> (Aiton) Cronquist var. <i>aspera</i> (Aiton) Fernald subsp. <i>rugosa</i> var. <i>rugosa</i>	wrinkle-leaf goldenrod, rough-leaf goldenrod, rough-stem goldenrod wrinkle-leaf goldenrod, rough-leaf goldenrod, rough-stem goldenrod
<i>Symphotrichum drummondii</i> (Lindl.) G.L.Nesom var. <i>drummondii</i> var. <i>texanum</i> (E.S.Burgess) G.L.Nesom	blue wood aster, Drummond's aster blue wood aster, Drummond's aster
<i>Symphotrichum lanceolatum</i> (Willd.) G.L.Nesom var. <i>interior</i> (Weigand) G.L.Nesom var. <i>lanceolatum</i> var. <i>latifolium</i> (Semple & Chmielewski) G.L.Nesom	tall white aster tall white aster tall white aster
<i>Symphotrichum patens</i> (Aiton) G.L.Nesom var. <i>gracile</i> (Hook) G.L.Nesom var. <i>patens</i> var. <i>patentissimum</i> (Lindl. ex DC.) G.L.Nesom	late purple aster, spreading aster late purple aster, spreading aster late purple aster, spreading aster

BETULACEAE**Birch Family**

<i>Carpinus caroliniana</i> Walter subsp. <i>caroliniana</i> subsp. <i>virginiana</i> (Marshall) Furlow	musclewood, ironwood, American hornbeam musclewood, ironwood, American hornbeam
---	--

CHENOPODIACEAE

<i>Chenopodium berlandieri</i> Moq. var. <i>bushmanum</i> (Aellen) Cronquist in Gleason & Cronquist var. <i>zschackei</i> (Murr) Murr in Urb. & Graebn.	pit-seed goosefoot pit-seed goosefoot
---	--

CONVOLVULACEAE**Goosefoot Family**

<i>Cuscuta indecora</i> Choisy var. <i>indecora</i> var. <i>longisepala</i> Yunck.	large-seed dodder large-seed dodder
--	--

FAGACEAE**Beech Family**

<i>Quercus marilandica</i> Münchh. var. <i>ashei</i> Sudworth var. <i>marilandica</i>	blackjack oak blackjack oak
<i>Quercus shumardii</i> Buckley var. <i>schneckii</i> (Britton) Sarg. var. <i>shumardii</i>	Schneck's oak, spotted oak Shumard's oak, spotted oak

POLYGONACEAE

Polygonum aviculare L.
 subsp. *aviculare*
 subsp. *buxiforme* (Small) Costea & Tardif
 subsp. *depressum* (Meisn.) Arcang.
 subsp. *rurivagum* (Jord. ex Boreau) Berher

Polygonum ramosissimum Michx.
 subsp. *prolificum* (Small) Costea & Tardif
 subsp. *ramosissimum*

SALICACEAE

Salix humilis Marshall
 var. *humilis*
 var. *tristis* (Aiton) Griggs

SAPINDACEAE

Acer negundo L.
 var. *negundo*
 var. *texanum* Pax

Aesculus glabra Willd.
 var. *arguta* (Buckley) B.L.Rob.
 var. *glabra*

VIOLACEAE

Viola sororia Willd.
 var. *missouriensis* (Greene) L.E.McKinney
 var. *sororia*

ANGIOSPERMS (MONOCOTS)**CYPERACEAE**

Carex nigromarginata Schwein.
 var. *floridana* (Schwein.) Kük.
 var. *nigromarginata*

Cyperus esculentus L.
 var. *leptostachyus* Boeck.
 var. *macrostachyus* Boeck.

POACEAE

Dichanthelium aciculare (Desv. ex Poir.) Gould & C.A.Clark
 subsp. *aciculare*
 subsp. *angustifolium* (Elliott) Freckmann & Lelong

Dichanthelium acuminatum (Sw.) Gould & C.A.Clark
 subsp. *acuminatum*
 subsp. *fasciculatum* (Torr.) Freckmann & Lelong
 subsp. *implicatum* (Scribn.) Freckmann & Lelong
 subsp. *lindheimeri* (Nash) Freckmann & Lelong

Dichanthelium commutatum (Schult.) Gould
 subsp. *ashei* (T.G.Pearson ex Ashe) Freckmann & Lelong
 subsp. *commutatum*

Buckwheat Family

knotweed, knotgrass 1
 knotweed, knotgrass 1
 knotweed, knotgrass 1
 knotweed, knotgrass 1

bushy knotweed
 bushy knotweed

Willow Family

upland willow, prairie willow
 dwarf upland willow, dwarf prairie willow

Soapberry Family

box elder
 box elder

Texas buckeye
 Ohio buckeye

Violet Family

Missouri violet
 woolly blue violet

Sedge Family

sedge
 sedge

yellow nutsedge, chufa
 yellow nutsedge, chufa

Grass Family

narrow-leaf rosette grass, narrow-leaf panic grass
 narrow-leaf rosette grass, narrow-leaf panic grass

hairy rosette grass, hairy panic grass
 hairy rosette grass, hairy panic grass
 hairy rosette grass, hairy panic grass
 hairy rosette grass, hairy panic grass

variable rosette grass, variable panic grass
 variable rosette grass, variable panic grass

<i>Dichanthelium dichotomum</i> (L.) Gould		
subsp. <i>dichotomum</i>	forked rosette grass, forked panic grass	
subsp. <i>lucidum</i> (Ashe) Freckmann & Lelong	forked rosette grass, forked panic grass	
subsp. <i>microcarpon</i> (Muhl. ex Elliott) Freckmann & Lelong	forked rosette grass, forked panic grass	
subsp. <i>nitidum</i> (Lam.) Freckmann & Lelong	forked rosette grass, forked panic grass	
subsp. <i>roanokense</i> (Ashe) Freckmann & Lelong	Roanoke rosette grass, Roanoke panic grass	4
<i>Dichanthelium oligosanthes</i> (Schult.) Gould		
subsp. <i>oligosanthes</i>	few-flower rosette grass, few-flower panic grass	
subsp. <i>scribnerianum</i> (Nash) Freckmann & Lelong	Scribner's rosette grass, Scribner's panic grass	
<i>Dichanthelium ovale</i> (Elliott) Gould & C.A.Clark		
subsp. <i>praecocius</i> (Hitche. & Chase) Freckmann & Lelong	stiff-leaf rosette grass, stiff-leaf panic grass	
subsp. <i>pseudopubescens</i> (Nash) Freckmann & Lelong	stiff-leaf rosette grass, stiff-leaf panic grass	
subsp. <i>villosissimum</i> (Nash) Freckmann & Lelong	stiff-leaf rosette grass, stiff-leaf panic grass	
<i>Echinochloa muricata</i> (P.Beauv.) Fernald		
var. <i>microstachya</i> Wiegand	American barnyard grass	
var. <i>muricata</i>	American barnyard grass	
<i>Lolium perenne</i> L.		
var. <i>aristatum</i> Willd.	Italian rye grass	1
var. <i>perenne</i>	perennial rye grass	1
<i>Paspalum setaceum</i> Michx.		
var. <i>ciliatifolium</i> (Michx.) Vasey	fringe-leaf paspalum	
var. <i>muhlenbergii</i> (Nash) D.J.Banks	hurrah grass	
var. <i>setaceum</i>	thin paspalum	
var. <i>stramineum</i> (Nash) D.J.Banks	yellow sand paspalum	
<i>Schizachyrium scoparium</i> (Michx.) Nash		
var. <i>divergens</i> (Hack.) Gould	pinehill bluestem	
var. <i>scoparium</i>	little bluestem	
<i>Vulpia octoflora</i> (Walter) Rydb.		
var. <i>glauca</i> (Nutt.) Fernald	common six-weeks grass, six-weeks fescue	
var. <i>octoflora</i>	common six-weeks grass, six-weeks fescue	

APPENDIX II
ARKANSAS ENDEMIC TAXA

The eleven taxa of vascular plants currently known to occur only within the borders of Arkansas are listed below, along with each taxon's common name and family.

<i>Claytonia ozarkensis</i> J.M.Miller & K.L.Chambers	Ozark spring-beauty	PORTULACACEAE
<i>Crataegus</i> × <i>canescens</i> (J.B.Phipps) T.A.Dickinson & E.Y.Y.Lo	Stern's medlar	ROSACEAE
<i>Delphinium newtonianum</i> Dw.Moore	Moore's delphinium	RANUNCULACEAE
<i>Galium arkansanum</i> A.Gray var. <i>pubiflorum</i> E.B.Sm.	hairy-flower Arkansas bedstraw	RUBIACEAE
<i>Heuchera villosa</i> Michx. var. <i>arkansana</i> (Rydb.) E.B.Sm.	Arkansas alumroot	SAXIFRAGACEAE
<i>Hydrophyllum brownei</i> Kral & V.M.Bates	Browne's waterleaf	BORAGINACEAE
<i>Liatris compacta</i> (Torr. & A.Gray) Rydb.	Ouachita blazing-star	ASTERACEAE
<i>Polymnia cossatotensis</i> Pittman & V.M.Bates	Cossatot leafcup	ASTERACEAE
<i>Quercus acerifolia</i> (E.J.Palmer) Stoyhoff & W.J.Hess	maple-leaf oak	FAGACEAE
<i>Sabatia arkansana</i> J.S.Pringle & Witsell	Pelton's rose-gentian	GENTIANACEAE
<i>Streptanthus maculatus</i> Nutt. subsp. <i>obtusifolius</i> (Hook.) Rollins	Arkansas twistflower	BRASSICACEAE

APPENDIX III

ARKANSAS VASCULAR PLANT FAMILIES

This appendix consists of an alphabetical list of all vascular plant families currently represented in Arkansas, along with their common names and page numbers of primary occurrence.

ACANTHACEAE	Wild Petunia Family	75
ACORACEAE	Sweet-flag Family	397
ADOXACEAE	Arrow-wood Family	76
AGAVACEAE	Agave Family	397
AIZOACEAE	Iceplant Family	78
ALISMATACEAE	Water-plantain Family	398
ALLIACEAE	Onion Family	400
ALTINGIACEAE	Sweet-gum Family	78
AMARANTHACEAE	Amaranth Family	78
AMARYLLIDACEAE	Amaryllis Family	402
ANACARDIACEAE	Sumac Family	81
ANNONACEAE	Custard-apple Family	82
APIACEAE	Parsley Family	83
APOCYNACEAE	Dogbane Family	92
AQUIFOLIACEAE	Holly Family	97
ARACEAE	Arum Family	405
ARALIACEAE	Ginseng Family	98
ARECACEAE	Palm Family	407
ARISTOLOCHIACEAE	Dutchman's-pipe Family	100
ASPARAGACEAE	Asparagus Family	407
ASPLENIACEAE	Spleenwort Fern Family	51
ASTERACEAE	Sunflower Family	101
AZOLLACEAE	Mosquito Fern Family	52
BALSAMINACEAE	Touch-me-not Family	157
BERBERIDACEAE	Barberry Family	158
BETULACEAE	Birch Family	159
BIGNONIACEAE	Trumpet-creeper Family	160
BLECHNACEAE	Chain Fern Family	52
BORAGINACEAE	Borage Family	160
BRASSICACEAE	Mustard Family	167
BROMELIACEAE	Bromeliad Family	408
BURMANNIACEAE	Bluethread Family	408
CABOMBACEAE	Fanwort Family	179
CACTACEAE	Cactus Family	180
CAMPANULACEAE	Bellflower Family	180
CANNABACEAE	Hemp Family	182
CAPRIFOLIACEAE	Honeysuckle Family	183
CARYOPHYLLACEAE	Pink Family	185
CELASTRACEAE	Bittersweet Family	192
CERATOPHYLLACEAE	Hornwort Family	193
CHENOPODIACEAE	Goosefoot Family	194
CISTACEAE	Rock-rose Family	196
CLEOMACEAE	Spider-flower Family	197
COLCHICACEAE	Bellwort Family	408
COMMELINACEAE	Spiderwort Family	408
CONVOLVULACEAE	Morning-glory Family	198
CORNACEAE	Dogwood Family	203
CRASSULACEAE	Stonecrop Family	204
CUCURBITACEAE	Gourd Family	205
CUPRESSACEAE	Cypress Family	71
CYPERACEAE	Sedge Family	412
DENNSTAEDTIACEAE	Bracken Fern Family	53
DIOSCOREACEAE	Yam Family	453
DIPSACACEAE	Teasel Family	206

DROSERACEAE	Sundew Family	207
DRYOPTERIDACEAE	Wood Fern Family	53
EBENACEAE	Ebony Family	207
ELAEAGNACEAE	Oleaster Family	207
ELATINACEAE	Waterwort Family	207
EQUISETACEAE	Horsetail Family	55
ERICACEAE	Heath Family	208
ERIOCAULACEAE	Pipewort Family	453
EUPHORBIACEAE	Spurge Family	210
FABACEAE	Bean Family	218
FAGACEAE	Beech Family	246
GELSEMIACEAE	Jessamine Family	251
GENTIANACEAE	Gentian Family	251
GERANIACEAE	Geranium Family	253
GROSSULARIACEAE	Currant Family	255
HALORAGACEAE	Water-milfoil Family	255
HAMAMELIDACEAE	Witch-hazel Family	256
HEMEROCALLIDACEAE	Day-lily Family	453
HYACINTHACEAE	Hyacinth Family	454
HYDRANGEACEAE	Hydrangea Family	257
HYDROCHARITACEAE	Frog's-bit Family	454
HYDROLEACEAE	Blue-waterleaf Family	258
HYMENOPHYLLACEAE	Filmy Fern Family	56
HYPERICACEAE	St. John's-wort Family	258
HYPOXIDACEAE	Star-grass Family	456
IRIDACEAE	Iris Family	456
ISOETACEAE	Quillwort Family	56
ITEACEAE	Sweetspire Family	261
JUGLANDACEAE	Walnut Family	262
JUNCACEAE	Rush Family	460
LAMIACEAE	Mint Family	264
LAURACEAE	Laurel Family	276
LENTIBULARIACEAE	Bladderwort Family	277
LILIACEAE	Lily Family	465
LINACEAE	Flax Family	278
LINDERNIACEAE	False Pimpernel Family	279
LOASACEAE	Stick-leaf Family	280
LOGANIACEAE	Logania Family	280
LOMARIOPSIDACEAE	Sword Fern Family	57
LYCOPODIACEAE	Club-moss Family	57
LYGODIACEAE	Climbing Fern Family	59
LYTHRACEAE	Loosestrife Family	280
MAGNOLIACEAE	Magnolia Family	282
MALVACEAE	Mallow Family	283
MARANTACEAE	Thalia Family	466
MARSILEACEAE	Water-clover Fern Family	59
MARTYNIACEAE	Unicorn-plant Family	288
MELANTHIACEAE	Bunchflower Family	466
MELASTOMATACEAE	Meadow-beauty Family	288
MELIACEAE	Mahogany Family	288
MENISPERMACEAE	Moonseed Family	289
MENYANTHACEAE	Buck-bean Family	289
MOLLUGINACEAE	Carpetweed Family	289
MORACEAE	Mulberry Family	290
MYRICACEAE	Wax-myrtle Family	291
MYRSINACEAE	Colicwood Family	291
NARTHECIACEAE	Colicroot Family	467
NELUMBONACEAE	Lotus Family	292
NYCTAGINACEAE	Four-o'clock Family	293
NYMPHAEACEAE	Water-lily Family	293
NYSSACEAE	Tupelo Family	294
OLEACEAE	Olive Family	294

ONAGRACEAE	Evening-primrose Family	296
ONOCLEACEAE	Sensitive Fern Family	59
OPHIOGLOSSACEAE	Adder's-tongue Fern Family	59
ORCHIDACEAE	Orchid Family	468
OROBANCHACEAE	Broomrape Family	303
OSMUNDACEAE	Royal Fern Family	61
OXALIDACEAE	Wood-sorrel Family	306
PAPAVERACEAE	Poppy Family	307
PARNASSIACEAE	Grass-of-Parnassus Family	309
PASSIFLORACEAE	Passion-flower Family	309
PAULOWNIACEAE	Princess-tree Family	310
PENTHORACEAE	Ditch-stonecrop Family	310
PHRYMACEAE	Lopseed Family	310
PHYLLANTHACEAE	Leaf-flower Family	311
PHYTOLACCACEAE	Pokeweed Family	312
PINACEAE	Pine Family	71
PLANTAGINACEAE	Plantain Family	312
PLATANACEAE	Sycamore Family	321
POACEAE	Grass Family	474
PODOSTEMACEAE	Riverweed Family	321
POLEMONIACEAE	Phlox Family	321
POLYGALACEAE	Milkwort Family	323
POLYGONACEAE	Buckwheat Family	325
POLYPODIACEAE	Polypody Fern Family	61
PONTEDERIACEAE	Pickerel-weed Family	525
PORTULACACEAE	Purslane Family	330
POTAMOGETONACEAE	Pondweed Family	526
PRIMULACEAE	Primrose Family	332
PSILOTAEEAE	Whisk Fern Family	62
PTERIDACEAE	Brake Fern Family	62
RANUNCULACEAE	Buttercup Family	333
RHAMNACEAE	Buckthorn Family	342
ROSACEAE	Rose Family	343
RUBIACEAE	Madder Family	360
RUSCACEAE	Solomon's-seal Family	528
RUTACEAE	Rue Family	367
SALICACEAE	Willow Family	367
SALVINIACEAE	Floating Fern Family	64
SANTALACEAE	Sandalwood Family	369
SAPINDACEAE	Soapberry Family	370
SAPOTACEAE	Sapodilla Family	372
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APPENDIX IV ADDITIONAL TAXA REPORTED FOR ARKANSAS

The following list contains additional taxa that have been cited by various sources as occurring in Arkansas but for which voucher specimens have not yet been located and/or reviewed by the Arkansas Vascular Flora Committee. Some in the following list may eventually be confirmed as bona fide members of the Arkansas flora. Others may be dubious reports for the state.

PTERIDOPHYTES

ASPLENIACEAE

Spleenwort Fern Family

Asplenium ruta-muraria L.

wall-rue spleenwort

This species has been attributed to Arkansas by Nuttall (1835), Lesquereux (1860), Harvey (1881), Wagner et al. (1993), Weakley (2008), and Kartesz (2009). PLANTS Database (USDA 2008) also showed it for the state, citing Fernald (1928), who listed the species for Arkansas, but did not cite a voucher specimen. This plant occurs in southeastern Missouri, including Howell, Oregon, and Ozark counties (Yatskievych 1999; Kartesz 2009), on dolomite and limestone bluffs and boulders within the Ozarks (Yatskievych 1999). It likely occurs in similar habitats in the Arkansas Ozarks.

DRYOPTERIDACEAE

Wood Fern Family

Dryopteris intermedia (Muhl. ex Willd.) A.Gray

evergreen wood fern

Weakley (2008) cited Arkansas as within the range of this species. Otherwise it has been reported as approaching the state in southeastern Missouri (Yatskievych 1999), southern Illinois, and western Kentucky (USDA 2008; Kartesz 2009). Montgomery and Wagner (1993) did not attribute *D. intermedia* to Arkansas but they did show its range approaching the northeastern corner of the state.

LYCOPODIACEAE

Club-moss Family

Huperzia × *bartleyi* (Cusick) Kartesz & Gandhi
{*H. lucidula* (Michx.) Trevis.
× *H. porophila* (F.E.Lloyd & Underw.) Holub}

hybrid fir-moss

Kartesz (2009) attributed this sterile hybrid to Arkansas, as did PLANTS Database (USDA 2008), which cited personal communication with "anonymous." However, one of the purported parents, *H. porophila*, has not been documented from Arkansas, and Wagner and Beitel (1993) did not report *H. ×bartleyi* for the state. Nevertheless, the hybrid and both of the purported parents are known from southeastern Missouri (Yatskievych 1999; USDA 2008; Kartesz 2009) and could possibly all occur in northeastern Arkansas.

ANGIOSPERMS (DICOTS)

AIZOACEAE

Iceplant Family

Sesuvium verrucosum Raf.

western sea-purslane

Smith (1988) included this species in the Arkansas flora, citing reports by Correll and Johnston (1970) and the Great Plains Flora Association (1986). Ferren (2003), PLANTS Database (USDA 2008), and Kartesz (2009) also attributed *S. verrucosum* to Arkansas. The primary range of this species appears to be west of Arkansas, approaching the state in central Kansas, central Oklahoma, and western Texas, but it has also been reported from Claiborne Parish, Louisiana (Kartesz 2009).

AMARANTHACEAE**Amaranth Family***Alternanthera caracasana* Kunth in Humb. et al.

mat chaff-flower

This tropical American species was attributed to southern Arkansas by Clemants (2003) and to the state by Kartesz (2009) and PLANTS Database (USDA 2008), the latter citing Smith (1988). However, Smith excluded *A. caracasana* from the flora, although he did state that it had been reported for Arkansas by Demaree (1943) as *Achyranthes repens* L. Regardless of the accuracy of Demaree's report, it should be noted that *A. repens* is actually a synonym of *Alternanthera pungens* Kunth.

Amaranthus australis (A.Gray) J.D.Sauer

southern amaranth

This tropical American [and possibly Gulf Coast native] species was attributed to Arkansas by Mosyakin and Roberston (2003), as well as by Weakley (2008). Kartesz (2009) reported it as far north as Caddo, East Carroll, and Morehouse parishes, Louisiana and central Tennessee.

APIACEAE**Parsley Family***Petroselinum crispum* (Mill.) Nyman ex A.W.Hill

parsley

This Mediterranean species is often cultivated and was reported for Arkansas by Kartesz (2009) and PLANTS Database (USDA 2008), the latter citing Coulter and Rose (1900). Coulter and Rose referred to a voucher specimen at the United States National Herbarium (US), but it is not entirely clear of its cultivation or escape status.

APOCYNACEAE**Dogbane Family***Asclepias longifolia* Michx.

long-leaf milkweed

This species was reported for Calhoun County by Smith (1988) [as subsp. *longifolia*], and subsequently by PLANTS Database (USDA 2008) and Kartesz (2009), on the basis of a report by Orzell and Bridges (1987). However, the voucher specimens supporting this report have not been located for verification. Additionally, the Prairie County record cited by Kartesz was based on misdetermined material of *A. hirtella*.

Asclepias rubra L.

red milkweed

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing an unpublished and undated *Vascular Flora of the Southeastern United States*, edited by Albert E. Radford et al. It occurs in seeps and swamp habitats (Weakley 2008) of the coastal plain, and is reported from eastern Texas and west-central Louisiana (USDA 2008; Kartesz 2009). The Arkansas report may be dubious, but it does seem remotely possible in wetland habitats of southern Arkansas.

Matelea carolinensis (Jacq.) Woodson

Carolina milkvine

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). *Matelea carolinensis* has been reported from northern Louisiana, including Caddo and Union parishes, and western Mississippi, including DeSoto County (Kartesz 2009). It may possibly occur in southern or eastern Arkansas.

ASTERACEAE**Sunflower Family***Anaphalis margaritacea* (L.) Benth. & Hook.f.

pearly-everlasting

Nesom (2006b) attributed this northern and western North American species to Arkansas, as did Kartesz (2009). Nesom noted that *A. margaritacea* is widely planted as an ornamental and often escapes.

Bidens mitis (Michx.) Sherff

beggar-ticks, stick-tight

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. However, Strother and Weedon (2006) did attribute it to Arkansas, as did Kartesz (2009). Kartesz also showed it for Claiborne, Union, and West Carroll parishes, Louisiana, as well as northern Mississippi. Cronquist (1980) stated that it is a plant of the coastal plain from Maryland to Texas. It may occur in the West Gulf Coastal Plain of southern Arkansas.

Bidens trichosperma (Michx.) Britton

crowned beggar-ticks, stick-tight

Strother and Weedon (2006) attributed this species to Arkansas, but Kartesz (2009) showed it no closer to the state than east-central Missouri, southern Illinois, and western Kentucky. Yatskievych (2006) treated it as introduced to St. Louis, Missouri from the northeastern United States.

Brickellia eupatorioides (L.) Shinnery

var. *corymbulosa* (Torr. & A.Gray) Shinnery

false boneset

This variety was listed for Arkansas in the *Checklist* (AVFC 2006) based on the report by Scott (2006). PLANTS Database (USDA 2008) and Kartesz (2009) attributed this taxon to Faulkner and Logan counties, citing the Great Plains Flora Association (1977). Yatskievych (2006) also listed Arkansas as within the range of this variety.

Brickellia eupatorioides (L.) Shinnery

var. *gracillima* (A.Gray) B.L.Turner

false boneset

Scott (2006) reported this variety for Arkansas, as did Kartesz (2009).

Cirsium texanum Buckley

Texas thistle

Keil (2006b) attributed this species to southwestern Arkansas and stated that it grows along roadsides and in “pastures, fields, [and] shrub-tree savannas.” Kartesz (2009) showed it as scattered in Texas and southern Oklahoma, including McCurtain County, but did not attribute it to Arkansas.

Coreopsis gladiata Walter

tickseed

This species was listed for Arkansas in the *Checklist* (AVFC 2006) based on the report by Strother (2006a). Strother attributed this coastal plain species to Arkansas, listing its habitat as “peaty bogs, swamps, depressions, in pine barrens.”

Coreopsis verticillata L.

whorled tickseed

Strother (2006a) attributed this species to Arkansas and a number of other southeastern states. Kartesz (2009) and PLANTS Database (USDA 2008) also attributed it to the state, the latter citing the *North American Flora* series published by the New York Botanical Garden. The primary range of the species, however, appears to be well east of Arkansas, mainly in Maryland, the Virginias, the Carolinas, and Georgia (Kartesz 2009).

Crepis capillaris (L.) Wallr.

smooth hawk’s-beard

Bogler (2006) and Kartesz (2009) attributed this European species to Arkansas.

Eupatorium lancifolium (Torr. & A.Gray) Small

lance-leaf boneset

Siripun and Schilling (2006) attributed this species to Arkansas along with Texas, Louisiana, and Alabama, listing the habitat as “dry, rolling terrain, clay soils, ... [and] shortleaf pine and oak woods.” Weakley (2008) also listed southern Arkansas as within the range of this species. Kartesz (2009) attributed it to Lonoke County, citing personal communication with Lucile M. McCook and stating that a voucher specimen exists at the Pullen Herbarium (MISS).

Guizotia abyssinica (L.f.) Cass. in F.Cuvier

Niger-seed, Niger-thistle

Strother (2006b) attributed this African species to Arkansas, stating that most North American occurrences are from birdseed waste areas.

Helenium drummondii H.Rock

fringed sneezeweed

Biernier (2006) attributed this species to Arkansas, listing its habitat as “ditches [and] other moist areas such as wet woods, bogs, and swamp edges.” Kartesz (2009) attributed it only to southeastern Texas, southwestern Louisiana, and southern Mississippi.

Helinium elegans DC. in DC. & A.DC.
var. *elegans*

sneezeweed

Bierner (2006) attributed this taxon to Arkansas, stating that it grows on “calcareous soils, [in] ditches, washes, [and] along streams.” Kartesz (2009) attributed it only to central Texas, Oklahoma, and Louisiana.

Helianthus decapetalus L.

thin-leaf sunflower

Schilling (2006) and Kartesz (2009) attributed this species to Arkansas. Yatskievych (2006) explained that many of the historic Missouri records of this species were based on misdeterminations, and that it was only known from the northeastern part of that state.

Heliopsis helianthoides (L.) Sweet
var. *helianthoides*

ox-eye

This variety was reported for Arkansas in the *Checklist* (AVFC 2006) based on the report by Smith (2006). PLANTS Database (USDA 2008) and Kartesz (2009) also attributed it to the state. However, all Arkansas material of *H. helianthoides* examined thus far seems referable to var. *scabra*.

Lactuca ludoviciana (Nutt.) Riddell

Louisiana wild lettuce

Strother (2006e) attributed this species to Arkansas. Kartesz (2009) showed it for the state, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, Smith excluded the species, stating that previous reports had been based on misdetermined material. Nevertheless, it has been reported from several states surrounding Arkansas (Strother 2006e; Kartesz 2009), including from numerous border parishes and counties in Louisiana and Oklahoma (Kartesz 2009).

Nothocalais cuspidata (Pursh) Greene

false dandelion, prairie-dandelion

Chambers (2006) attributed this species to Arkansas, as did PLANTS Database (USDA 2006) and Kartesz (2009), both citing Smith (1988). Smith included it [as *Microseris cuspidata* (Pursh) Sch.-Bip.] in the flora based solely on a Montgomery County report by the Great Plains Flora Association (1977). A Montgomery County occurrence would be considerably disjunct from the primary range of this species, which includes the northern Rockies, northern Plains, and parts of the Midwest (Kartesz 2009). It may be worth noting that *N. cuspidata* is known from Montgomery County, Missouri and that Montgomery County, Kansas is also within the range of this species (Kartesz 2009), and thus the record cited by the Great Plains Flora Association could possibly be the result of a state reporting error.

Packera anonyma (A.W.Wood) W.A.Weber & Á.Löve

Small's ragwort, Small's groundsel

Trock (2006) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, Smith excluded the species [as *Senecio smallii* Britt.] as a probable erroneous report, stating that it was “exceedingly unlikely” for the state.

Pluchea baccharis (Miller) Pruski

rosy camphorweed

Nesom (2006g) reported this species for Arkansas but noted that he had not seen a voucher specimen. Smith (1988, 1994) included it [as *P. rosea* Godfrey] as a possible addition to the state flora based on reports from northern Louisiana. Kartesz (2009) showed it from northern Louisiana, including Bossier, Claiborne, Morehouse, Union, and Webster parishes.

Rhaponticum repens (L.) Hidalgo

Russian knapweed, hardheads

Kartesz (2009) attributed this invasive Eurasian species to Arkansas, as did PLANTS Database (USDA 2008) [as *Acroptilon repens* (L.) DC. in DC. & A.DC.]. Keil (2006a) stated that this species [as *Acroptilon repens*] had been reported for Arkansas but that he had not seen a voucher specimen.

Rudbeckia fulgida Aiton

var. *sullivantii* (C.L.Boynton & Beadle) Cronquist

orange coneflower

Urbatsch and Cox (2006) attributed this variety to Arkansas, listing its habitat as “swamps, shorelines, fens, [and] sedge meadows.” Kartesz (2009) merged this taxon with var. *speciosa*.

Santolina chamaecyparissus L. lavender-cotton

This frequently cultivated Mediterranean species was listed for Arkansas in the *Checklist* (AVFC 2006) based on apparently cultivated material. However, Watson (2006) and Kartesz (2009) both attributed it to the state, although it is unclear whether their reports are based on the same cultivated material.

Silphium radula Nutt.
var. *gracile* (A.Gray) J.A.Clevinger rosinweed

Smith (1994) treated this taxon [as *S. gracile* Gray] as a possible addition to the state flora. Yatskiyevych (2006) listed Arkansas as within its range, though neither Clevinger (2006) nor Kartesz (2009) reported it for the state. Kartesz (2009) showed it approaching Arkansas in Bossier, Caddo, and Webster parishes, Louisiana.

Solidago rugosa Mill.
subsp. *aspera* (Aiton) Cronquist wrinkle-leaf goldenrod, rough-leaf goldenrod,
var. *celtidifolia* (Small) Fernald rough-stem goldenrod

Semple and Cook (2006) as well as Kartesz (2009) attributed this variety to Arkansas.

Symphyotrichum laeve (L.) A.Love & D.Love
var. *purpuratum* (Nees) G.L.Nesom smooth aster

Brouillet (2006) and Kartesz (2009) attributed this variety to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943).

Symphyotrichum parviceps (E.S.Burgess) G.L.Nesom small white aster, small-head aster

Smith (1988, 1994) listed this species [as *Aster parviceps* (Burgess) Mack. & Bush] as a possible addition to the Arkansas flora, stating that it seemed probable in the northern part of the state. Brouillet et al. (2006), Yatskiyevych (2006), PLANTS Database (USDA 2008), and Kartesz (2009) all attributed it to Arkansas.

Symphyotrichum undulatum (L.) G.L.Nesom wavy-leaf aster

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). Brouillet et al. (2006), however, did not show it for the state.

BALSAMINACEAE

Touch-me-not Family

Impatiens balfourii Hook.f. Balfour's touch-me-not, Kashmir balsam

Kartesz (2009) attributed this Himalayan species to Arkansas.

BORAGINACEAE

Borage Family

Hydrophyllum canadense L. Canadian waterleaf

Kartesz (2009) attributed this species to Clay County, citing Constance (1942). Constance did cite an Eggert specimen collected in Clay County in 1893 but did not mention where the specimen was located.

Lappula squarrosa (Retz.) Dumort. bristly stickseed

Kartesz (2009) attributed this Eurasian species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). Smith (1988) listed it [as *L. echinata* Gilib.] as a possible addition to the state flora based on Demaree's listing and reports from neighboring states. However, a voucher specimen has yet to be located to substantiate Demaree's report.

Myosotis scorpioides L. forget-me-not, water scorpion-grass

PLANTS Database (USDA 2008) attributed this European species to Arkansas, citing Hulten and Fries (1986). It is also reported from southern Missouri, including Ozark County (Yatskiyevych 2006; Kartesz 2009).

Onosmodium bejariense A.DC.

var. *occidentale* (Mack.) B.L.Turner

marbleseed, false gromwell

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this variety to Arkansas, citing Smith (1988). However, it appears that Smith may have misapplied this name [as *O. molle* Michx. var. *occidentale* (Mack.) I.M.Johnst.] to specimens of various other varieties. Based on our interpretation of the *O. bejariense* complex, no Arkansas specimens observed thus far are referable to var. *occidentale*, though the genus is in much need of a more thorough review in the state.

BRASSICACEAE

Mustard Family

Arabis hirsuta (L.) Scop.

var. *pycnocarpa* (M.Hopkins) Rollins

hairy rockcress

Smith (1988) included this taxon in the Arkansas flora based on a Logan County report and a citation by the Great Plains Flora Association (1986). Later, Smith (1994) included it as a bona fide member of the flora based on a specimen that had been deposited at the University of Arkansas Herbarium (UARK) but which was later redetermined as var. *adpressipilis*. Both Yatskievych (2006) and Weakley (2008) [as *A. pycnocarpon* M.Hopkins var. *pycnocarpon*] cited Arkansas as within the range of this variety. PLANTS Database (USDA 2008) and Kartesz (2009) merged the two varieties, thus treating all Arkansas material as *A. hirsuta* var. *pycnocarpa*.

Descurainia pinnata (Walter) Britton

subsp. *halictorum* (Cockerell) Detling

tansy-mustard

This subspecies was cited for western Arkansas by Rollins (1993) and attributed to the state by Kartesz (2009), as well as PLANTS Database (USDA 2008), which cited the Great Plains Flora Association (1986).

Erysimum asperum (Nutt.) DC.

prairie wallflower

Al-Shehbaz (2010a) attributed this Great Plains species to Arkansas.

Erysimum cheiranthoides L.

wormseed wallflower

PLANTS Database (USDA 2008) attributed this Eurasian species to Arkansas, citing Demaree (1943). Al-Shehbaz (2010a) also attributed it to the state. Smith (1988) cited it as a possible addition to the Arkansas flora based on Demaree's listing and a citation by Steyermark (1963). Kartesz (2009), though, did not show it for the state.

Erysimum inconspicuum (S. Watson) MacMill.

shy wallflower

Al-Shehbaz (2010a) attributed this species to Arkansas.

Lepidium perfoliatum L.

clasping pepper-grass

Al-Shehbaz and Gaskin (2010) attributed this Eurasian species to Arkansas.

Lepidium ruderales L.

roadside pepper-grass

Kartesz (2009), as well as Al-Shehbaz and Gaskin (2010), attributed this European species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Smith included it in the Arkansas flora based on a listing by Al-Shehbaz (1986). The species was subsequently listed in the *Checklist* (AVFC 2006) based on the above stated citations. However, no Arkansas voucher specimen has yet been located to substantiate the report.

Nasturtium microphyllum Boenn. ex Reichenb.

watercress

Kartesz (2009) attributed this European species to Arkansas, as did PLANTS Database (USDA 2008), which cited the University of North Carolina Herbarium (NCU) as the location of a voucher specimen.

Rorippa curvipes Greene

var. *truncata* (Jepson) Rollins

yellowcress

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited personal communication with "anonymous." Al-Shehbaz (2010b) also attributed *Rorippa curvipes* to the state.

Turritis glabra L.

tower-mustard

Hopkins (1937) attributed this species to Pulaski County, citing a voucher specimen at the New York Botanical Garden Herbarium (NY). Since it hadn't been collected in over 50 years, though, Smith (1988) excluded it [as *Arabis glabra* (L.) Bernh.] from the Arkansas flora, stating that it was likely no longer present in the state. The species has subsequently been cited for Arkansas by the Arkansas Vascular Flora Committee (2006), Yatskievych (2006), Weakley (2008), PLANTS Database (USDA 2008), and Kartesz (2009), probably all ultimately based on the specimen cited by Hopkins. However, no voucher specimen could be located at NY to verify the report.

BUDDLEJACEAE**Butterfly-bush Family***Buddleja lindleyana* Fortune

Lindley's butterfly-bush

Kartesz (2009) attributed this frequently cultivated Chinese species to Arkansas, as did PLANTS Database (USDA 2008), which cited an unpublished and undated *Vascular Flora of the Southeastern United States*, edited by Albert E. Radford et al.

CACTACEAE**Cactus Family***Escobaria missouriensis* (Sweet) D.R.Hunt

Missouri fox-tail cactus

Zimmerman and Parfitt (2003) did not attribute this species [as *Coryphantha missouriensis* (Sweet) Britton & Rose in Britton & A.Br.] to Arkansas, but it was shown for Miller County by PLANTS Database (USDA 2008) and Kartesz (2009), both citing Benson (1982). Smith (1988), however, excluded this taxon [as *Coryphantha missouriensis*] from the Arkansas flora, stating that the Miller County record reported by Benson [as var. *caespitosa* (Engelm.) L.D.Benson] was "doubtless on the basis of material collected in the Arkansas territory – in what is presently part of Oklahoma – as pointed out by Orzell and Bridges (1987)." Orzell and Bridges argued that the locality, "Red River, Arkansas," as stated on the 1830 voucher specimen collected by Pitcher and cited by Benson, almost certainly referred to southern Oklahoma, part of Arkansas Territory at the time. Barry Snow (pers. comm. 2005), in turn citing personal communication with Benson, however, stated that the specimen on which the Arkansas record was based was collected by Zina Pitcher from a high bluff overlooking the Red River at Fulton, but this has yet to be substantiated. Incidentally, if accurate, the specimen would probably be mapped in Hempstead rather than Miller County based on habitat and locality. Of further note and support for a probable Arkansas occurrence, *E. missouriensis* has been observed in McCurtain County, Oklahoma, a mere four miles from the Arkansas border (Susan Hooks, pers. comm. 2012).

CAMPANULACEAE**Bellflower Family***Triodanis holzingeri* McVaugh

Holzinger's Venus'-looking-glass

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Carroll County, citing Smith (1988). Smith included it the Arkansas flora, citing the Carroll County report by the Great Plains Flora Association (1977), but later (Smith 1994) excluded the species from the flora.

CARYOPHYLLACEAE**Pink Family***Arenaria lanuginosa* (Michx.) Rohrb. in Mart. et al.
var. *lanuginosa*

spreading sandwort

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Gleason and Cronquist (1991). Weakley (2008) also included Arkansas as within the range of this taxon. Hartman et al. (2005a), however, did not attribute it to the state.

Dianthus caryophyllus L.

clove pink, carnation

Kartesz (2009) attributed this Mediterranean species to Montgomery County, as did PLANTS Database (USDA 2008), both citing the University of North Carolina Herbarium (NCU) as the location of a voucher specimen. However, Rabeler and Hartman (2005) stated that this species does not escape or persist after cultivation in North America.

Silene dichotoma Ehrh.
subsp. *dichotoma* forked catchfly

PLANTS Database (USDA 2008) attributed this European taxon to Arkansas, citing Hulten and Fries (1986). However, Morton (2005b) did not show it for the state.

CHENOPODIACEAE**Goosefoot Family**

Chenopodium berlandieri Moq.
var. *boscianum* (Moq.) Wahl pit-seed goosefoot

PLANTS Database (USDA 2008) attributed this variety to Arkansas, citing Demaree (1943). However, neither Clemants and Mosyakin (2003a) nor Kartesz (2009) attributed it to the state. They showed it as restricted mostly to the immediate Gulf Coast from Florida to Texas, and Clemants and Mosyakin listed the habitat as “beaches, sandy soils, [and] marshes.”

Chenopodium pallescens Standl. in Britton et al. slim-leaf goosefoot

PLANTS Database (USDA 2008) and Kartesz (2009) both attributed this species to Crittenden County, citing Smith (1988). Smith included the species in the Arkansas flora based solely on a report by Wilcox (1973). Clemants and Mosyakin (2003a) also reported *C. pallescens* for northern Arkansas. Yatskievych (2006) cited Arkansas as within the range of the species and also showed it for Dunklin, McDonald, and Oregon counties, Missouri.

Chenopodium strictum Roth goosefoot

PLANTS Database (USDA 2008) and Kartesz (2009) both attributed this species to Arkansas, citing Smith (1988). The species was also attributed to the state in the *Checklist* (AVFC 2006) based on Smith’s report. Smith included the taxon [as *C. strictum* var. *glaucophyllum* (Aellen) Wahl] in the Arkansas flora, stating that he had seen three specimens at the New York Botanical Garden Herbarium (NY). However, the NY specimens have been reviewed and appear referable, though with some hesitation, to other species. Nevertheless, Clemants and Mosyakin (2003a) attributed *C. strictum* to Arkansas and it would seem that Arkansas material of *Chenopodium* requires further study.

CONVOLVULACEAE**Morning-glory Family**

Calystegia silvatica (Kit.) Griseb.
subsp. *fraterniflora* (Mack. & Bush) Brummitt hedge bindweed

PLANTS Database (USDA 2008) attributed this taxon to Arkansas, citing Demaree (1943). Yatskievych (2006) showed it scattered statewide in Missouri, including in Howell, Pemiscott, and Stone counties. Kartesz (2009) showed it approaching Arkansas in Texas, Oklahoma, Kansas, Missouri, and Tennessee.

Cuscuta cephalanthi Engelm. buttonbush dodder

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Smith included it in the Arkansas flora based solely on a report by Demaree (1943). *Cuscuta cephalanthi* is reported from “stream banks, bottomland forests, and wet prairies” throughout Missouri, including from Butler, Dunklin, Howell, and McDonald counties (Yatskievych 2006). It may occur in similar habitats in northern Arkansas.

CRASSULACEAE**Stonecrop Family**

Crassula longipes (Rose) M.Bywater & Wickens water pygmyweed

Moran (2009) attributed this species to Arkansas. In contrast, he did not show *C. aquaticica* for the state, although Arkansas does appear to be within the range of this species. Until a thorough assessment of Arkansas material is conducted, we are treating all Arkansas *Crassula* specimens as *C. aquaticica*.

CUCURBITACEAE**Gourd Family***Cucumis sativus* L.

cucumber

Kartesz (2009) attributed this commonly cultivated Asian species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Despite Smith's comments that this species was "occasionally seen as a waif in waste areas, etc." and that it was "perhaps frequent enough to include [in the flora] as a common waif," no voucher specimens of non-cultivated material have yet been observed from the state.

ERICACEAE**Heath Family***Vaccinium corymbosum* L.

high-bush blueberry

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Vander Kloet (1988). Vander Kloet (2009) merged *V. elliottii*, *V. fuscatum*, and *V. virgatum*, among other taxa, under the name *V. corymbosum*, stating that "[e]very morphological variant of the high-bush blueberry has been named formally at one time or another," but of the twenty-five or more segregate taxa, "none is distinct throughout its putative range nor has the properties normally associated with biological species..." Despite Vander Kloet's conclusions, *V. elliotti*, *V. fuscatum*, and *V. virgatum* appear quite distinct morphologically, geographically, and, to an extent, ecologically within Arkansas and are thus being retained at the specific level in the present treatment. It remains to be determined if *V. corymbosum*, in a stricter sense, occurs in Arkansas in addition to the above listed taxa.

EUPHORBIACEAE**Spurge Family***Euphorbia helioscopia* L.

mad-woman's-milk

Kartesz (2009) attributed this European species to Arkansas, as did PLANTS Database (USDA 2008), which cited personal communication with Grady L. Webster.

FABACEAE**Bean Family***Dalea phleoides* (Torr. & A.Gray) Shinnars
var. *phleoides*

slim-spike prairie-clover

Isely (1998) listed southwestern Arkansas as within the range of this variety but did not show an Arkansas occurrence on his map. Curiously, Isely stated that var. *microphylla* had only been "reported" from southwestern Arkansas, but he did show a Miller County occurrence on the map for that taxon. Variety *phleoides* has been reported from Oklahoma, eastern Texas, including Cass County, and Louisiana, including Caddo Parish (Isely 1998; Kartesz 2009), and thus does at least seem possible in southwestern Arkansas.

Desmodium canadense (L.) DC.

tick-trefoil, beggar's-lice

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Gleason (1963). Kartesz (2009) showed the range of this species generally north of the state but approaching Arkansas in eastern Oklahoma, southeastern Kansas, and southern Missouri, including Oregon County. Isely (1998) also showed *D. canadense* generally well north of Arkansas but did attribute a record to southwestern Missouri and another to central Oklahoma.

Glycyrrhiza lepidota Nutt. ex Pursh

wild licorice, American licorice

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Demaree (1943). It has otherwise been reported as approaching Arkansas in central Oklahoma, southeastern Kansas, and western Missouri (Isely 1998; Kartesz 2009).

Lathyrus sylvestris L.

narrow-leaf vetchling

Kartesz (2009) attributed this European species to Arkansas, as did PLANTS Database (USDA 2008), which cited Isely (1990).

Pediomelum rhombifolium (Torr. & A.Gray) Rydb.

Indian-breadroot

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Polk County, citing Isely (1990) and Isely (1998), respectively.

Psoralidium tenuiflorum (Pursh) Rydb. slender scurf-pea

This species was listed for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. Smith (1988, 1994) included it [as *Psoralea tenuiflora* Pursh var. *floribunda* (Nutt.) Rydb.] in the Arkansas flora based on Steyermark's (1963) inclusion of Arkansas in its range and under the assumption that it did occur in the state. This species is reported as approaching Arkansas in eastern Texas, southeastern Kansas, southern Missouri, and eastern Oklahoma, including Adair, Delaware, LeFlore, and Sequoyah counties (Kartesz 2009). Although it remains unconfirmed for the state, *P. tenuiflorum* very likely occurs in western or northwestern Arkansas.

Rhynchosia tomentosa (L.) Hook & Arn.
var. *tomentosa* snout-bean

Smith (1994) listed this taxon as a possible addition to the Arkansas flora. Isely (1998) attributed it to Garland County, and PLANTS Database (USDA 2008) and Kartesz (2009) also attributed it to Garland County based on Isely's citation. It was reported for Arkansas in the *Checklist* (AVFC 2006) based on Isely's citation as well; however, a voucher specimen has not yet been located to substantiate the report.

Trifolium polymorphum Poir. peanut clover

Isely (1998) stated that this species [as *T. amphianthum* Torr. & A.Gray] had been reported from southwestern Arkansas. It has also been reported from eastern Texas and western Louisiana (Isely 1998; Kartesz 2009).

Vicia pannonica Crantz Hungarian vetch

Kartesz (2009) attributed this European species to Arkansas, as did PLANTS Database (USDA 2008), which cited Isely (1998). Isely stated that he had seen a specimen from Arkansas but provided no information on the specimen or its location.

Vigna unguiculata (L.) Walp. cow-pea, black-eyed-pea

Kartesz (2009) attributed this commonly cultivated African and Asian species to Arkansas, as did PLANTS Database (USDA 2008), which cited Isely (1998). Isely did indicate that he had seen specimens from Arkansas.

HYDRANGEACEAE **Hydrangea Family**

Hydrangea cinerea Small ashy hydrangea

PLANTS Database (USDA 2008), Weakley (2008), and Kartesz (2009) recognized this entity as distinct and attributed it to Arkansas, while Tucker (1976) and Smith (1988) merged it with *H. arborescens*. Until Arkansas material can be studied more thoroughly, we are following the latter group in the present treatment.

HYPERICACEAE **St. John's-wort Family**

Hypericum nudiflorum Michx. ex Willd. early St. John's-wort

Some authorities have treated *H. apocynifolium* as synonymous with *H. nudiflorum*, which has been reported for Arkansas (e.g., Tucker 1976; Smith 1988, 1994; AVFC 2006; USDA 2008; Kartesz 2009). Others have treated them as distinct species (e.g., Weakley 2008). We believe that *H. apocynifolium* seems distinct enough to be recognized as separate from *H. nudiflorum*. In addition, all Arkansas material observed thus far seems referable to *H. apocynifolium*, although Weakley did cite the state as within the range for both *H. apocynifolium* and *H. nudiflorum*.

LAMIACEAE**Mint Family***Collinsonia canadensis* L.

richweed

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Although it had been reported for Arkansas by both Demaree (1943) and Steyermark (1963), Smith, nevertheless, excluded the species since he had seen no voucher specimens. A voucher specimen has still yet to be located for Arkansas, but the species has been reported from northern Mississippi and western Tennessee, including Dyer and Shelby counties (Kartesz 2009), as well as from southeastern Missouri (Steyermark 1963; Kartesz 2009), where it is reported to grow in “rich woods of usually limestone soils, in ravines and [on] slopes” (Steyermark 1963). It may occur in similar habitats in northeastern Arkansas.

Lycopus uniflorus Michx.
var. *uniflorus*northern bugleweed,
northern water-horehound

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, despite Demaree (1943) listing it for the state, Smith excluded the species from the Arkansas flora on the basis of its primarily northern range and lack of any voucher material from the state. Weakley (2008) cited Arkansas as within the range of the species. The primary range of *L. uniflorus* does seem to be well north of Arkansas and would support its exclusion from the state flora, but there are a few curious reports from eastern Oklahoma, including McCurtain County and western Tennessee, including Shelby County (Kartesz 2009).

Pycnanthemum torrei Benth.

Torrey’s mountain-mint

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Fernald (1950). It has also been reported from southeastern Missouri, including Butler, Dunklin, and Pemiscott counties (Kartesz 2009), and may occur in northeastern Arkansas.

Scutellaria nervosa Pursh

veiny skullcap

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Demaree (1943). It has been reported from “rich, moist or low woodland bordering swamps and streams, [and at the] base of rich woodland bluffs” (Steyermark 1963) in eastern and southeastern Missouri, including Dunklin, Howell, and Pemiscott counties (Steyermark 1963, Kartesz 2009). It may occur in similar habitats in northeastern Arkansas.

Scutellaria saxatilis Riddell

smooth rock skullcap

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Leonard (1927). Leonard did cite a Marion County specimen housed at the Missouri Botanical Garden Herbarium (MO), but the specimen has not been relocated for confirmation. The primary range of this species is generally well east of Arkansas, in the Appalachian Mountains (Kartesz 2009), and it seems rather unlikely to occur in the state.

Stachys clingmanii Small

Clingman’s hedge-nettle

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Mulligan and Munro (1989). However, Weakley (2008) stated that this species is a southern Appalachian endemic, restricted to southwestern North Carolina and southeastern Tennessee, though he did acknowledge some possible populations in Virginia and Indiana.

Stachys pilosa Nutt.var. *arenicola* (Britton) G.A.Mulligan & D.B.Munro hairy hedge-nettle

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Mulligan and Munro (1989).

LENTIBULARIACEAE**Bladderwort Family***Utricularia biflora* Lam.

long-spur bladderwort

Some authorities (e.g., Weakley 2008) have recognized this taxon as distinct from *U. gibba* and report Arkansas as within its range. Others (e.g., Smith 1988; Diggs et al. 1999; USDA 2008; Kartesz 2009) have merged it with *U. gibba*. Pending a more thorough study of Arkansas material, we are following the latter group in the present treatment.

Utricularia juncea Vahl southern bladderwort

Weakley (2008) attributed this species to southeastern Arkansas.

LINACEAE

Flax Family

Linum rigidum Pursh

var. *berlandieri* (Hook.) Torr. & A.Gray

yellow flax

This taxon was listed for Arkansas in the *Checklist* (AVFC 2006) based on the report by Rogers (1968). Kartesz (2009) attributed it [as *L. berlandieri* Hook. var. *berlandieri*] to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, Smith (1988) had excluded the taxon from the state flora, dismissing the reports by Demaree (1943) and Browne (1974) as “spurious” and the report by Rogers (1968) as “probably...a waif.” Rogers showed a dot in extreme southwestern Arkansas (possibly in either Hempstead, Little River, or Miller County). No voucher specimens have yet been located, though, to substantiate any of these reports.

MAGNOLIACEAE

Magnolia Family

Magnolia pyramidata Bartr.

pyramid magnolia

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Hardin (1972). Hardin did list Arkansas as within the range of this species but did not supply voucher information. This primarily coastal plain species has been reported from along the Mississippi River in Fulton County, Kentucky (Johnson & Nicely 1990) and may occur at localities along the lower Mississippi River Alluvial Plain.

MYRSINACEAE

Colicwood Family

Lysimachia tonsa (A.W.Wood) A.W.Wood ex R.Knuth in Engler

Appalachian yellow-loosestrife,
southern yellow-loosestrife

Cholewa (2009) attributed this species to Arkansas, possibly ultimately based on the unsubstantiated 1943 report by Demaree discussed by Peck (2003). Weakley (2008) and Kartesz (2009) indicated a primarily southern Appalachian range for this species.

NYMPHAEACEAE

Water-lily Family

Nymphaea odorata Aiton

subsp. *tuberosa* (Paine) Wiersema & Hellquist

fragrant water-lily,
white water-lily

Kartesz (2009) attributed this subspecies to Arkansas, as did PLANTS Database (USDA 2008), which cited Muenscher (1944). Wiersema (1997), however, did not show it for Arkansas, although he did indicate that it occurs in northeastern Oklahoma, southeastern Kansas, and western Missouri.

OLEACEAE

Olive Family

Forsythia viridissima Lindl.

forsythia

Kartesz (2009) attributed this Chinese species to Arkansas, as did PLANTS Database (USDA 2008), which cited Hardin (1974). Hardin stated that “[t]here are a number of records...of local establishment” of two *Forsythia* species in the southeastern United States, and listed Arkansas under *F. viridissima*. He did not provide information on a voucher specimen, though.

ONAGRACEAE

Evening-primrose Family

Calylophus serrulatus (Nutt.) P.H.Raven

yellow evening-primrose

This species was listed for Arkansas in the *Checklist* (2006) based on misdetermined material. Kartesz (2009) attributed this Great Plains species to Scott County, as did PLANTS Database (USDA 2008), both citing Smith (1988). Smith included it in the state flora based solely on an as yet unconfirmed Scott County report by the Great Plains Flora Association (1977).

Ludwigia polycarpa Short & Peter

primrose-willow

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Clay County, citing the Great Plains Flora Association (1977). Smith (1988) had listed it as a possible addition to the state flora and it was reported for Arkansas in the *Checklist* (AVFC 2006) based on the report by the Great Plains Flora Association (1977); however, no specimen has yet been located to confirm this occurrence.

Ludwigia repens J.R.Forst.

creeping primrose-willow, false loosestrife

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Crittenden County, citing Smith (1988). Smith stated that it was reported [as *L. ascendens* (L.) H.Hara] for Crittenden County by Wilcox (1973). It was also reported for Arkansas in the *Checklist* (AVFC 2006) based on this report by Wilcox. However, a voucher specimen documenting this report has yet to be located.

Oenothera nutans G.F.Atk. & Bartlett

evening-primrose

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Dietrich et al. (1997). Dietrich et al. did state in the text that “disjunct occurrences in Missouri and Arkansas probably represent unintentional introductions by humans,” but the authors do not show an Arkansas occurrence on their map, nor do they cite an Arkansas voucher specimen.

OROBANCHACEAE**Broomrape Family***Agalinis oligophylla* Pennell

false foxglove, gerardia

Apparently, there may be a historical collection of this species from southern Arkansas (John F. Hays, pers. comm. 2003).

OXALIDACEAE**Wood-sorrel Family***Oxalis corniculata* L.

creeping yellow wood-sorrel, creeping lady’s-sorrel

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this Asian species to Arkansas, citing Smith (1988). Smith did include *O. corniculata* in the flora but stated that it “is sometimes difficult to separate from *O. dillenii*” and that he “suspect[ed] that some of the indicated distribution is based on material of that species.” Nesom (2009) also attributed the species to the state. However, although we have seen a few Arkansas voucher specimens of *O. corniculata* collected from within greenhouses or as weeds in potted plants, we have yet to review any obviously escaped or naturalized material.

PAPAVERACEAE**Poppy Family***Macleaya cordata* (Willd.) R.Br. in Denham & Clapperton

plume-poppy, tree-celandine

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this eastern Asian species to Washington County, citing the University of North Carolina Herbarium (NCU) as the location of a voucher specimen.

PHYTOLACCACEAE**Pokeweed Family***Rivina humilis* L.

pigeon-berry, rouge-plant

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). Nienaber and Thieret (2003) also reported it for the state. However, these reports may be based on a Thomas Nuttall specimen at the New York Botanical Garden Herbarium (NY) that was collected at “Red River, Arkansas” (Smith 1988). Smith (1988) concluded that the specimen was almost certainly collected on the Red River in southern Oklahoma, then part of Arkansas Territory. There have been reports, though, from Bowie County, Texas, and Caddo Parish, Louisiana (Kartesz 2009), suggesting the possibility of an occurrence in southwestern Arkansas.

PLANTAGINACEAE**Plantain Family**

Linaria dalmatica (L.) Mill.
subsp. *dalmatica*

Dalmatian toadflax

Kartesz (2009) attributed this Eurasian taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited the University of North Carolina Herbarium (NCU) as the location of a voucher specimen. This species is generally much more widely established in western North America (Kartesz 2009).

Penstemon alluviorum Pennell

lowland beardtongue

PLANTS Database (USDA 2008) recognized this taxon as distinct and attributed it to Arkansas, citing Demaree (1943). Kartesz (2009) also recognized it and attributed it to Craighead County, citing Pennell (1935). However, pending a more thorough study of the Arkansas material, in the present treatment we are following Smith (1988), who treated it as a form of *P. digitalis*.

Penstemon laevigatus Aiton

beardtongue

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited the University of North Carolina Herbarium (NCU) as the location of a voucher specimen. It has also been reported from Louisiana, Mississippi, including DeSoto and Washington counties, and Tennessee, including Dyer, Shelby, and Tipton counties (Kartesz 2009). Weakley (2008) included Arkansas within the range of *P. laevigatus* and listed its habitat as "low meadows, bottomlands, [and] forest edges." However, Pennell (1935) showed this species approaching Arkansas no closer than extreme eastern Mississippi.

Plantago major L.

great plantain

PLANTS Database (USDA 2008) attributed this European species to Arkansas, citing Demaree (1943). It appears to be more widely established in western and northern North America but is also reportedly scattered in the Southeast, including in DeSoto County, Mississippi and Claiborne and Morehouse parishes, Louisiana (Kartesz 2009).

POLEMONIACEAE**Phlox Family**

Phlox carolina L.
subsp. *angusta* Wherry

Carolina phlox

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Wherry (1955).

Phlox carolina L.
subsp. *carolina*

Carolina phlox

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Wherry (1955).

Phlox divaricata L.
subsp. *divaricata*

wild blue phlox, wild sweet-William

Kartesz (2009) attributed this subspecies to Arkansas, as did PLANTS Database (USDA 2008), which cited an unpublished and undated *Vascular Flora of the Southeastern United States*, edited by Albert E. Radford et al. This subspecies generally occurs east and northeast of Arkansas but has been reported from all bordering Tennessee counties (Kartesz 2009).

Phlox oklahomensis Wherry

Oklahoma phlox

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Wherry (1955).

Phlox pilosa L.
subsp. *fulgida* (Wherry) Wherry

downy phlox

Kartesz (2009) attributed this subspecies to Arkansas, as did PLANTS Database (USDA 2008), which cited Wherry (1970). The primary range of this subspecies seems to be generally north of the state, though (Kartesz 2009).

Phlox pilosa L.subsp. *pulcherrima* Lundell

downy phlox

Kartesz (2009) attributed this subspecies to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Smith merely listed the taxon [as *P. pilosa* L. var. *amplexicaulis* (Raf) Wherry] as a possible addition to the Arkansas flora based on the range stated by Steyermark (1963) and a previous listing for the state by Demaree (1943).

POLYGALACEAE**Milkwort Family***Polygala ambigua* Nutt.

whorled milkwort

This taxon, which is sometimes treated as a variety of *P. verticillata*, was attributed to Arkansas by PLANTS Database (USDA 2008), citing Demaree (1943), by Kartesz (2009), citing a voucher specimen at the University of Alabama Herbarium (UNA), and as within range according to Weakley (2008). For the present treatment, though, we are considering this taxon a member of the variable *P. verticillata* species, without recognizing infraspecific taxa.

POLYGONACEAE**Buckwheat Family***Polygonum aviculare* L.subsp. *neglectum* (Besser) Arcang.

knotweed, knotgrass

This European subspecies was listed for Arkansas in the *Checklist* (AVFC 2006) based on the report by Costea et al. (2005). Kartesz (2009) also attributed it to the state.

Rumex fueginus Phil.

golden dock

Kartesz (2009) attributed this species [as var. *fueginus*] to Arkansas, as did Mosyakin (2005). Smith (1988) listed it [as *R. maritimus* L. var. *fueginus* (Phil.) Dusen] only as a possible addition to the flora but stated that it had been reported for Pulaski County (Little Rock) according to Graham and Wood (1965), evidently based on a report by Reching (1937), who, in turn, cited a Pulaski County specimen at the United States National Herbarium (US).

PORTULACACEAE**Purslane Family***Portulaca grandiflora* Hook.

moss-rose

Matthews (2003) attributed this commonly cultivated South American species to Arkansas, as did Kartesz (2009).

RANUNCULACEAE**Buttercup Family***Thalictrum pubescens* Pursh

late meadow-rue, king-of-the-meadow

This species was listed for Arkansas in the *Checklist* (AVFC 2006) based on Park and Festerling (1997), who attributed it to extreme eastern Arkansas.

RESEDACEAE**Mignonette Family***Reseda alba* L.

white mignonette

This Mediterranean species was attributed to Arkansas by Martín-Bravo et al. (2010).

Reseda lutea L.

yellow mignonette

This Eurasian and north African species was attributed to Arkansas by Martín-Bravo et al. (2010).

ROSACEAE**Rose Family***Crataegus dissona* Sarg.

hawthorn

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943).

Crataegus latebrosa Sarg.

hawthorn

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Palmer (1925).

Crataegus monogyna Jacq.

English hawthorn

Kartesz (2009) attributed this cultivated Eurasian species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Smith listed it as a possible addition to the Arkansas flora, stating that Tucker (1976) had included it based on Ernest J. Palmer's authority and that it "perhaps rarely escapes in the state." No voucher specimen has yet been located to substantiate this report, though.

Crataegus succulenta Schrad. ex Link

hawthorn

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). Smith listed it as a possible addition to the Arkansas flora, stating that Tucker (1976) had included it based on Ernest J. Palmer's authority. However, no voucher specimen has yet been located to substantiate this report.

Malus coronaria (L.) Mill.

sweet crabapple

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on the report by Tucker (1976) as well as on misdetermined material. PLANTS Database (USDA 2008) and Kartesz (2009) attributed it to northeastern Arkansas, citing Smith (1988). Smith included it [as *Pyrus coronaria* L.] in the state flora based on Tucker's authority.

Potentilla rivalis Nutt.

brook cinquefoil

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Smith (1988, 1994) treated two varieties [var. *millegrana* (Engelm.) Wats. and var. *pentandra* (Engelm.) Wats.] as possible additions to the Arkansas flora based on listings by Small (1913), Steyermark (1963), and Robertson (1974), none of whom cited voucher specimens. This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on the report by Robertson (1974). However, no Arkansas voucher specimens have yet been located to substantiate any of these reports.

Prunus americana Marshall

wild plum, American plum

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). Kartesz (2009) also attributed it to the state, citing Little (1977) and Smith (1988). Weakley (2008) stated a range for this species that would likely include Arkansas. Despite having been shown from throughout the Interior Highlands of the state by Little and Smith, all Arkansas specimens previously determined as *P. americana* observed thus far actually seem best referable to *P. mexicana*. It should be noted that Smith's (1994) key contributes to some of the confusion about these taxa within the state; an individual tree may key to *P. americana* while in flower but to *P. mexicana* later in the season. Although we are currently referring all Arkansas material to *P. mexicana*, this issue certainly requires further study before *P. americana* can be conclusively removed from the Arkansas flora.

Prunus rivularis Scheele

creek plum

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Logan County, citing Smith (1988). Smith included it in the state flora based solely on Tucker's (1976) authority. Tucker attributed it to Logan County but did not cite a voucher specimen. *Prunus rivularis* has been reported from throughout Oklahoma, including LeFlore County (Kartesz 2009), and may occur in western Arkansas.

Prunus virginiana L.

choke cherry

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). Kartesz (2009) also attributed it to the state, citing Smith as well as a report originating from the University of Arkansas Herbarium (UARK). In addition, Weakley (2008) included Arkansas within the range of this species. However, the UARK report listed by Kartesz was based on misdetermined specimens, and although Smith did include the species in the state flora based on two separate reports for northwestern Arkansas, he had seen voucher specimens for neither report. Furthermore, Tucker (1976) had excluded *P. virginiana* from the Arkansas flora, indicating that despite his extensive herbaria searches and collections, he never saw Arkansas voucher material for this species.

RUBIACEAE**Madder Family***Houstonia canadensis* Willd. ex Roem. & Schult.

Canadian bluet

Weakley (2008) listed Arkansas as within the range of this species. However, Kartesz (2009) showed the range to the northeast of the state.

SALICACEAE**Willow Family***Populus nigra* L.

black poplar, Lombardy poplar

Kartesz (2009) attributed this southern European species to Arkansas, as did PLANTS Database (USDA 2008), which cited an unpublished and undated *Vascular Flora of the Southeastern United States*, edited by Albert E. Radford et al. Eckenwalder (2010) stated that although *Populus nigra* is often planted, persists after cultivation, and spreads by root suckers, the plants are all staminate clones and the species does not become naturalized.

Salix caprea L.

goat willow, pussy willow

Kartesz (2009) and Argus (2010) attributed this Eurasian species to Arkansas.

SAPINDACEAE**Soapberry Family***Acer rubrum* L.var. *trilobum* Torr. & A.Gray ex K.Koch

red maple

Weakley (2008), PLANTS Database (USDA 2008), and Kartesz (2009) recognized this variety as distinct, and the latter two attributed it to Arkansas. Yatskievych (2006), however, argued that there seems to be no correlation between the number of leaf lobes and other characteristics of the leaves and fruit in Missouri, and that, therefore, this variety does not warrant separation from the typic variety. We are following Yatskievych (2006) in the present treatment.

Acer saccharum Marshallvar. *schneckii* Rehder

sugar maple

PLANTS Database (USDA 2008) and Kartesz (2009) recognized this variety as distinct and attributed it to Arkansas. Yatskievych (2006) also recognized it as distinct [as subsp. *schneckii* (Rehder) Desmarais] and stated that it occurs in eastern and southern Missouri but did acknowledge that “there are some questions as to [its] status.” Weakley (2008) stated that this entity “is probably only a form” of *A. saccharum*. Tucker (1976) relegated it to synonymy with the typic variety without explanation. In light of its questionable status and pending a more thorough assessment of Arkansas material, we choose to synonymize it with the typic variety in the present treatment.

SOLANACEAE**Nightshade Family***Datura wrightii* Regel

sacred thorn-apple

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Arkansas, citing Smith (1988). There is considerable confusion about the distinctiveness of this taxon from *D. inoxia* (Weakley 2008), hence the Arkansas report of *D. wrightii* in the *Checklist* (AVFC 2006). Kartesz attributed only *D. wrightii* to the United States. However, it is unclear, due to the poor condition of most of the Arkansas specimens, which name [or if both] applies to Arkansas plants. Since *D. inoxia* has nomenclatural priority, and since Smith (1988, 1994) treated Arkansas plants as such, we are inclined to only recognize *D. inoxia* in Arkansas at this time.

Physalis grisea (Waterf.) M.Martinez

strawberry-tomato

Kartesz (2009) attributed this species to Garland County, citing Martinez (1993). PLANTS Database (USDA 2008) also attributed it to the state, citing Martinez.

Physalis peruviana L.

Peruvian ground-cherry

Kartesz (2009) attributed this South American species to Sevier County, citing Waterfall (1958). PLANTS Database (USDA 2008) also attributed it to the state, citing Waterfall. Waterfall made reference to a Sevier County specimen at the Herbarium of the University of Texas (TEX) but includes a question mark in his notation, implying some doubt about the record.

VIOLACEAE**Violet Family***Viola cucullata* Aiton

marsh violet, bog violet

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Gleason and Cronquist (1991). Weakley (2008) also listed eastern Arkansas as within the range of this species. However, Smith (1988) stated that this name had been misapplied in Arkansas to plants of *V. palmata*. *Viola cucullata* is a plant of “bogs, seeps, [and] margins of spring branches” (Weakley 2008) and has been reported from southeastern Missouri, western Tennessee, and northern Mississippi (Kartesz 2009). It may occur in similar habitats in northeastern Arkansas.

Viola nephrophylla Greene

northern bog violet

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Arkansas, citing Russell (1965). Smith (1988), however, stated that this name had been misapplied in Arkansas to material of *V. sororia*.

VITACEAE**Grape Family***Vitis mustangensis* Buckley

mustang grape

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Tucker (1976). Tucker stated that Bailey (1934) had listed it for western Arkansas, but Bailey merely stated that it [as *V. candicans* Engelm. in Gray] has been “accredited also to western Louisiana, southern Oklahoma, [and] western Arkansas...” in addition to eastern Texas. No voucher specimens have been located to substantiate the report, though.

ANGIOSPERMS (MONOCOTS)**ALISMATACEAE****Water-plantain Family***Alisma triviale* Pursh

water-plantain

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Hendricks (1957), who, in turn, cited a Hot Spring County specimen. The species has been reported from southern Missouri, including Barry, Howell, McDonald, Ozark, and Ripley counties by Yatskievych (1999), and subsequently by Kartesz (2009). However, Haynes and Hellquist (2000a) showed this species no closer to Arkansas than southern Illinois. All *Alisma* specimens at the University of Arkansas Herbarium (UARK) were annotated by Robert R. Haynes as *A. subcordatum* in 1995; all subsequent collections are also referable to *A. subcordatum*.

ARACEAE**Arum Family***Lemna trisulca* L.

star duckweed

Landolt (2000) attributed this species to northern Arkansas, specifically Fulton County (Landolt 1986). This was the basis for the Arkansas report in the *Checklist* (AVFC 2006). Kartesz (2009) also attributed it to the state, as did PLANTS Database (USDA 2008), which cited Landolt (1986). *Lemna trisulca* has also been reported from “cool, flowing water of spring branches, streams, and rivers” of southeastern Missouri, including Ripley and Oregon counties (Yatskievych 1999).

CYPERACEAE**Sedge Family***Carex albicans* Willd. ex Spreng.var. *emmonsii* (Dewey ex Torr.) Rettig

sedge

Crins and Rettig (2002) attributed this variety to Arkansas, as did Kartesz (2009).

Carex crinita Lam. in Lam. et al.var. *crinita*

fringed sedge

This variety was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material, though Standley et al. (2002) as well as Kartesz (2009) did attribute it to the state. However, all Arkansas material of *C. crinita* examined thus far seems referable to var. *brevicrinis*.

Carex microrhyncha Mack. sedge

Diggs et al. (2006) and Kartesz (2009) treated this taxon as distinct from *C. umbellata* and attributed it to Arkansas. PLANTS Database (USDA 2008) also attributed it to the state, citing personal communication with Stanley D. Jones. In the present treatment, however, we are following Crins and Rettig (2002) who synonymized it with *C. umbellata*, though it warrants further study.

Carex tribuloides Wahlenb.
var. *tribuloides* sedge

Kartesz (2009) attributed this variety to Arkansas, as did PLANTS Database (USDA 2008), which cited the *North American Flora* series published by the New York Botanical Garden. However, Mastrogiuseppe et al. (2002) did not attribute this variety to the state. All Arkansas material of this species observed thus far seems referable to var. *sangamonensis*.

Carex virescens Muhl. ex Willd. sedge

This species was listed for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. PLANTS Database (USDA 2008) attributed it to Arkansas, citing Smith (1988), who, in turn, included it in the state flora citing reports from five counties. Hyatt (1998) also reported it from two counties. However, these reports have either been proven erroneous or remain unconfirmed. Ball (2002) did attribute *C. virescens* to Arkansas, but his report may be based on Smith's or Hyatt's citations. The range has been reported to extend westward into southeastern Missouri (Yatskievych 1999; Kartesz 2009), western Tennessee, and northern Mississippi (Kartesz 2009), making at least a northeastern Arkansas occurrence a possibility.

Eleocharis coloradoensis (Britton) Gilly dwarf spike-rush, Colorado spike-rush

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on Smith (2002b). Kartesz (2009) synonymized it with *E. parvula*.

Eleocharis montana (Kunth) Roem. & Schult. in Roem. et al. mountain spike-rush

Diggs et al. (2006) listed Arkansas as within the range of this species. Kartesz (2009) showed it for central and southern Louisiana and southeastern Texas but not for Arkansas. Smith (2002a) did not attribute it to the state either.

Rhynchospora nivea Boeck. white-top sedge

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Correll and Johnston (1970). Smith (1988) listed the species [as *Dichromena nivea* (Boeck.) Britt.] as a possible addition to the flora, stating that it had been reported for Arkansas by Correll and Johnston (1970) and the Great Plains Flora Association (1986). Kral (2002), however, did not attribute it to the state and no voucher specimens have been located.

DIOSCOREACEAE

Yam Family

Dioscorea quaternata J.F.Gmel. wild yam

Some authorities (e.g., Yatskievych 1999; Weakley 2008; USDA 2008) have recognized this taxon as distinct from *D. villosa*, and have given a range that would include Arkansas. Others (e.g., Raz 2002; Diggs et al. 2006; Kartesz 2009) merge it with *D. villosa*. Raz stated that “[a]t present, I can find no natural gaps in the variation between the plants that have been called...*D. villosa* and those called *D. quaternata*, and therefore I am treating the complex as a single species.” We are following the latter group in the present treatment. If the two taxa are recognized as distinct, though, all Arkansas material apparently may belong to *D. quaternata* (Al-Shehbaz & Schubert 1989).

HEMEROCALLIDACEAE

Day-lily Family

Hemerocallis lilioasphodelus L. yellow day-lily, lemon day-lily

This eastern Asian species was erroneously reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. However, Kartesz (2009) did attribute it to Arkansas, as did PLANTS Database (USDA 2008), which cited an unpublished and undated *Vascular Flora of the Southeastern United States*, edited by Albert E. Radford et al. Additionally, Straley and Utech (2002) also attributed it to the state.

HYPOXIDACEAE**Star-grass Family***Hypoxis wrightii* (Baker) Brackett

yellow star-grass

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited the University of North Carolina Herbarium (NCU) as the location of a voucher specimen. According to NCU's *Flora of the Southeastern United States Atlas* (NCU 2009), there is a Hempstead County specimen at NCU that was determined as *H. wrightii* in 1991 by Alan Herndon. However, Herndon (2002), curiously, did not attribute the species to Arkansas but rather showed it as restricted to the outer Gulf and southern Atlantic coasts.

JUNCACEAE**Rush Family***Juncus elliotii* Chapm.

Elliott's rush

Clemants (2000) attributed this primarily coastal plain species to Arkansas, as did PLANTS Database (USDA 2008) and Kartesz (2009), the latter two citing Smith (1988). Diggs et al. (2006) also included Arkansas as within its range. Smith attributed it to three counties in northeastern Arkansas, citing a voucher specimen at the Southern Methodist University Herbarium (SMU) [now a part of the Botanical Research Institute of Texas Herbarium (BRIT)] and indicated that it had also been reported for Bradley County.

LILIACEAE**Lily Family***Erythronium americanum* Ker Gawl.
subsp. *americanum*

American trout-lily, yellow trout-lily

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Parks and Hardin (1963). Weakley (2008) also included Arkansas as within the range of this taxon, possibly based on the Parks and Hardin report. Parks and Hardin did list Arkansas [as well as Oklahoma] in the range of *E. americanum* subsp. *americanum*, but they seemed to express uncertainty of the Arkansas [and Oklahoma] material in light of tentative determinations of specimens of *E. rostratum*. In addition, they only attributed *E. rostratum* to Arkansas on their map. Although *E. americanum* subsp. *americanum* has been reported from southeastern Missouri (Allen & Robertson 2002), including Butler County (Yatskievych 1999; Kartesz 2009), and therefore could occur in northeastern Arkansas, no specimens have yet been confirmed from the state. Furthermore, Allen and Robertson (2002) did not attribute it to Arkansas.

ORCHIDACEAE**Orchid Family***Platanthera flava* (L.) Lindl.
var. *herbiola* (R.Br.) Luernorthern rein orchid, northern tubercled orchid,
pale-green orchid

Sheviak (2002) attributed this variety to northeastern Arkansas. It has been reported from southeastern Missouri, including Butler, Howell, Oregon, and Ripley counties (Kartesz 2009), and would seem likely to occur in northeastern Arkansas. No definitive specimens attributable to this variety have yet been reviewed by us, though several have appeared intermediate between this and the typic variety.

POACEAE**Grass Family***Agrostis scabra* Willd.

rough bent grass

This western and northern North American species was listed for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. However, Harvey (2007) did attribute it to a county in west-central Arkansas. Additionally, PLANTS Database (USDA 2008) and Kartesz (2009) showed it for the state, the former citing Hitchcock (1950). The primary range of this species, though, appears to be well to the north and west of Arkansas (Harvey 2007; Kartesz 2009).

Alopecurus pratensis L.

meadow foxtail

This Eurasian and northern African species was reported for Arkansas in the *Checklist* (AVFC 2006) based on advanced data from the Grass Manual/Flora of North America Project (i.e., Crins 2007). Crins did attribute it to a county in west-central Arkansas and Kartesz (2009) also attributed it to the state. The species has been reported from southern Missouri (Crins 2007), including Howell County (Yatskievych 1999; Kartesz 2009).

Arundinaria tecta (Walter) Muhl.

switch cane

Clark and Triplett (2007) attributed this species to Miller County. Kartesz (2009) also showed it for the state, as did PLANTS Database (USDA 2008) [as *A. gigantea* (Walter) Muhl. subsp. *tecta* (Walter) McClure], which cited Demaree (1943).

Bouteloua gracilis (Kunth) Lag. ex Griffiths

blue grama

Kartesz (2009) attributed this western North American species to Washington County, citing Arrieta et al. (2004). Smith (1988) had excluded it from the flora despite listings by Demaree (1943) and Moore (1961), stating that the only voucher material he had seen represented cultivated material from the 1930s from the University of Arkansas grass nursery in Fayetteville. This material may be the source of the reports by Demaree, Moore, and Arrieta et al.

Danthonia compressa Austin

flattened oat grass

This species was listed for Arkansas in the *Checklist* (AVFC 2006) based on the report by Darbyshire (2003), who attributed it to one county in eastern Arkansas. Kartesz (2009) also attributed it to the state, as did PLANTS Database (USDA 2008), which cited personal communication with Mary E. Barkworth. However, an eastern Arkansas occurrence would be considerably disjunct from the primary range extending from eastern Tennessee through New England (Darbyshire 2003; Kartesz 2009).

Dichanthelium boreale (Nash) Freckmann

northern rosette grass, northern panic grass

Weakley (2008) listed Arkansas as within the range of this species. It has been reported from southern Missouri (Yatskievych 1999; Freckmann & Lelong 2003a; Kartesz 2009), including Barry, McDonald, and Ripley counties (Yatskievych 1999; Kartesz 2009). Curiously, though, these occurrences are considerably disjunct from the primary range in the northeastern United States and southern Canada (Gould & Clark 1978; Freckmann & Lelong 2003a).

Dichanthelium ensifolium (Baldwin ex Elliott) Gould

sword-leaf rosette grass, sword-leaf panic grass

Kartesz (2009) attributed this primarily coastal plain taxon [as *D. dichotomum* var. *ensifolium* (Baldwin ex Elliott) Gould & C.A.Clark] to Arkansas, as did PLANTS Database (USDA 2008) [as *D. dichotomum* var. *ensifolium*], which cited Gould and Clark (1978). Weakley (2008) also listed Arkansas as within its range. Gould and Clark simply stated, though, that this taxon [as *D. dichotomum* var. *ensifolium*] had been "reported for Arkansas," without further documentation.

Dichanthelium ovale (Elliott) Gould & C.A.Clark
subsp. *ovale*stiff-leaf rosette grass,
stiff-leaf panic grass

This taxon was listed for Arkansas in the *Checklist* (AVFC 2006) without a voucher specimen to substantiate the report. Kartesz (2009) attributed it [as var. *ovale*] to Arkansas, as did PLANTS Database (USDA 2008) [as var. *ovale*], which cited Gould and Clark (1978). Based on the range stated by Freckmann and Lelong (2003a), this subspecies may occur in the Gulf Coastal Plain of southern Arkansas.

Dichanthelium tenue (Muhl.) Freckmann & Lelong

slender rosette grass, slender panic grass

Kartesz (2009) attributed this primarily coastal plain taxon [as *D. dichotomum* (L.) Gould var. *tenue* (Muhl.) Gould & C.A.Clark] to Lafayette County, citing a report originating from the University of Arkansas Herbarium (UARK). However, no voucher specimens of this taxon have been located at UARK. PLANTS Database (USDA 2008) also attributed it [as *D. dichotomum* var. *tenue*] to the state, citing Demaree (1943). It may occur in southern Arkansas, as it has been reported from nearby Claiborne and Union parishes, Louisiana (Freckmann & Lelong 2003a; Kartesz 2009).

Digitaria bicornis (Lam.) Roem. & Schult.

tropical crab grass

This species was listed for Arkansas in the *Checklist* (AVFC 2006) based on the report by Wipff (2003b). Wipff attributed it to Pulaski County, as did Kartesz (2009).

Echinochloa crus-gavonis (Kunth) Schult.
var. *macera* (Wiegand) Gould

Gulf barnyard grass

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, Michael (2003, 2007) did not attribute it to the state.

Echinochloa frumentacea Link

Indian-millet

Kartesz (2009) attributed this Asian species to Arkansas, as did PLANTS Database (USDA 2008), which cited Gould et al. (1972), who, in turn, cited Washington County specimens collected by Younge and Nielsen [as *E. crusgalli* (L.) Beauv. var. *frumentacea* (Roxb.) W.F.Wight] at the University of Illinois Herbarium (ILL) and the University of Minnesota Herbarium (MIN).

Elymus × *pseudorepens* (Scribn. & J.G.Sm.)

Barkworth & D.R.Dewey

false quack grass

{*E. lanceolatus* (Scribn. & J.G.Sm.) Gould× *E. trachycaulus* (Link) Gould}

Kartesz (2009) attributed this hybrid taxon to Dallas County, citing *Flora of North America* (i.e., Barkworth et al. 2007a) and *Manual of Grasses for North America* (i.e., Barkworth et al. 2007b), who merely stated that it has been “reported from...Arkansas.” An Arkansas occurrence of this taxon seems unlikely, though, as it would be highly disjunct from the western North American range of the two purported parents.

Eragrostis elliotii S.Watson

Elliott’s love grass

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Yatskievych (1999). Yatskievych stated that it is native to the southeastern United States, “west to Arkansas and Texas.” Peterson (2003a), however, did not show it for the state.

Eragrostis lugens Nees

mourning love grass

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. However, Kartesz (2009) did attribute it to Drew and Union counties, citing Peterson (2003a). PLANTS Database (USDA 2008) also attributed it to the state, citing the University of North Carolina Herbarium (NCU) as the location of a voucher specimen.

Eragrostis pectinacea (Michx.) Neesvar. *miserrima* (E.Fourn.) Reeder

tufted love grass

Kartesz (2009) attributed this variety to Arkansas, as did PLANTS Database (USDA 2008), which cited Harvey (1948). Peterson (2003a) stated that this variety occurs in the southern United States, from Texas to Florida. Thus, it may occur in southern Arkansas.

Eragrostis trichodes (Nutt.) A.W.Wood

sand love grass

Kartesz (2009) attributed this primarily Great Plains species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, Smith had actually excluded the species from the state flora. Peck (2003) attributed it to Arkansas, citing a Thomas Nuttall specimen lacking precise locality data at the Philadelphia Herbarium (PH), as well as a George M. Merrill specimen supposedly at the University of Arkansas Herbarium (UARK) but which has not been located. Peterson (2003a) did not attribute the species to Arkansas, though it has been reported from all surrounding states, including from Claiborne and Morehouse parishes, Louisiana (Kartesz 2009), Howell, Oregon, and Ozark counties, Missouri (Yatskievych 1999; Kartesz 2009), Shelby County, Tennessee, and Bowie County, Texas (Kartesz 2009).

Hopia obtusa (Kunth) Zuloaga & Morrone

vine mesquite

This species was reported for Arkansas [as *Panicum obtusum* Kunth] in the *Checklist* (AVFC 2006) without a supporting voucher specimen. Smith (1988) included it [as *P. obtusum*] in the Arkansas flora, citing Washington County (Moore 1961) and Conway County (Moore 1965) reports. Freckmann and Lelong (2003b) [as *P. obtusum*], PLANTS Database (USDA 2008) [as *P. obtusum*], and Kartesz (2009) also attributed it to the same two counties, undoubtedly on the basis of Smith’s report. Furthermore, Yatskievych (1999) [as *P. obtusum*] listed Arkansas as within the range of the species. The Arkansas reports may have been based on misdetermined material, as an Arkansas occurrence would be somewhat disjunct from the primary range to the west (Freckmann & Lelong 2003b; Kartesz 2009).

Muhlenbergia mexicana (L.) Trin.

wire-stem muhly, Mexican muhly

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Arkansas, citing Smith (1988). Peterson (2003b) attributed it to the state, likely also based on Smith. Smith included it in the Arkansas flora based on a Drew County specimen at the Missouri Botanical Garden Herbarium (MO), as well as on reports by Moore (1961) and Robinson (1968). However, no voucher specimens have yet been confirmed for the state. The Drew County specimen, although verified by Smith, has not been reviewed by the Arkansas Vascular Flora Committee and seems rather disjunct from the species' generally northern and northeastern United States distribution (Peterson 2003b; Kartesz 2009).

Panicum rigidulum Bosc ex Nees

subsp. *combsii* (Scribn. & C.R.Ball)

Freckmann & Lelong

red-top panic grass

Kartesz (2009) attributed this taxon [as var. *combsii* (Scribn. & C.R.Ball) Lelong] to Arkansas, as did PLANTS Database (USDA 2008), which cited Gleason (1963).

Panicum rigidulum Bosc ex Nees

subsp. *elongatum* (Scribn.) Freckmann & Lelong

red-top panic grass

Kartesz (2009) attributed this taxon [as var. *elongatum* (Pursh) Lelong] to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943).

Paspalidium geminatum (Forssk.) Stapf

Egyptian water grass, alligator grass

Smith (1988) listed this species [as *Panicum geminatum* Forsk.] as a possible addition to the Arkansas flora. Kartesz (2009) attributed it to Bradley County, citing *Flora of North America* (i.e., Allen 2003) and *Manual of Grasses for North America* (i.e., Allen 2007). It was likewise reported for the state in the *Checklist* (AVFC 2006) based on the report by Allen (2003).

Paspalum setaceum Michx.

var. *supinum* (Bosc ex Poir.) Trin.

thin paspalum

This variety was reported for Arkansas in the *Checklist* (AVFC 2006) based on the report by Allen and Hall (2003), who listed Arkansas as within its range. Weakley (2008), however, implied a range for this variety extending only as far west as southern Mississippi.

Pennisetum glaucum (L.) R.Br.

pearl-millet

The reports of this Asian species by PLANTS Database (USDA 2008), which cited Smith (1988), were erroneously based on Smith's reports of *Setaria glauca* (L.) Beauv., a synonym of *Pennisetum glaucum*, but a name which he incorrectly applied to *Setaria pumila* subsp. *pumila*. Kartesz (2009) attributed *P. glaucum* to Columbia and Lawrence counties, citing a report originating from the University of Arkansas Herbarium (UARK), as well as to Montgomery County, citing *Manual of Grasses for North America* (i.e., Wipff 2007). However, the reports from UARK were based on misdetermined material of *Setaria pumila* subsp. *pumila*. Likewise, Wipff's report of *P. glaucum* from Montgomery County was likely based on Marsico (2005), which was also based on misdetermined material of *Setaria pumila* subsp. *pumila*. *Pennisetum glaucum* is occasionally planted as wildlife forage and as a soil stabilizer, and is reported as an occasional waif throughout the southeastern United States, apparently not persisting for more than a few years (Wipff 2003c).

Poa alsodes A.Gray

grove blue grass

This species was reported for Arkansas in the *Checklist* (AVFC 2006) without a supporting voucher specimen. Kartesz (2009) attributed it to Crittenden County, though, citing personal communication with Lucile M. McCook and stating that a voucher specimen exists in the Pullen Herbarium (MISS). However, this is a species of northeastern North America (Soreng 2007; Kartesz 2009) and it seems unlikely to occur in Arkansas.

Saccharum brevibarbe (Michx.) Pers.
var. *brevibarbe*

short-beard plume grass

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this taxon to Arkansas, citing Smith (1988). It was also reported for Arkansas in the *Checklist* (AVFC 2006) based on Smith's report. Smith did include the taxon [as *Erianthus brevibarbis* Michx.] in the Arkansas flora, attributing it to Calhoun, Drew, Pulaski, and Saline counties and cited a Delzie Demaree specimen at the Missouri Botanical Garden Herbarium (MO). However, Smith also stated that he doubted the distinctness of this taxon from var. *contortum* [as *Erianthus contortus* Ell.]. Although a few Arkansas specimens have awns that are slightly less coiled (which varies even on the same plant), the awns are short and well within the range of the character for var. *contortum* (Webster 2003). Webster did state, though, that var. *brevibarbe* "is common in central and southern Arkansas." Obviously a more thorough assessment of Arkansas material is needed.

Schedonorus pratensis (Huds.) P.Beauv.

meadow fescue

This Eurasian species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material, as well as on the reports by Darbyshire (2007), PLANTS Database (USDA 2008) and Kartesz (2009), which were, in turn, all seemingly based originally on the report by the Great Plains Flora Association (1977). However, all Arkansas *Schedonorus* specimens examined thus far are referable to *S. arundinaceus*. The reports by the Great Plains Flora Association seem dubious.

Tridens eragrostoides (Vasey & Scribn.) Nash

love grass tridens

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on the report by Valdés-Reyna (2003), who appeared to attribute it to Crittenden County. PLANTS Database (USDA 2008) and Kartesz (2009) attributed it to Phillips County, citing Smith (1988). Smith included the species in the Arkansas flora based solely on a Phillips County report by Richards (1985), but later Smith (1994) only included it as a possible addition to the flora. The Richards specimen could not be located during the present inventory and may have been redetermined. Furthermore, the primary range of this species appears to be well to the southwest of Arkansas (Valdés-Reyna 2003; Kartesz 2009), making an eastern Arkansas occurrence rather unlikely.

Urochloa plantaginea (Link) R.D.Webster

plantain signal grass

Kartesz (2009) attributed this African species to Arkansas, as did PLANTS Database (USDA 2008), which cited the University of North Carolina Herbarium (NCU) as the location of a voucher specimen. Wipff and Thompson (2003) did not attribute this species to Arkansas but rather showed it as introduced only in southern Louisiana, Alabama, Florida, and Georgia.

Zizania palustris L.
var. *palustris*

northern wild rice

PLANTS Database (USDA 2008) attributed this taxon to Arkansas, citing Tucker (1988). Tucker stated that var. *palustris* occurs as far south as Missouri, Arkansas, and Kansas. However, Yatskievych (1999) and Kartesz (2009) only attributed var. *interior* to Missouri, and Kartesz indicates that the range of the typical variety is far to the north of Arkansas. Terrell (2007) did not attribute the species to Arkansas but did show Missouri records on the species' distribution map, though it is unclear which variety they represent.

POTAMOGETONACEAE

Pondweed Family

Potamogeton epihydrus Raf.

ribbon-leaf pondweed

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited personal communication with Robert R. Haynes. Peck (2003) indicated that Haynes had no recollection of this communication, however. The species has been reported from a sinkhole pond in one county in southeastern Missouri (Yatskievych 1999) as well as from West Carroll Parish, Louisiana (Kartesz 2009), but otherwise primarily occurs in the northeastern United States and Great Lakes region (Haynes & Hellquist 2000b; Kartesz 2009). Haynes and Hellquist did not attribute it to Arkansas.

TRILLIACEAE**Trillium Family***Trillium texanum* Buckley.

Texas trillium, Texas wakerobin

Case (2002) submerged this taxon into the typical variety of *T. pusillum* L., stating that it merely represented a “widely disjunct, regional population.” Other recent authorities, however, have recognized it as distinct, either as a separate variety of *T. pusillum*, var. *texanum* (Buckl.) Reveal & Bloome (e.g., Diggs et al. 2006), or as elevated to species, *T. texanum* (e.g., Kartesz 2009). It has been reported from eastern Texas, including Cass County (Diggs et al. 2006; USDA 2008), as well as from Caddo Parish in northwestern Louisiana (USDA 2008; Kartesz 2009). Diggs et al. (2006) stated that it grows in “creek bottom bogs (baygalls) at the head of springs and seeps” and “acid hardwood bottoms and lower slopes.” It likely occurs in similar habitats in extreme southwestern Arkansas and has even been attributed to Miller County by Freeman (1994) but without specific locality or voucher specimen information.

APPENDIX V EXCLUDED TAXA

The following list includes taxa that were either attributed erroneously to Arkansas in the *Checklist* (AVFC 2006), by Smith (1988, 1994), or by others, or are taxa treated in those sources but which are not currently being recognized as valid.

ANGIOSPERMS (DICOTS)

ACANTHACEAE

Wild Petunia Family

Yeatesia viridiflora (Nees) Small

yellow bract-spike

Kartesz (2009) attributed this species to Dallas County, citing Sorrie and LeBlond (2008). However, the specimen they cited is actually from Dallas County, Alabama.

AMARANTHACEAE

Amaranth Family

Amaranthus arenicola I.M.Johnst.

sandhill amaranth, sandhill pigweed

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Thomas et al. (1991). Smith (1994) and the Arkansas Vascular Flora Committee (2006) also included it in the state flora based on the same report. However, the specimen cited by Thomas et al. actually represents material of *A. tuberculatus*. Although Mosyakin and Robertson (2003) attributed *A. arenicola* to Arkansas, they make note that some of the state references outside of the native range [central and southwestern Great Plains] might be based on misidentified *A. tuberculatus*. *Amaranthus arenicola* probably does not occur in Arkansas and should be excluded from the state flora.

Celosia cristata L.

crested cock's-comb

This tropical species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material of *C. argentea*.

ANACARDIACEAE

Sumac Family

Schinus terebinthifolius Raddi

Brazilian pepper-tree

Peck (2003) attributed this species to Arkansas; however, the voucher specimen cited was based on a single, cultivated individual plant that was later eradicated. This should not be considered a part of the Arkansas flora.

APIACEAE

Parsley Family

Berula erecta (Huds.) Coville

cut-leaf water-parsnip

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Demaree (1943). However, this plant of the western United States and Great Plains seems to approach Arkansas no closer than central Texas, northwestern Oklahoma, central Kansas (Kartesz 2009), and north-central Missouri (Yatskievych 2006, Kartesz 2009). Demaree's report is dubious and should probably be excluded from the state flora.

Zizia trifoliata (Michx.) Fernald

meadow Alexanders

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material of *Z. aurea*. Kartesz (2009) did attribute it to Arkansas County, though, citing Smith (1988). However, Smith did not include this species, so the source of Kartesz's report is unclear. Weakley (2008) cited Arkansas as within the range of this species, and PLANTS Database (USDA 2008) showed it for the state, citing the *North American Flora* series published by the New York Botanical Garden. The primary range of *Z. trifoliata*, however, is considerably east of Arkansas (Kartesz 2009) and it seems rather unlikely to occur in the state.

APOCYNACEAE**Dogbane Family**

Amsonia ciliata Walter
var. *ciliata*

bluestar

Kartesz (2009) attributed this variety to Arkansas, as did PLANTS Database (USDA 2008), both citing Smith (1988). However, these were erroneous reports stemming from Smith's use of a similar varietal name, *ciliolata* (A.DC.) Lemke & Ayers, which apparently was never validly published. All Arkansas material of this species is referable to var. *tenuifolia*.

Asclepias sullivantii Engelm. ex A.Gray

prairie milkweed

This species was listed for Arkansas in the *Checklist* (AVFC 2006) based on a spurious report. The Jackson County voucher specimen cited by Smith (1988), and the basis for the reports by PLANTS Database (USDA 2008) and Kartesz (2009), was actually collected in Jackson County, Missouri. The only other Arkansas report was a notation on a reference card file in the University of Arkansas Herbarium (UARK) which stated that Ernest J. Palmer "saw," but did not collect a specimen near Fayetteville in Washington County on 12 June 1923, and that evidently John T. Buchholz collected it the following day. Despite this notation, however, there was no further record of such a specimen. Thus, this species has been excluded from the state flora. It does, however, seem quite possible in the prairies of northwestern Arkansas, having been reported from west-central Missouri (Kartesz 2009; Yatskievych 2006), southeastern Kansas, and northeastern Oklahoma, including Delaware County (Kartesz 2009).

Matelea obliqua (Jacq.) Woodson

climbing-milkweed

Yatskievych (2006) stated that this species had been reported for Arkansas but only after mentioning that previous reports for Missouri (Steyermark 1963; USDA 2008; Kartesz 2009) were either erroneous or remained unconfirmed. It seems that the primary range of this species is mainly southern Appalachian (Kartesz 2009), and thus it probably does not occur in Arkansas.

AQUIFOLIACEAE**Holly Family**

Ilex glabra (L.) A.Gray

inkberry

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing an unpublished and undated *Vascular Flora of the Southeastern United States*, edited by Albert E. Radford et al. However, the primary range of this shrub extends along the coastal states from southeastern Louisiana to Maine (Kartesz 2009). It doubtfully occurs in Arkansas.

ASTERACEAE**Sunflower Family**

Ageratina altissima (L.) R.M.King & H.Rob.
var. *angustata* (A.Gray) Clewell & Wooten

white snakeroot

PLANTS Database (USDA 2008) attributed this variety to Arkansas, citing Clewell and Wooten (1971). However, Nesom (2006a), Yatskievych (2006), and Kartesz (2009) all relegated it to synonymy with the typic variety. We are following the latter group in the present treatment.

Antennaria solitaria Rydb.

single-head pussytoes

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Arkansas. Bayer (2006) attributed it to Arkansas, but the listing was based on literature reports, not on an actual voucher specimen (Randall J. Bayer, pers. comm. 2007). Smith (1988) had stated that the species was shown for the southeastern half of the state by Bayer and Stebbins (1982), who did show the distribution as including eastern Arkansas but did not cite or reference any Arkansas specimens. It is likely that their mapped distribution for *A. solitaria* was inferred to include eastern Arkansas based on known records from western Tennessee, Mississippi, and eastern Louisiana rather than being supported by actual voucher specimens.

Astranthium integrifolium (Michx.) Nutt. western daisy

PLANTS Database (USDA 2008) attributed this taxon [as subsp. *integrifolium*] to Arkansas, citing DeJong (1965), in addition to reporting *A. ciliatum* [as subsp. *ciliatum* (Raf.) DeJong] for the state. Smith (1988, 1994) treated Arkansas material as *A. integrifolium*, without reference to infraspecific taxa. However, based on Nesom's (2005, 2006c) taxonomic reassessment of the group, all Arkansas material is referable to *A. ciliatum*. *Astranthium integrifolium* occurs to the east of Arkansas (Nesom 2006c), primarily in Kentucky, central Tennessee, and northern Alabama (Kartesz 2009).

Berlandiera pumila (Michx.) Nutt.
var. *scabrella* G.L.Nesom & B.L.Turner green-eyes, berlandiera

This name was misapplied in the *Checklist* (AVFC 2006) to plants from Miller County that are better treated as *B. pumila* var. *pumila* (Guy L. Nesom, pers. comm. 2007). Incidentally, in the present work we are following Nesom and Turner's (1998) treatment of the *B. pumila* complex.

Bidens beckii Torr. ex Spreng. water-marigold

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. It seems rather unlikely to occur in the state given its primary range in the northeastern United States and Great Lakes regions (Storther & Weedon 2006; Kartesz 2009).

Bidens polylepis S.F.Blake tickseed-sunflower

Strother and Weedon (2006) attributed this species to Arkansas. However, we are following Lipscomb and Smith (1977), Smith (1988), Yatskievych (2006), and Kartesz (2009) in merging it with *B. aristosa*.

Cirsium horridulum Michx.
var. *horridulum* yellow thistle

This variety was erroneously reported for Arkansas in the *Checklist* (AVFC 2006). The reports for Arkansas by Kartesz (2009) and PLANTS Database (USDA 2008) were apparently also in error. According to Keil's (2006b) treatment, Arkansas material is referable to var. *megacanthum*.

Diaperia verna (Raf.) Morefield
var. *drummondii* (Torr. & A.Gray) Morefield rabbit-tobacco, cotton-rose

PLANTS Database (USDA 2008) attributed this variety [as *Evax verna* Raf. var. *drummondii* (Torr. & A.Gray) Kartesz & Gandhi] to Arkansas, citing personal communication with James D. Moorefield. However, Moorefield (2006) did not show this variety for the state.

Doellingeria umbellata (Mill.) Nees parasol white-top aster, white flat-top aster

This name was misapplied in the *Checklist* (AVFC 2006) to Arkansas plants of *D. sericocarpoides*.

Erigeron quercifolius Lam. in Lam. & Poir. southern fleabane

This name was misapplied in Arkansas by Smith (1988, 1994), and subsequently by the Arkansas Vascular Flora Committee (2006), PLANTS Database (USDA 2008), and Kartesz (2009), to plants of *E. philadelphicus* var. *philadelphicus*. *Erigeron quercifolius* is restricted to the extreme southeastern coastal United States from Virginia to Florida (Nesom 2006d) and is not to be expected in Arkansas.

Erigeron strigosus Muhl. ex Willd.
var. *beyrichii* (Fisch. & C.A.Mey.)
Torr. & A.Gray ex A.Gray daisy fleabane

This variety was reported for Arkansas in the *Checklist* (AVFC 2006), and PLANTS Database (USDA 2008) attributed it to the state, citing Demaree (1943). However, in the present treatment we are following Nesom (2006d) and Kartesz (2009) in treating it as a synonym of the typic variety.

Eupatorium album L.var. *glandulosum* (Michx.) DC.

boneset, white thoroughwort

This variety was reported for Arkansas in the *Checklist* (AVFC 2006) but is being treated as a synonym of the typic variety in the present treatment following Siripun and Schilling (2006) and Kartesz (2009).

Eupatorium hyssopifolium L.var. *calcaratum* Fernald & B.G.Schub.

hyssop-leaf boneset

PLANTS Database (USDA 2008) attributed this variety, in addition to the typic variety, to Arkansas, citing Smith (1988). Smith had placed var. *calcaratum* in synonymy with var. *hyssopifolium*, though. Yatskievych (2006) recognized this variety as distinct, and reported it from southeastern Missouri, including Butler, Howell, and Ripley counties. In the present treatment, however, we are following Smith, Siripun and Schilling (2006), and Kartesz (2009) in placing var. *calcaratum* in synonymy with the typic variety.

Eurybia furcata (E.S.Burgess) G.L.Nesom

forked aster

The Arkansas Vascular Flora Committee (2006), Brouillet (2006), Yatskievych (2006), PLANTS Database (USDA 2008), and Kartesz (2009) all attributed this species to Arkansas. However, the only known voucher specimen, housed at the University of Arkansas Herbarium (UARK), and presumably the basis for all the above reports, actually represents material of *E. macrophylla*. Based on the Missouri distribution given by Yatskievych and Kartesz, *E. furcata* remains a possibility for northern Arkansas. It would most likely be found on moist limestone and dolomite ledges and bluffs or along the banks of streams (Brouillet 2006; Yatskievych 2006).

Galinsoga parviflora Cav.var. *parviflora*

gallant-soldier

PLANTS Database (USDA 2008) attributed this tropical American taxon to Arkansas, citing Demaree (1943). However, neither Canne-Hilliker (2006) nor Kartesz (2009) attributed it to the state. It seems likely that Demaree's listing was based on misdetermined material of *G. quadriradiata*.

Gamochaeta falcata (Lam.) Cabrera

sickle cudweed

This name has been misapplied in North America, and thus in Arkansas (Smith 1988, 1994 [as *Gnaphalium purpureum* L. var. *falcatum* (Lam.) Torr. & A.Gray]; AVFC 2006; USDA 2008), to plants of *G. antillana* and *G. calviceps* (Nesom 2006e). *Gamochaeta falcata* is a South American species not presently known from North America (Nesom 2006e).

Hasteola suaveolens (L.) Pojark.

false Indian-plantain

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. Smith (1988, 1994) listed it [as *Cacalia suaveolens* L.] as a possible addition to the flora. Yatskievych (2006) and Kartesz (2009) reported it for eastern and southeastern Missouri, including Butler County. It also approaches Arkansas in western Kentucky and western Tennessee (Kartesz 2009). *Hasteola suaveolens* is stated as growing in rich woods, on moist bluff bases, and along stream banks (Anderson 2006; Yatskievych 2006), and it may occur in suitable habitats in northeastern Arkansas.

Helianthus atrorubens L.

rosinweed sunflower

This name was misapplied in the *Checklist* (AVFC 2006) to plants of *H. silphioides*. *Helianthus atrorubens* occurs to the east of Arkansas (Schilling 2006; Kartesz 2009).

Heterotheca barbata (Rydb.) Semple

Spokane golden-aster

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing the University of North Carolina Herbarium (NCU) as the location of a voucher specimen. Semple (2006) questioned the status of this taxon but, regardless, attributed it only to the Spokane River Valley of Washington and Idaho. Kartesz (2009) also attributed it only to those two states. The PLANTS Database report is undoubtedly erroneous.

Hieracium marianum Willd.

Maryland hawkweed

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited personal communication with Guy L. Nesom. However, Peck (2003) indicated that Nesom did not recollect such a communication and suspected the report to be erroneous. Furthermore, Strother (2006c) stated that the type of *H. marianum* may be a cross between plants of *H. venosum* L. and either *H. gronovii* or *H. scabrum*. Given the generally more eastern distribution of *H. marianum* (Kartesz 2009), as well as the fact that *H. venosum* is not currently known from Arkansas, *H. marianum* seems unlikely to occur in the state.

Hymenopappus scabiosaeus L'Hér.

var. *corymbosus* (Torr. & A.Gray) B.L.Turner

old-plainsman

This variety was attributed to Arkansas by PLANTS Database (USDA 2008) and Kartesz (2009), both citing a report by the Great Plains Flora Association (1977). It was also reported for the state in the *Checklist* (AVFC 2006) based on the report by the Great Plains Flora Association. However, all Arkansas material observed thus far is referable to var. *scabiosaeus*. Furthermore, Strother (2006d) reported only var. *scabiosaeus* for the state. In light of the fact that the Great Plains Flora Association makes no mention of the typic variety, it seems probable that there was an error in reporting.

Liatris densispicata (Bush) Gaiser

var. *interrupta* Gaiser

gayfeather

PLANTS Database (USDA 2008) erroneously reported this taxon for Arkansas, citing Gaiser (1946a). However, Gaiser described var. *interrupta* as a variety of *L. mucronata*, not *L. densispicata*. Furthermore, Gaiser cited neither *L. mucronata* var. *interrupta* nor *L. densispicata* for Arkansas. *Liatris mucronata* var. *interrupta* is synonymous with *L. mucronata* var. *mexicana* Gaiser, which occurs in Mexico, New Mexico, Texas (Nesom 2006f; Kartesz 2009), and possibly Louisiana (Nesom 2006f). Nesom and Kartesz treated *L. densispicata*, cited by Gaiser as restricted to Minnesota, as a synonym of *L. punctata* var. *punctata*.

Liatris ligulistylis (A.Nelson) K.Schum.

gayfeather

Kartesz (2009) attributed this species to Carroll, Logan, and Marion counties, citing Smith (1988). However, Arkansas plants previously treated as this species are better treated as *L. scariosa* var. *nieuwlandii*. *Liatris ligulistylis* is a plant of the Rocky Mountains and northern Midwest (Nesom 2006f).

Liatris punctata Hook.

var. *nebraskana* Gaiser

dotted gayfeather

PLANTS Database (USDA 2008) recognized this variety and attributed it to Arkansas. However, Nesom (2006f) synonymized it under the typic variety, stating that "weak geographic trends exist" in the features used to distinguish var. *nebraskana*, and that "variability renders var. *nebraskana* largely typological and necessitates much arbitrary identification." Kartesz (2009) also placed it in synonymy with the typic variety.

Liatris spicata (L.) Willd.

var. *spicata*

florist's gayfeather

PLANTS Database (USDA 2008) and Kartesz (2009) [as *L. spicata*] attributed this taxon to Arkansas, citing Smith (1988). Smith included it [as *L. spicata*] in the Arkansas flora based solely on a Bradley County report by Leslie (1986). The taxon was subsequently reported for Arkansas in the *Checklist* (AVFC 2006) based on Leslie's report. Nesom (2006f) also attributed it to Arkansas, presumably based on Leslie's report as well, but stated that the report is probably based on garden plants or a garden escape. The Bradley County voucher specimen has not been located, and it is possible that it was redetermined. Given the dubious nature of the report, it seems best to exclude *L. spicata* var. *spicata* from the state flora.

Liatris × *spheroidea* Michx. gayfeather
 { *L. aspera* Michx. ×
L. ligulistylis (A.Nelson) K.Schum. }

PLANTS Database (USDA 2008) treated this taxon as a distinct species and attributed it to Arkansas, citing Gaiser (1946b). Nesom (2006f) treated it as a hybrid involving *L. aspera*, as did Kartesz (2009), who attributed it to Carroll County, citing Gaiser. Gaiser considered the entity [as × *L. spheroidea*] to be of hybrid origin and cited a Carroll County specimen collected by Ernest J. Palmer at the United States National Herbarium (US). Yatskievych (2006), on the other hand, treated the taxon as a direct synonym of *L. aspera*. Although there may be some confusion as to the proper treatment of this name, for the time being we are assuming this entity does not warrant recognition in the Arkansas flora.

Melampodium leucanthum Torr. & A.Gray Plains blackfoot

This species was erroneously reported for Arkansas in the *Checklist* (AVFC 2006) [as *M. paludosum* Kunth], and apparently subsequently by Kartesz (2009), based on misdetermined material of *M. divaricatum*.

Pluchea odorata (L.) Cass. in F.Cuvier
 var. *succulenta* (Fernald) Cronquist sweetscent

This varietal name was misapplied to Arkansas plants of the typic variety by Smith (1988, 1994) and the Arkansas Vascular Flora Committee (2006). Variety *succulenta* is restricted to the northeastern United States (Nesom 2006g; Kartesz 2009) and is not to be expected in Arkansas.

Pyrrhopappus grandiflorus (Nutt.) Nutt. false dandelion

Smith did not include this species in the Arkansas flora in his *Atlas* (1988) but did include it in his *Keys* (1994). Strother (2006f) merely stated that it “has been reported from Arkansas....” *Pyrrhopappus grandiflorus* was listed for Arkansas in the *Checklist* (AVFC 2006) based on a single misdetermined specimen. PLANTS Database (USDA 2008) attributed it to Arkansas, citing Turner and Kim (1990). However, Turner and Kim only showed the “approximate distribution” for *P. grandiflorus* as barely extending into northwestern Benton County. Their inclusion of Arkansas in the map appears to be an estimation of the possible range of the species rather than a report based on an actual observation or voucher specimen.

Rudbeckia fulgida Aiton
 var. *fulgida* orange coneflower

This variety was erroneously reported for Arkansas in the *Checklist* (AVFC 2006). It occurs to the east of the state (Urbatsch & Cox 2006; Kartesz 2009).

Rudbeckia hirta L.
 var. *angustifolia* (T.V.Moore) Perdue black-eyed Susan

This variety was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. It occurs on the Gulf Coastal Plain to the south of the state (Urbatsch & Cox 2006; Kartesz 2009).

Silphium integrifolium Michx.
 var. *deamii* L.M.Perry rosinweed

PLANTS Database (USDA 2008) treated this variety as distinct and attributed it to Arkansas, citing Demaree (1943). However, Yatskievych (2006) and Weakley (2008) both stated that it is not worthy of recognition and, along with Clevenger (2006) and Kartesz (2009), placed it in synonymy with the typic variety.

Silphium integrifolium Michx.
 var. *speciosum* (Nutt.) Clevenger rosinweed

This invalid varietal name was applied in the *Checklist* (AVFC 2006) to plants correctly called var. *laeve*.

Silphium scaberrimum Elliott

rough-leaf rosinweed

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). However, Smith excluded this as a “weak species” that should be merged with *S. asteriscus* var. *asteriscus*. Likewise, Clevinger (2006) and Kartesz (2009) both merged it with *S. asteriscus* var. *asteriscus*.

Solidago altissima L.subsp. *gilvocanescens* (Rydb.) Semple

tall goldenrod

This taxon was erroneously reported for Arkansas in the *Checklist* (AVFC 2006). PLANTS Database (USDA 2008) also attributed it [as *S. canadensis* L. var. *gilvocanescens* Rydb.] to the state, citing Demaree (1943). However, this name has been misapplied in the state to material of subsp. *altissima* and should be excluded.

Solidago arguta Aitonsubsp. *arguta*

goldenrod

This taxon was erroneously reported for Arkansas in the *Checklist* (AVFC 2006). Kartesz (2009) attributed it [as var. *arguta*] to the state, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, all Arkansas material of this species observed thus far is referable to subsp. *caroliniana* var. *boottii*.

Solidago arguta Aitonsubsp. *caroliniana* (A.Gray) G.H.Mortonvar. *caroliniana* A.Gray in A.Gray et al.

goldenrod

Although Smith (1988, 1994) [as the misapplied and orthographic variant name var. *boottii* (Hook.) Palmer & Steyerl.], Semple and Cook (2006), PLANTS Database (USDA 2008), and Kartesz (2009) all attributed this variety to Arkansas, upon thorough study of Arkansas specimens of this species, var. *caroliniana* apparently does not occur in the state. The range of this variety appears to be well east of the state (Kartesz 2009).

Solidago arguta Aitonvar. *neurolepis* (Fernald) Steyerl.

goldenrod

Kartesz (2009) attributed this variety to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, Yatskievych (2006) explained that the type specimen is probably of hybrid origin. Also, Semple and Cook (2006) did not mention the taxon. Thus, it doubtfully deserves recognition in the state flora.

Solidago bicolor L.

white goldenrod, silverrod

The Garland County specimen cited by Orzell and Bridges (1987), and the basis for the Arkansas reports by Smith (1988), Semple and Cook (2006), the Arkansas Vascular Flora Committee (2006), PLANTS Database (USDA 2008), Kartesz (2009), and probably Cronquist (1980), actually represents misdetermined material of *S. hispida*. *Solidago bicolor* generally occurs well northeast of Arkansas (Kartesz 2009) and is not to be expected in the state.

Solidago canadensis L.var. *hageri* Fernald

Canadian goldenrod

This taxon was erroneously reported for Arkansas in the *Checklist* (AVFC 2006) based on material of *S. altissima* subsp. *altissima*. *Solidago canadensis* occurs to the north of the state (Semple & Cook 2006; Kartesz 2009).

Solidago curtisii Torr. & A.Grayvar. *curtisii*

Curtis' goldenrod

This taxon was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material.

Solidago squarrosa Nutt.

goldenrod

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. It occurs in the northeastern United States (Semple & Cook 2006; Kartesz 2006) and is not to be expected in Arkansas.

Symphyotrichum shortii (Lindl.) G.L.Nesom

Short's aster

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Montgomery and Newton counties, citing Smith (1988). Although Smith acknowledged that the species [as *Aster shortii* Lindl.] had been reported for Arkansas by Cronquist (1980), he initially excluded it from the state flora, stating that it was "perhaps in the state, but so similar to *A. oolentangiensis* that it should perhaps be lumped with that species." However, prior to publication Smith added *Aster shortii* to the flora, citing the Montgomery and Newton county reports by Orzell and Bridges (1987), although he did imply that the Arkansas plants could be based on hybrid material. *Symphyotrichum shortii* was also attributed to Arkansas by the Arkansas Vascular Flora Committee (2006) and Brouillet et al. (2006) based on the aforementioned reports. However, upon further review of the specimens, as well as after communication with Guy L. Nesom (pers. comm. 2008), it was concluded that the Arkansas material formerly attributed to *S. shortii* was referable either to different species or possible hybrids. The primary range of this species is generally well east and northeast of Arkansas (Kartesz 2009) and probably not to be expected in the state.

Symphyotrichum tradescantii (L.) G.L.Nesom

Tradescant's aster

This species was erroneously reported for Arkansas in the *Checklist* (AVFC 2006). It occurs in New England and adjacent Canada (Brouillet et al. 2006; Kartesz 2009) and is not to be expected in Arkansas.

Tetraneuris scaposa (DC.) Greene
var. *scaposa*

bitterweed

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this taxon to Prairie County, citing Smith (1988). Smith included it [as *Hymenoxys scaposa* (DC.) Parker var. *glabra* (Nutt.) Parker] in the Arkansas flora based solely on a Prairie County report by the Great Plains Flora Association (1977). However, Smith (1994) later excluded the taxon from the flora. Furthermore, Bierner and Turner (2006) did not attribute it to the state. An Arkansas occurrence, especially in the eastern part of the state, would be considerably disjunct from the primary range of this species: central Texas, central Oklahoma, central Kansas, and southwestern Nebraska, west to New Mexico and Colorado (Great Plains Flora Association 1977; Kartesz 2009). The original report was likely in error, and thus should probably be excluded from the state flora.

Verbesina occidentalis (L.) Walter

yellow crownbeard

This species was erroneously reported for Arkansas in the *Checklist* (AVFC 2006). It generally occurs well to the east of Arkansas (Kartesz 2009), and is probably not to be expected in the state.

Vernonia fasciculata Michx.

prairie ironweed

This name has been misapplied to Arkansas specimens from the Ouachita Mountains (Smith 1988, 1994; AVFC 2006; USDA 2008; Kartesz 2009) that represent hybrid material of *V. lettermannii* with other species. *Vernonia fasciculata* occurs in "bottomlands, ditches, [and] low prairies" (Strother 2006g) of the Midwest, approaching Arkansas in southeastern Kansas and southern Missouri (Yatskevych 2006; Kartesz 2009) but has yet to be documented in Arkansas.

Vernonia marginata (Torr.) Raf.

Plains ironweed

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. It is a plant of the southwestern United States and Mexico (Strother 2006g; Kartesz 2009) and is not to be expected in Arkansas.

BORAGINACEAE**Borage Family***Cynoglossum amabile* Stapf. & J.R.Drumm.

Chinese hound's-tongue

This eastern Asian species has long been reported for southwestern Arkansas (Smith 1988, 1994; AVFC 2006; USDA 2008; Kartesz 2009), as well as adjacent southeastern Oklahoma (Waterfall 1979; Kartesz 2009). However, apparently identical plants in adjacent Louisiana, and possibly several other southern states, have been called *C. zeylanicum* [or the possible synonym *C. furcatum* Wall.] (USDA 2008; Kartesz 2009). It is not entirely clear at this point what name is correctly applied to Arkansas material, but based on circumstantial evidence as well as the descriptions and keys in *Flora of China* (eFloras 2012) it appears that *C. amabile*, a frequently cultivated plant, evidently has larger and showier corollas and larger nutlets than *C. zeylanicum* [*C. furcatum*]. Thus, the Arkansas material, with rather small corollas, seems better referable to *C. zeylanicum* [*C. furcatum*]. These plants and this issue certainly require further

investigation, but for the time being we are treating the Arkansas specimens as *C. zeylanicum* and excluding *C. amabile*.

Heliotropium europaeum L. European heliotrope

This Eurasian and northern African species was included in the Arkansas flora by Smith (1988), and subsequently by the Arkansas Vascular Flora Committee (2006), PLANTS Database (USDA 2008), and Kartesz (2009), based on undetermined material of *H. procumbens*.

Hydrophyllum macrophyllum Nutt. large-leaf waterleaf

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Arkansas, citing Smith (1988). However, Smith had misapplied the name to specimens of various other species, including the subsequently described *H. brownei*. *Hydrophyllum macrophyllum* occurs to the northeast of Arkansas (Kartesz 2009) and is not to be expected in the state.

Phacelia dubia (L.) Trel.
var. *dubia* small-flower scorpion-weed

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited an unpublished and undated *Vascular Flora of the Southeastern United States*, edited by Albert E. Radford et al. However, its range is generally well east of Arkansas (Kartesz 2009), and it seems rather unlikely to occur in the state.

BRASSICACEAE

Mustard Family

Cardamine diphylla (Michx.) A.W.Wood crinkleroot

This species has been erroneously attributed to Arkansas. Harriman (1965) cited a Yell County specimen in his unpublished dissertation on the genus *Dentaria* [now treated within the genus *Cardamine*]. This Arkansas report was later cited by Al-Shehbaz (1988), mentioned by Yatskievych (2006), as well as incorporated into PLANTS Database (USDA 2008) and Kartesz's *Floristic Synthesis of North America* (2009). It was also the basis for the Arkansas report of the species in the *Checklist* (AVFC 2006) and likely the Arkansas report by Al-Shehbaz et al. (2010). However, upon further investigation it was discovered that Edwin B. Smith had reviewed the specimen cited by Harriman and found that, not only did it represent material of *C. concatenata*, but it had actually been annotated as such by Harriman himself [as *Dentaria laciniata*], contrary to the report in his dissertation (Smith 1982). Although widespread in the northeastern United States, southward through the Appalachians (Al-Shehbaz 1988; Kartesz 2009), *C. diphylla* reproduces almost exclusively asexually (Al-Shehbaz 1988) and approaches Arkansas only as close as central Tennessee and northern Alabama. It doubtfully is to be expected in the state.

CACTACEAE

Cactus Family

Escobaria orcuttii Boed. Orcutt's fox-tail cactus

PLANTS Database (USDA 2008) erroneously attributed this species to Arkansas, citing Anderson (2001). Anderson did not, however, report this species for the state. On the contrary, the species is apparently restricted to southern Arizona, southern New Mexico, southwestern Texas, and Mexico (Anderson 2001; Zimmerman & Parfitt 2003 [as *Coryphantha sneedii* (Britton & Rose) A.Berger]; Kartesz 2009) and is not to be expected in Arkansas.

CAPRIFOLIACEAE

Honeysuckle Family

Lonicera albiflora Torr. & A.Gray western white honeysuckle

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). However, Smith (1988) excluded it, stating that previous reports for the state were likely based on Arkansas Territory records, and thus probably from present-day Oklahoma.

Lonicera dioica L.

limber honeysuckle

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. PLANTS Database (USDA 2008) and Kartesz (2009) attributed it to the state, citing Smith (1988). Smith, however, treated *L. flava* as conspecific with *L. dioica*, thus calling all Arkansas material *L. dioica*. The two taxa are generally considered quite distinct (Yatskievych 2006; Weakley 2008), though, and *L. dioica* generally has a much more northern and northeastern United States distribution (Kartesz 2009). Although *L. dioica* is reported as far south as Missouri (Yatskievych 2006; Kartesz 2009), no representative specimens have yet been observed from Arkansas.

Lonicera reticulata Raf.

grape honeysuckle

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). Additionally, Weakley (2008) included Arkansas as within its range. However, all material previously labeled as this species in Arkansas is referable to *L. flava*. *Lonicera reticulata* generally has a more northern distribution, though it is reported as approaching Arkansas in Missouri (Yatskievych 2006; Kartesz 2009).

Triosteum aurantiacum E.P.Bicknell
var. *aurantiacum*

horse-gentian

PLANTS Database (USDA 2008) attributed this taxon to Arkansas, citing Smith (1988). However, Smith had misapplied the name *T. perfoliatum* var. *aurantiacum*, a synonym of *T. aurantiacum* var. *aurantiacum*, to Arkansas material of *T. aurantiacum* var. *illinoense*, as well as to some material of *T. perfoliatum*. The typic variety of *T. aurantiacum* occurs well to the north and northeast of Arkansas (Kartesz 2009) and is not to be expected in the state.

CARYOPHYLLACEAE**Pink Family***Cerastium arvense* L.subsp. *strictum* Gaudin

field mouse-ear chickweed

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this taxon to Newton County, citing Smith (1988). However, the material to which Smith (1988) applied the name *C. arvense* is better treated as *C. velutinum* var. *velutinum* (Morton 2005a).

Dianthus deltoides L.subsp. *deltoides*

maiden pink

Smith (1988) included this European taxon in the Arkansas flora based on a report by Richards (1985) for Clay County and an additional report for Carroll County. However, the report by Richards was based on a misdetermined specimen, and a Carroll County voucher specimen has not been located. Rabeler and Hartman (2005) and Yatskievych (2006) attributed this taxon to Arkansas, but their reports are likely based on Smith. PLANTS Database (USDA 2008) and Kartesz (2009) both attributed it to Carroll and Clay counties, citing Smith, but Kartesz also showed it for Sevier County based on a report originating from the University of Arkansas Herbarium (UARK). However, no specimen has been located at UARK, thus the record is assumed erroneous.

Minuartia godfreyi (Shinners) McNeill

Godfrey's sandwort

Smith (1988) included this species [as *Arenaria godfreyi* Shinners] in the Arkansas flora, citing a Drew County report by Kral (1983). PLANTS Database (USDA 2008) and Kartesz (2009) attributed it to Drew County, citing Smith, but Kartesz also showed it for Polk County, citing a University of Arkansas Herbarium (UARK) report. Additionally, Rabeler et al. (2005) and Weakley (2008) also attributed the species to Arkansas. However, these reports have proven erroneous, all based on misdetermined material of *M. muscorum* (Richard K. Rabeler, pers. comm. 2007; Theo Witsell, pers. comm. 2007). *Minuartia godfreyi*, an extremely rare species of the southeastern United States, is not currently known from west of Alabama, and is probably not to be expected in Arkansas (Richard K. Rabeler, pers. comm. 2007).

Paronychia fastigiata (Raf.) Fernaldvar. *paleacea* Fernald

forked-chickweed, hairy forked nailwort

PLANTS Database (USDA 2008) recognized this variety and attributed it to Arkansas. Weakley (2008) also recognized it, and the range he gave for it could include Arkansas. However, in the present treatment we are following Hartman et al. (2005b) and Kartesz (2009) in merging it with the typic variety.

CELASTRACEAE**Bittersweet Family***Euonymus kiautschovicus* Loes.

creeping strawberry-bush

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). Kartesz (2009) also attributed it to the state, specifically Crittenden County, citing Smith. However, although it had been reported for Crittenden County by Wilcox (1973), Smith excluded the taxon, stating that it was “a cultivated species, not known to escape in Arkansas.” It was subsequently reported for Arkansas in the *Checklist* (AVFC 2006) based on a Crittenden County specimen that has since been redetermined as *E. fortunei*.

CHENOPODIACEAE**Goosefoot Family***Dysphania botrys* (L.) Mosyakin & Clemants

Jerusalem-oak, feather-geranium

Kartesz (2009) attributed this Eurasian species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Although all the University of Arkansas Herbarium (UARK) material had been annotated to *Chenopodium pumilio* R.Br., Smith included *Dysphania botrys* [as *Chenopodium botrys* L.] in the flora, merely stating that it “probably does occur in Arkansas.” Clemants and Mosyakin (2003b) did not attribute it to the state but did show it for northern Louisiana and southern Missouri. It was listed for Arkansas in the *Checklist* (AVFC 2006) based on a report [as *Chenopodium bortys*] by Buchholz and Palmer (1926) for Marion County. However, it seems likely that this record was also based on a misdetermined material of *D. pumilio*.

CONVOLVULACEAE**Morning-glory Family***Calystegia catesbeiana* Pursh

Catesby’s bindweed

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. Its range is well east of Arkansas (USDA 2008; Weakley 2008; Kartesz 2009) and it is not to be expected in the state.

Calystegia sepium (L.) R.Br.subsp. *americana* (Sims) Brummitt

hedge bindweed

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this subspecies to Arkansas, citing Smith (1988). However, all Arkansas material of this species observed thus far seems referable to subsp. *angulata*.

Cuscuta rostrata Shuttlw. ex Engelm. & A.Gray

beaked dodder, Appalachian dodder

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), both based on misidentified specimens at the University of North Carolina Herbarium (NCU). A southern Appalachian endemic (Weakley 2008), *C. rostrata* is not likely to occur in Arkansas.

Ipomoea cairica (L.) Sweet

mile-a-minute-vine

Kartesz (2009) attributed this African species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). These reports are almost certainly based on material of *I. wrightii*, which Smith (1988) stated has been previously misreported in Arkansas as *I. cairica* (L.) House.

Ipomoea × *leucantha* Jacq.{*I. cordatotriloba* Dennst. × *I. lacunosa* L.}

hybrid morning-glory

This introgressive hybrid was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material.

CUCURBITACEAE**Gourd Family***Cucurbita pepo* L.subsp. *ovifera* (L.) D.S.Deckervar. *ovifera* (L.) Harz

gourd

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this taxon [as *C. pepo* var. *ovifera*] to Arkansas, citing Smith (1988). However, Arkansas specimens of this species actually correspond to either var. *ozarkana* or var. *texana*, neither of which Smith recognized. The cultivated gourd is not represented in the state by voucher specimens of escaped material.

Echinocystis lobata (Michx.) Torr. & A.Gray wild cucumber

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). It was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. Smith (1988) listed it as a possible addition to the flora, stating that there was a single specimen at the University of Arkansas Herbarium (UARK) from Pulaski County that “perhaps represent[ed] a local escape.” However, that specimen has not been relocated, and given the lack of a voucher specimen, it seems best to exclude the species from the state flora.

Lagenaria siceraria (Molina) Standl. bottle gourd, calabash

Kartesz (2009) attributed this African species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Smith, however, merely listed it as a possible addition to the flora, stating that it “probably appear[s] occasionally as a waif” and possibly escapes locally. However, no voucher specimens have been observed to support this claim. Thus it should be excluded from the state flora.

DROSERACEAE

Sundew Family

Drosera intermedia Hayne spoon-leaf sundew

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). However, Smith excluded the species, stating that the Conway County report (Moore 1965) was likely based on material of *D. brevifolia*. *Drosera intermedia* apparently approaches Arkansas no closer than southeastern Louisiana (Kartesz 2009) and doubtfully occurs in the state.

ELATINACEAE

Waterwort Family

Elatine americana (Pursh) Arn. waterwort

Kartesz (2009) attributed this species to Arkansas, almost certainly based on the reports of *E. triandra* by Marsico (2005) and the Arkansas Vascular Flora Committee (2006). However, the basis for both of those reports, a single Arkansas specimen from Montgomery County, clearly fits the description of *E. rubella* (Weakley 2008).

Elatine triandra Schkuhr waterwort

This name was misapplied by Marsico (2005) and the Arkansas Vascular Flora Committee (2006) to the only known Arkansas *Elatine* specimen. The Montgomery County specimen clearly fits the description of *E. rubella* (Weakley 2008), a North American native species (Weakley 2008; Kartesz 2009). *Elatine triandra*, strictly defined, is a Eurasian species known only in the United States from New England (Kartesz 2009) and possibly Missouri (Yatskievych 2006).

ERICACEAE

Heath Family

Oxydendrum arboreum (L.) DC. in DC. & A.DC. sourwood

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). However, Smith actually excluded it from the state flora. *Oxydendrum arboreum* does approach Arkansas in Louisiana, Mississippi, and Tennessee (Kartesz 2009; Judd 2009) and may possibly be found in eastern or southeastern Arkansas but has yet to be documented from the state.

Rhododendron oblongifolium (Small) Millais Texas azalea

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, Smith (1988) treated it as a synonym of *R. viscosum*. In the present treatment we are following Smith, as well as Judd and Kron (2009), who also place *R. oblongifolium* in synonymy with *R. viscosum*, stating that *R. viscosum* is a variable species that has been divided into as many as four different species as well as several minor varieties and forms, but that “[b]ecause correlated or geographically coherent sets of character states cannot be discerned within this species,” infraspecific taxa cannot be recognized.

EUPHORBIACEAE**Spurge Family***Euphorbia hyssopifolia* L.

hyssop-leaf sandmat

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Wheeler (1941). However, Wheeler did not attribute the species to Arkansas.

Euphorbia obtusata Pursh

blunt-leaf spurge

Yatskievych (2006) recognized this taxon as distinct and reported it from Missouri, including Barry, Howell, Oregon, and Ripley counties. Weakley (2008) also recognized it as distinct and lists a range that seems to include Arkansas. However, other authorities merge this entity with *E. spathulata* (Great Plains Flora Association 1986; Smith 1988; Kartesz 2009). Further investigation is needed in order to determine the distinctness of *E. obtusata* in Arkansas, but for now we are following the latter group and including it within *E. spathulata*.

Euphorbia pubentissima Michx.

false flowering spurge

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, this taxon apparently exists to the east and southeast of Arkansas (Yatskievych 2006; Weakley 2008), and is likely reported for the state based on the misapplication of one or more of its synonyms (Yatskievych 2006).

Euphorbia tetrapora Engelm.

weak spurge

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on material of a new species currently being described from the Ouachita Mountains of Arkansas and Oklahoma (Mark H. Mayfield, pers. comm. 2007). *Euphorbia tetrapora* is reported, though, from "sandy woods and fields" (Diggs et al. 1999) in eastern Texas and western Louisiana, including Caddo Parish (Kartesz 2009) and remains a possibility in the Gulf Coastal Plain of Arkansas.

FABACEAE**Bean Family***Abrus precatorius* L.

rosary-pea

PLANTS Database (USDA 2008) attributed this tropical African and Asian species to Arkansas, citing Isely (1998). However, the report is based on an error in Isely's (1998) map in which the symbols for *A. precatorius* and *Amorpha nitens* are transposed. *Abrus precatorius* is only known in the United States from peninsular Florida (Isely 1998; Kartesz 2009), and is not to be expected in Arkansas.

Canavalia ensiformis (L.) DC.

wonder-bean, Jack-bean

Kartesz (2009) attributed this tropical American species to Arkansas, as did PLANTS Database (USDA 2008), which cited Sauer (1964). Peck (2003) also attributed it to the state, referencing Sauer. Sauer did cite two Arkansas voucher specimens of this species: one at the Gray Herbarium (GH) and the other in the Herbarium of the Field Museum of Natural History (F). There are also several specimens in the University of Arkansas Herbarium (UARK), but all are obviously of cultivated material. Isely (1998) stated that he had not seen definitive specimens of non-cultivated material outside of Florida. It stands to reason that the specimens cited by Sauer are likely of cultivated material as well, and that the species should probably be excluded from the state flora.

Codariocalyx gyroides (Roxb. ex Link) Hassk.

false tick-trefoil

Kartesz (2009) attributed this Asian species to Arkansas, apparently based on reports of the native *Desmodium ciliare*. *Codariocalyx gyroides*, though, has supposedly not been documented from the United States (Isely 1998; USDA 2008).

Crotalaria rotundifolia (Walter) Walter ex J.F.Gmel.

rabbitbells

This species was reported for Arkansas by Thomas et al. (1991) [as *C. angulata* Miller], Smith (1994) [as *C. angulata*], and subsequently by PLANTS Database (USDA 2008) and Kartesz (2009), based on misdetermined material of *C. sagittalis*. *Crotalaria rotundifolia* approaches Arkansas no closer than southeastern Louisiana and southern Mississippi (Isely 1998; Kartesz 2009) and doubtfully occurs in the state.

Dalea compacta Spreng.
var. *pubescens* (A.Gray) Barneby prairie-clover

The Hempstead County voucher specimen of this variety cited by Orzell and Bridges (1987), which also served as the basis for the Arkansas reports by Smith (1988), the Arkansas Vascular Flora Committee (2006), PLANTS Database (USDA 2008), and Kartesz (2009), has since been redetermined as *D. purpurea* var. *purpurea*. The Arkansas Natural Heritage Commission had a report of another specimen from Little River County in the Arkansas Heritage Program database, but the voucher specimen cannot be located and remains unconfirmed (Theo Witsell, pers. comm. 2009). Therefore, *Dalea compacta* var. *pubescens* should probably be excluded from the state flora for now. However, it is reported from northwestern Louisiana, including Caddo Parish, southern Oklahoma, and eastern Texas (Isely 1998; Kartesz 2009) and may occur in southwestern Arkansas.

Galactia regularis (L.) Britton, Sterns & Poggenb. milk-pea

There is considerable confusion between this taxon and *G. volubilis* due to unstable nomenclatural application. Both are members of a closely related group of taxa within the genus in the southeastern United States. Traditionally, it seems that the name *G. volubilis* was most often applied to the more widespread entity that spans from New York to Florida, west to Kansas, Oklahoma, and Texas. The name *G. regularis*, therefore, was most often applied to the entity more restricted to the outer coastal plain. Duncan (1979) studied the group and concluded that the name *G. regularis* was better applied to the more widespread entity, and that the more restricted entity actually consisted of several taxa, including *G. glabella* Michx. and *G. volubilis*. The Great Plains Flora Association (1986) and Smith (1988, 1994) followed Duncan's interpretation. Thus all Arkansas material was called *G. regularis*. The application of the names, however, was not settled by Duncan's work. Even among more recent manuals one or the other name may be applied to the same plant; hence the report of both taxa for Arkansas in the *Checklist* (AVFC 2006). Weakley (2008) basically follows Duncan, although he does not separate *G. glabella* from *G. volubilis*. Diggs et al. (1999) and Isely (1998) treat the more widespread entity (and, therefore, Arkansas material) as *G. volubilis*, but even Isely's treatment lends itself to some confusion. Using Isely's key, all Arkansas material examined thus far keys to *G. volubilis*. This is supported by his description of the range of this taxon, as well as by his description of the range of the more restricted *G. regularis*, which he stated as ranging from southeastern New York and southeastern Pennsylvania, south to Florida, and west to southern Mississippi (Isely 1998). The confusion lies in the fact that his map shows both taxa in Arkansas [as well as in Louisiana]. At least a portion of the *G. regularis* map may be in error, though, as some of the distribution [including the Arkansas dots] correspond to the distribution map for Duncan's *G. regularis* [Isely's *G. volubilis*]. On an additional note, PLANTS Database (USDA 2008) and Kartesz (2009) attributed both taxa to Arkansas, but their maps seem generally confused as well. After close examination of Arkansas material, it appears that only one entity is represented in the state, and, without having studied the type material ourselves, we choose to follow Isely's keys, descriptions, and described ranges of the two taxa [while assuming his map for *G. regularis* is erroneous], thus recognizing only *G. volubilis* for the state.

Lathyrus ochroleucus Hook. cream-pea, cream vetchling

This northern North American species (Isely 1998; Kartesz 2009) was erroneously reported for Arkansas in the *Checklist* (AVFC 2006).

Lespedeza intermedia (S.Watson ex A.Gray) Britton bush-clover

Specimens treated by Smith (1988, 1994), the Arkansas Vascular Flora Committee (2006), and many other regional floras (e.g., Isely 1998) as *L. intermedia* are actually correctly referable to *L. violacea*, a name which the aforementioned authorities misapplied to plants correctly called *L. frutescens*.

Pediomelum hypogaeum (Nutt. ex Torr. & A.Gray) Rydb.
var. *scaposum* (A.Gray) Mahler buried Indian-breadroot

Orzell and Bridges (1987) reported this taxon [as subsp. *scaposum* (Gray) Ockendon] for Miller County but stated that the voucher specimen seemed to have mixed characters. However, Smith (1988) postulated that the specimen probably represented var. *subulatum* [as *Psoralea subulata* Bush], and thus did not include var. *scaposum* in the state flora. Furthermore, Isely (1998), Diggs et al. (1999), and Kartesz (2009) all treated var. *scaposum* as endemic to central and north-central Texas.

Prosopis juliflora (Sw.) DC. mesquite

Kartesz (2009) attributed this tropical American species to Pulaski County [the only record for the contiguous United States], citing Smith (1988). However, the specimen mentioned by Smith actually represents material of *P. glandulosa* var. *glandulosa*, which, incidentally, Kartesz also showed for Pulaski County, citing Smith.

Trifolium hirtum All. rose clover

This Eurasian species was reported for Arkansas in the *Checklist* (AVFC 2006), and subsequently by Kartesz (2009), based on misdetermined material.

Vicia cracca L.
var. *cracca* tufted vetch

PLANTS Database (USDA 2008) attributed this European taxon to Arkansas, citing Smith (1988). However, although it had been listed for the state by Demaree (1943), Smith excluded it as “probably not in the state.” Furthermore, Kartesz (2009) did not attribute it to Arkansas.

HALORAGACEAE **Water-milfoil Family**

Myriophyllum verticillatum L. whorled water-milfoil

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing an unpublished and undated *Vascular Flora of the Southeastern United States*, edited by Albert E. Radford et al. However, its range is generally well north of Arkansas (Kartesz 2009), and it seems rather unlikely to occur in the state.

HYDRANGEACEAE **Hydrangea Family**

Philadelphus sharpianus Hu Sharp’s mock orange

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Demaree (1943), and Kartesz (2009) showed it for Van Buren County, citing Hu (1954 [presumably 1956]). Some authorities (e.g., Tucker 1976; Smith 1988; Weakley 2008), though, believe that this entity is probably better treated as a form of *P. hirsutus*. We are in agreement with the latter group.

JUGLANDACEAE **Walnut Family**

Carya ovalis (Wangenh.) Sarg. red hickory

PLANTS Database (USDA 2008) attributed this taxon to Arkansas, citing Smith (1988). Smith did recognize this entity but as a variety of *C. glabra* [var. *odorata* (Wangenh.) K.Koch]. However, some authorities (e.g., Stone 1997; Kartesz 2009) treat this entity as merely a form of *C. glabra*. We are following the latter group in the present treatment.

KRAMERIACEAE **Ratany Family**

Krameria lanceolata Torr. trailing ratany

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). As Peck (2003) stated, though, it is probable that the report was ultimately based on a Thomas Nuttall specimen from Oklahoma, part of Arkansas Territory during his time, or even a C.W. Short specimen at the Missouri Botanical Garden Herbarium (MO) collected on the “Arkansas [River] at Leavenworth,” which also falls within Oklahoma. The range of this species is generally to the west of the Arkansas (Kartesz 2009), although it is reported in McCurtain County, Oklahoma, and thus may occur in southwestern Arkansas.

LAMIACEAE **Mint Family**

Clinopodium glabellum (Michx.) Kuntz calamint

This species was cited for Arkansas by Weakley (2008). However, this is evidently a taxon of north-central Kentucky, central Tennessee, and northern Alabama (Kartesz 2009). There apparently has been some confusion between this taxon and *C. arkansanum*. Evidently, broad-leaf forms [“probably environmentally induced” (Smith 1988)] of *C. arkansanum* superficially resemble *C. glabellum*.

Clinopodium vulgare L.

wild basil

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Demaree (1943). This report is likely erroneous, though, as the primary range of this species seems to be well northeast of Arkansas (Kartesz 2009).

Hedeoma drummondii Benth.

false pennyroyal

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing the Arkansas Heritage Program. However, this report is almost certainly based on the Arkansas record of *H. reverchonii* var. *reverchonii* [synonym: *H. drummondii* var. *reverchonii*], which PLANTS Database did not attribute to the state. *Hedeoma drummondii* occurs primarily to the west of Arkansas (Kartesz 2009) and probably does not occur in the state.

Lamium maculatum L.

spotted dead-nettle

Kartesz (2009) attributed this species to Arkansas, likely based on the Arkansas report in the *Checklist* (AVFC 2006). However, this name was misapplied in the *Checklist* to apparent waif material of *Lamiastrum galeobdolon* (L.) Ehrend. & Polatschek.

Monarda fistulosa L.var. *fistulosa*

beebalm, wild bergamot

This variety has been variously reported for Arkansas (e.g., Great Plains Flora Association 1977; AVFC 2006; USDA 2008; Kartesz 2009). However, we are following Weakley (2008) in his interpretation of the varietal limits of *M. fistulosa*. Accordingly, the typical variety, restricted to the Appalachians, has only spreading hairs. Thus, Arkansas material, with its canescent pubescence, is better treated as var. *mollis*.

Monarda lindheimeri Engelm. & A.Gray ex A.Gray

Lindheimer's beebalm

Arkansas material previously attributed to this species (AVFC 2006; Kartesz 2009) is referable to the recently described *M. luteola* (Singhurst & Holmes 2011).

Origanum vulgare L.

wild marjoram

Smith (1994) included this cultivated Eurasian species in the Arkansas flora based on a specimen at the University of Arkansas Herbarium (UARK) that was accidentally transplanted to a different site with some topsoil from a persistent plant at an old home site. Kartesz (2009) attributed the species to the state, though, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, the basis for Demaree's report is unknown. The species should probably be excluded from the state flora until a truly naturalized voucher specimen is located.

Prunella vulgaris L.subsp. *vulgaris*

heal-all, self-heal

This Eurasian subspecies was erroneously reported for Arkansas in the *Checklist* (AVFC 2006), and subsequently by Kartesz (2009), based on misdetermined material of subsp. *lanceolata*.

Scutellaria incana Biehlervar. *punctata* (Chapm.) C.Mohr

hoary skullcap

Kartesz (2009) attributed this variety to Arkansas, as did PLANTS Database (USDA 2008), which cited Fernald (1950). However, all Arkansas specimens of *S. incana* observed thus far are referable to the typical variety. Furthermore, Weakley (2008) stated that var. *punctata* is a southern Appalachian endemic.

Stachys cordata Riddell

heart-leaf hedge-nettle

Kartesz (2009) attributed this species to Logan, Montgomery, and Polk counties, citing Nelson (1975). PLANTS Database (USDA 2008) also attributed it to the state, citing Demaree (1943). However, these records are almost certainly based on the recently described *S. iltisii* (Nelson 2008). The primary range of *S. cordata* is well east of Arkansas (Kartesz 2009) and it is doubtfully expected in the state.

Stachys eplingii J.Nelson

Epling's hedge-nettle

Arkansas material previously treated as this species (Smith 1988, 1994; AFVC 2006; USDA 2008; Kartesz 2009) has recently been referred to the newly described *S. iltisii* (Nelson 2008). *Stachys eplingii* is restricted to the southern Appalachian Mountains (Nelson 2008) and is not to be expected in Arkansas.

LINACEAE**Flax Family***Linum rigidum* Pursh
var. *rigidum*

yellow flax

PLANTS Database (USDA 2008) attributed this taxon to Arkansas, citing Demaree (1943). However, the primary range of this taxon appears to be well west of Arkansas, in the central and northern Great Plains, approaching Arkansas no closer than central Oklahoma (Kartesz 2009; Rogers 1968). Demaree's report was likely in reference to *L. rigidum* var. *berlandieri*. Variety *rigidum* is probably not to be expected in the state.

Linum virginianum L.

woodland flax, Virginia yellow flax

This species was listed for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. It is reported, though, from southern Missouri, including Howell, McDonald, Oregon, and Ozark counties (Kartesz 2009) and thus could possibly occur in northern Arkansas.

MALVACEAE**Mallow Family***Althaea officinalis* L.

marsh-mallow

Kartesz (2009) attributed this European species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, although it had been listed for the state by Demaree (1943), Smith excluded it from the flora, stating that "this cultivated species persists in old gardens around old homesteads, but does not really escape in the state." No Arkansas voucher specimens have been located for this species.

MYRSINACEAE**Colicwood Family***Lysimachia japonica* Thunb.

Japanese yellow-loosestrife

Kartesz (2009) attributed this eastern Asian species to Arkansas, as did PLANTS Database (USDA 2008), which cited Sundell et al. (1999). However, the voucher specimen cited by Sundell et al. appears to be material spreading within a garden from cultivated plants. In light of this fact, the species probably does not deserve inclusion in the state flora at this time.

NYCTAGINACEAE**Four-o'clock Family***Mirabilis hirsuta* (Pursh) MacMill.

hairy four-o'clock

Smith (1988, 1994), PLANTS Database (USDA 2008), and Kartesz (2009) recognized this taxon as distinct from *M. albida*, and reported it for Arkansas. Nevertheless, we are following Spellenberg (2003) in treating it as merely a form of the variable *M. albida*.

Mirabilis linearis (Pursh) Heimerl
var. *linearis*

narrow-leaf four-o'clock

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, although it had been listed for the state by Demaree (1943), Smith excluded this species from the flora. Although it is reported just to the west and northwest of Arkansas (Kartesz 2009; Spellenberg 2003) and possibly occurs in western parts of the state, no voucher specimen has yet been located to verify its existence in the state.

OLEACEAE**Olive Family***Forsythia suspensa* (Thunb.) Vahl

weeping forsythia

This Chinese species was reported for Arkansas in the *Checklist* (AVFC 2006) based on cultivated material. Kartesz (2009) attributed it to Newton County, citing Thompson (1977). PLANTS Database (USDA 2008) also attributed it to the state, citing Smith (1988). Smith, however, excluded the species, explaining that the Newton County report was based on cultivated material.

Ligustrum amurense Carrière

Amur privet

This Chinese species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. Kartesz (2009) did attribute it to Poinsett County, though, citing Smith (1988). PLANTS Database (USDA 2008) also attributed it to the state, citing Smith. However, despite the Poinsett County report (Johnson 1971), Smith excluded *L. amurense* from the flora, stating that this is a “cultivated species, not known to escape in Arkansas.” Although the voucher specimen has not been located or reviewed, the Poinsett County report should probably be considered dubious.

Syringa vulgaris L.

lilac

PLANTS Database (USDA 2008) attributed this European species to Arkansas, citing Smith (1988). However, Smith excluded it, stating that the Newton County report by Thompson (1977) was based on cultivated material.

ONAGRACEAE**Evening-primrose Family***Ludwigia bonariensis* (Micheli) H.Hara

primrose-willow

This tropical American species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. At present, it is only known to be introduced in the United States to coastal areas from Virginia to Alabama (Kartesz 2009).

Ludwigia grandiflora (Michx.) Greuter & Burdet
subsp. *grandiflora*

primrose-willow

PLANTS Database (USDA 2008) attributed this tropical American subspecies to Arkansas, citing Smith (1988). Smith, though, only included subsp. *hexapetala* [as *L. hexapetala* (Hook. & Arn.) Zardini & Peng]. Kartesz (2009) showed the typic subspecies for Lawrence and Pike counties, citing two reports that originated from the University of Arkansas Herbarium (UARK). However, all UARK specimens of this species are referable to subsp. *hexapetala*.

OROBANCHACEAE**Broomrape Family***Agalinis aspera* (Douglas ex Benth.) Britton

tall false foxglove, tall gerardia

The Arkansas reports of this species by Smith (1988), and subsequently by PLANTS Database (USDA 2008) and Kartesz (2009), were based on misdetermined material. However, it does apparently approach Arkansas in southeastern Kansas and southwestern Missouri (Kartesz 2009) and seems at least possible in northwestern Arkansas.

Agalinis nuttallii Shinnery

Nuttall's false foxglove, Nuttall's gerardia

Kartesz (2009) recognized this taxon as distinct and attributed it to Arkansas, as did PLANTS Database (USDA 2008), which cited Pennell (1935). Peck (2003) also attributed it to the state, citing Pennell. However, this name is probably better treated as synonymous with *A. homalantha* (John F. Hays, pers. comm. 2003).

Agalinis setacea (J.F.Gmel.) Raf.

false foxglove, gerardia

This species was reported for Arkansas by PLANTS Database (USDA 2008) and Kartesz (2009) based on misdetermined material of *Agalinis gattingeri*. The primary range of this species is well east of Arkansas (Kartesz 2009) and it is not to be expected in the state.

OXALIDACEAE**Wood-sorrel Family**

Oxalis albicans Kunth
subsp. *albicans*

yellow wood-sorrel

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Turner (1994). Turner, however, treated *O. corniculata* in a very broad sense, admittedly including Eiten's (1955, 1963) concepts of *O. dillenii* and *O. stricta* within *O. corniculata* var. *wrightii* (A.Gray) B.L.Turner, a name widely treated as a synonym of the more restricted and southwestern North American *O. albicans* subsp. *albicans* (Eiten 1963; USDA 2008; Kartesz 2009). Therefore, the reports of *O. albicans* subsp. *albicans* for Arkansas are almost certainly based on material of either *O. dillenii* or *O. stricta*.

PAPAVERACEAE**Poppy Family**

Argemone mexicana L.

Mexican prickly-poppy, yellow prickly-poppy

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Demaree (1943). Kartesz (2009) attributed it to Fulton County, citing the University of North Carolina Herbarium (NCU) as the location of a voucher specimen. These reports, however, are based on material of *A. albiflora* subsp. *texana*.

Corydalis aurea Willd.
subsp. *aurea*

golden corydalis

PLANTS Database (USDA 2008) attributed this taxon [as *C. aurea*] to Arkansas, citing Smith (1988). However, Smith had actually excluded it [as *C. aurea*] from the flora. Kartesz (2009) also attributed it [as *C. aurea*] to the state, specifically Washington County, but based on a misdetermined specimen at the University of North Carolina Herbarium (NCU). An Arkansas occurrence of this taxon would be considerably disjunct from its western and northern North American range (Stern 1997). Thus, *C. aurea* doubtfully occurs in the state.

Fumaria officinalis L.

drug fumitory

This Mediterranean species was not attributed to Arkansas by Boufford (1997) but was by Kartesz (2009) [as subsp. *officinalis*], as well as by PLANTS Database (USDA 2008) [as subsp. *officinalis*], which cited Smith (1988). Smith treated it as a possible addition to the state flora, postulating that a single Pulaski County specimen at the University of Arkansas Herbarium (UARK) possibly represented "a local escape from cultivation." The species was subsequently listed for Arkansas in the *Checklist* (AVFC 2006) based on this Pulaski County specimen collected in Little Rock in 1955 and which lacks any information on its cultivation status. Given that this specimen may represent cultivated material and since no other collections have been made in the intervening years, it should probably be excluded from the state flora.

PLANTAGINACEAE**Plantain Family**

Penstemon tenuiflorus Pennell

beardtongue

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). However, Smith excluded the species, stating that the report for Stone County (Browne 1974) was based on misdetermined material.

Plantago elongata Pursh

dwarf plantain

This name was applied in the *Checklist* (AVFC 2006) to plants currently treated as *P. pusilla*. There are differing opinions on whether *P. pusilla* should be recognized as distinct from *P. elongata*. The Great Plains Flora Association (1986) and Diggs et al. (1999) merged *P. pusilla* with *P. elongata*. In the present treatment, however, we are following Weakley (2008) and Kartesz (2009) in recognizing *P. pusilla*.

Veronica agrestis L.

field speedwell

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this Eurasian species to Arkansas, citing Smith (1988). However, Smith (1988, 1994) misapplied the name *V. agrestis* to material of *V. polita*.

Veronica americana Schwein. ex Benth.

American speedwell, American brooklime

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Baxter County, citing Smith (1988). It was also reported for Arkansas in the *Checklist* (AVFC 2006) based on the specimen cited by Smith. However, upon close examination, the voucher specimen cited by Smith was actually found to be referable to *V. anagallis-aquatica*. *Veronica americana* is primarily a western and northeastern North American taxon (Kartesz 2009), and is probably not to be expected in the state.

POLYGALACEAE

Milkwort Family

Polygala alba Nutt.

white milkwort

This species was attributed to Arkansas by Peck (2003) and listed for the state in the *Checklist* (AVFC 2006) based on misdetermined material. It has a western and central Plains distribution, approaching Arkansas in central Texas, central Oklahoma, and central Kansas (Kartesz 2009) but probably does not occur in the state.

Polygala nuttallii Torr. & A.Gray

Nuttall's milkwort

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Jefferson County, citing Smith (1988). Smith (1988, 1994), however, included it in the Arkansas flora based on a misdetermined Jefferson County specimen, as well as on a citation by Miller (1971). The primary range for this species is generally well east of Arkansas (Kartesz 2009; Weakley 2008), though, and an Arkansas occurrence seems doubtful.

POLYGONACEAE

Buckwheat Family

Fallopia cristata (Engelm. & A.Gray) Holub

climbing false buckwheat, hedge-smartweed

Kartesz (2009) recognized this species as distinct from *F. scandens* and attributed it to Arkansas. PLANTS Database (USDA 2008) also recognized the taxon [as *Polygonum scandens* L. var. *cristatum* (Engelm. & A.Gray) Gleason] as distinct from *F. scandens* [as *Polygonum scandens* var. *scandens*] and attributed it to the state, citing Smith (1988). Smith, however, noted that the two entities had been convincingly shown to intergrade completely and, thus, did not treat them as distinct. Furthermore, neither Freeman and Hinds (2005) nor Weakley (2008) recognized *F. cristata* as distinct from *F. scandens*. We are following the latter group in the present treatment.

Fallopia dumetorum (L.) Holub

corpse-bindweed, climbing false buckwheat

Freeman and Hinds (2005) and Kartesz (2009) attributed this Eurasian species to Arkansas. PLANTS Database (USDA 2008) also attributed it [as *Polygonum scandens* L. var. *dumetorum* (L.) Gleason] to the state, citing Demaree (1943). However, Freeman and Hinds state that “[e]xperience suggests that many North American herbarium specimens attributed to *F. dumetorum* are misidentified” and that “the range of *F. dumetorum* in North America is unclear...[and] probably exaggerated in most floras.” In support of their statement, all Arkansas voucher specimens originally determined as this taxon that have been examined thus far actually represent material of *F. scandens*. *Fallopia dumetorum* probably does not occur in the state.

Polygonum bellardii All.

knotweed, knotgrass

PLANTS Database (USDA 2008) attributed this European species to Arkansas, citing Demaree (1943). However, PLANTS Database treats *P. neglectum* Besser [i.e., *P. aviculare* subsp. *neglectum*], which is attributed to Arkansas by Costea et al. (2005) and Kartesz (2009), as a synonym of *P. bellardii*. Costea et al. and Kartesz, though, only attribute *P. bellardii* in the stricter sense to Massachusetts. *Polygonum bellardii* almost certainly does not occur in Arkansas.

Rumex maritimus L.

golden dock

PLANTS Database (USDA 2008) attributed this Eurasian species to Arkansas, citing a 1937 *Contributions from the United States National Herbarium* article. Evidently, though, the citation was actually based on Rechinger (1937), which was a *Field Museum of Natural History* work. It should be noted that PLANTS Database synonymized the North American indigenous *R. fueginus* with *R. maritimus*. Rechinger, Mosyakin (2005), and Kartesz (2009) all treated *R. maritimus* as very sparingly introduced in North America, with no populations near Arkansas. *Rumex maritimus*, as recognized by these latter three authorities, should be excluded from the Arkansas flora.

PORTULACACEAE**Purslane Family***Claytonia caroliniana*

Carolina spring-beauty, tangle-gut

This name was misapplied by Smith (1988, 1994) and in the *Checklist* (AVFC 2006) to material of the more recently described *C. ozarkensis* and wide-leaf forms of *C. virginica*. The range of *C. caroliniana* occurs well east of Arkansas and it is not to be expected in the state.

Portulaca halimoides L.

silk-cotton purslane

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited the *North American Flora* series published by the New York Botanical Garden. However, this is a plant of the southwestern United States and Mexico and seems rather unlikely to occur in Arkansas (Matthews 2003).

RANUNCULACEAE**Buttercup Family***Ranunculus cymbalaria* Pursh

buttercup

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Keener (1976). Keener did include the Gulf Coastal Plain of Arkansas as within the range of this species, but the primary range appears to be well to the west and northwest of the state (Kartesz 2009; Whittemore 1997). It seems rather unlikely to occur in Arkansas and until a voucher specimen is located to verify its existence, it seems best to exclude it from the state flora.

ROSACEAE**Rose Family***Agrimonia gryposepala* Wallr.

agrimony

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). However, Smith excluded the species, stating that a previous Arkansas report proved to be a misdetermination. The primary range of this species is generally well north and northeast of Arkansas (Kartesz 2009) and it seems unlikely to occur in the state.

Crataegus arborea Beadle

Montgomery hawthorn

Kartesz (2009) recognized this taxon as distinct and attributed it to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, in the present treatment we are following Tucker (1976) and Smith (1988) in synonymizing it with *C. berberifolia*.

Crataegus carrollensis Sarg.

Eureka Springs hawthorn

Kartesz (2009) recognized this taxon as distinct and attributed it to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, in the present treatment we are following Tucker (1976) and Smith (1988) in synonymizing it with *C. calpodendron*.

Crataegus collina Chapm.

Chapman's hawthorn

Weakley (2008) recognized this taxon as distinct and attributed it to Arkansas. It was reported for Arkansas in the *Checklist* (AVFC 2006) based on Weakley's citation. However, in the present treatment we are following Tucker (1976), Smith (1988), and Kartesz (2009) in synonymizing it with *C. punctata*.

Crataegus engelmannii Sarg.

Engelmann's hawthorn

PLANTS Database (USDA 2008) and Kartesz (2009) recognized this taxon and attributed it to Arkansas. Diggs et al. (1999) also recognized this species, listing *C. berberifolia* as a synonym. However, in the present treatment we are following Tucker (1976) and Smith (1988) in synonymizing *C. engelmannii* with *C. berberifolia*.

Crataegus flabellata (Bosc ex Spach) Rydb.

fan-leaf hawthorn

PLANTS Database (USDA 2008) and Kartesz (2009) recognized this taxon and attributed it to Pope County, citing Smith (1988). It was reported for Arkansas in the *Checklist* (AVFC 2006) based on these citations. However, in the present treatment we are following Tucker (1976) and Weakley (2008) in treating it as a synonym of *C. macrosperma*.

Crataegus harveyana Sarg.

Harvey's hawthorn

Kartesz (2009) recognized this taxon as distinct and attributed it to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). It was reported for Arkansas in the *Checklist* (AVFC 2006) based on these citations. In the present treatment, however, we are following Tucker (1976) and Smith (1988) in synonymizing it with *C. intricata*.

Crataegus lanuginosa Sarg.

hawthorn

Kartesz (2009) recognized this taxon as distinct and attributed it to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, in the present treatment we are following Tucker (1976) and Smith (1988) in synonymizing it with *C. mollis*.

Crataegus nitida (Engelm.) Sarg.

hawthorn

Kartesz (2009) recognized this taxon as distinct and attributed it to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, in the present treatment we are following Tucker (1976) and Smith (1988) in synonymizing it with *C. viridis*.

Crataegus reverchonii Sarg.

Reverchon's hawthorn

Kartesz (2009) recognized this taxon as distinct and attributed it to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). It was reported for Arkansas in the *Checklist* (AVFC 2006) based on these citations. However, in the present treatment we are following Tucker (1976) and Smith (1988) in synonymizing it with *C. crus-galli*.

Crataegus thermopegaea E.J.Palmer

graceful hawthorn

Kartesz (2009) recognized this taxon as distinct and attributed it to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). Peck (2003) also attributed it to the state. In the present treatment, however, we are following Tucker (1976) and Smith (1988) in synonymizing it with *C. calpodendron*.

Prunus cerasus L.

sour cherry

Kartesz (2009) attributed this Eurasian species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, Smith excluded it, stating that the Newton County report (Thompson 1977) was based on cultivated material.

Prunus pumila L.var. *besseyi* (L.H.Bailey) Gleason

sand cherry

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this variety to Prairie County based on Smith's (1988) report of var. *susquehanae*. PLANTS Database and Kartesz treated var. *susquehanae* at the species level and showed it well to the east and northeast of Arkansas. However, in the present treatment we are following Joseph R. Rohrer (pers. comm. 2008), who stated that the Arkansas material is best treated as *P. pumila* var. *susquehanae*.

Pyracantha coccinea M.Roemer

scarlet firethorn

This Eurasian species was erroneously reported for Arkansas in the *Checklist* (AVFC 2006) based on apparently cultivated material. Kartesz (2009) did attribute it to Arkansas, though, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, Smith excluded it from the Arkansas flora, stating that the Newton County report (Thompson 1977) was based on cultivated material.

Rosa arkansana Portervar. *suffulta* (Greene) Cockerellsunshine rose,
wild prairie rose

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this taxon to Benton County, citing Smith (1988). Smith did attribute the taxon to Benton County, merely citing the Demaree specimen that Tucker (1976) had stated was housed at the University of Arkansas Herbarium (UARK). The taxon was also reported for Arkansas in the *Checklist* (AVFC 2006) based on Tucker's authority. However, the voucher specimen, which has since been located at the Arkansas Tech University Herbarium (APCR) instead, actually represents material of *R. carolina*. Although it must now be excluded from the Arkansas flora in light of this evidence, the range of *R. arkansana* does approach Arkansas

in northeastern Oklahoma, southeastern Kansas, and southwestern Missouri (Kartesz 2009), and thus it remains a possibility in northwestern Arkansas.

Rosa canina L. dog rose

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this Eurasian species to Franklin County, citing Smith (1988). However, Smith excluded it, stating that the single voucher specimen “probably represents a local escape or was persistent at an old home site.” We are in agreement with Smith and are, likewise, excluding it from the flora.

Rosa virginiana Mill.
var. *virginiana* Virginia rose

PLANTS Database (USDA 2008) attributed this taxon to Arkansas, citing the *North American Flora* series published by the New York Botanical Garden. The primary range of this taxon, however, is considerably northeast of Arkansas (Kartesz 2009) and it seems rather unlikely to occur in the state.

Rubus bushii L.H. Bailey Bush’s high-bush blackberry

The Arkansas plants to which Kartesz (2009) applied this name are currently treated at *R. laudatus*.

Rubus discolor Weihe & Nees Himalayan blackberry

Smith (1988, 1994) misapplied this name to Arkansas material of *R. armeniacus* (Johnnie L. Gentry, pers. comm. 2009). The name *R. discolor* is an illegitimate name and has been treated as a synonym of another European species, *R. ulmifolius* Schott (Ceska 1999).

Rubus idaeus L.
var. *idaeus* red raspberry

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this European taxon to Arkansas, citing Smith (1988). Smith included it in the Arkansas flora based on Tucker’s (1976) authority. Tucker stated that it was escaping from old homesites in the Ozarks; however, no voucher specimens have been located to verify this claim.

Rubus ostryifolius Rydb. high-bush blackberry

Smith (1988, 1994) included this species in the Arkansas flora. However, Kartesz (2009) showed it occurring only in the extreme northeastern United States, placing the Arkansas records under the name *R. bushii*. The name *R. ostryifolius* as used by Rydberg is illegitimate because the binomial had previously been associated with an unrelated European species. The North American type specimen to which Rydberg applied this name is actually a member of section *Flagellares* (dewberries) and not applicable to any member of section *Arguti* (high-bush blackberries) (Johnnie L. Gentry, pers. comm. 2009). The Arkansas plants to which Smith applied the name *R. ostryifolius* are currently treated as *R. laudatus*.

Rubus pensilvanicus Poir. high-bush blackberry

Smith (1988, 1994) included this species in the Arkansas flora. However, Kartesz (2009) showed in the northeastern United States, west and south to Minnesota, Illinois, and Tennessee. We are considering this name applicable to a northeastern element of *Rubus* that is apparently not present in Arkansas. The entity within Arkansas to which Smith applied this name is being treated as *R. laudatus*.

Rubus pubifolius L.H. Bailey high-bush blackberry

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Davis et al. (1969). However, this name should be placed in synonymy with *R. alumnus* (Widrechner 1998).

Spiraea ×*vanhouttei* (Briot) Carrière spiraea
{*S. cantoniensis* Lour. × *S. trilobata* L. }

Kartesz (2009) attributed this Asian hybrid to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Smith, however, excluded it from the flora, stating that the Newton County report (Thompson 1977) was based on cultivated material.

RUBIACEAE**Madder Family***Houstonia tenuifolia* Nutt.

bluet

Weakley (2008) recognized this taxon as distinct and stated that its distribution is centered in the southern Appalachians and Ozarks, presumably including Arkansas. However, in the present treatment we are following Terrell (1991) and Kartesz (2009) in placing it in synonymy with *H. longifolia*.

RUTACEAE**Rue Family***Zanthoxylum hirsutum* Buckley

toothache-tree, Texas Hercules'-club

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Correll and Johnston (1970). Although Correll and Johnston did list Arkansas as within the range of this species, Smith (1988) implied that previous Arkansas reports of *Z. hirsutum* were erroneous. Furthermore, Kartesz (2009) showed the range of this species extending from south-central Oklahoma through central Texas to Mexico, well excluding Arkansas.

SALICACEAE**Willow Family***Populus tremuloides* Michx.

quaking aspen

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). However, Smith had excluded it, stating that the report for Crittenden County (Wilcox 1973) was likely based on cultivated material. No voucher specimens have been located, and given that the primary range of this species is well north and west of Arkansas (Kartesz 2009), it seems rather unlikely that it occurs in the state.

Salix amygdaloides Andersson

peach-leaf willow

Although the Arkansas report of this species by the Great Plains Flora Association (1977) had proven erroneous and both Tucker (1976) and Argus (1986) had excluded it from the state flora, Smith (1988) included it in his *Atlas* based on a Crittenden County report by Wilcox (1973), which Smith had not verified. However, Smith (1994) later treated it as merely a possible addition to the flora in his *Keys*. The species is reported as approaching Arkansas in southeastern Missouri (Kartesz 2009) and remains a possibility for the state but for now should probably be excluded from the flora.

SOLANACEAE**Nightshade Family***Petunia axillaris* (Lam.) Britton, Sterns, & Poggenb.

white garden petunia

Kartesz (2009) attributed this South American species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). Although it had been listed for the state by Demaree (1943), Smith excluded it as an occasional waif and not a normal part of the flora. Regardless, all escaped or waif *Petunia* material observed from Arkansas thus far is referable to *P. ×atkinsiana*.

Solanum physalifolium Rusby

hairy nightshade

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this South American species to Arkansas, citing Smith (1988), who actually listed *S. sarrachoides*, a species that PLANTS Database and Kartesz excluded from the North American flora. *Solanum physalifolium* was reported for Arkansas in the *Checklist* (AVFC 2006) based on the assumption that it was the only widely escaped entity in North America. However, Edmonds (1986) argued that both species are present in North America. Based on her interpretation of the taxa, all Arkansas material observed thus far is referable to *S. sarrachoides*.

Solanum tuberosum L.

potato

Kartesz (2009) attributed this frequently cultivated South American species to Poinsett County, citing Smith (1988). PLANTS Database (USDA 2008) also attributed it to the state, citing Smith. However, Smith excluded this species from the flora, stating that the Poinsett County report (Johnson 1971) was "doubtless on the basis of cultivated material or a waif." We are, likewise, assuming that the specimen is of cultivated material and do not deem it worthy of inclusion in the state flora.

STYRACACEAE**Storax Family**

Halesia tetraptera Ellis
var. *tetraptera*

mountain silverbell

Some authorities (e.g., USDA 2008; Weakley 2008; Kartesz 2009) have attributed this taxon to Arkansas, treating *H. carolina* as a narrowly defined taxon of the extreme southeastern United States from southern Mississippi to South Carolina. The other variety of *H. tetraptera*, var. *monticola* (Rehder) Reveal & Seldina, a name once misapplied to Arkansas material (Smith 1988, 1994), was defined as a southern Appalachian endemic by these same authorities (Weakley 2008; Kartesz 2009). However, Fritsch and Lucas (2000) showed that there is a gradual gradation of characters over the entire southeastern United States and that only one variable species should be recognized. After a thorough review of Arkansas specimens, we are in agreement with Fritsch and Lucas and are treating Arkansas material in the broadly defined and variable *H. carolina*.

TAMARICACEAE**Tamarisk Family**

Tamarix chinensis Lour.

Chinese tamarisk, salt-cedar

This name has been misapplied in Arkansas (Smith 1988, 1994; Crins 1989; AVFC 2006; USDA 2008; Kartesz 2009) to material of *T. ramosissima*. *Tamarix chinensis* is a distinct Asian species (Crins 1989; Diggs et al. 1999) that is not currently known as naturalized in Arkansas.

Tamarix gallica L.

French tamarisk, salt-cedar

This name was misapplied in the *Checklist* (AVFC 2006) to Arkansas material of *T. ramosissima*. *Tamarix gallica* is a distinct European species (Crins 1989; Diggs et al. 1999) that is not currently known as naturalized in Arkansas.

ULMACEAE**Elm Family**

Ulmus parvifolia Jacq.

Chinese elm

Kartesz (2009) attributed this Asian species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, Smith excluded the species, stating that the Newton County report (Thompson 1977) was “doubtless on the basis of cultivated material.” This name seems to have also been misapplied in Arkansas to material of *U. pumila*.

VERBENACEAE**Vervain Family**

Verbena litoralis Kunth

seashore vervain

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this tropical American species to Arkansas. However, it is apparently not known to be naturalized in the United States and the name has been misapplied in Arkansas to material of *V. montevidensis* (Nesom 2010b).

Verbena scabra Vahl

sandpaper vervain

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Arkansas, citing Smith (1988). However, although *V. scabra* had been reported for the state by Demaree (1943), Moore (1965), and Wilcox (1973), Smith excluded it from the Arkansas flora, stating that the reports were probably based on material of *V. urticifolia*. Upon a thorough examination of Arkansas specimens labeled as *V. scabra*, it is now clear that they are, in fact, referable to *V. urticifolia*. *Verbena scabra* occurs to the south of Arkansas, along the outer Gulf and southern Atlantic Coasts, as well as in the southwestern United States (Kartesz 2009). It doubtfully occurs in Arkansas.

VIOLACEAE**Violet Family**

Viola affinis Leconte

Leconte’s violet

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Arkansas, citing Russell (1965). Russell did show it as widely scattered in the state but showed a primary range generally well northeast of Arkansas. Weakley (2008) also described a range that could include Arkansas. However, in the present treatment we are following Smith (1988), who stated that this name has been misapplied in Arkansas to material of *V. sororia*.

Viola arvensis Murray

European field pansy

PLANTS Database (USDA 2008) attributed this European species to Arkansas, citing Smith (1988). However, although it had been listed for the state by Demaree (1943), Smith had actually excluded *V. arvensis* from the Arkansas flora due to the lack of voucher material.

Viola triloba Schwein.

three-lobe violet

PLANTS Database (USDA 2008) and Kartesz (2009) recognized this species and attributed it to Arkansas, citing Russell (1965). In the present treatment, however, we are following Smith (1988, 1994), Diggs et al. (1999), and Weakley (2008) in treating it as a synonym of *V. palmata*.

ANGIOSPERMS (MONOCOTS)

AGAVACEAE

Agave Family

Yucca glauca Nutt.

yucca, soapweed

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Demaree (1943) and Tucker (1976). However, Tucker did not report this species for the state, and the report by Demaree was likely based on *Y. glauca* var. *mollis* Engelm. ex Branner & Coville, a synonym of *Y. arkansana*. *Yucca glauca* is reported as far east as eastern Oklahoma, including McCurtain County (Hess & Robbins 2002; Kartesz 2009), and would seem possible for western Arkansas. However, it is possible that some of the eastern Oklahoma records may actually represent material of *Y. arkansana*.

ALISMATACEAE

Water-plantain Family

Echinodorus tenellus (Mart.) Buchenau

dwarf burhead

The specimen cited by Sorrie and LeBlond (2008), the basis for the reports by Kartesz (2009) and PLANTS Database (USDA 2008) [which cited the original report by Lipscomb (1977)], and the same specimen that Smith (1988) cited as the state voucher for *E. berteroi*, actually represents material of *Sagittaria graminea*. *Echinodorus tenellus*, widely scattered and uncommon throughout its range, has been reported from all states surrounding Arkansas except Tennessee (Kartesz 2009), including from Howell County, Missouri (Yatskievych 1999; Kartesz 2009) and McCurtain County, Oklahoma (Kartesz 2009). It may occur in widely scattered localities in Arkansas as well.

Sagittaria ambigua J.G.Sm.

arrowhead

This species was listed by Smith (1988) as a possible addition to the state flora but was later included as a bona fide member (Smith 1994). It was included in the *Checklist* (AVFC 2006) based on misdetermined material. PLANTS Database (USDA 2008) and Kartesz (2009) attributed it to the state, the former citing the Arkansas Heritage Program. However, the Arkansas Natural Heritage Commission had tracked the species on the basis of misdetermined specimens and unsubstantiated reports (Theo Witsell, pers. comm. 2008). *Sagittaria ambigua* is reported from southwestern Missouri, southeastern Kansas (Haynes & Hellquist 2000a; Kartesz 2009), and eastern Oklahoma (Haynes & Hellquist 2000a), including LeFlore, McCurtain, and Sequoyah counties (Kartesz 2009), and thus does seem at least possible in western or northwestern Arkansas.

Sagittaria chapmanii (J.G.Sm.) C.Mohr

Chapman's arrowhead

The specimens cited by Sorrie and LeBlond (2008) for Bradley and Calhoun counties, the basis for the Arkansas reports by the Arkansas Vascular Flora Committee (2006) [as *S. graminea* Michx. subsp. *chapmanii* (J.G.Sm.) R.R.Haynes & Hellq.], PLANTS Database (USDA 2008) [as *S. graminea* Michx. var. *chapmanii* J.G.Sm.] and Kartesz (2009), actually represent material of *S. papillosa*. *Sagittaria chapmanii* is restricted to Alabama, Florida, Georgia, and South Carolina (Haynes & Hellquist 2000a [as *S. graminea* subsp. *chapmanii*]), and is not to be expected in Arkansas.

ALLIACEAE

Onion Family

Allium porrum L.

garden leek

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this Eurasian species to Drew County, citing Smith (1988). However, the specimen cited by Smith actually represents material of *A. ampeloprasum*.

AMARYLLIDACEAE**Amaryllis Family**

Crinum americanum L.
var. *americanum*

swamp-lily

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). However, although it had been listed for Arkansas by Demaree (1943), Smith excluded it from the flora as “not likely for the state.” Furthermore, Holmes (2002a) did not attribute it to Arkansas.

COMMELINACEAE**Spiderwort Family**

Gibasis pellucida (M.Martens & Galeotti) D.R.Hunt

bridal-veil

This Mexican species was reported for Arkansas in the *Checklist* (AVFC 2006), and subsequently by Kartesz (2009), based on cultivated material. Although often cultivated as a house plant and occasionally spreading vegetatively from containers, *G. pellucida* doubtfully persists through Arkansas winters and is not to be expected as a naturalized member of the flora.

Tradescantia crassula Link & Otto

succulent spiderwort

Kartesz (2009) attributed this South American species to Arkansas, as did PLANTS Database (USDA 2008), which cited Sundell et al. (1999). However, the report by Sundell et al. was based on misdetermined material. Although often cultivated as a house plant, *T. crassula* doubtfully persists through Arkansas winters and is not to be expected as a naturalized member of the flora.

Tradescantia occidentalis (Britton) Smyth
var. *melanthera* MacRoberts

prairie spiderwort

Kartesz (2009) recognized this variety as distinct and attributed it to Arkansas, as did PLANTS Database (USDA 2008), which cited Tucker (1989). In the present treatment, however, we are following Faden (2000), who stated that he had been unable to recognize the character of dark anther connectives in dried specimens, as well as Smith (1988), who stated that this variety “appears to be merely a minor color variant.”

CYPERACEAE**Sedge Family**

Bulbostylis ciliatifolia (Elliott) Fernald
var. *ciliatifolia*

fringe-leaf hairsedge

This variety was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material of var. *coarctata*. PLANTS Database (USDA 2008) attributed var. *ciliatifolia* to Arkansas, citing Fernald (1950), but this report is also likely based on material of var. *coarctata*.

Carex backii Boott in Hook.

sedge

Smith (1988) attributed this species to Polk County based on a report by Lipscomb (1980). However, the specimen cited by Lipscomb actually represents material of *C. latebracteata* (Hyatt 1998). *Carex backii* is a species of the northern United States and Canada (Crins et al. 2002; Kartesz 2009) and is not to be expected in Arkansas.

Carex baileyi Britton

Bailey’s sedge

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited personal communication with Philip E. Hyatt. However, Hyatt (1998) excluded it from the state flora. The report could possibly be based on a citation by Wilcox (1973) for Crittenden County, which Smith (1988) deemed unlikely and a probable misidentification. *Carex baileyi* appears to be mostly New England and Appalachian (Kartesz 2009; Weakley 2008) in distribution and was not attributed to Arkansas by Reznicek and Ford (2002).

Carex debilis Michx.var. *rudgei* L.H.Bailey sedge

Smith (1994) and Hyatt (1998) included this taxon [as var. *pubera* Gray] in the Arkansas flora based on misdetermined material of var. *debilis*. Kartesz (2009) attributed it to the state, as did PLANTS Database (USDA 2008) [as var. *pubera* A.Gray], which cited the Arkansas Heritage Program. However, the Arkansas Heritage Program report was also based on the misdetermined specimens mentioned above (Theo Witsell, pers. comm. 2009). Furthermore, Waterway (2002) showed the range well to the northeast of Arkansas. This variety is probably not to be expected in the state.

Carex stipata Muhl. ex Willd.

sedge

Smith (1988, 1994) misapplied this name to Arkansas material of *C. oklahomensis*. Although it has been variously reported for all states surrounding Arkansas (Yatskievych 1999; Standley 2002; Weakley 2008; Kartesz 2009), no authentic material from Arkansas has been observed.

Carex styloflexa Buckley

sedge

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. Furthermore, Bryson and Naczi (2002) did not attribute it to the state.

Carex tetanica Schkuhr

sedge

Smith (1988) excluded this primarily northern North American species from the Arkansas flora in his *Atlas* but later included it in his *Keys* (1994). No voucher specimen has been located and neither Rothrock and Reznicek (2002) nor Kartesz (2009) attributed it to Arkansas. However, it is reported from fens of southeastern Missouri (Yatskievych 1999) and may be found in similar habitats in northern Arkansas.

Cyperus schweinitzii Torr.

flatsedge

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Clay County, citing Smith (1988). Smith included it in the Arkansas flora based solely on a report for Clay County by the Great Plains Flora Association (1977). However, Tucker et al. (2002) did not attribute it to Arkansas, and its primary range appears generally north and west of the state (Tucker et al. 2002; Kartesz 2009).

Cyperus thyrsoiflorus Jungh.

southern flatsedge

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Tucker (1994). However, Peck (2003) pointed out that the report by Tucker (1994) was merely a text passage and contained neither a map nor a voucher to substantiate the claim. Furthermore, neither Tucker et al. (2002) nor Kartesz (2009) attributed it to the state.

Rhynchospora cephalantha A.Gray

beaksedge, beak-rush

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). It was also reported for Arkansas in the *Checklist* (AVFC 2006) based on the report cited by Smith. Smith included this species in the Arkansas flora based solely on the report by Davis (1981). However, the specimen cited by Davis has since been redetermined. According to Arkansas Natural Heritage Commission records, there may also be a central Arkansas specimen at the New York Botanical Garden Herbarium (NY) (Theo Witsell, pers. comm. 2008), but this record seems dubious. Kral (2002) did not attribute *R. cephalantha* to Arkansas, and given the outer Gulf and southern Atlantic coastal distribution (Kartesz 2009), an Arkansas occurrence seems unlikely.

Rhynchospora chalarocephala Fernald & Gale

beaksedge, beak-rush

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material.

Scirpus lineatus Michx.

bulrush

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on a misapplication of the name to material of *S. pendulus*. *Scirpus lineatus* occurs to the southeast of Arkansas (Whittemore & Schuyler 2002; Kartesz 2009), and is probably not to be expected in the state.

Scleria reticularis Michx.

nut-rush

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). However, Smith misapplied this name to material of *S. muehlenbergii*. *Scleria reticularis* generally occurs along the outer Gulf and Atlantic coasts (Reznicek et al. 2002; Kartesz 2009) and probably does not occur in the state.

Websteria confervoides (Poir.) S.S.Hooper

algal bulrush

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing the Arkansas Heritage Program. However, the reports by the Arkansas Natural Heritage Commission (Theo Witsell, pers. comm. 2007), as well as the Arkansas report in the *Checklist* (AVFC 2006), were based on sterile, proliferating, submerged material of *Eleocharis* species. *Websteria confervoides* has only been documented within the United States from Florida, Georgia (Bruhl 2002), and Alabama (Kartesz 2009) and is not to be expected in Arkansas.

IRIDACEAE**Iris Family***Gladiolus dalenii* Van Geelsubsp. *dalenii*

gladiolus

Kartesz (2009) attributed this African taxon to Arkansas, listing *G. lemoinei* Baker as a synonym and citing Smith (1988). However, Smith misapplied the names *G. lemoinei* Hort. (Smith 1988) and *G. ×lemoinei* Hort. (Smith 1994) to plants of *G. communis*. True *G. dalenii* is not known to persist or escape in Arkansas.

Gladiolus lemoinei Baker

gladiolus

This name was erroneously applied in the *Checklist* (AVFC 2006) to Arkansas material of *G. communis*, a result of Smith's misapplication of the names *G. lemoinei* Hort. (Smith 1988) and *G. ×lemoinei* Hort. (Smith 1994) to plants of *G. communis*.

Gladiolus ×gandavensis Van Houtte{*G. dalenii* Van Geel × *G. oppositiflorus* Herb.}

garden gladiolus

PLANTS Database (USDA 2008) attributed this African taxon to Arkansas, citing Smith (1988), evidently based on his report of *G. lemoinei* escaping in the state. However, Smith misapplied the names *G. lemoinei* Hort. (Smith 1988) and *G. ×lemoinei* Hort. (Smith 1994) to plants of *G. communis*. The common garden gladiolus, *G. ×gandavensis*, is not known to persist or escape in Arkansas.

Iris hexagona Walter

Dixie iris

PLANTS Database (USDA 2008) attributed this species [as *I. hexagona* var. *hexagona*] to Arkansas, citing Thomas et al. (1991). Smith (1994) included it in the Arkansas flora apparently based on the report by Thomas et al.. However, the specimen cited by Thomas et al. actually represents material of *I. brevicaulis*. *Iris hexagona* is apparently restricted to Florida and South Carolina (Henderson 2002) and is not to be expected in Arkansas.

Iris pallida Lam. in Lam. et al.

sweet iris, Dalmatian iris

This European species was reported for Arkansas in the *Checklist* (AVFC 2006) based on the Newton County (Thompson 1977) and Bradley County (Leslie 1986) literature reports. Kartesz (2009) attributed it to Newton and Bradley counties, citing Smith (1988). PLANTS Database (USDA 2008) also attributed it to the state, citing Smith. However, Smith excluded the species from the state flora, arguing that the reports by Thompson and Leslie were "doubtless...based on cultivated material or infrequent waifs." Since no Arkansas voucher specimens of *I. pallida* have yet been located to substantiate these reports, it seems best to exclude it from the flora for now.

Sisyrinchium capillare E.P.Bicknell

blue-eyed-grass

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. Its range is well east of Arkansas (Cholewa & Henderson 2002; Kartesz 2009), and it is not to be expected in the state.

JUNCACEAE**Rush Family***Juncus arcticus* Willd.var. *balticus* (Willd.) Trautv.

Baltic rush

This taxon was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. PLANTS Database (USDA 2008) and Kartesz (2009) attributed it [as *J. arcticus* subsp. *littoralis* (Engelm.) Hultén] to the state, citing Smith (1988), who, in turn, attributed it [as *J. balticus* Willd.] to Calhoun, Dallas, and Saline counties. Brooks (2000) also reported it for Arkansas, likely ultimately based on Smith's report. However, upon close examination, the specimens were all found to actually represent material of *J. coriaceus*. *Juncus arcticus* var. *balticus* occurs in northern and western North American and approaches Arkansas no closer than west-central Missouri (Yatskievych 1999; Brooks 2000; Kartesz 2009) and is probably not to be expected in the state.

Juncus trigonocarpus Steud.

rush

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Brown and Thomas (1992). Smith (1994) had included it in the Arkansas flora, presumably based on the Brown and Thomas report. However, the specimen cited by Brown and Thomas is referable to *J. canadensis*. Furthermore, Clemants (2000) did not attribute *J. trigonocarpus* to Arkansas.

LILIACEAE**Lily Family***Erythronium americanum* Ker Gawl.subsp. *harperi* (W.Wolf) Parks & Hardin

American trout-lily, yellow trout-lily

PLANTS Database (USDA 2008) attributed this taxon to Arkansas, citing the University of North Carolina Herbarium (NCU) as the location of a voucher specimen. However, this subspecies is apparently restricted to northern Alabama, Tennessee, northeastern Mississippi, and northwestern Georgia (Parks & Hardin 1963; Allen & Robertson 2002; Weakley 2008; Kartesz 2009) and doubtfully occurs in Arkansas.

Lilium canadense L.

Canadian lily

PLANTS Database (USDA 2008) attributed this taxon [as *L. canadense* subsp. *canadense*] to Arkansas, citing an unpublished and undated *Vascular Flora of the Southeastern United States*, edited by Albert E. Radford et al. However, the range of *L. canadense* appears to be well east and northeast of Arkansas (Skinner 2002; Kartesz 2009), making an Arkansas occurrence rather unlikely. Skinner (2002) stated that *L. canadense* had been reported for Ashley County but that it was "quite likely to represent *L. superbum*." This is supported by the fact that *L. superbum* has been treated in the past as a subspecies of *L. canadense*; the reports may simply be the result of nomenclatural confusion.

Lilium formosanum Wallace

Formosa lily

This Taiwanese species was reported for Arkansas in the *Checklist* (AVFC 2006), and subsequently by Kartesz (2009), based on misdetermined material of *L. philippinense*.

Lilium michauxii Poir. in Lam. et al.

Carolina lily

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Demaree (1943). However, neither Skinner (2002) nor Kartesz (2009) attributed it to the state.

Lilium philadelphicum L.

wood lily

PLANTS Database (USDA 2008) attributed this taxon [as *L. philadelphicum* var. *philadelphicum*] to Arkansas, citing Hitchcock et al. (1969). Skinner (2002) mentioned reports from Arkansas but stated that they have not been verified. The range of this species appears to be well north of Arkansas (Skinner 2002; Kartesz 2009), making an Arkansas occurrence rather unlikely.

Medeola virginiana L.

Indian cucumber-root

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Demaree (1943). However, neither Utech (2002) nor Kartesz (2009) attributed it to the state.

ORCHIDACEAE**Orchid Family***Platanthera leucophaea* (Nutt.) Lindl.

eastern prairie fringed orchid

Smith (1988) excluded this species from the Arkansas flora, citing Sheviak (1987), who had shown that the voucher specimens once cited for the state neither represented this species nor were collected in present-day Arkansas. However, Smith later included the species in his *Keys* (1994) as a member of the flora. The basis for that inclusion is unknown and likely erroneous. Neither Sheviak (2002) nor Kartesz (2009) attributed it to Arkansas.

Platanthera psycodes (L.) Lindl.

small purple fringed orchid

Yatskievych (1999) cited this species as ranging from the eastern United States west to Arkansas, but this statement may be erroneous, as he went on to state that the single report in Missouri, from Ozark County, is questionable and disjunct from the nearest populations in northern Illinois and Iowa, seemingly ruling out an Arkansas occurrence. Other than the questionable Missouri record, the species approaches Arkansas no closer than eastern Iowa, northern Indiana, and extreme eastern Tennessee (Sheviak 2002; Kartesz 2009), and thus seems rather unlikely to occur in the state.

Spiranthes laciniata (Small) Ames

lace-lip ladies'-tresses

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Sebastian County, citing Smith (1988). However, Smith (1988, 1994) included it in the Arkansas flora based on a misdetermined specimen of *S. vernalis*. *Spiranthes laciniata* is reported as approaching Arkansas in Mississippi and Louisiana (Sheviak & Brown 2002), as close as Caddo and Union Parishes, Louisiana (Kartesz 2009), and thus it may possibly occur in southern Arkansas.

Spiranthes sylvatica P.M.Br.

woodland ladies'-tresses

Diggs et al. (2006) attributed this species to Arkansas, most likely based on the report by Brown (2006), who indicated that all Arkansas plants treated as *S. praecox* are in fact of *S. sylvatica*. However, the Arkansas plants seem rather intermediate in characters and for now we are continuing to recognize them as *S. praecox*. It should also be noted that Kartesz (2009) attributed *S. sylvatica* only to Florida.

POACEAE**Grass Family***Achnatherum hymenoides* (Roem. & Schult.) Barkworth

Indian rice grass

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on a dubious report. Barkworth (2007a) attributed this species to a county in northeastern Arkansas. Kartesz (2009) showed it for Randolph County, citing *Flora of North America* (i.e., Barkworth 2007a) and *Manual of Grasses for North America* (i.e., Barkworth 2007b). Mary E. Barkworth (pers. comm. 2003) stated that the basis for the listing was a Sharp County report by Kartesz and Meacham (1999), who, in turn, cited the Arkansas Heritage Program as the source of the original record. PLANTS Database (USDA 2008) also attributed it to the state, citing the Arkansas Heritage Program. However, the Arkansas Natural Heritage Commission (Theo Witsell, pers. comm. 2006) has no such record. Given the dubious nature of the record and the fact that the primary range of this species is in the western United States, *A. hymenoides* should be excluded from the state flora.

Agrostis capillaris L.

colonial bent grass

PLANTS Database (USDA 2008) attributed this European species to Arkansas, citing Smith (1988). Smith, however, only listed the taxon [as *A. tenuis* Sibth.] as a possible addition to the state flora based on Steyermark's (1963) reports from Missouri. In addition, Smith stated that Moore's (1961) Arkansas report was likely based on a cultivated specimen at the University of Arkansas Herbarium (UARK). Furthermore, neither Harvey (2007) nor Kartesz (2009) attributed *A. capillaris* to Arkansas. It doubtfully occurs in the state.

Anthenantia rufa (Elliott) Schult.

purple silkyscale

Although this species has been reported for Arkansas by Smith (1988, 1994), Wipff (2003a), PLANTS Database (USDA 2008), and Kartesz (2009), the Arkansas material previously referred to this taxon represents the recently described *A. texana* (Kral 2004).

Anthenantia villosa (Michx.) P.Beauv. green silkyscale

Wipff (2003a), and subsequently Kartesz (2009), attributed this species to Bradley County. This report, however, is likely based on material of the recently described *A. texana* (Kral 2004).

Axonopus compressus (Sw.) P.Beauv. broad-leaf carpet grass

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on the report by Barkworth (2003a). PLANTS Database (USDA 2008) attributed it the state, citing Smith (1988), though Smith merely mentioned that it may not be specifically distinct from *A. fissifolius* [as *A. affinis* Chase]. Kartesz (2009) attributed it to Pulaski County, citing *Flora of North America* (i.e., Barkworth 2003a) and *Manual of Grasses for North America* (i.e., Barkworth 2007c). Barkworth (2003a) attributes *A. compressus* to Pulaski and Saline counties on the basis of two Dwight M. Moore specimens at the Utah State University Herbarium (UTC) (Kathleen Capels, pers. comm. 2005). However, duplicates of both specimens at the University of Arkansas Herbarium (UARK) seem best referable to *A. fissifolius*.

Bromus arvensis L. field brome

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Arkansas, but they treated *B. japonicus* as a synonym. However, in the present treatment we are following Pavlick and Anderton (2007), who treated the two taxa as distinct and only attributed *B. japonicus* to Arkansas.

Bromus squarrosus L. chess

This Eurasian species was erroneously listed for Arkansas in the *Checklist* (AVFC 2006). The two county records reported by Smith (1988), and subsequently by PLANTS Database (USDA 2008), Kartesz (2009), and Pavlick and Anderton (2007), actually represent material of *B. japonicus*. *Bromus squarrosus* is naturalized in North America generally well north of Arkansas (Pavlich & Anderton 2007) and probably does not occur in the state.

Calamagrostis porteri A.Gray
subsp. *porteri* Porter's reed grass

Weakley (2008) attributed this subspecies to both Arkansas and Missouri. However, this report is surely in error, as the Arkansas and Missouri populations belong to subsp. *insperata* (Smith 1988, 1994; Yatskievych 1999; Marr et al. 2007; Kartesz 2009). Subspecies *porteri* is restricted to the Appalachians (Marr et al. 2007; Kartesz 2009) and is probably not to be expected in Arkansas.

Chloris cucullata Bisch. windmill grass

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited Smith (1988). However, although it had been listed for the state by Demaree (1943), Smith excluded it from the flora as "unlikely for the state." Furthermore, Barkworth (2003b) did not attribute it to Arkansas. The primary range of *C. cucullata* is to the southwest of Arkansas (Barkworth 2003b; Kartesz 2009) and it probably does not occur in the state.

Dichanthelium acuminatum (Sw.) Gould & C.A.Clark hairy rosette grass,
subsp. *longiligulatum* (Nash) Freckmann & Lelong hairy panic grass

Kartesz (2009) attributed this taxon [as *D. longiligulatum* (Nash) Freckmann] to Arkansas, as did PLANTS Database (USDA 2008) [as *D. longiligulatum*], which cited Gould and Clark (1978). However, there are apparently errors with a few of Gould and Clark's maps and they did not actually attribute this taxon [as *D. acuminatum* var. *longiligulatum*] to Arkansas. This subspecies is reported primarily from the coastal plain (Gould & Clark 1978) and a few inland sites (Freckmann & Lelong 2003a). Although it possibly could occur in the Gulf Coastal Plain of southern Arkansas, it should be excluded for now.

Dichanthelium acuminatum (Sw.) Gould & C.A.Clark hairy rosette grass,
var. *thurowii* (Scribn. & J.G.Sm.) Gould & C.A.Clark hairy panic grass

Gould and Clark (1978) and Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). Weakley (2008) also listed Arkansas as within its range and indicated that Freckmann and Lelong (2003a) apparently included this entity within subsp. *acuminatum*. In the present treatment we are following Freckmann and Lelong in not recognizing the taxon.

Dichanthelium dichotomum (L.) Gould
subsp. *mattamuskeetense* (Ashe) Freckmann & Lelong

forked rosette grass,
forked panic grass

This subspecies was erroneously reported for Arkansas in the *Checklist* (AVFC 2006). It occurs on the Atlantic Coastal Plain from Massachusetts to Florida (Freckmann & Lelong 2003a) and is not to be expected in Arkansas.

Dichanthelium latifolium (L.) Harvill

broad-leaf rosette grass, broad-leaf panic grass

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. Smith (1988, 1994) included it [as *Panicum latifolium* L.] in the Arkansas flora, though he stated that all the University of Arkansas Herbarium (UARK) material was out on loan and, thus, could not be confirmed. The loan was either never returned or the specimens were all redetermined because UARK currently has no Arkansas specimens of this species. In addition, no authentic voucher material of the species has yet been located for the state at any other of the herbaria searched. The reports by Freckmann and Lelong (2003a), PLANTS Database (USDA 2008), and Kartesz (2009) were almost certainly based on Smith's (1988) report, and are, therefore, dubious. Nevertheless, *D. latifolium* is reported from throughout Missouri, including Dunklin, Howell, McDonald, and Taney counties (Yatskievych 1999; Kartesz 2009) and would seem at least possible for northern Arkansas.

Dichanthelium ovale (Elliott) Gould & C.A.Clark
var. *addisonii* (Nash) Gould & C.A.Clark

stiff-leaf rosette grass,
stiff-leaf panic grass

Kartesz (2009) attributed this taxon to Arkansas, as did PLANTS Database (USDA 2008), which cited Gould and Clark (1978). Although he, too, treated the taxon as above, Weakley (2008) implied that Freckmann and Lelong (2003a) synonymized this name with *D. ovale* subsp. *pseudopubescens*. We are following Freckmann and Lelong in the present treatment.

Elymus diversiglumis Scribn. & C.R.Ball

wild rye

PLANTS Database (USDA 2008) erroneously reported this species for Arkansas based on Smith's (1988) report of *E. interruptus*. However, Smith's (1988, 1994) reports of *E. interruptus* were actually based on material of the recently described *E. churchii*. *Elymus diversiglumis* is a species of the north-central United States and south-central Canada (Barkworth et al. 2007a; Kartesz 2009) and is not to be expected in Arkansas.

Elymus glaucus Buckley
subsp. *glaucus*

western wild rye,
blue wild rye

The Arkansas reports of this subspecies (Smith 1988, 1994; AVFC 2006; USDA 2008; Kartesz 2009) are based on specimens currently treated as subspecies *mackenziei* (Barkworth et al. 2007a). The typical subspecies occurs primarily in western North America (Barkworth et al. 2007a) and is not to be expected in Arkansas.

Elymus interruptus Buckley

southwestern wild rye

This species was reported for Arkansas by Smith (1988, 1994) and the Arkansas Vascular Flora Committee (2006) based on material of a recently described species, *E. churchii* (Campbell 2006; Barkworth et al. 2007a). *Elymus interruptus* is restricted to the southwestern United States and northern Mexico (Barkworth et al. 2007a; Kartesz 2009) and is not to be expected in Arkansas.

Elymus svensonii G.L.Church

Svenson's wild rye

This species was erroneously reported for Arkansas in the *Checklist* (AVFC 2006). PLANTS Database (USDA 2008) attributed it to the state, citing personal communication with Julian J. N. Campbell. However, Barkworth et al. (2007a) did not report it for the state but instead showed it as restricted to central Kentucky and central Tennessee.

Elymus virginicus L.
var. *halophilus* (E.P.Bicknell) Wiegand

Virginia wild rye

This variety was erroneously reported for Arkansas in the *Checklist* (AVFC 2006). It is restricted to the northern Atlantic coast (Barkworth et al. 2007a; Kartesz 2009) and is not to be expected in Arkansas.

Glyceria fluitans (L.) R.Br.

water manna grass

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this Eurasian species to Washington County, citing Smith (1988). It was also reported for Arkansas in the *Checklist* (AVFC 2006) based on Smith's report. Smith included it in the Arkansas flora based solely on a report for Washington County by Moore (1961). It is possible, though, that the Moore report was based on two F. L. Harvey specimens at the University of Arkansas Herbarium (UARK) collected in 1882 from "N.W. Ark." [possibly interpreted as Washington County] of *G. septentrionalis* var. *septentrionalis* that were originally labeled as *G. fluitans*. Furthermore, Barkworth and Anderton (2007a) did not attribute *G. fluitans* to the state.

Glyceria notata Chevall.

plicate manna grass

Kartesz (2009) attributed this Eurasian species to Clay, Prairie, and St. Francis counties, citing *Flora of North America* (i.e., Barkworth and Anderton 2007a) and *Manual of Grasses for North America* (i.e., Barkworth and Anderton 2007b). Barkworth and Anderton (2007a) stated that "the reports [from North America] have not been verified." The Arkansas reports are likely based on material of *G. septentrionalis*.

Miscanthus floridulus (Labill.) Warb. ex K.Schum. & Lauterb.

giant Chinese silver grass

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Smith (1988). However, Smith excluded the species, stating that the Newton County report (Thompson 1977) was based on cultivated material.

Phragmites australis (Cav.) Trin. ex Steud.subsp. *americanus* Saltonstall, P.M.Peterson & Soreng American reed

Kartesz (2009) attributed this North American native subspecies to Arkansas in addition to the weedy, introduced Eurasian subspecies. PLANTS Database (USDA 2008) attributed the species to the state, without infraspecific designation, citing Demaree (1943). However, the only specimens of the species known from Arkansas are of recently collected material of the weedy, introduced strain. Subspecies *americanus* doubtfully occurs in the state.

Pseudoroegneria spicata (Pursh) Á.Löve

blue-bunch wheat grass

This species was erroneously reported for Arkansas in the *Checklist* (AVFC 2006). It is a species of western North America (Carlson 2007; Kartesz 2009) and is not to be expected in Arkansas.

Setaria leucopila (Scribn. & Merr.) K.Schum.

streambed bristle grass

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited personal communication with Mary E. Barkworth. However, Rominger (2003, 2007) did not attribute it to Arkansas, and the primary range appears to be well to the west of the state (Rominger 2003, 2007; Kartesz 2009).

Setaria pumila (Poir.) Roem. & Schult.subsp. *pallidifusca* (Schumach.) B.K.Simon yellow bristle grass, yellow foxtail

This African taxon was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material, though Kartesz (2009) did attribute it to the state. However, Rominger (2003) stated that this subspecies is only known from southeastern Louisiana and Oregon.

Sorghastrum secundum (Elliott) Nash

lopsided Indian grass

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing personal communication with Mary E. Barkworth. However, neither Aranda and Hatch (2003, 2007) nor Kartesz (2009) attributed it to Arkansas; and they give a range for the species well to the southeast of the state, from southern Mississippi to North Carolina. *Sorghastrum secundum* seems rather unlikely to occur in Arkansas.

Sporobolus airoides (Torr.) Torr.

alkali sacaton

Kartesz (2009) attributed this species to Arkansas, as did PLANTS Database (USDA 2008), which cited the Arkansas Heritage Program. However, the Arkansas Heritage Program report was based on a misdetermined specimen of *S. cryptandrus* at the University of Arkansas Herbarium (UARK) (Smith 1988). The primary range of *S. airoides* extends westward from southern Texas, central Oklahoma, central Kansas, and central Nebraska (Peterson et al. 2003; Kartesz 2009). It is probably not to be expected in Arkansas.

Tridens ambiguus (Elliott) Schult. pine-barren tridens

This species was reported for Arkansas in the *Checklist* (AVFC 2006) based on misdetermined material. The basis for this report, as well as the reports by Valdés-Reyna (2007) and Kartesz (2009), represents material of the hybrid *T. ×oklahomensis*.

Tridens muticus (Torr.) Nash
var. *muticus* slim tridens

Kartesz (2009) attributed this variety to Arkansas, as did PLANTS Database (USDA 2008), which cited Demaree (1943). However, the typic variety apparently occurs well to the southwest of Arkansas (Valdés-Reyna 2003; Kartesz 2009). Demaree's report was likely based on material of var. *elongatus*.

Zoysia matrella (L.) Merr. Manila grass

Kartesz (2009) attributed this southeastern Asian species to Ouachita County, citing *Flora of North America* (i.e., Anderson 2003) and *Manual of Grasses for North America* (i.e., Anderson 2007). However, Anderson did not attribute this species to Arkansas in either source, though he did add a record for Ouachita Parish, Louisiana in the latter. The Arkansas report is thus considered erroneous.

RUSCACEAE

Solomon's-seal Family

Ophiopogon jaburan (Siebold) Lodd. monkey-grass, lily-turf

This species was attributed to Arkansas by Smith (1988), and subsequently by the Arkansas Vascular Flora Committee (2006), PLANTS Database (USDA 2008), and Kartesz (2009), based on misdetermined material of *Liriope spicata* (Nesom 2010a).

SMILACACEAE

Greenbrier Family

Smilax auriculata Walter wild bamboo

PLANTS Database (USDA 2008) and Kartesz (2009) attributed this species to Montgomery County, citing Smith (1988). Tucker (1976) and Smith both included it in the Arkansas flora based on a Montgomery County report by Duncan (1967). Duncan did show a dot for Montgomery County on the distribution map but did not cite a voucher specimen. Peck (2003) speculated that this report was the result of a clerical error. Other than the Montgomery County report, the species appears to be restricted to "dunes and sandy flatwoods" on the outer coastal plain from southeastern Louisiana to North Carolina (Holmes 2002b). It seems rather unlikely that *S. auriculata* occurs in Arkansas.

Smilax illinoensis Mangaly Illinois carrion-flower

PLANTS Database (USDA 2008) attributed this species to Arkansas, citing Mangaly (1968). Mangaly stated that its "distribution is mostly in the Great Lakes Region" and "extends to northern Missouri," but he did list Arkansas among the states from which specimens have been collected. However, he did not cite an Arkansas voucher specimen, nor did he show any Arkansas occurrences on his map. Holmes (2002b) and Kartesz (2009) showed the species ranging from the Great Lakes southward to east-central Missouri and southern Illinois, but neither attributed it to Arkansas. Since no voucher specimens are known, and since Arkansas seems to be outside of its range, *S. illinoensis* should probably be excluded from the state flora.

TRILLIACEAE

Trillium Family

Trillium pusillum Michx.
var. *pusillum* wakerobin

This taxon was reported for Arkansas in the *Checklist* (AVFC 2006) following Case (2002), who merged var. *ozarkanum* with the typic variety, stating that it merely represented a "widely disjunct, regional population." For the present treatment, however, we are recognizing the Ozark entity at the species level, following Susan B. Farmer's (pers. comm. 2008) recommendation. Thus, var. *pusillum*, in the strictest sense, is a more eastern entity (Kartesz 2009) and is being excluded from the Arkansas flora.

APPENDIX VI

ARKANSAS VASCULAR PLANTS OF CONSERVATION CONCERN

Arkansas' list of vascular plants of conservation concern is the result of over three decades of work by Arkansas botanists and ecologists. It began with the development of a State Biological Inventory Program in 1978, in partnership with The Nature Conservancy. Known as the Arkansas Heritage Program, this inventory process is now managed by the Research and Inventory Section of the Arkansas Natural Heritage Commission (ANHC). The Arkansas Heritage Program is a member of NatureServe, an international network of state Natural Heritage Programs and Conservation Data Centers. The principal mission of NatureServe members is to gather, organize, and distribute high-quality biodiversity information. To this end, NatureServe members utilize the same data management methodology, enabling standardized information regarding biological diversity to be shared across state and international boundaries.

The plants on the following list are those determined by the Arkansas Heritage Program to be of conservation concern in the state. They are also designated in the main body of the *Atlas* with a "4" status code. This list conforms to the nomenclature and organization used throughout the body of the *Atlas*. In a few cases the scientific names presented here may not match that used by NatureServe, though they will likely be found by searching synonyms.

Each species or infraspecific taxon on this list is assigned a conservation status rank, made up of a global (G) rank and a state (S) rank. Global and state ranks provide information as to the relative rarity and endangerment of a taxon throughout its range. Global ranks address the status of taxa throughout their entire range,

while state ranks address status within the state. The appearance of a taxon on this list and the ranks that it carries are based upon the best available science but are not static. The list is reviewed periodically and may change as new data are gathered about plants on the list or as changes in their status are documented. Updated lists and status ranks can be found at www.naturalheritage.com.

Each taxon on this list is actively tracked by the ANHC, which maintains a geospatial (GIS) database with information on known occurrences or populations of each. This database houses detailed information on almost 14,000 occurrences of rare plants, animals, and natural communities in Arkansas. Data from the database are used for conservation planning, environmental review, and research purposes.

A legend is also provided which includes explanations of federal and state status codes as well as global and state ranks. Federal status codes represent designations by the U.S. Fish and Wildlife Service under the Endangered Species Act. State status codes comprise administrative designations by the ANHC to describe a taxon's status within Arkansas. The ANHC has summarized, county-level distribution information on these plants from its database available from its website at www.naturalheritage.com.

For more information on the Arkansas Heritage Program, or to report an occurrence of a plant of conservation concern, please contact: Theo Witsell, Botanist; Arkansas Natural Heritage Commission; 1500 Tower Building, 323 Center Street; Little Rock, AR 72201. Or call 501.324.9615 or email theo@arkansasheritage.org.

CONSERVATION STATUS CODE/RANK LEGEND

STATUS CODES

FEDERAL STATUS CODES

- C** = **Candidate Species.** The U.S. Fish and Wildlife Service has enough scientific information to warrant proposing this species for listing as endangered or threatened under the Endangered Species Act.
- LE** = **Listed Endangered.** The U.S. Fish and Wildlife Service has listed this species as endangered under the Endangered Species Act.
- LT** = **Listed Threatened.** The U.S. Fish and Wildlife Service has listed this species as threatened under the Endangered Species Act.

STATE STATUS CODES

- INV** = **Inventory Element.** The Arkansas Natural Heritage Commission is currently conducting active inventory work on these elements. Available data suggests these elements are of conservation concern. These elements may include outstanding examples of Natural Communities, colonial bird nesting sites, outstanding scenic and geologic features as well as plants and animals, which, according to current information, may be rare, peripheral, or of an undetermined status in the state. The ANHC is gathering detailed location information on these elements.
- SE** = **State Endangered.** The Arkansas Natural Heritage Commission applies this term to native plant taxa which are in danger of being extirpated from the state.
- ST** = **State Threatened.** The Arkansas Natural Heritage Commission applies this term to native plant taxa which are believed likely to become endangered in Arkansas in the foreseeable future, based on current inventory information.

DEFINITION OF RANKS

GLOBAL RANKS

- G1** = **Critically Imperiled Globally.** At a very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
- G2** = **Imperiled Globally.** At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
- G3** = **Vulnerable Globally.** At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
- G4** = **Apparently Secure Globally.** Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5** = **Secure Globally.** Common, widespread and abundant.
- GH** = **Of Historical Occurrence, Possibly Extinct Globally.** Missing; known from only historical occurrences but still some hope of rediscovery.
- GU** = **Unrankable.** Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- GX** = **Presumed Extinct Globally.** Not located despite intensive searches and virtually no likelihood of rediscovery.
- GNR** = **Unranked.** The global rank not yet assessed.
- GNA** = **Not Applicable.** A conservation status rank is not applicable.

T-Ranks = **T subranks are given to global ranks when a subspecies, variety, or race is considered at the state level.** The subrank consists of a “T” plus a number or letter (1, 2, 3, 4, 5, H, U, X) with the same ranking rules as a full species.

STATE RANKS

- S1 =** **Critically Imperiled in the State.** At a very high risk of extirpation due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
- S2 =** **Imperiled in the State.** At high risk of extirpation due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
- S3 =** **Vulnerable in the State.** At moderate risk of extirpation due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
- S4 =** **Apparently Secure in the State.** Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- S5 =** **Secure in the State.** Common, widespread and abundant.
- SH =** **Of Historical Occurrence, With Some Possibility of Rediscovery.** Its presence may not have been verified in the past 20–40 years. A species may be assigned this rank without the 20–40 year delay if the only known occurrences were destroyed or if it had been extensively and unsuccessfully sought.
- SU =** **Unrankable.** Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- SX =** **Presumed Extirpated From the State.** Not located despite intensive searches and virtually no likelihood of rediscovery.
- SNR =** **Unranked.** The state rank not yet assessed.
- SNA =** **Not Applicable.** A conservation status rank is not applicable.

GENERAL RANKING NOTES

- Q =** A “Q” in the global rank indicates the element’s taxonomic classification as a species is a matter of conjecture among scientists.
- Ranges =** Ranges are used to indicate a range of uncertainty about the status of the element.
- ? =** A question mark is used to denote an inexact numeric rank.

VASCULAR PLANTS OF CONSERVATION CONCERN

Name	Common Name	Federal Status	State Status	Global Rank	State Rank
PTERIDOPHYTES					
ASPLENIACEAE		Spleenwort Fern Family			
<i>Asplenium pinnatifidum</i>	lobed spleenwort	-	INV	G4	S3
<i>Asplenium ×ebenoides</i>	Scott's spleenwort	-	INV	GNA	S1
<i>Asplenium ×gravesii</i>	Graves' spleenwort	-	INV	GNA	S1
<i>Asplenium ×kentuckiense</i>	Kentucky spleenwort	-	INV	GNA	SH
AZOLLACEAE		Mosquito Fern Family			
<i>Azolla caroliniana</i>	Carolina mosquito fern	-	INV	G5	SU
DENNSTAEDTIACEAE		Bracken Fern Family			
<i>Dennstaedtia punctilobula</i>	hay-scented fern	-	INV	G5	S2
DRYOPTERIDACEAE		Wood Fern Family			
<i>Dryopteris carthusiana</i>	spinulose wood fern	-	ST	G5	S1
<i>Dryopteris celsa</i>	log fern	-	INV	G4	S2
<i>Dryopteris goldiana</i>	Goldie's wood fern	-	INV	G4	S1
<i>Dryopteris ludoviciana</i>	southern wood fern	-	INV	G4	S1
<i>Dryopteris ×australis</i>	Dixie wood fern	-	INV	GNA	S1
<i>Dryopteris ×leedsii</i>	Leed's wood fern	-	INV	GNA	S1
EQUISETACEAE		Horsetail Family			
<i>Equisetum laevigatum</i>	smooth scouring-rush	-	INV	G5	S1
HYMENOPHYLLACEAE		Filmy Fern Family			
<i>Trichomanes boschianum</i>	Appalachian filmy fern	-	ST	G4	S2S3
<i>Trichomanes petersii</i>	dwarf bristle fern	-	ST	G4G5	S2
ISOETACEAE		Quillwort Family			
<i>Isoetes engelmannii</i>	Engelmann's quillwort	-	INV	G4	S1
LYCOPODIACEAE		Club-moss Family			
<i>Diphasiastrum digitatum</i>	southern running-pine	-	INV	G5	S1S2
<i>Huperzia lucidula</i>	shining fir-moss	-	INV	G5	S2S3
<i>Lycopodiella prostrata</i>	prostrate bog club-moss	-	INV	G5	S1
<i>Palhinhaea cernua</i>	nodding club-moss	-	INV	G5	S1
<i>Pseudolycopodiella caroliniana</i>	slender bog club-moss	-	INV	G4	S1
OSMUNDACEAE		Royal Fern Family			
<i>Osmunda claytoniana</i>	interrupted fern	-	ST	G5	S1
PSILOTACEAE		Whisk Fern Family			
<i>Psilotum nudum</i>	whisk fern	-	INV	G5	S1?

Name	Common Name	Federal Status	State Status	Global Rank	State Rank
PTERIDACEAE		Brake Fern Family			
<i>Argyrochosma dealbata</i>	powdery cloak fern	-	INV	G4G5	S2
<i>Cheilanthes eatonii</i>	Eaton's lip fern	-	INV	G5?	SH
SELAGINELLACEAE		Spike-moss Family			
<i>Selaginella arenicola</i> subsp. <i>riddellii</i>	Riddell's spike-moss	-	INV	G4T4	S3
WOODSIACEAE		Lady Fern Family			
<i>Woodsia appalachiana</i>	Appalachian cliff fern	-	INV	G4	S1
ANGIOSPERMS (DICOTS)					
ADOXACEAE		Arrow-wood Family			
<i>Viburnum acerifolium</i>	maple-leaf viburnum	-	INV	G5	S1
<i>Viburnum dentatum</i> var. <i>scabrellum</i>	southern arrow-wood	-	INV	G5TNR	SH
<i>Viburnum molle</i>	soft-leaf arrow-wood	-	INV	G5	S1
<i>Viburnum recognitum</i>	northern arrow-wood	-	INV	G4G5	S1
AMARANTHACEAE		Amaranth Family			
<i>Gossypianthus lanuginosus</i> var. <i>tenuiflorus</i>	woolly cotton-flower	-	INV	G5T4	SH
ANACARDIACEAE		Sumac Family			
<i>Rhus trilobata</i> var. <i>trilobata</i>	skunk-bush sumac	-	INV	G5T5	S1
ANNONACEAE		Custard-apple Family			
<i>Asimina parviflora</i>	dwarf pawpaw	-	INV	G5	S2S3
APIACEAE		Parsley Family			
<i>Bifora americana</i>	prairie bishop	-	INV	GNR	SH
<i>Eryngium hookeri</i>	Hooker's eryngo	-	INV	G3G5	S1
<i>Eryngium integrifolium</i>	blue-flower eryngo	-	INV	G5	S2
<i>Eryngium leavenworthii</i>	Leavenworth's eryngo	-	INV	G4	S1
<i>Lilaeopsis carolinensis</i>	Carolina grasswort	-	INV	G3G5	SH
<i>Osmorhiza claytonii</i>	hairy sweet-cicely	-	INV	G5	S1S3
<i>Perideridia americana</i>	American squaw-root	-	INV	G4	S2
<i>Ptilimnium costatum</i>	big mock bishop's-weed	-	INV	G4	SH
<i>Ptilimnium nodosum</i>	harperella	LE	INV	G2	S2
<i>Ptilimnium texense</i>	Texas mock bishop's-weed	-	INV	GNR	S1
<i>Sanicula smallii</i>	Small's black-snakeroot	-	INV	G5	S3
<i>Sium suave</i>	water-parsnip	-	INV	G5	S1S3

Name	Common Name	Federal Status	State Status	Global Rank	State Rank
APOCYNACEAE		Dogbane Family			
<i>Amsonia hubrichtii</i>	Ouachita bluestar	-	INV	G3	S3
<i>Apocynum androsaemifolium</i>	spreading dogbane	-	INV	G5	SH
<i>Asclepias incarnata</i> subsp. <i>incarnata</i>	swamp milkweed	-	INV	G5T5	S2
<i>Asclepias obovata</i>	savannah milkweed	-	INV	G5?	S2
<i>Asclepias stenophylla</i>	narrow-leaf milkweed	-	INV	G4G5	SH
<i>Matelea cynanchoides</i>	milkvine	-	SE	G4G5	S1
AQUIFOLIACEAE		Holly Family			
<i>Ilex longipes</i>	Georgia holly	-	INV	G5	S3
<i>Ilex verticillata</i>	winterberry	-	ST	G5	S2
ARALIACEAE		Ginseng Family			
<i>Hydrocotyle americana</i>	marsh pennywort	-	INV	G5	SH
ASTERACEAE		Sunflower Family			
<i>Antennaria neglecta</i>	field pussytoes	-	INV	G5	S1
<i>Aphanostephus skirrhobasis</i> var. <i>skirrhobasis</i>	Arkansas lazy daisy	-	INV	G5TNR	S1
<i>Artemisia ludoviciana</i> subsp. <i>mexicana</i>	white sagebrush	-	INV	G5T5?	S1S2
<i>Berlandiera pumila</i> var. <i>pumila</i>	sandhill green-eyes	-	INV	G4G5TNR	S1
<i>Brickellia grandiflora</i>	tassel-flower	-	INV	G5	S2
<i>Cirsium muticum</i>	swamp thistle	-	ST	G5	S1
<i>Coreopsis basalis</i>	golden-mane tickseed	-	INV	G5	S2
<i>Coreopsis grandiflora</i> var. <i>saxicola</i>	large-flower tickseed	-	INV	G5T4?	S3
<i>Coreopsis intermedia</i>	golden-wave tickseed	-	INV	G3	S1
<i>Diaperia candida</i>	silver rabbit-tobacco	-	INV	G3G5	S1S2
<i>Diaperia prolifera</i> var. <i>prolifera</i>	big-head rabbit-tobacco	-	INV	G5TNR	S1S3
<i>Diaperia verna</i> var. <i>verna</i>	many-stem rabbit-tobacco	-	INV	G5TNR	SH
<i>Echinacea paradoxa</i> var. <i>paradoxa</i>	yellow coneflower	-	ST	G2T2	S2
<i>Echinacea sanguinea</i>	sanguine purple coneflower	-	ST	G3G5	S2S3
<i>Engelmannia peristenia</i>	Engelmann's daisy	-	INV	G5	S1
<i>Eurybia macrophylla</i>	big-leaf aster	-	ST	G5	SH
<i>Helianthus occidentalis</i> subsp. <i>occidentalis</i>	naked-stem sunflower	-	INV	G5T5	S1S2
<i>Helianthus occidentalis</i> subsp. <i>plantagineus</i>	plantain-leaf sunflower	-	INV	G5T2T3	S1
<i>Helianthus pauciflorus</i> subsp. <i>pauciflorus</i>	prairie sunflower	-	INV	G5T5?	S1
<i>Heliopsis gracilis</i>	pinewoods ox-eye	-	INV	G5?	S1
<i>Hieracium scabrum</i>	rough hawkweed	-	INV	G5	S2
<i>Hymenopappus artemisiifolius</i> var. <i>artemisiifolius</i>	woolly-white	-	INV	G5T4	S2
<i>Iva angustifolia</i>	slender marsh-elder	-	INV	G5?	S1
<i>Krigia occidentalis</i>	western dwarf-dandelion	-	INV	G5	S3

Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Liatris compacta</i>	Ouachita blazing-star	-	INV	G3	S3
<i>Liatris punctata</i>					
var. <i>mucronata</i>	dotted gayfeather	-	INV	G5T5	S2
<i>Liatris punctata</i>					
var. <i>punctata</i>	bottle-brush gayfeather	-	INV	G5T5	SH
<i>Liatris scariosa</i>					
var. <i>nieuwlandii</i>	northern blazing-star	-	INV	G5?T3T5	S2?
<i>Liatris squarrosa</i>					
var. <i>glabrata</i>	smooth scaly blazing-star	-	INV	G5T5	S1
<i>Liatris squarrosa</i>					
var. <i>squarrosa</i>	hairy scaly blazing-star	-	INV	G5T5	S1
<i>Lindheimera texana</i>	Texas yellowstar	-	INV	G5	SH
<i>Marshallia caespitosa</i>					
var. <i>caespitosa</i>	Barbara's-buttons	-	INV	G4T4	S2
<i>Marshallia caespitosa</i>					
var. <i>signata</i>	leafy Barbara's-buttons	-	INV	G4T4	S1
<i>Polymnia cossatotensis</i>	Cossatot leafcup	-	INV	G1	S1
<i>Prenanthes alba</i>	white rattlesnake-root	-	INV	G5	S1S2
<i>Prenanthes aspera</i>	prairie rattlesnake-root	-	INV	G4?	S2S3
<i>Prenanthes barbata</i>	barbed rattlesnake-root	-	INV	G3	S2
<i>Pyrrhopappus pauciflorus</i>	few-flower false dandelion	-	INV	G5	S1S2
<i>Rudbeckia maxima</i>	great coneflower	-	INV	G4?	S3
<i>Senecio ampullaceus</i>	Texas ragwort	-	INV	G4	S1
<i>Solidago gattingeri</i>	Gattinger's goldenrod	-	INV	G3?Q	S1
<i>Solidago juncea</i>	early goldenrod	-	INV	G5	S1
<i>Solidago ouachitensis</i>	Ouachita goldenrod	-	INV	G3	S3
<i>Solidago patula</i>					
subsp. <i>strictula</i>	swamp goldenrod	-	INV	G5T5	S1S2
<i>Solidago ptarmicoides</i>	white flat-top goldenrod	-	INV	G5	S1S2
<i>Solidago riddellii</i>	Riddell's goldenrod	-	ST	G5	S1
<i>Solidago speciosa</i>					
subsp. <i>speciosa</i>					
var. <i>rigidiuscula</i>	narrow-leaf showy goldenrod	-	INV	G5T4	S2S3
<i>Solidago tortifolia</i>	twist-leaf goldenrod	-	INV	G4G5	S2
<i>Symphotrichum pratense</i>	barrens silky aster	-	ST	G4?	S2
<i>Symphotrichum sericeum</i>	silvery aster	-	INV	G5	S2
<i>Tetragonotheca ludoviciana</i>	Louisiana squarehead	-	SE	G4	S1
<i>Thelesperma flavodiscum</i>	yellow-disk greenthread	-	INV	G4	S1
<i>Verbesina walteri</i>	rayless crownbeard	-	INV	G4	S1
<i>Vernonia lettermannii</i>	Letterman's ironweed	-	INV	G3	S3
<i>Vernonia lindheimeri</i>	woolly ironweed	-	INV	G4G5	SH
<i>Xanthisma spinulosum</i>					
var. <i>spinulosum</i>	lacy tansy-aster	-	INV	G5TNR	SH
BERBERIDACEAE	Barberry Family				
<i>Caulophyllum thalictroides</i>	blue cohosh	-	INV	G4G5	S2
BORAGINACEAE	Borage Family				
<i>Heliotropium convolvulaceum</i>	phlox heliotrope	-	INV	G5	S2
<i>Hydrophyllum brownei</i>	Browne's waterleaf	-	INV	G2	S2
<i>Lithospermum incisum</i>	fringed puccoon	-	INV	G5	S2S3
<i>Lithospermum tuberosum</i>	tuberous puccoon	-	INV	G4	S2
<i>Phacelia gilioides</i>	Brand's scorpion-weed	-	INV	G5	S2S3
<i>Phacelia purshii</i>	Miami mist	-	INV	G5	S1
<i>Phacelia strictiflora</i>					
var. <i>robbinsii</i>	Robbins' prairie scorpion-weed	-	INV	G5T4	S1S2

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BRASSICACEAE		Mustard Family			
<i>Arabis hirsuta</i>					
var. <i>adpressipilis</i>	hairy rockcress	-	INV	G5T4Q	S1?
<i>Cardamine angustata</i>	slender toothwort	-	INV	G5	S2
<i>Cardamine dissecta</i>	fork-leaf toothwort	-	INV	G4?	S1
<i>Cardamine douglassii</i>	purple cress	-	INV	G5	S1
<i>Draba aprica</i>	open-ground whitlow-grass	-	ST	G3	S2
<i>Erysimum capitatum</i>					
var. <i>capitatum</i>	western wallflower	-	INV	G5T5	S2
<i>Physaria filiformis</i>	Missouri bladderpod	LT	INV	G3	S1
<i>Physaria gracilis</i>					
subsp. <i>gracilis</i>	slender bladderpod	-	INV	G5T4	S1
<i>Streptanthus hyacinthoides</i>	sandhill twistflower	-	ST	G4	S2
<i>Streptanthus maculatus</i>					
subsp. <i>obtusifolius</i>	Arkansas twistflower	-	INV	G3T3	S3
<i>Streptanthus squamiformis</i>	Ouachita twistflower	-	ST	G2G3	S2
CANNABACEAE		Hemp Family			
<i>Humulus lupulus</i>					
var. <i>pubescens</i>	wild hop	-	INV	G5T4?	S1S2
CAPRIFOLIACEAE		Honeysuckle Family			
<i>Triosteum aurantiacum</i>					
var. <i>illinoense</i>	red-fruit horse-gentian	-	INV	G5TNR	SH
CARYOPHYLLACEAE		Pink Family			
<i>Cerastium velutinum</i>					
var. <i>velutinum</i>	velvety chickweed	-	INV	GNRT4?	S1
<i>Geocarpon minimum</i>	geocarpon	LT	SE	G2	S2
<i>Loeflingia squarrosa</i>	spreading loeflingia	-	INV	G5	S1
<i>Minuartia drummondii</i>	Drummond's sandwort	-	INV	G5	S2S3
<i>Minuartia michauxii</i>	rock sandwort	-	INV	G5	S1
<i>Paronychia virginica</i>	yellow nailwort	-	INV	G4	S2
<i>Silene ovata</i>	ovate-leaf catchfly	-	ST	G3	S3
<i>Silene regia</i>	royal catchfly	-	ST	G3	S2
CELASTRACEAE		Bittersweet Family			
<i>Euonymus obovatus</i>	running strawberry-bush	-	INV	G5	S3
CISTACEAE		Rock-rose Family			
<i>Crocanthemum bicknellii</i>	hoary frostweed	-	INV	G5	SH
<i>Crocanthemum rosmarinifolium</i>	rosemary rock-rose	-	INV	G4	S1
CLEOMACEAE		Spider-flower Family			
<i>Polanisia erosa</i>					
subsp. <i>erosa</i>	sandhill clammy-weed	-	INV	G5T5	S1S2

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CONVOLVULACEAE		Morning-glory Family			
<i>Convolvulus equitans</i>	Texas bindweed	-	INV	G5	S1
<i>Cuscuta coryli</i>	hazel dodder	-	INV	G5?	SU
<i>Cuscuta glomerata</i>	rope dodder	-	INV	G5	S1
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	glandular dodder	-	INV	G5T4T5	SU
<i>Evolvulus sericeus</i>	silver dwarf morning-glory	-	ST	G5	S1
<i>Ipomoea cordatotriloba</i> var. <i>cordatotriloba</i>	tie-vine morning-glory	-	INV	G5T5	S1
<i>Stylisma aquatica</i>	water dawnflower	-	INV	G4	S1S2
<i>Stylisma pickeringii</i> var. <i>pattersonii</i>	Patterson's dawnflower	-	INV	G4T4	S2
CRASSULACEAE		Stonecrop Family			
<i>Crassula aquatica</i>	water pygmyweed	-	INV	G5	S1S3
DROSERACEAE		Sundew Family			
<i>Drosera capillaris</i>	pink sundew	-	INV	G5	S1
ELATINACEAE		Waterwort Family			
<i>Bergia texana</i>	Texas bergia	-	INV	G5	S2
ERICACEAE		Heath Family			
<i>Gaylussacia baccata</i>	black huckleberry	-	INV	G5	S3
EUPHORBIACEAE		Spurge Family			
<i>Acalypha deamii</i>	Deam's copperleaf	-	INV	G4?	S1
<i>Croton lindheimerianus</i> var. <i>lindheimerianus</i>	Lindheimer's croton	-	INV	G5TNR	S1
<i>Croton michauxii</i>	narrow-leaf rushfoil	-	INV	G5	S1S2
<i>Ditrysinia fruticosa</i>	Sebastian-bush	-	INV	G5	S1
<i>Euphorbia hexagona</i>	six-angle spurge	-	INV	G5	S2
<i>Euphorbia longicruris</i>	wedge-leaf spurge	-	INV	G4G5	S1
<i>Euphorbia missurica</i>	Missouri spurge	-	INV	G5	S2
<i>Tragia smallii</i>	Small's noseburn	-	INV	G4?	S1
FABACEAE		Bean Family			
<i>Amorpha canescens</i>	lead-plant	-	INV	G5	S1
<i>Amorpha ouachitensis</i>	Ouachita indigo-bush	-	INV	G3Q	S3
<i>Amorpha paniculata</i>	panicked indigo-bush	-	ST	G2G3	S1
<i>Astragalus crassicaarpus</i> var. <i>crassicaarpus</i>	purple ground-plum	-	INV	G5T5	S2
<i>Astragalus leptocarpus</i>	slim-pod milk-vetch	-	INV	G5	S2
<i>Astragalus nuttallianus</i> var. <i>nuttallianus</i>	Nuttall's milk-vetch	-	INV	G5TNR	S1
<i>Astragalus soxmaniorum</i>	Soxman's milk-vetch	-	INV	G3	S2
<i>Dalea compacta</i> var. <i>compacta</i>	compact prairie-clover	-	INV	G5T4	S2
<i>Dalea gattingeri</i>	Gattinger's prairie-clover	-	INV	G3G4	S2

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<i>Dalea lanata</i>					
var. <i>lanata</i>	woolly prairie-clover	-	INV	G5TNR	S2S3
<i>Dalea phleoides</i>					
var. <i>microphylla</i>	little-leaf prairie-clover	-	ST	G4T4	S1
<i>Dalea villosa</i>					
var. <i>grisea</i>	silky prairie-clover	-	SE	G5T4	S1
<i>Desmodium illinoense</i>	Illinois tick-trefoil	-	INV	G5	S2
<i>Indigofera miniata</i>	scarlet-pea	-	ST	G5	S2
<i>Lupinus texensis</i>	Texas bluebonnet	-	INV	G5	S1
<i>Orbexilum onobrychis</i>	French-grass	-	INV	G5	S1
<i>Pediomelum digitatum</i>	palm-leaf Indian-breadroot	-	ST	G5	S1
<i>Pediomelum esculentum</i>	large Indian-breadroot	-	INV	G5	S2
<i>Pediomelum hypogaeum</i>					
var. <i>subulatum</i>	buried Indian-breadroot	-	SE	G5T4	S1
<i>Styphnolobium affine</i>	Eve's necklace	-	INV	G4	S2S3
<i>Trifolium bejariense</i>	Bejar clover	-	INV	G4	SH
<i>Trifolium carolinianum</i>	Carolina clover	-	INV	G5	S1?
<i>Trifolium stoloniferum</i>	running buffalo clover	LE	INV	G3	SH
<i>Vicia ludoviciana</i>					
subsp. <i>leavenworthii</i>	Leavenworth's vetch	-	INV	G5T5	S1S2
<i>Vicia ludoviciana</i>					
subsp. <i>ludoviciana</i>	Louisiana vetch	-	INV	G5TNR	SH
FAGACEAE	Beech Family				
<i>Quercus acerifolia</i>	maple-leaf oak	-	ST	G1	S1
<i>Quercus austrina</i>	bluff oak	-	INV	G4?	S1
<i>Quercus hemisphaerica</i>	Darlington's oak	-	INV	G5	S1S2
<i>Quercus prinoides</i>	dwarf chinquapin oak	-	INV	G5	SH
<i>Quercus sinuata</i>	Durand's white oak	-	ST	G4G5	S2
GENTIANACEAE	Gentian Family				
<i>Eustoma exaltatum</i>	catchfly prairie-gentian	-	INV	G5	S2
<i>Gentiana alba</i>	pale gentian	-	INV	G4	S1
<i>Gentiana puberulenta</i>	downy gentian	-	INV	G4G5	S2
<i>Sabatia arkansana</i>	Pelton's rose-gentian	-	INV	G1	S1
<i>Sabatia campanulata</i>	slender rose-gentian	-	SE	G5	S1
<i>Sabatia gentianoides</i>	pinewoods rose-gentian	-	INV	G4G5	S1
GERANIACEAE	Geranium Family				
<i>Geranium texanum</i>	Texas crane's-bill	-	INV	G4	SH
GROSSULARIACEAE	Currant Family				
<i>Ribes cynosbati</i>	prickly gooseberry	-	INV	G5	S2S3
HAMAMELIDACEAE	Witch-hazel Family				
<i>Fothergilla major</i>	witch-alder	-	INV	G3	S1
HYDRANGEACEAE	Hydrangea Family				
<i>Decumaria barbara</i>	climbing-hydrangea	-	INV	G5	S1
<i>Philadelphus hirsutus</i>	hairy mock orange	-	INV	G5	S2S3

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HYPERICACEAE		St. John's-wort Family				
<i>Hypericum adpressum</i>	creeping St. John's-wort	-		INV	G3	S1
<i>Hypericum apocynifolium</i>	dogbane St. John's-wort	-		INV	GNR	S1S2
<i>Hypericum virgatum</i>	sharp-leaf St. John's-wort	-		INV	G4?	S1
<i>Triadenum virginicum</i>	Virginia marsh-St. John's-wort	-		INV	G5	S1
JUGLANDACEAE		Walnut Family				
<i>Carya pallida</i>	pale hickory	-		ST	G5	S1
<i>Juglans cinerea</i>	butternut	-		INV	G4	S3
LAMIACEAE		Mint Family				
<i>Blephilia hirsuta</i>	hairy wood mint	-		INV	G5?	S1
<i>Hedeoma reverchonii</i> var. <i>reverchonii</i>	Reverchon's false pennyroyal	-		INV	G5?TNR	S1
<i>Mentha arvensis</i>	wild mint	-		INV	G5	S1
<i>Monarda luteola</i>	yellow-flower beebalm	-		INV	GNR	S1
<i>Physostegia digitalis</i>	foxglove false dragonhead	-		INV	G5	S1
<i>Pycnanthemum verticillatum</i>	whorled mountain-mint	-		INV	G5	S1
<i>Pycnanthemum virginianum</i>	Virginia mountain-mint	-		INV	G5	S1S2
<i>Salvia reflexa</i>	Rocky Mountain sage	-		INV	G5	SH
<i>Scutellaria bushii</i>	Bush's skullcap	-		ST	G3	S2
<i>Scutellaria cardiophylla</i>	Gulf skullcap	-		INV	G4?	S1S2
<i>Stachys crenata</i>	shade betony	-		INV	G5	SH
<i>Stachys iltisii</i>	Ouachita hedge-nettle	-		INV	GNR	S3
Lauraceae		Laurel Family				
<i>Lindera melissifolia</i>	pondberry		LE	SE	G2G3	S2
<i>Persea borbonia</i>	red bay	-		SE	G5	SH
Lentibulariaceae		Bladderwort Family				
<i>Utricularia cornuta</i>	horned bladderwort	-		INV	G5	S1
<i>Utricularia inflata</i>	swollen bladderwort	-		INV	G5	S1
<i>Utricularia macrorhiza</i>	greater bladderwort	-		INV	G5	SH
<i>Utricularia subulata</i>	zigzag bladderwort	-		INV	G5	S2
Loasaceae		Stick-leaf Family				
<i>Mentzelia oligosperma</i>	stick-leaf	-		INV	G4	SH
Loganiaceae		Logania Family				
<i>Mitreola sessilifolia</i>	swamp hornpod	-		INV	G4G5	S2
Lythraceae		Loosestrife Family				
<i>Didiplis diandra</i>	water-purslane	-		INV	G5	S1S3
Magnoliaceae		Magnolia Family				
<i>Magnolia macrophylla</i>	big-leaf magnolia	-		SE	G5	S1

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MALVACEAE		Mallow Family			
<i>Abutilon fruticosum</i>	Texas Indian-mallow	-	INV	G4G5	S1S2
<i>Callirhoe alcaeoides</i>	plains poppy-mallow	-	INV	G5?	S1?
<i>Callirhoe bushii</i>	Bush's poppy-mallow	-	INV	G3	S3
<i>Callirhoe papaver</i>	woodland poppy-mallow	-	INV	G5	S1
<i>Hibiscus coccineus</i>	scarlet rose-mallow	-	INV	G4?	S1
<i>Malvastrum hispidum</i>	yellow false mallow	-	INV	G3G5	S2
<i>Sida elliotii</i>	Elliott's sida	-	INV	G4G5	S2S3
MENYANTHACEAE		Buck-bean Family			
<i>Obolaria virginica</i>	Virginia pennywort	-	INV	G5	S2
MYRSINACEAE		Colicwood Family			
<i>Lysimachia hybrida</i>	lowland yellow-loosestrife	-	INV	G5	S1
ONAGRACEAE		Evening-primrose Family			
<i>Ludwigia microcarpa</i>	small-fruit primrose-willow	-	INV	G5	S1
<i>Oenothera clelandii</i>	Cleland's evening-primrose	-	INV	G3G5	S1
<i>Oenothera heterophylla</i> subsp. <i>heterophylla</i>	sandhill evening-primrose	-	INV	G4TNR	S1
<i>Oenothera heterophylla</i> subsp. <i>orientalis</i>	eastern sandhill evening-primrose	-	INV	G4TU	S1S2
<i>Oenothera pilosella</i> subsp. <i>sessilis</i>	prairie evening-primrose	-	ST	G5T2	S2
<i>Oenothera spachiana</i>	Spach's evening-primrose	-	INV	G5	SH
<i>Stenosiphon linifolius</i>	false gaura	-	ST	G5	S1
OROBANCHACEAE		Broomrape Family			
<i>Agalinis auriculata</i>	ear-leaf false foxglove	-	INV	G3	S1
<i>Agalinis skinneriana</i>	Skinner's false foxglove	-	INV	G3G4	SH
<i>Castilleja indivisa</i>	entire-leaf Indian-paintbrush	-	INV	G5	SH
<i>Pedicularis lanceolata</i>	swamp lousewort	-	INV	G5	S1
<i>Seymeria cassioides</i>	yaupon black-senna	-	INV	G5	S1
OXALIDACEAE		Wood-sorrel Family			
<i>Oxalis texana</i>	Texas yellow wood-sorrel	-	INV	GNR	SU
PAPAVERACEAE		Poppy Family			
<i>Stylophorum diphyllum</i>	celandine-poppy	-	INV	G5	S3
PARNASSIACEAE		Grass-of-Parnassus Family			
<i>Parnassia asarifolia</i>	kidney-leaf grass-of-Parnassus	-	INV	G4	S1
PHRYMACEAE		Lopseed Family			
<i>Mimulus floribundus</i>	yellow monkey-flower	-	INV	G5	S2S3
<i>Mimulus ringens</i> var. <i>ringens</i>	Allegheny monkey-flower	-	INV	G5T5	S1S2

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PHYLLANTHACEAE		Leaf-flower Family			
<i>Phyllanthus polygonoides</i>	knotweed leaf-flower	-	INV	G5	S1
PLANTAGINACEAE		Plantain Family			
<i>Chelone glabra</i>	white turtlehead	-	INV	G5	S1
<i>Chelone obliqua</i> var. <i>speciosa</i>	rose turtlehead	-	SE	G4T3	SH
<i>Collinsia verna</i>	blue-eyed Mary	-	INV	G5	S1
<i>Gratiola brevifolia</i>	sticky hedge-hyssop	-	INV	G4	S3
<i>Nuttallanthus canadensis</i>	sand blue toadflax	-	INV	G5	S1S2
<i>Penstemon cobaea</i>	showy beardtongue	-	INV	G4	S3
<i>Penstemon murrayanus</i>	scarlet beardtongue	-	ST	G4	S2
<i>Plantago cordata</i>	heart-leaf plantain	-	ST	G4	S2
<i>Plantago patagonica</i>	woolly plantain	-	INV	G5	S2
<i>Plantago rhodosperma</i>	red-seed plantain	-	INV	GNR	S1S2
POLEMONIACEAE		Phlox Family			
<i>Phlox amplifolia</i>	broad-leaf phlox	-	INV	G3G5	S1
<i>Phlox bifida</i> subsp. <i>bifida</i>	sand phlox	-	INV	G5?T5?	SU
<i>Phlox bifida</i> subsp. <i>stellaria</i>	starry sand phlox	-	INV	G5?T3	SU
POLYGALACEAE		Milkwort Family			
<i>Polygala incarnata</i>	pink milkwort	-	INV	G5	S1S2
<i>Polygala nana</i>	candyroot	-	INV	G5	S2S3
POLYGONACEAE		Buckwheat Family			
<i>Eriogonum annuum</i>	annual wild buckwheat	-	INV	G5	S1
<i>Eriogonum multiflorum</i> var. <i>multiflorum</i>	many-flower wild buckwheat	-	INV	G5T3T5	S3
PORTULACACEAE		Purslane Family			
<i>Claytonia ozarkensis</i>	Ozark spring-beauty	-	INV	G1G3Q	S2
<i>Pemseranthus rugospermus</i>	rough-seed fameflower	-	INV	G3G4	S1
PRIMULACEAE		Primrose Family			
<i>Androsace occidentalis</i>	rock-jasmine	-	INV	G5	S1
<i>Primula frenchii</i>	French's shooting-star	-	ST	G3	S2
RANUNCULACEAE		Buttercup Family			
<i>Anemone acutiloba</i>	sharp-lobe hepatica	-	INV	G5	S1S2
<i>Anemone quinquefolia</i> var. <i>quinquefolia</i>	wood anemone	-	INV	G5T4T5	S2
<i>Delphinium carolinianum</i> subsp. <i>vimineum</i>	pinewoods larkspur	-	INV	G5T5	S2
<i>Delphinium carolinianum</i> subsp. <i>virescens</i>	plains larkspur	-	INV	G5T5	S2
<i>Delphinium newtonianum</i>	Moore's delphinium	-	INV	G3	S3
<i>Delphinium treleasei</i>	Trelease's larkspur	-	INV	G3	S3

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<i>Ranunculus aquatilis</i> var. <i>diffusus</i>	white water crowfoot	-	INV	G5T5	S2S3
<i>Ranunculus flabellaris</i>	yellow water crowfoot	-	INV	G5	S3
<i>Thalictrum arkansanum</i>	Arkansas meadow-rue	-	ST	G2Q	S2
<i>Thalictrum dioicum</i>	early meadow-rue	-	INV	G5	S1
<i>Trautvetteria caroliniensis</i>	false bugbane	-	INV	G5	S1
RHAMNACEAE	Buckthorn Family				
<i>Condalia hookeri</i>	bluewood	-	INV	G5	S1
ROSACEAE	Rose Family				
<i>Crataegus brachyacantha</i>	blueberry hawthorn	-	INV	G4	S2
<i>Crataegus coccinioides</i>	Kansas hawthorn	-	INV	G4?	SH
<i>Crataegus macrosperma</i>	fan-leaf hawthorn	-	INV	G5	S1
<i>Crataegus phaenopyrum</i>	Washington hawthorn	-	INV	G4?	S1
<i>Crataegus triflora</i>	three-flower hawthorn	-	INV	G2G3	S1
<i>Crataegus ×canescens</i>	Stern's medlar	-	INV	G1	S1
<i>Drymocallis arguta</i>	tall cinquefoil	-	ST	G5	S1S2
<i>Gillenia trifoliata</i>	Bowman's-root	-	INV	G4G5	S1
<i>Neviusia alabamensis</i>	Alabama snow-wreath	-	ST	G2	S1S2
<i>Photinia melanocarpa</i>	black chokeberry	-	INV	G5	S1
<i>Prunus gracilis</i>	Oklahoma plum	-	INV	G4G5	S1
<i>Prunus pumila</i> var. <i>susquehanae</i>	sand cherry	-	ST	G5T4	S1
<i>Rosa foliolosa</i>	white prairie rose	-	INV	G5	S2
<i>Sanguisorba annua</i>	prairie burnet	-	INV	G4	S1
<i>Spiraea tomentosa</i>	hardhack	-	INV	G5	S2
<i>Waldsteinia fragarioides</i>	barren-strawberry	-	INV	G5	S1
RUBIACEAE	Madder Family				
<i>Galium arkansanum</i> var. <i>pubiflorum</i>	hairy-flower Arkansas bedstraw	-	INV	G5TNR	S2
<i>Galium texense</i>	Texas bedstraw	-	INV	G4	S1
<i>Houstonia ouachitana</i>	Ouachita bluet	-	INV	G3	S3
<i>Houstonia parviflora</i>	Greenman's bluet	-	INV	G3	S1
SALICACEAE	Willow Family				
<i>Salix sericea</i>	silky willow	-	SE	G5	SH
SAPINDACEAE	Soapberry Family				
<i>Acer saccharum</i> var. <i>leucoderme</i>	chalk maple	-	INV	G5T5	S2S3
<i>Acer saccharum</i> var. <i>nigrum</i>	black maple	-	INV	G5T5	S1S2
SAXIFRAGACEAE	Saxifrage Family				
<i>Heuchera villosa</i> var. <i>arkansana</i>	Arkansas alumroot	-	INV	G5T3Q	S3
<i>Micranthes virginianensis</i>	early saxifrage	-	INV	G5	S1S2
<i>Mitella diphylla</i>	miterwort	-	INV	G5	S2

Name	Common Name	Federal Status	State Status	Global Rank	State Rank
SCHISANDRACEAE	Star-vine Family				
<i>Schisandra glabra</i>	bay star-vine	-	INV	G3	S2S3
SIMAROUBACEAE	Quassia Family				
<i>Leitneria floridana</i>	corkwood	-	INV	G3	S3
SOLANACEAE	Nightshade Family				
<i>Physalis cinerascens</i> var. <i>cinerascens</i>	small-flower ground-cherry	-	INV	G4G5T3T5	S1
<i>Physalis missouriensis</i>	Missouri ground-cherry	-	INV	G5?	SH
<i>Physalis pumila</i>	prairie ground-cherry	-	INV	G5	S1
STYRACACEAE	Storax Family				
<i>Halesia diptera</i>	two-wing silverbell	-	SE	G5	SH
THEACEAE	Tea Family				
<i>Stewartia malacodendron</i>	silky-camellia	-	SE	G4	S1
THYMELAEACEAE	Leatherwood Family				
<i>Dirca decipiens</i>	Ozark leatherwood	-	INV	G1G2	S1?
ULMACEAE	Elm Family				
<i>Ulmus thomasi</i>	rock elm	-	INV	G5	S2
VALERIANACEAE	Cornsalad Family				
<i>Valerianella amarella</i>	hairy cornsalad	-	INV	GNR	S1
<i>Valerianella nuttallii</i>	Nuttall's cornsalad	-	INV	G2?	S2
<i>Valerianella ozarkana</i>	Ozark cornsalad	-	INV	G3	S3
<i>Valerianella palmeri</i>	Palmer's cornsalad	-	INV	G3	S3
VERBENACEAE	Vervain Family				
<i>Glandularia bipinnatifida</i> var. <i>bipinnatifida</i>	Dakota vervain	-	INV	G5T5	S2
VIOLACEAE	Violet Family				
<i>Viola canadensis</i> var. <i>canadensis</i>	Canadian white violet	-	INV	G5T5	S2
<i>Viola pedatifida</i>	prairie violet	-	INV	G5	S2
<i>Viola walteri</i>	Walter's violet	-	INV	G4G5	S1S2
VITACEAE	Grape Family				
<i>Vitis rupestris</i>	sand grape	-	INV	G3	S3

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ANGIOSPERMS (MONOCOTS)					
AGAVACEAE		Agave Family			
<i>Camassia angusta</i>	prairie wild hyacinth	-	INV	G5?Q	S2S3
<i>Schoenolirion wrightii</i>	Texas sunnybell	-	ST	G3	S2S3
ALISMATACEAE		Water-plantain Family			
<i>Echinodorus berteroi</i>	upright burhead	-	INV	G5	S1S3
<i>Sagittaria rigida</i>	stiff arrowhead	-	INV	G5	SH
ALLIACEAE		Onion Family			
<i>Allium canadense</i>					
var. <i>lavendulare</i>	tall pink glade onion	-	INV	G5TNR	S2
<i>Allium cernuum</i>	nodding wild onion	-	INV	G5	SH
<i>Allium drummondii</i>	Drummond's wild onion	-	INV	G5	S1
AMARYLLIDACEAE		Amaryllis Family			
<i>Cooperia drummondii</i>	rain-lily	-	INV	G5	S1S2
BURMANNIACEAE		Bluethread Family			
<i>Burmannia biflora</i>	northern bluethread	-	INV	G4G5	S1
COLCHICACEAE		Bellwort Family			
<i>Uvularia perfoliata</i>	perfoliate bellwort	-	INV	G5	S3
COMMELINACEAE		Spiderwort Family			
<i>Tradescantia bracteata</i>	long-bract spiderwort	-	INV	G5	S2
<i>Tradescantia longipes</i>	dwarf spiderwort	-	INV	G4	S2
<i>Tradescantia ozarkana</i>	Ozark spiderwort	-	INV	G3	S3
<i>Tradescantia paludosa</i>	Confederate spiderwort	-	INV	G4?Q	S1S2
<i>Tradescantia reverchonii</i>	Reverchon's spiderwort	-	INV	G4	S3
<i>Tradescantia subaspera</i>	zigzag spiderwort	-	INV	G5	S1S3
<i>Tradescantia virginiana</i>	Virginia spiderwort	-	INV	G5	S1
CYPERACEAE		Sedge Family			
<i>Bolboschoenus robustus</i>	salt-marsh bulrush	-	INV	G5	S1
<i>Bulbostylis ciliatifolia</i>					
var. <i>coarctata</i>	fringe-leaf hairsedge	-	INV	G5T3T5	S1S2
<i>Carex aggregata</i>	cluster sedge	-	INV	G5	S1
<i>Carex alata</i>	broad-wing sedge	-	INV	G5	S1
<i>Carex arkansana</i>	Arkansas sedge	-	INV	G4	S1
<i>Carex atlantica</i>					
subsp. <i>atlantica</i>	prickly bog sedge	-	INV	G5T4	S2
<i>Carex bicknellii</i>	Bicknell's sedge	-	INV	G5	S1
<i>Carex bromoides</i>					
subsp. <i>bromoides</i>	brome sedge	-	INV	G5T5	S2
<i>Carex bullata</i>	button sedge	-	INV	G5	S1
<i>Carex buxbaumii</i>	brown bog sedge	-	INV	G5	S1

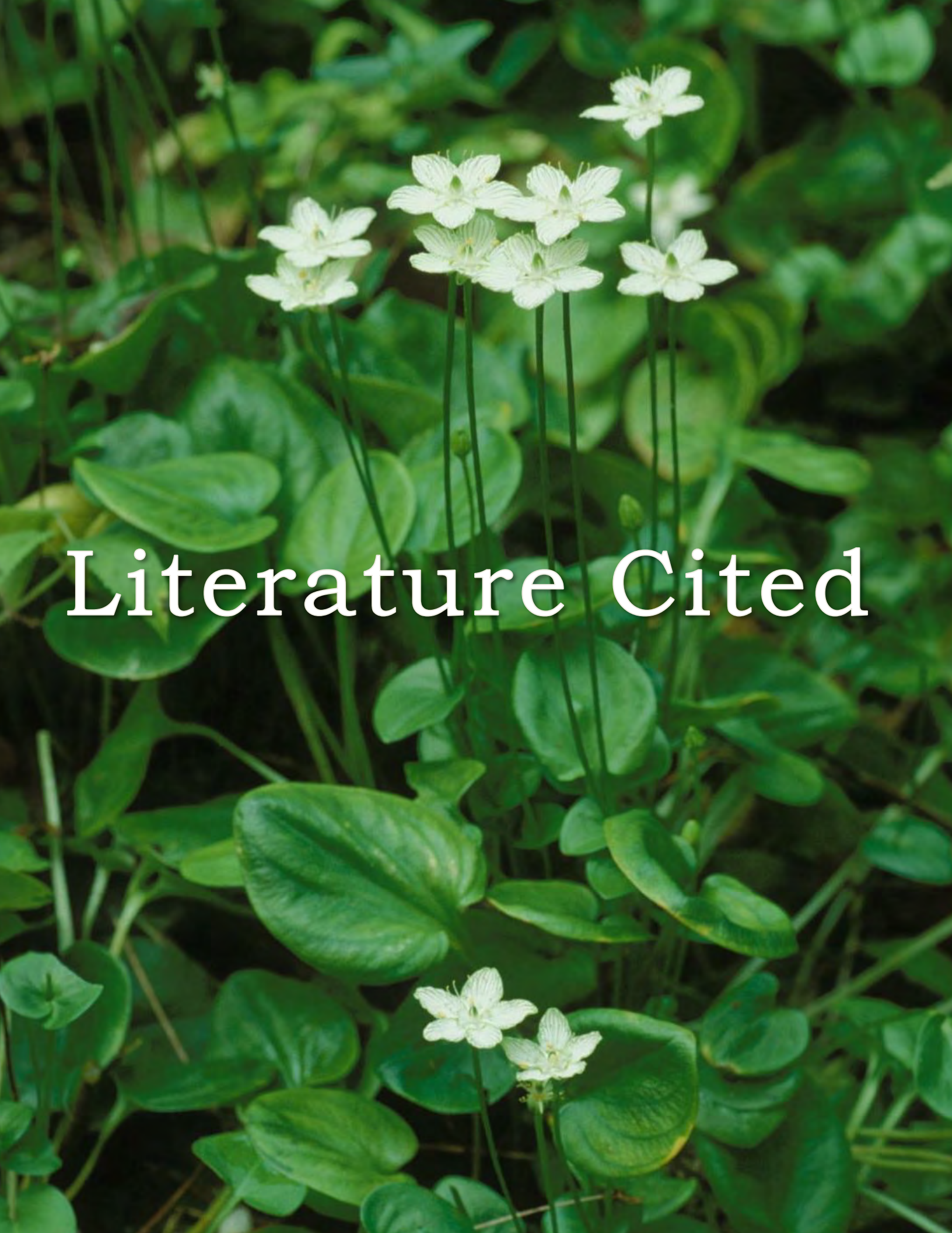
Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Carex careyana</i>	Carey's sedge	-	INV	G4G5	S3
<i>Carex comosa</i>	bottle-brush sedge	-	INV	G5	S1S2
<i>Carex conjuncta</i>	soft fox sedge	-	INV	G4G5	S1
<i>Carex conoidea</i>	open-field sedge	-	INV	G5	S1
<i>Carex cumberlandensis</i>	Cumberland sedge	-	INV	GNR	S1
<i>Carex davisii</i>	Davis' sedge	-	INV	G4	S3
<i>Carex decomposita</i>	cypress-knee sedge	-	INV	G3G4	S2
<i>Carex emoryi</i>	Emory's sedge	-	INV	G5	S1
<i>Carex fissa</i> var. <i>fissa</i>	hammock sedge	-	INV	G4?T3T4	S1
<i>Carex gigantea</i>	giant sedge	-	INV	G4	S1S2
<i>Carex glaucescens</i>	southern waxy sedge	-	INV	G4	S1
<i>Carex gracilescens</i>	slender wood sedge	-	INV	G5?	S2
<i>Carex gracillima</i>	graceful sedge	-	INV	G5	S1
<i>Carex gravida</i>	heavy sedge	-	INV	G5	S2S3
<i>Carex hirtifolia</i>	hairy sedge	-	INV	G5	S3
<i>Carex hitchcockiana</i>	Hitchcock's sedge	-	INV	G5	S1S2
<i>Carex interior</i>	inland star sedge	-	INV	G5	S1
<i>Carex kraliana</i>	Kral's sedge	-	INV	G5	S1S2
<i>Carex laevivaginata</i>	smooth-sheath sedge	-	INV	G5	S2
<i>Carex latebracteata</i>	Waterfall's sedge	-	ST	G3	S3
<i>Carex leptalea</i>	bristly-stalk sedge	-	INV	G5	S2S3
<i>Carex lupuliformis</i>	false hop sedge	-	INV	G4	S1S2
<i>Carex muskingumensis</i>	palm sedge	-	INV	G4	S1
<i>Carex normalis</i>	spreading oval sedge	-	INV	G5	S1
<i>Carex opaca</i>	opaque prairie sedge	-	SE	G4	S2S3
<i>Carex pellita</i>	woolly sedge	-	INV	G5	S1S2
<i>Carex pennsylvanica</i>	Pennsylvania sedge	-	INV	G5	S3
<i>Carex planostachys</i>	cedar sedge	-	INV	G5	S1
<i>Carex prasina</i>	drooping sedge	-	INV	G4	SH
<i>Carex radiata</i>	eastern star sedge	-	INV	G4	S1
<i>Carex reznicekii</i>	Reznicek's sedge	-	INV	G5	S2?
<i>Carex scoparia</i> var. <i>scoparia</i>	pointed broom sedge	-	INV	G5T5	S1S2
<i>Carex seorsa</i>	swamp star sedge	-	INV	G4	SH
<i>Carex shinneryi</i>	Shinners' sedge	-	INV	G3	S1
<i>Carex sparganioides</i>	bur-reed sedge	-	INV	G5	S3
<i>Carex stricta</i>	tussock sedge	-	INV	G5	S3
<i>Carex suberecta</i>	prairie straw sedge	-	INV	G4	S2
<i>Carex timida</i>	timid sedge	-	INV	G2G3	S2S3
<i>Carex willdenowii</i>	Willdenow's sedge	-	INV	G5	S1
<i>Cladium jamaicense</i>	saw-grass	-	INV	G5	SH
<i>Cyperus grayoides</i>	Illinois flatsedge	-	INV	G3	S1
<i>Cyperus haspan</i>	haspan flatsedge	-	INV	G5	S2
<i>Cyperus hystricinus</i>	bristly flatsedge	-	INV	G4	S2S3
<i>Cyperus retrofractus</i>	rough flatsedge	-	INV	G5	S1?
<i>Dulichium arundinaceum</i> var. <i>arundinaceum</i>	three-way sedge	-	INV	G5TNR	S2S3
<i>Eleocharis equisetoides</i>	horsetail spike-rush	-	INV	G4	SH
<i>Eleocharis flavescens</i> var. <i>flavescens</i>	yellow spike-rush	-	INV	G5T5	S1S2
<i>Eleocharis flavescens</i> var. <i>olivacea</i>	bright-green spike-rush	-	INV	G5T4T5	S1
<i>Eleocharis montevidensis</i>	sand spike-rush	-	INV	G5	S1
<i>Eleocharis wolfii</i>	Wolf's spike-rush	-	INV	G3G4	S3

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<i>Fuirena bushii</i>	Bush's umbrella sedge	-	INV	G5	S3
<i>Fuirena pumila</i>	dwarf umbrella sedge	-	INV	G4	SH
<i>Fuirena simplex</i>					
var. <i>aristulata</i>	western umbrella sedge	-	INV	G5T4	S1
<i>Fuirena squarrosa</i>	hairy umbrella sedge	-	INV	G4G5	S1
<i>Lipocarpus drummondii</i>	Drummond's halfchaff sedge	-	INV	G4G5	SH
<i>Rhynchospora capillacea</i>	capillary beaksedge	-	INV	G4	S2
<i>Rhynchospora colorata</i>	white-top sedge	-	SE	G5	S1
<i>Rhynchospora globularis</i>					
var. <i>globularis</i>	globe beaksedge	-	INV	G5?T5?	S2
<i>Rhynchospora gracilentia</i>	slender beaksedge	-	INV	G5	S2
<i>Rhynchospora macrostachya</i>	prairie horned beaksedge	-	INV	G4	S2
<i>Rhynchospora microcarpa</i>	southern beaksedge	-	INV	G5	S1
<i>Rhynchospora plumosa</i>	plumed beaksedge	-	INV	G5	S1
<i>Rhynchospora rariflora</i>	few-flower beaksedge	-	ST	G5	S1S2
<i>Rhynchospora scirpoides</i>	long-beak bald-rush	-	INV	G4	S1
<i>Schoenoplectus acutus</i>					
var. <i>acutus</i>	hard-stem bulrush	-	INV	G5T5	S1
<i>Schoenoplectus californicus</i>	California bulrush	-	INV	G5	S1S2
<i>Scirpus divaricatus</i>	spreading bulrush	-	INV	G5	SH
<i>Scirpus polyphyllus</i>	leafy bulrush	-	INV	G5	S2
<i>Scleria muehlenbergii</i>	Muhlenberg's nut-rush	-	INV	G5	S1S2
<i>Scleria verticillata</i>	whorled nut-rush	-	ST	G5	S1
<i>Trichophorum planifolium</i>	bashful bulrush	-	INV	G4G5	S1
ERIOCAULACEAE	Pipewort Family				
<i>Eriocaulon decangulare</i>	large-head pipewort	-	INV	G5	S1S2
<i>Eriocaulon koernickianum</i>	small-head pipewort	-	SE	G2	S2
HYDROCHARITACEAE	Frog's-bit Family				
<i>Vallisneria americana</i>	eel-grass	-	INV	G5	S1
HYPOXIDACEAE	Star-grass Family				
<i>Hypoxis curtissii</i>	Curtiss' star-grass	-	INV	G4?	S1
<i>Hypoxis sessilis</i>	glossy-seed star-grass	-	INV	G4	S1
IRIDACEAE	Iris Family				
<i>Alophia drummondii</i>	pinewoods-lily	-	INV	G4	S2
<i>Iris verna</i>					
var. <i>smalliana</i>	dwarf iris	-	INV	G5T4T5	S2
<i>Nemastylis geminiflora</i>	celestial-lily	-	INV	G4	S3
<i>Nemastylis nuttallii</i>	Nuttall's pleat-leaf	-	INV	G4	S2
<i>Sisyrinchium minus</i>	dwarf blue-eyed-grass	-	INV	G5?	S1
<i>Sisyrinchium sagittiferum</i>	spear-bract blue-eyed-grass	-	INV	G4?	SH
JUNCACEAE	Rush Family				
<i>Juncus brachyphyllus</i>	tufted-stem rush	-	INV	G5	S1
<i>Juncus canadensis</i>	Canadian rush	-	INV	G5	S1
<i>Juncus subcaudatus</i>	fen rush	-	INV	G5	S1
<i>Luzula acuminata</i>					
var. <i>carolinae</i>	Carolina wood-rush	-	INV	G5T4T5	S2

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LILIACEAE		Lily Family			
<i>Erythronium mesochoreum</i>	prairie trout-lily	-	INV	G4G5	S1S2
<i>Lilium superbum</i>	Turk's-cap lily	-	INV	G5	S1
<i>Prosartes lanuginosa</i>	yellow mandarin	-	INV	G5	S2
MELANTHIACEAE		Bunchflower Family			
<i>Stenanthium gramineum</i>	featherbells	-	INV	G4G5	S3
<i>Veratrum latifolium</i>	bunchflower	-	INV	G5	SH
<i>Veratrum woodii</i>	Wood's false hellebore	-	INV	G5	S3
NARTHECIACEAE		Colicroot Family			
<i>Aletris aurea</i>	golden colicroot	-	INV	G5	S1S2
ORCHIDACEAE		Orchid Family			
<i>Calopogon oklahomensis</i>	Oklahoma grass-pink	-	INV	G3	S2
<i>Calopogon tuberosus</i> var. <i>tuberosus</i>	tuberous grass-pink	-	INV	G5T5	S1
<i>Cypripedium kentuckiense</i>	Kentucky lady's-slipper	-	INV	G3	S3
<i>Cypripedium reginae</i>	showy lady's-slipper	-	SE	G4	S1
<i>Hexaletris spicata</i> var. <i>spicata</i>	crested-coralroot	-	INV	G5T4T5	S2
<i>Liparis loeselii</i>	Loesel's twayblade	-	ST	G5	S1
<i>Platanthera cristata</i>	crested fringed orchid	-	INV	G5	S1S2
<i>Platanthera flava</i> var. <i>flava</i>	southern rein orchid	-	ST	G4?T4?Q	S2S3
<i>Platanthera nivea</i>	snowy orchid	-	SE	G5	SH
<i>Platanthera peramoena</i>	purple fringeless orchid	-	ST	G5	S2
<i>Platanthera ×channellii</i>	Channell's fringed orchid	-	INV	GNA	S1
<i>Pogonia ophioglossoides</i>	rose pogonia	-	ST	G5	S2
<i>Spiranthes lacera</i> var. <i>lacera</i>	northern slender ladies'-tresses	-	INV	G5T5	S1
<i>Spiranthes lucida</i>	shining ladies'-tresses	-	INV	G5	S2
<i>Spiranthes magnicamporum</i>	Great Plains ladies'-tresses	-	INV	G4	S1S2
<i>Spiranthes odorata</i>	fragrant ladies'-tresses	-	INV	G5	S1
<i>Spiranthes ovalis</i> var. <i>erostellata</i>	northern oval ladies'-tresses	-	INV	G5?T4?	S1
<i>Spiranthes praecox</i>	giant ladies'-tresses	-	INV	G5	S1S2
POACEAE		Grass Family			
<i>Andropogon virginicus</i> var. <i>glaucus</i>	chalky bluestem	-	INV	G5T4T5	S1
<i>Anthenantia texana</i>	Kral's silkyscale	-	INV	G3G4	S3
<i>Aristida desmantha</i>	curly three-awn	-	INV	G5	S1
<i>Aristida lanosa</i>	woolly three-awn	-	INV	G5	S2
<i>Aristida purpurea</i> var. <i>purpurea</i>	purple three-awn	-	INV	G5T5	S1
<i>Bouteloua hirsuta</i> subsp. <i>hirsuta</i>	hairy grama	-	SE	G5T5	S1
<i>Bouteloua rigidiseta</i>	Texas grama	-	SE	G5	S1
<i>Bromus nottowanus</i>	satin brome	-	INV	G3G5	S2
<i>Calamagrostis porteri</i> subsp. <i>insperata</i>	Porter's reed grass	-	SE	G4T3	SH
<i>Calamovilfa arcuata</i>	Cumberland sand-reed	-	INV	G2G3	S1
<i>Coelorachis rugosa</i>	wrinkled joint-tail	-	INV	G5	S2

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<i>Danthonia sericea</i>	downy oat grass	-	INV	G5?	S1
<i>Deschampsia flexuosa</i>	wavy hair grass	-	INV	G5	S2S3
<i>Dichanthelium consanguineum</i>	blood rosette grass	-	INV	G5	SH
<i>Dichanthelium dichotomum</i> subsp. <i>roanokense</i>	Roanoke rosette grass	-	INV	G5TNR	S1
<i>Dichanthelium scabriusculum</i>	tall swamp rosette grass	-	INV	G4	S1S2
<i>Distichlis spicata</i>	salt grass	-	INV	G5	S1
<i>Elymus churchii</i>	Church's wild rye	-	INV	G2G3	S2?
<i>Elymus glaucus</i> subsp. <i>mackenzii</i>	Mackenzie's blue wild rye	-	INV	G5TNR	S1
<i>Elymus riparius</i>	river-bank wild rye	-	INV	G5	S1S2
<i>Elymus virginicus</i> var. <i>intermedius</i>	intermediate wild rye	-	INV	G5TNR	S1
<i>Festuca versuta</i>	Texas fescue	-	INV	G3	S1
<i>Glyceria acutiflora</i>	creeping manna grass	-	INV	G5	S1
<i>Gymnopogon brevifolius</i>	short-leaf skeleton grass	-	INV	G5	S2
<i>Koeleria macrantha</i>	prairie June grass	-	INV	G5	S2
<i>Leersia hexandra</i>	southern cut grass	-	INV	G5	S1
<i>Limnodea arkansana</i>	Ozark grass	-	INV	G4?	SH
<i>Muhlenbergia bushii</i>	nodding muhly	-	INV	G5	S2
<i>Muhlenbergia cuspidata</i>	plains muhly	-	INV	G4	SH
<i>Muhlenbergia glabrifloris</i>	inland muhly	-	INV	G4?	S1
<i>Nassella leucotricha</i>	Texas winter grass	-	INV	G5	SH
<i>Panicum hemitomon</i>	maiden-cane	-	INV	G5?	S1
<i>Panicum rigidulum</i> subsp. <i>pubescens</i>	red-top panic grass	-	INV	G5T5?	S1
<i>Paspalum bifidum</i>	pitchfork paspalum	-	INV	G5	SH
<i>Paspalum boscianum</i>	bull paspalum	-	INV	G5	S1
<i>Paspalum praecox</i>	early paspalum	-	INV	G4	S1S2
<i>Poa wolfii</i>	Wolf's blue grass	-	INV	G4	S2
<i>Schedonardus paniculatus</i>	tumble grass	-	INV	G5	S2
<i>Setaria magna</i>	giant bristle grass	-	INV	G4G5	SH
<i>Sphenopholis filiformis</i>	long-leaf wedgescale	-	INV	G4?	SH
<i>Sphenopholis longiflora</i>	Texas wedgescale	-	INV	G4	S1?
<i>Sporobolus junceus</i>	pineywoods dropseed	-	ST	G5	S1S2
<i>Sporobolus pyramidatus</i>	whorled dropseed	-	ST	G5	S2
<i>Tridens muticus</i> var. <i>elongatus</i>	slim tridens	-	INV	G5T4?	S1
<i>Vulpia sciurea</i>	squirrel-tail six-weeks grass	-	INV	G5	S1
<i>Zizania palustris</i> var. <i>interior</i>	interior wild rice	-	INV	G4G5T4T5	SH
POTAMOGETONACEAE	Pondweed Family				
<i>Zannichellia palustris</i>	horned-pondweed	-	INV	G5	S2S3
RUSCACEAE	Solomon's-seal Family				
<i>Maianthemum stellatum</i>	starry false Solomon's-seal	-	INV	G5	S1
SMILACACEAE	Greenbrier Family				
<i>Smilax ecirrhata</i>	carrion-flower	-	INV	G5?	SH
<i>Smilax walteri</i>	red-berried greenbrier	-	INV	G5	S2S3
TRILLIACEAE	Trillium Family				
<i>Trillium flexipes</i>	white trillium	-	INV	G5	S1
<i>Trillium ozarkanum</i>	Ozark trillium	-	INV	G3	S3

Name	Common Name	Federal Status	State Status	Global Rank	State Rank
TYPHACEAE		Cat-tail Family			
<i>Sparganium angrocladum</i>	branched bur-reed	-	INV	G4G5	S1
XYRIDACEAE		Yellow-eyed-grass Family			
<i>Xyris ambigua</i>	Coastal Plain yellow-eyed-grass	-	INV	G5	S2S3
<i>Xyris baldwiniana</i>	Baldwin's yellow-eyed-grass	-	ST	G5	S1
<i>Xyris difformis</i> var. <i>curtissii</i>	Curtiss' yellow-eyed-grass	-	INV	G5T5	S1
<i>Xyris difformis</i> var. <i>difformis</i>	bog yellow-eyed-grass	-	INV	G5T5	S2



Literature Cited



LITERATURE CITED

- ALLEN, C.M. 2003. *Paspalidium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:558–560.
- ALLEN, C.M. 2007. *Paspalidium*. In: Barkworth, M.E., L.K. Anderton, K.M. Capels, S. Long, and M.B. Piep, eds. Manual of Grasses for North America. Utah State University Press, Logan, Utah. pp. 310, 553.
- ALLEN, C.M. and D.W. HALL. 2003. *Paspalum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:566–599.
- ALLEN, G.A. and K.R. ROBERTSON. 2002. *Erythronium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:153–164.
- AL-SHEHBAZ, I.A. 1986. The genera of Lepidieae (Cruciferae; Brassicaceae) in the southeastern United States. *Journal of the Arnold Arboretum* 67:265–311.
- AL-SHEHBAZ, I.A. 1988. The genera of Arabideae (Cruciferae; Brassicaceae) in the southeastern United States. *Journal of the Arnold Arboretum* 69:85–166.
- AL-SHEHBAZ, I.A. 2010a. *Erysimum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 7:534–545.
- AL-SHEHBAZ, I.A. 2010b. *Rorippa*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 7:493–506.
- AL-SHEHBAZ, I.A. and B.G. SCHUBERT. 1989. The Dioscoreaceae in the southeastern United States. *Journal of the Arnold Arboretum* 70:57–95.
- AL-SHEHBAZ, I.A. and J.F. GASKIN. 2010. *Lepidium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 7:570–595.
- AL-SHEHBAZ, I.A., K. MARHOLD, and J. LIHOVÁ. 2010. *Cardamine*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 7:464–484.
- ANDERSON, E.F. 2001. The Cactus Family. Timber Press, Portland, Oregon.
- ANDERSON, L.C. 2006. *Hasteola*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 20:610–611.
- ANDERSON, S.J. 2003. *Zoysia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:281–283.
- ANDERSON, S.J. 2007. *Zoysia*. In: Barkworth, M.E., L.K. Anderton, K.M. Capels, S. Long, and M.B. Piep, eds. Manual of Grasses for North America. Utah State University Press, Logan, Utah. pp. 249, 542.
- ARANDA, P.D.D. and S.L. HATCH. 2003. *Sorghastrum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:630–631.
- ARANDA, P.D.D. and S.L. HATCH. 2007. *Sorghastrum*. In: Barkworth, M.E., L.K. Anderton, K.M. Capels, S. Long, and M.B. Piep, eds. Manual of Grasses for North America. Utah State University Press, Logan, Utah. pp. 329, 555.
- ARGUS, G.W. 1986. The genus *Salix* (Salicaceae) in the southeastern United States. *Systematic Botany Monographs* 9:1–170.
- ARGUS, G.W. 2010. *Salix*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 7:23–162.
- ARKANSAS VASCULAR FLORA COMMITTEE (AVFC). 2006. Checklist of the Vascular Plants of Arkansas. Arkansas Vascular Flora Committee, Fayetteville, Arkansas.
- ARRIETA, Y.H., P.M. PETERSON, and M. DE LA CERDA LEMUS. 2004. Revisión de *Bouteloua* Lag. (Poaceae). CIIDIR Unidad Durango, Durango, Mexico.
- AUTIN, W.J., S.A. BURNS, B.J. MILLER, R.T. SAUCIER, and J.I. SNEAD. 1991. Quaternary geology of the Lower Mississippi Valley. In: Morrison, R.B., ed. Quaternary Non-glacial Geology of the Conterminous United States. Geology of North America vol. K-2. Geological Society of America. pp. 547–582.
- BAILEY, L.H. 1934. The species of grapes peculiar to North America. *Gentes Herbarum* 3:149–244.
- BAILEY, R.G., P.E. AVERS, T. KING, and W.H. MCNAB, eds. 1994. Ecoregions and subregions of the United States (map). Scale 1:7,500,000; color. U.S. Geological Survey, Washington D.C. Prepared for the U.S. Department of Agriculture Forest Service.
- BALL, P.W. 2002. *Carex* sect. *Porocystis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:482–485.
- BARKWORTH, M.E. 2003a. *Axonopus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:565–566.
- BARKWORTH, M.E. 2003b. *Chloris*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:204–218.
- BARKWORTH, M.E. 2007a. *Achnatherum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 24:114–142.
- BARKWORTH, M.E. 2007b. *Achnatherum*. In: Barkworth, M.E., L.K. Anderton, K.M. Capels, S. Long, and M.B. Piep, eds. Manual of Grasses for North America. Utah State University Press, Logan, Utah. pp. 30–35, 509–510.
- BARKWORTH, M.E. 2007c. *Axonopus*. In: Barkworth, M.E., L.K. Anderton, K.M. Capels, S. Long, and M.B. Piep, eds. Manual of Grasses for North America. Utah State University Press, Logan, Utah. pp. 312, 553.
- BARKWORTH, M.E. and L.K. ANDERTON. 2007a. *Glyceria*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 24:68–88.
- BARKWORTH, M.E. and L.K. ANDERTON. 2007b. *Glyceria*. In: Barkworth, M.E., L.K. Anderton, K.M. Capels, S. Long, and M.B. Piep, eds. Manual of Grasses for North America. Utah State University Press, Logan, Utah. pp. 20–24, 508.
- BARKWORTH, M.E., J.J.N. CAMPBELL, and B. SALOMON. 2007a. *Elymus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 24:288–343.
- BARKWORTH, M.E., J.J.N. CAMPBELL, and B. SALOMON. 2007b. *Elymus*. In: Barkworth, M.E., L.K. Anderton, K.M. Capels, S. Long, and M.B. Piep, eds. Manual of Grasses for North America. Utah State University Press, Logan, Utah. pp. 64–75, 515–516.

- BAYER, R.J.** 2006. *Antennaria*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:388–415.
- BAYER, R.J.** and **G.L. STEBBINS**. 1982. A revised classification of *Antennaria* (Asteraceae: Inuleae) of the eastern United States. *Systematic Botany* 7:300–313.
- BENSON, L.** 1982. The Cacti of the United States and Canada. Stanford University Press, Stanford, California.
- BIERNER, M.W.** 2006. *Helenium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:426–435.
- BIERNER, M.W.** and **B.L. TURNER**. 2006. *Tetranneuris*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:447–453.
- BLATT, H.** 1994. Petrology: Igneous, Sedimentary, and Metamorphic. W.H. Freeman and Co., New York.
- BLUM, M.D., M.J. GUCCIONE, D.A. WYSOCKI, P.C. ROBBETT,** and **E.M. RUTLEDGE**. 2000. Late Pleistocene evolution of the lower Mississippi River valley, southern Missouri to Arkansas. *The Geological Society of America Bulletin* 112:221–235.
- BOGLER, D.J.** 2006. *Crepis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:222–239.
- BOUFFORD, D.E.** 1997. *Fumaria*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 3:356–357.
- BRANNER, J.C.** and **F.V. COVILLE**. 1891. A list of the plants of Arkansas. Annual Report for 1888. *Arkansas Geological Survey* 4:155–242.
- BRAUN, E.L.** 1950. Deciduous Forests of Eastern North America. The Blakiston Company, Philadelphia.
- BROOKS, R.E.** 2000. *Juncus* subg. *Genuini*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 22:212–217.
- BROUILLET, L.** 2006. *Eurybia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 20:365–382.
- BROUILLET, L., J.C. SEMPLE, G.A. ALLEN, K.L. CHAMBERS,** and **S.D. SUNDBERG**. 2006. *Symphyotrichum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 20:465–539.
- BROWN, L.E.** and **R.D. THOMAS**. 1992. *Isoetes engelmannii* (Isoetaceae) and *Juncus trigonocarpus* (Juncaceae) new to Arkansas. *Sida* 15:162.
- BROWN, P.M.** 2006. Wild Orchids of the Prairies and Great Plains Region of North America. University Press of Florida, Gainesville, Florida.
- BROWNE, E.T., JR.** 1974. A preliminary report on the vascular flora of the Sylamore Ranger District Ozark National Forest, Stone Co., Arkansas. *Castanea* 39:170–188.
- BRUHL, J.J.** 2002. *Websteria*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:120–121.
- BRUMMITT, R.K.** and **C.E. POWELL**, eds. 1992. Authors of Plant Names. Royal Botanic Gardens, Kew.
- BRYSON, C.T.** and **R.F.C. NACZI**. 2002. *Carex* sect. *Laxiflorae*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:431–440.
- BUCHHOLZ, J.T.** and **W.R. MATTOON**. 1924. Common Forest Trees of Arkansas. University of Arkansas, Fayetteville, Arkansas.
- BUCHHOLZ, J.T.** and **E.J. PALMER**. 1926. Supplement to the catalogue of Arkansas plants. *Transactions of the Academy of Science of St. Louis* 25:91–155.
- BURKE, K.** and **J.F. DEWEY**. 1973. Plume-generated triple junctions: key indicators in applying plate tectonics to old rocks. *The Journal of Geology* 81:406–433.
- CAMPBELL, J.J.N.** 2006. Two new species of *Elymus* (Poaceae) in the southern U.S.A. and other notes on North American *Elymus* species. *Sida* 22:485–494.
- CANNE-HILLIKER, J.M.** 2006. *Galinsoga*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:179–182.
- CARLSON, J.R.** 2007. *Pseudoroegneria*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 24:279–282.
- CASE, F.W., JR.** 2002. *Trillium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:90–117.
- CESKA, A.** 1999. *Rubus armeniacus* – a correct name for Himalayan blackberries. *Botanic Electronic News*, No. 230 (www.ou.edu/cas/botany-micro/ben).
- CHAMBERS, K.L.** 2006. *Nothocalais*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:335–337.
- CHANDLER, A.**, ed. 2009. Regions and Landforms in Arkansas. Arkansas Geological Survey (www.geology.ar.gov/pdf/landforms%20workshop.pdf).
- CHOLEWA, A.F.** 2009. *Lysimachia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 8:308–318.
- CHOLEWA, A.F.** and **D.M. HENDERSON**. 2002. *Sisyrinchium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:351–371.
- CLARK, L.G.** and **J.K. TRIPLETT**. 2007. *Arundinaria*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 24:17–18.
- CLEMANTS, S.E.** 2000. *Juncus* subg. *Septati*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 22:240–255.
- CLEMANTS, S.E.** 2003. *Alternanthera*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 4:447–451.
- CLEMANTS, S.E.** and **S.L. MOSYAKIN**. 2003a. *Chenopodium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 4:275–299.
- CLEMANTS, S.E.** and **S.L. MOSYAKIN**. 2003b. *Dysphania*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 4:267–275.
- CLEVINGER, J.A.** 2006. *Silphium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:77–82.

- CLEWELL, A.F. and J.W. WOOTEN. 1971. A revision of *Ageratina* (Compositae: Eupatorieae) from eastern North America. *Brittonia* 23:123–143.
- COLE, K.W. 1971. A consideration of macro-climate and macro-biotic change in the Ozark Highlands during post-glacial times. *Proceedings of the Arkansas Academy of Science* 25:15–20.
- CONSTANCE, L. 1942. The genus *Hydrophyllum* L. *American Midland Naturalist* 27:710–731.
- CORRELL, D.S. and M.C. JOHNSTON. 1970. *Manual of the Vascular Plants of Texas*. Texas Research Foundation, Renner, Texas.
- COSTEA, M., F.J. TARDIF, and H.R. HINDS. 2005. *Polygonum*. In: *Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico*. 16+ vols. Oxford University Press, New York and Oxford. 5:547–571.
- COULTER, J.M. and J.N. ROSE. 1900. *Monograph of the North American Umbelliferae*. Contributions from the United States National Herbarium 7:9–256.
- CRINS, W.J. 1989. The Tamaricaceae in the southeastern United States. *Journal of the Arnold Arboretum* 70:403–425.
- CRINS, W.J. 2007. *Alopecurus*. In: *Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico*. 16+ vols. Oxford University Press, New York and Oxford. 24:780–788.
- CRINS, W.J., R.F.C. NACZI, A.A. REZNICEK, and B.A. FORD. 2002. *Carex* sect. *Phyllostachyae*. In: *Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico*. 16+ vols. Oxford University Press, New York and Oxford. 23:558–563.
- CRINS, W.J. and J.H. RETTIG. 2002. *Carex* sect. *Acrocystis*. In: *Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico*. 16+ vols. Oxford University Press, New York and Oxford. 23:532–545.
- CRONEIS, C. 1930. *Geology of the Arkansas Paleozoic Area, with especial reference to oil and gas possibilities*. Bulletin 3, Arkansas Geological Survey, Little Rock, Arkansas. 457 pp.
- CRONQUIST, A. 1980. *Vascular Flora of the Southeastern United States, Vol. 1: Asteraceae*. The University of North Carolina Press, Chapel Hill, North Carolina.
- DARBYSHIRE, S.J. 2003. *Danthonia*. In: *Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico*. 16+ vols. Oxford University Press, New York and Oxford. 25:301–305.
- DARBYSHIRE, S.J. 2007. *Schedonorus*. In: *Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico*. 16+ vols. Oxford University Press, New York and Oxford. 24:445–448.
- DAVIS, H.A., A.M. FULLER, and T. DAVIS. 1969. Contributions toward the revision of the *Eubati* of eastern North America. V. *Arguti*. *Castanea* 34:235–266.
- DAVIS, R. 1981. Additional records and updates on the Arkansas flora. *Proceedings of the Arkansas Academy of Science* 35:84.
- DEJONG, D.C.D. 1965. A systematic study of the genus *Astranthium* (Compositae, Asterae). Michigan State University Museum, East Lansing, Michigan. *Biological Series* 2:429–528.
- DELCOURT, P.A. and H.R. DELCOURT. 1981. Vegetation maps for eastern North America 40,000 yr. B.P. to the present. In: *Romans, R.C., ed. Geobotany II*. Plenum Press, New York. pp. 123–165.
- DELCOURT, P.A., H.R. DELCOURT, R.C. BRISTER, and L.E. LACKEY. 1980. Quaternary vegetation history of the Mississippi Embayment. *Quaternary Research* 13:111–132.
- DEMAREE, D. 1932. A catalogue of the ligneous plants of Arkansas. *Hendrix-Galloway Bulletin* 19:1–18.
- DEMAREE, D. 1943. A catalogue of the vascular plants of Arkansas. *Taxodium* 1:1–88.
- DIETRICH, W., W.L. WAGNER, and P.H. RAVEN. 1997. Systematics of *Oenothera* section *Oenothera* subsection *Oenothera* (Onagraceae). *Systematic Botany Monographs* 50:1–234.
- DIGGS, G.M., JR., B.L. LIPSCOMB, and R.J. O'KENNON. 1999. *Shinners & Mahler's Illustrated Flora of North Central Texas*. Botanical Research Institute of Texas, Fort Worth, Texas.
- DIGGS, G.M., JR., B.L. LIPSCOMB, M.D. REED, and R.J. O'KENNON. 2006. *Illustrated Flora of East Texas*. Vol. 1. Botanical Research Institute of Texas, Fort Worth, Texas.
- DUNCAN, W.H. 1967. Woody vines of the southeastern states. *Sida* 3:1–76.
- DUNCAN, W.H. 1979. Changes in *Galactia* (Fabaceae) of the southeastern United States. *Sida* 8:170–180.
- ECKENWALDER, J.E. 2010. *Populus*. In: *Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico*. 16+ vols. Oxford University Press, New York and Oxford. 7:5–22.
- EDMONDS, J.M. 1986. Biosystematics of *Solanum sarrachoides* Sendtner and *S. physalifolium* Rusby (*S. nitidibaccatum* Bitter). *Botanical Journal of the Linnean Society* 92:1–38.
- EFLORAS. 2012. Published on the Internet (www.efloras.org, 11 June, 2012). Missouri Botanical Garden, St. Louis, Missouri & Harvard University Herbaria, Cambridge, Massachusetts.
- EITEN, G. 1955. The typification of the names "*Oxalis corniculata* L." and "*Oxalis stricta* L." *Taxon* 4:99–105.
- EITEN, G. 1963. Taxonomy and regional variation of *Oxalis* section *Corniculatae*. I. Introduction, keys and synopsis of the species. *American Midland Naturalist* 69:257–309.
- FADEN, R.B. 2000. *Commelinaceae*. In: *Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico*. 16+ vols. Oxford University Press, New York and Oxford. 22:170–197.
- FENNEMAN, N.M. 1938. *Physiography of Eastern United States*. McGraw-Hill Book Company, New York.
- FERGUSON, J.A. 1984. Weather patterns in Arkansas. *The Arkansas Naturalist* 2(2):1–3, 5–6, 14–16.
- FERNALD, M.L. 1928. The American representatives of *Asplenium ruta-muraria*. *Rhodora* 30:37–43.
- FERNALD, M.L. 1950. *Gray's Manual of Botany*, eighth edition. American Book Company, New York, New York.
- FERREN, W.R., JR. 2003. *Sesuvium*. In: *Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico*. 16+ vols. Oxford University Press, New York and Oxford. 4:80–81.
- FISK, H.N. 1944. *Geological Investigation of the Alluvial Valley of the Lower Mississippi River*. U.S. Corps of Engineers, Mississippi River Commission, Vicksburg, Mississippi. 78 pp.
- FLORA OF NORTH AMERICA EDITORIAL COMMITTEE, eds. 1993+. *Flora of North America North of Mexico*. 16+ vols. Oxford University Press, New York and Oxford.
- FOTI, T.L. 1974. Natural divisions of Arkansas. In: *Arkansas Department of Planning. Arkansas Natural Area Plan*. Little Rock, Arkansas. pp. 11–37.
- FOTI, T.L. 1976. *Arkansas, its land and people*. Arkansas Department of Education. 71 pp.
- FOTI, T.L. 1978. *The Natural Divisions of Arkansas, a Three-Week Unit Classroom Guide*. Arkansas Ecology Center, Little Rock, Arkansas. 70 pp.

- FOTI, T.L.** 2004. Upland hardwood forests and related communities of the Arkansas Ozarks in the early 19th Century. In: Spetich, M.A., ed. Upland Oak Ecology Symposium: History, Current Conditions, and Sustainability. Gen. Tech. Rep. SRS-73. U.S. Department of Agriculture Forest Service, Southern Research Station, Asheville, North Carolina. pp. 21–29.
- FOTI, T.L.** and **G.A. BUKENHOFER.** 1998. A description of the sections and subsections of the Interior Highlands of Arkansas and Oklahoma. Journal of the Arkansas Academy of Science 52:53–62.
- FRANKEL, H.** 1988. From continental drift to plate tectonics. Nature 335:127–130.
- FRECKMANN, R.W.** and **M.G. LELONG.** 2003a. *Dichanthelium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:406–450.
- FRECKMANN, R.W.** and **M.G. LELONG.** 2003b. *Panicum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:450–488.
- FREEMAN, C.C.** and **H.R. HINDS.** 2005. *Fallopia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 5:541–546.
- FREEMAN, J.D.** 1994. Status survey of the *Trillium pusillum* complex. Unpublished report to Alabama Natural Heritage Section, State Lands Division, Alabama Department of Conservation and Natural Resources, Montgomery, Alabama.
- FRITSCH, P.W.** and **S.D. LUCAS.** 2000. Clinal variation in the *Halesia carolina* complex (Styracaceae). Systematic Botany 25:197–210.
- GAISER, L.O.** 1946a. *Liatris densispicata* and *Liatris mucronata*. In: The genus *Liatris*. Rhodora 48:363–368.
- GAISER, L.O.** 1946b. × *Liatris sphaeroidea*. In: The genus *Liatris*. Rhodora 48:312–314.
- GLEASON, H.A.** 1963. The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada. Hafner Publishing Co., Inc., New York.
- GLEASON, H.A.** and **A. CRONQUIST.** 1991. Manual of Vascular Plants of the Northeastern United States and Adjacent Canada, second edition. New York Botanical Garden, New York.
- GOULD, F.W.** and **C.A. CLARK.** 1978. *Dichanthelium* (Poaceae) in the United States and Canada. Annals of the Missouri Botanical Garden 65:1088–1132.
- GOULD, F.W., M.A. ALLI,** and **D.E. FAIRBROTHERS.** 1972. A revision of *Echinochloa* in the United States. American Midland Naturalist 87:36–59.
- GRAHAM, S.A.** and **C.E. WOOD, JR.** 1965. The genera of Polygonaceae in the southeastern United States. Journal of the Arnold Arboretum 46:91–121.
- GREAT PLAINS FLORA ASSOCIATION.** 1977. Atlas of the Flora of the Great Plains. The Iowa State University Press, Ames, Iowa.
- GREAT PLAINS FLORA ASSOCIATION.** 1986. Flora of the Great Plains. University Press of Kansas, Lawrence, Kansas.
- GUCCIONE, M.J., W.L. PRIOR,** and **E.M. RUTLEDGE.** 1986. Tertiary and Quaternary Geology of Crowley's Ridge. Arkansas Geological Commission, Guidebook 86-4. Little Rock, Arkansas. 39 pp.
- HALEY, B.R., E.E. GLICK, W.V. BUSH, B.F. CLARDY, C.G. STONE, M.B. WOODWARD,** and **D.L. ZACHRY.** 1993. Geologic Map of Arkansas. Scale 1:500,000. Arkansas Geological Commission and U.S. Geological Survey. Arkansas Geological Survey. (www.geology.ar.gov/ark_state_maps/geologic.htm).
- HALLAM, A.** 1975. Alfred Wegener and the hypothesis of continental drift. Scientific American 232:88–97.
- HARDIN, J.W.** 1972. Studies of the southeastern United States flora. III. Magnoliaceae and Illiciaceae. Journal of the Elisha Mitchell Scientific Society 88:30–32.
- HARDIN, J.W.** 1974. Studies of the southeastern United States flora. IV. Oleaceae. Sida 5:274–285.
- HARRIMAN, N.A.** 1965. The genus *Dentaria* (Cruciferae) in eastern North America. Ph.D. Dissertation, Vanderbilt University, Nashville, Tennessee.
- HARTMAN, R.L., R.K. RABELER,** and **F.H. UTECH.** 2005a. *Arenaria*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 5:51–56.
- HARTMAN, R.L., J.W. THIERET,** and **R.K. RABELER.** 2005b. *Paronychia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 5:30–43.
- HARVEY, F.L.** 1881. Classified list of the ferns of Arkansas with notes on the geographical range and habitat of the species. Botanical Gazette 6:189–190, 213–215.
- HARVEY, L.H.** 1948. *Eragrostis* in North and Middle America. Ph.D. Dissertation. University of Michigan, Ann Arbor, Michigan.
- HARVEY, M.J.** 2007. *Agrostis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 24:633–662.
- HAYNES, R.R.** and **C.B. HELLQUIST.** 2000a. Alismataceae. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 22:7–25.
- HAYNES, R.R.** and **C.B. HELLQUIST.** 2000b. Potamogetonaceae. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 22:47–74.
- HEITMEYER, M.E., L.H. FREDRICKSON,** and **S. KING.** 2000. An evaluation of ecosystem restoration options for the Grand Prairie region of Arkansas. Unpublished report prepared for the U.S. Army Corps of Engineers, Memphis District. Memphis Tennessee. 72 pp.
- HENDERSON, N.C.** 2002. *Iris*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:371–395.
- HENDRICKS, A.J.** 1957. A revision of the genus *Alisma* (Dill.) L. American Midland Naturalist 58:470–493.
- HERNDON, A.** 2002. *Hypoxis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:201–204.
- HESS, W.J.** and **R.L. ROBBINS.** 2002. *Yucca*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:423–439.
- HILDENBRAND, T.G.** and **J.D. Hendricks.** 1995. Geophysical setting of the Reelfoot Rift and relations between rift structures and the New Madrid Seismic Zone. In: Sedlock, K.M. and A.C. Johnson, eds. Investigations of the New Madrid Seismic Zone. U.S. Geological Survey Professional Paper 1538-E. pp. 1–30.
- HITCHCOCK, A.S.** 1950. Manual of the Grasses of the United States, second edition, revised by A. Chase. U.S. Department of Agriculture Miscellaneous Publications No. 200. United States Government Printing Office, Washington, D.C.

- HITCHCOCK, C.L., A. CRONQUIST, M. OWNBEY, and J.W. THOMPSON.** 1969. Vascular Plants of the Pacific Northwest. 5 vols. University of Washington Press, Seattle, Washington.
- HOLMES, W.C.** 2002a. *Crinum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:278–279.
- HOLMES, W.C.** 2002b. Smilacaceae. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:468–478.
- HOPKINS, M.** 1937. *Arabis* in eastern and central North America. *Rhodora* 39:106–186.
- HOWARD, J.M. and W.D. HANSON.** 2008. Geology of the Crater of Diamonds State Park and Vicinity, Pike County, Arkansas. Arkansas Geological Survey, State Parks Series 03. 14 pp.
- HU, S.** 1956. A monograph of the genus *Philadelphus*, continued. *Journal of the Arnold Arboretum* 37:15–90.
- HUDSON, M.R.** 2000. Coordinated strike-slip and normal faulting in the southern Ozark Dome of northern Arkansas: Deformation in the late Paleozoic foreland. *Geology* 28:511–514.
- HULTEN, E. and M. FRIES.** 1986. Atlas of North European Vascular Plants North of the Tropic of Cancer. 3 vols. Koeltz Scientific Books, Königstein, Germany.
- HUNTER, C.G.** 1984. Wildflowers of Arkansas. Ozark Society Foundation, Little Rock, Arkansas.
- HUNTER, C.G.** 1989. Trees, Shrubs, and Vines of Arkansas. Ozark Society Foundation, Little Rock, Arkansas.
- HUNTER, C.G.** 1995. Autumn Leaves and Winter Berries in Arkansas. Ozark Society Foundation, Little Rock, Arkansas.
- HYATT, P.E.** 1998. Arkansas *Carex* (Cyperaceae): a briefly annotated list. *Sida* 18:535–554.
- ISELY, D.** 1990. Vascular Flora of the Southeastern United States. Vol. 3, Part 2: Leguminosae (Fabaceae). The University of North Carolina Press, Chapel Hill, North Carolina.
- ISELY, D.** 1998. Native and Naturalized Leguminosae (Fabaceae) of the United States. Monte L. Bean Life Science Museum, Brigham Young University, Provo, Utah.
- JACKSON, K.C.** 1979. Earthquakes and earthquake history of Arkansas. Arkansas Geological Commission, Information Circular 26. Little Rock, Arkansas. 70 pp.
- JAMES, E.** 1823. Account of an expedition from Pittsburgh to the Rocky Mountains, performed in the years 1819 and 1820. Reprinted in: Thwaites, R.G., ed. 1905. Early Western Travels, 1748–1846, S.H. Long's Expedition. Vol. 17. A.H. Clark Company, Cleveland, Ohio.
- JOHNSON, G.P. and K.A. NICELY.** 1990. The Magnoliales of Kentucky. *Transactions of the Kentucky Academy of Science* 51:14–17.
- JOHNSON, M.I.** 1971. A survey of the vascular flora of Poinsett County, Arkansas. *Proceedings of the Arkansas Academy of Science* 25:42–52.
- JUDD, W.S.** 2009. *Oxydendrum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 8:496–497.
- JUDD, W.S. and K.A. KRON.** 2009. *Rhododendron*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 8:455–473.
- KARTESZ, J.T.** 2009. Floristic Synthesis of North America, draft version 1.0.3401.15538. Biota of North America Program (BONAP). 24 April 2009.
- KARTESZ, J.T. and C.A. MEACHAM.** 1999. Synthesis of the North American Flora, version 1.0. Chapel Hill. [CD-ROM.]
- KARTESZ, J.T. and J.W. THIERET.** 1991. Common names for vascular plants: guidelines for use and application. *Sida* 14:421–434.
- KEENER, C.S.** 1976. Studies in the Ranunculaceae of the southeastern United States. V. *Ranunculus* L. *Sida* 6:266–283.
- KEIL, D.J.** 2006a. *Acroptilon*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:171–172.
- KEIL, D.J.** 2006b. *Cirsium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:95–164.
- KEYS, J.E., JR., C.A. CARPENTER, S.L. HOOKS, F.G. KOENIG, W.H. MCNAB, W.E. RUSSELL, and M.L. SMITH.** 1995. Ecological units of the eastern United States, first approximation (map and booklet of map unit tables). Presentation scale 1:3,500,000; color. U.S. Department of Agriculture Forest Service, Technical Publication R8-TP 21. Atlanta, Georgia.
- KING, J.E.** 1973. Late Pleistocene palynology and biogeography of the western Missouri Ozarks. *Ecological Monographs* 43:539–565.
- KLIMAS, C.V., E.O. MURRAY, J. PAGAN, H. LANGSTON, and T. FOTI.** 2004. A regional guidebook for applying the hydrogeomorphic approach to assessing wetland functions of forested wetlands in the Delta region of Arkansas, Lower Mississippi River Alluvial Valley. ERDC/EL TR-04-16. U.S. Army Corps of Engineers, Engineering Research and Development Center, Vicksburg, Mississippi. 152 pp., plus appendices.
- KRAL, R.** 1983. A report on some rare, threatened, or endangered forest-related vascular plants of the South, volume 1: Isoetaceae through Euphorbiaceae. U.S. Department of Agriculture Forest Service Technical Publication R8-TP2. Atlanta, Georgia.
- KRAL, R.** 2002. *Rhynchospora*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:200–239.
- KRAL, R.** 2004. An evaluation of *Anthenantia* (Poaceae). *Sida* 21:293–310.
- LANDOLT, E.** 1986. Biosystematic investigations in the family of duckweeds (Lemnaceae). Vol. 2. The family of Lemnaceae: a monographic study, part 1. *Veröffentlichungen des Geobotanischen Institutes der Eidg. Techn. Hochschule, Stiftung Rübel, in Zürich, Switzerland* 71:1–566.
- LANDOLT, E.** 2000. Lemnaceae. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 22:143–153.
- LE PAGE DU PRATZ, A.S.** 1774. The History of Louisiana. Translated from the French and edited by Tregle, J.G., Jr. 1975. Facsimile edition. Louisiana State University Press, Baton Rouge, Louisiana.
- LEONARD, E.C.** 1927. The North American species of *Scutellaria*. Contributions from the United States National Herbarium 22:703–748.
- LESLIE, S.A.** 1986. A preliminary survey of the vascular flora of Bradley County, Arkansas. M.S. Thesis. Northeast Louisiana University, Monroe, Louisiana.
- LESQUEREUX, L.** 1860. A catalogue of the plants of Arkansas. In: Owen, D.D. Second Report of a Geological Reconnaissance of the Middle and Southern Counties of Arkansas Made During the Years 1859 and 1860. C. Sherman & Son, Printers, Philadelphia. pp. 346–399.

- LIPSCOMB, B.L.** 1977. *Echinodorus tenellus* var. *parvulus* (Alismataceae) in the Ozarks of Arkansas. *Castanea* 42:254.
- LIPSCOMB, B.L.** 1980. Additions to the Cyperaceae of Arkansas. *Castanea* 45:70.
- LIPSCOMB, B.L.** and **E.B. SMITH.** 1977. Morphological intergradation of varieties of *Bidens aristosa* (Compositae) in northern Arkansas. *Rhodora* 79:203–213.
- LITTLE, E.L., JR.** 1977. Atlas of United States Trees: Vol. 4, Minor Eastern Hardwoods. Miscellaneous Publication 1342. Department of Agriculture Forest Service, Washington, D.C.
- MANGALY, J.K.** 1968. A cytotaxonomic study of the herbaceous species of *Smilax* section *Coprosmanthus*. *Rhodora* 70:55–82, 247–273.
- MANGER, W.L.** 1983. The geological provinces of Arkansas. *The Arkansas Naturalist* 1(7):1–6.
- MARR, K.L., R.J. HEBDA,** and **C.W. GREENE.** 2007. *Calamagrostis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 24:706–732.
- MARSICO, T.D.** 2005. The vascular flora of Montgomery County, Arkansas. *Sida* 21:2389–2423.
- MARTÍN-BRAVO, S., G.C. TUCKER,** and **T.F. DANIEL.** 2010. Resedaceae. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 7:189–193.
- MARTINEZ, M.L.** 1993. Systematics of *Physalis* (Solanaceae) Section *Epeteiorhiza*. Ph.D. Dissertation. University of Texas, Austin, Texas.
- MASTROGIUSEPPE, J., P.E. ROTHROCK, A.C. DIBBLE,** and **A.A. REZNICEK.** 2002. *Carex* sect. *Ovales*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:332–378.
- MATTHEWS, J.F.** 2003. *Portulaca*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 4:496–501.
- McFARLAND, J.D.** 1992. Landslide features of Crowley's Ridge. Arkansas Geological Commission, Information Circular 31. Little Rock, Arkansas. 30 pp.
- McFARLAND, J.D.** 1998. Stratigraphic summary of Arkansas. Arkansas Geological Commission, Information Circular 36. Little Rock, Arkansas. 39 pp.
- MEHRINGER, P.J., JR., C.E. SCHWEGER, W.R. WOOD,** and **R.B. McMILLAN.** 1968. Late-Pleistocene boreal forest in the western Ozark Highlands? *Ecology* 49:567–568.
- MICHAEL, P.W.** 2003. *Echinochloa*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:390–402.
- MICHAEL, P.W.** 2007. *Echinochloa*. In: Barkworth, M.E., L.K. Anderson, K.M. Capels, S. Long, and M.B. Piep, eds. Manual of Grasses for North America. Utah State University Press, Logan, Utah. pp. 276–279, 546–547.
- MILLER, N.G.** 1971. The Polygalaceae in the southeastern United States. *Journal of the Arnold Arboretum* 52:267–284.
- MONTGOMERY, J.D.** and **W.H. WAGNER, JR.** 1993. *Dryopteris*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 2:280–288.
- MOORE, D.M.** 1941. Checklist of the ligneous flora of Arkansas. *Proceedings of the Arkansas Academy of Science* 1:41–55.
- MOORE, D.M.** 1960. Trees of Arkansas, revised edition. Arkansas Forestry Commission, Little Rock, Arkansas.
- MOORE, D.M.** 1961. Revised and annotated catalogue of the grasses of Arkansas. *Proceedings of the Arkansas Academy of Science* 15:9–25.
- MOORE, J.E.** 1965. A study of the vegetation of Petit Jean Mountain in central Arkansas. *Castanea* 30:1–37.
- MOOREFIELD, J.D.** 2006. *Diaperia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:460–463.
- MORAN, R.V.** 2009. *Crassula*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 8:150–155.
- MORRIS, R.C.** 1974. Sedimentary and tectonic history of the Ouachita Mountains. In: Dickinson, W.R., ed. Tectonics and Sedimentation. Society of Economic Paleontologists and Mineralogists Special Publication 22:120–142.
- MORTON, J.K.** 2005a. *Cerastium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 5:74–93.
- MORTON, J.K.** 2005b. *Silene*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 5:166–214.
- MOSYAKIN, S.L.** 2005. *Rumex*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 5:489–533.
- MOSYAKIN, S.L.** and **K.R. ROBERTSON.** 2003. *Amaranthus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 4:410–435.
- MUENSCHER, W.C.L.** 1944. Aquatic Plants of the United States. Comstock Publishing Associates, Ithaca, New York.
- MULLIGAN, G.A.** and **D.B. MUNRO.** 1989. Taxonomy of species of North American *Stachys* (Labiatae) found north of Mexico. *Le Naturaliste Canadien* 116:35–51.
- NELSON, J.B.** 1975. The Genus *Stachys* in the Southeastern United States. M.S. Thesis. Clemson University, Clemson, South Carolina.
- NELSON, J.B.** 2008. A new hedge-nettle (*Stachys*: Lamiaceae) from the Interior Highlands of the United States, and keys to the southeastern species. *Journal of the Botanical Research Institute of Texas* 2:761–769.
- NESOM, G.L.** 2000. Which non-native plants are included in floristic accounts? *Sida* 19:189–193.
- NESOM, G.L.** 2005. Taxonomic review of *Astranthium integrifolium* (Asteraceae: Astereae). *Sida* 21:2015–2021.
- NESOM, G.L.** 2006a. *Ageratina*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:547–553.
- NESOM, G.L.** 2006b. *Anaphalis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:426–427.
- NESOM, G.L.** 2006c. *Astranthium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 20:203–204.
- NESOM, G.L.** 2006d. *Erigeron*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 20:256–348.
- NESOM, G.L.** 2006e. *Gamochaeta*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:431–438.

- NESOM, G.L. 2006f. *Liatis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:512–535.
- NESOM, G.L. 2006g. *Pluchea*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:478–484.
- NESOM, G.L. 2009. Again: taxonomy of yellow-flowered caulescent *Oxalis* (Oxalidaceae) in eastern North America. *Journal of the Botanical Research Institute of Texas* 3:727–738.
- NESOM, G.L. 2010a. Overview of *Liriope* and *Ophiopogon* (Ruscaceae) naturalized and commonly cultivated in the USA. *Phytoneuron* 2010-56:1–31.
- NESOM, G.L. 2010b. Taxonomic notes on *Verbena bonariensis* (Verbenaceae) and related species in the USA. *Phytoneuron* 2010-12:1–16.
- NESOM, G.L. and B.L. TURNER. 1998. Variation in the *Berlandiera pumila* (Asteraceae) complex. *Sida* 18:493–502.
- NIENABER, M.A. and J.W. THIÉRET. 2003. Phytolaccaceae. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 4:3–11.
- NUTTALL, T. 1821. A Journal of Travels into the Arkansas Territory During the Year 1819, with Occasional Observations on the Manners of the Aborigines. T.H. Palmer, Philadelphia.
- NUTTALL, T. 1835. Collections towards a flora of the territory of Arkansas. *Transactions of the American Philosophical Society* 5:139–203.
- OMERNIK, J.M. 1987. Ecoregions of the conterminous United States (map). Scale 1:7,500,000; color. Supplement to the *Annals of the Association of American Geographers* 77(1).
- ORZELL, S.L. and E.L. BRIDGES. 1987. Further additions and noteworthy collections in the flora of Arkansas, with historical, ecological, and phytogeographical notes. *Phytologia* 64:81–144.
- PALMER, E.J. 1925. Synopsis of North American Crataegi. *Journal of the Arnold Arboretum* 6:5–128.
- PARK, M.M. and D. FESTERLING, JR. 1997. *Thalictrum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 3:258–271.
- PARKS, C.R. and J.W. HARDIN. 1963. Yellow Erythroniums of the eastern United States. *Brittonia* 15:245–259.
- PAVLICK, L.E. and L.K. ANDERTON. 2007. *Bromus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 24:193–237.
- PECK, J.H. 2003. Arkansas flora: additions, reinstatements, exclusions, and re-exclusions. *Sida* 20:1737–1757.
- PELL, W.F. 1983. The natural divisions of Arkansas: a revised classification and description. *Natural Areas Journal* 3(2):12–23.
- PENNELL, F.W. 1935. The Scrophulariaceae of eastern temperate North America. *Academy of Natural Sciences of Philadelphia Monographs* 1:1–650.
- PETERSON, P.M. 2003a. *Eragrostis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:65–105.
- PETERSON, P.M. 2003b. *Muhlenbergia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:145–200.
- PETERSON, P.M., S.L. HATCH, and A.S. WEAKLEY. 2003. *Sporobolus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:115–139.
- RABELER, R.K. and R.L. HARTMAN. 2005. *Dianthus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 5:159–162.
- RABELER, R.K., R.L. HARTMAN, and F.H. UTECH. 2005. *Minuartia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 5:116–136.
- RAZ, L. 2002. Dioscoreaceae. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:479–485.
- RECHINGER, K.H., JR. 1937. The North American species of *Rumex*. *Field Museum of Natural History, Botanical Series* 17:1–151.
- REZNICEK, A.A. and B.A. FORD. 2002. *Carex* sect. *Vesicariae*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:501–511.
- REZNICEK, A.A., J.E. FAIREY III and A.T. WHITEMORE. 2002. *Scleria*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:242–251.
- RICHARDS, E.L. 1985. New and interesting plants for the Arkansas Flora. *Proceedings of the Arkansas Academy of Science* 39:147–148.
- ROBERTSON, K.R. 1974. The genera of Rosaceae in the southeastern United States. *Journal of the Arnold Arboretum* 55:303–332, 344–401, 611–662.
- ROBINSON, A., JR. 1968. Report on the Gramineae of the Arkansas Springfield Plateau. *Proceedings of the Arkansas Academy of Science* 22:76–87.
- ROGERS, C.M. 1968. Yellow-flowered species of *Linum* in Central America and western North America. *Brittonia* 20:107–135.
- ROGERS, J.J.W. 1996. A history of continents in the past three billion years. *The Journal of Geology* 104:91–107.
- ROLLINS, R.C. 1993. The Cruciferae of Continental North America: Systematics of the Mustard Family from the Arctic to Panama. Stanford University Press, Stanford, California.
- ROMINGER, J.M. 2003. *Setaria*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:539–558.
- ROMINGER, J.M. 2007. *Setaria*. In: Barkworth, M.E., L.K. Anderton, K.M. Capels, S. Long, and M.B. Piep, eds. *Manual of Grasses for North America*. Utah State University Press, Logan, Utah. pp. 306–310, 552–553.
- ROTHROCK, P.E. and A.A. REZNICEK. 2002. *Carex* sect. *Paniccae*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:426–431.
- RUSSELL, N.H. 1965. Violets (*Viola*) of central and eastern United States: an introductory survey. *Sida* 2:1–113.
- SAUCIER, R.T. 1994. Geomorphology and Quaternary geologic history of the lower Mississippi Valley, vol. 1. U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, Mississippi. 364 pp.
- SAUER, J. 1964. Revision of *Canavalia*. *Brittonia* 16:106–181.

- SCHILLING, E.E.** 2006. *Helianthus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:141–169.
- SCHOOLCRAFT, H.R.** 1821. Journal of a Tour into the Interior of Missouri and Arkansas, Performed in the Years 1818 and 1819. Sir Richard Phillips and Company, London.
- SCHWEIG, E.S.** and **R.B. VAN ARSDALE.** 1996. Neotectonics of the upper Mississippi embayment. Engineering Geology 45:185–203.
- SCOTT, R.W.** 2006. *Brickellia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:491–507.
- SEARS, P.B.,** and **G.C. COUCH.** 1932. Microfossils in an Arkansas peat and their significance. Ohio Journal of Science 32:63–68.
- SEIFERT, C.L., R.T. COX, S.L. FORMAN, T.L. FOTI, T.A. WASKLEWICZ,** and **A.T. MCCOLGAN.** 2009. Relict nebkhas (pimple mounds) record prolonged late Holocene drought in the forested region of south-central United States. Quaternary Research 71:329–339.
- SEMPLE, J.C.** 2006. *Heterotheca*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 20:230–256.
- SEMPLE, J.C.** and **R.E. COOK.** 2006. *Solidago*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 20:107–166.
- SHEVIK, C.J.** 1987. On the occurrence of *Platanthera leucophaea* in Louisiana and Arkansas. Rhodora 89:347–350.
- SHEVIK, C.J.** 2002. *Platanthera*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:551–571.
- SHEVIK, C.J.** and **P.M. BROWN.** 2002. *Spiranthes*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:530–545.
- SINGHURST, J.R.** and **W.C. HOLMES.** 2011. *Monarda luteola* (Lamiaceae): a new species from northeast Texas and southwest Arkansas. Phytoneuron 41:1–5.
- SIRIPUN, K.C.** and **E.E. SCHILLING.** 2006. *Eupatorium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:462–474.
- SKINNER, M.W.** 2002. *Lilium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:172–197.
- SMALL, J.K.** 1913. Flora of the Southeastern United States, second edition. New York Botanical Garden, New York.
- SMITH, A.R.** 2006. *Heliopsis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:67–70.
- SMITH, E.B.** 1978. An Atlas and Annotated List of the Vascular Plants of Arkansas. Self-published, Fayetteville, Arkansas.
- SMITH, E.B.** 1982. A new variety of *Cardamine angustata* (Cruciferae) from the Ouachita Mountains of Arkansas. Brittonia 34:376–380.
- SMITH, E.B.** 1988. An Atlas and Annotated List of the Vascular Plants of Arkansas, second edition. Self-published, Fayetteville, Arkansas.
- SMITH, E.B.** 1994. Keys to the Flora of Arkansas. The University of Arkansas Press, Fayetteville, Arkansas.
- SMITH, S.G.** 2002a. *Eleocharis* subg. *Eleocharis* sect. *Eleocharis* ser. *Eleocharis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:71–89.
- SMITH, S.G.** 2002b. *Eleocharis* subg. *Eleocharis* sect. *Parvulae*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:105–107.
- SORENG, R.J.** 2007. *Poa*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 24:486–601.
- SORRIE, B.A.** and **R.J. LEBLOND.** 2008. Noteworthy collections from the southeastern United States. Journal of the Botanical Research Institute of Texas 2:1353–1361.
- SPELLENBERG, R.W.** 2003. *Mirabilis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 4:40–57.
- STANDLEY, L.A.** 2002. *Carex* sect. *Vulpinae*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:273–278.
- STANDLEY, L.A., J. CAYOUILLE,** and **L. BRUEDERLE.** 2002. *Carex* sect. *Phacocystis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:379–401.
- STAUDER, W.** 1982. Present-day seismicity and identification of active faults in the New Madrid Seismic Zone. In: McKeown, F.A. and L.C. Pakiser, eds. Investigations of the New Madrid, Missouri earthquake region. U.S. Geological Survey Professional Paper 1236-C. pp. 21–30.
- STERN, K.R.** 1997. *Corydalis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 3:348–355.
- STEYERMARK, J.A.** 1963. Flora of Missouri. Iowa State University Press, Ames, Iowa.
- STONE, D.E.** 1997. *Carya*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 3:417–425.
- STRALEY, G.B.** and **F.H. UTECH.** 2002. *Hemerocallis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:219–220.
- STROTHER, J.L.** 2006a. *Coreopsis*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:185–198.
- STROTHER, J.L.** 2006b. *Guizotia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:40–41.
- STROTHER, J.L.** 2006c. *Hieracium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:278–294.
- STROTHER, J.L.** 2006d. *Hymenopappus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:309–316.
- STROTHER, J.L.** 2006e. *Lactuca*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:259–263.

- STROTHER, J.L.** 2006f. *Pyrrhopappus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:376–378.
- STROTHER, J.L.** 2006g. *Vernonia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:206–213.
- STROTHER, J.L.** and **R.R. WEEDON**. 2006. *Bidens*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:205–218.
- SUNDELL, E., R.D. THOMAS, C. AMASON, R.L. STUCKEY, and J. LOGAN**. 1999. Noteworthy vascular plants from Arkansas. *Sida* 18:877–887.
- TAYLOR, W.C.** 1984. Arkansas Ferns and Fern Allies. Milwaukee Public Museum, Milwaukee, Wisconsin.
- TERRELL, E.E.** 1991. Overview and annotated list of North American species of *Hedyotis*, *Houstonia*, *Oldenlandia*, and related genera. *Phytologia* 71:212–243.
- TERRELL, E.E.** 2007. *Zizania*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 24:47–50.
- THOMAS, R.D., E.B. SMITH, E. SUNDELL, P.H. HYATT, and C. AMASON**. 1991. Additions to the flora of Arkansas. *Sida* 14:483–491.
- THOMPSON, R.L.** 1977. The vascular flora of Lost Valley, Newton County, Arkansas. *Castanea* 42:61–94.
- THORBURY, W.D.** 1965. Regional Geomorphology of the United States. John Wiley & Sons, New York.
- TROCK, D.K.** 2006. *Packera*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 20:570–602.
- TROPICOS.ORG**. 2008. Missouri Botanical Garden, St. Louis, Missouri (www.tropicos.org).
- TUCKER, G.C.** 1988. The genera of Bambusoideae (Gramineae) in the southeastern United States. *Journal of the Arnold Arboretum* 69:239–273.
- TUCKER, G.C.** 1989. The genera of Commelinaceae in the southeastern United States. *Journal of the Arnold Arboretum* 70:97–130.
- TUCKER, G.C.** 1994. Revision of the Mexican species of *Cyperus* (Cyperaceae). *Systematic Botany Monographs* 43:1–213.
- TUCKER, G.C., B.G. MARCKS, and J.R. CARTER**. 2002. *Cyperus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:141–191.
- TUCKER, G.E.** 1976. A guide to the woody flora of Arkansas. Ph.D. Dissertation. University of Arkansas, Fayetteville, Arkansas.
- TURNER, B.L.** 1994. Regional variation in the North American elements of *Oxalis corniculata* (Oxalidaceae). *Phytologia* 77:1–7.
- TURNER, B.L.** and **K. KIM**. 1990. An overview of the genus *Pyrrhopappus* (Asteraceae: Lactuceae) with emphasis on chloroplast DNA restriction site data. *American Journal of Botany* 77:845–850.
- UNIVERSITY OF NORTH CAROLINA HERBARIUM (NCU), NORTH CAROLINA BOTANICAL GARDEN, UNIVERSITY OF NORTH CAROLINA CURRICULUM IN ECOLOGY, and UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL**. 2009. Flora of the Southeastern United States Atlas (www.herbarium.unc.edu/seflora/firstviewer.htm, 12 July 2009). University of North Carolina Herbarium, Chapel Hill, North Carolina 27599-3280 USA.
- URBATSCH, L.E.** and **P.B. COX**. 2006. *Rudbeckia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 21:44–60.
- USDA, NRCS**. 2008. The PLANTS Database (www.plants.usda.gov, 19 August 2008). National Plant Data Center, Baton Rouge, Louisiana 70874–4490 USA.
- UTECH, F.H.** 2002. *Medeola*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 26:150–151.
- VALDÉS-REYNA, J.** 2003. *Tridens*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:33–39.
- VALDÉS-REYNA, J.** 2007. *Tridens*. In: Barkworth, M.E., L.K. Anderton, K.M. Capels, S. Long, and M.B. Piep, eds. *Manual of Grasses for North America*. Utah State University Press, Logan, Utah. pp. 194–195, 531.
- VAN ARSDALE, R.B., K.I. KELSON, and C.H. LUMSDEN**. 1995. Northern extension of the Tennessee Reelfoot Scarp into Kentucky and Missouri. *Seismological Research Letters* 66:57–62.
- VANDER KLOET, S.P.** 1988. The genus *Vaccinium* in North America. Research Branch, Agriculture Canada, Publication 1828. Ottawa, Ontario.
- VANDER KLOET, S.P.** 2009. *Vaccinium*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 8:515–530.
- VIELE, G.W.** 1989. The Ouachita orogenic belt. In: Hatcher, R.D., Jr., W.A. Thomas, and G.W. Viele, eds. *The Geology of North America*, vol. F-2, The Appalachian-Ouachita Orogen in the United States. The Geological Society of America, Boulder, Colorado. pp. 555–561.
- WAGNER, W.H., JR. and J.M. BEITEL**. 1993. Lycopodiaceae. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 2:18–37.
- WAGNER, W.H., JR., R.C. MORAN, and C.R. WERTH**. 1993. Aspleniaceae. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 2:228–245.
- WALKER, J.D. and J. GEISSMAN**, compilers. 2009. Geologic Time Scale. Geological Society of America CTS004R2C. Boulder, Colorado.
- WATERFALL, U.T.** 1958. A taxonomic study of the genus *Physalis* in North America north of Mexico. *Rhodora* 60:106–114, 128–142, 152–173.
- WATERFALL, U.T.** 1979. Keys to the Flora of Oklahoma, sixth edition. Self-published, Stillwater, Oklahoma.
- WATERWAY, M.J.** 2002. *Carex* section *Hymenochlaenae*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:461–475.
- WATSON, L.E.** 2006. *Santolina*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 19:497–498.
- WEAKLEY, A.S.** 2008. Flora of the Carolinas, Virginia, Georgia, Northern Florida, and Surrounding Areas, working draft. University of North Carolina Herbarium, North Carolina Botanical Garden. University of North Carolina at Chapel Hill, North Carolina. 7 April 2008.
- WEBSTER, R.E.** 2003. *Saccharum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:609–616.

- WHEELER, L.C.** 1941. *Euphorbia* Subgenus *Chamaesyce* in Canada and the United States exclusive of southern Florida. Contributions of the Gray Herbarium, Publication Number 136. [Reprint from 1941 *Rhodora* 43:97–286].
- WHERRY, E.T.** 1955. The genus *Phlox*. Morris Arboretum Monographs 3:1–174.
- WHERRY, E.T.** 1970. Notes on phloxes in the Gulf states. *Castanea* 35:198–199.
- WHITEMORE, A.T.** 1997. *Ranunculus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 3:88–135.
- WHITEMORE, A.T.** and **A.E. SCHUYLER.** 2002. *Scirpus*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 23:8–21.
- WIDRECHNER, M.P.** 1998. The genus *Rubus* L. in Iowa. *Castanea* 63:415–465.
- WIERSEMA, J.H.** 1997. *Nymphaea*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 3:71–77.
- WILCOX, W.H.** 1973. A survey of the vascular flora of Crittenden County, Arkansas. *Castanea* 38:286–297.
- WIPFF, J.K.** 2003a. *Anthenantia*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:384.
- WIPFF, J.K.** 2003b. *Digitaria*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:358–382.
- WIPFF, J.K.** 2003c. *Pennisetum*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:515–529.
- WIPFF, J.K.** 2007. *Pennisetum*. In: Barkworth, M.E., L.K. Anderson, K.M. Capels, S. Long, and M.B. Piep, eds. Manual of Grasses for North America. Utah State University Press, Logan, Utah. pp. 301–304, 551.
- WIPFF, J.K.** and **R.A. THOMPSON.** 2003. *Urochloa*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 25:492–507.
- WOODS, A.J., T.L. FOTI, S.S. CHAPMAN, J.M. OMERNIK, J.A. WISE, E.O. MURRAY, W.L. PRIOR, J.B. PAGAN, JR., J.A. COMSTOCK, and M. RADFORD.** 2004. Ecoregions of Arkansas (color poster with map, descriptive text, summary tables and photographs). Scale 1:1,000,000. U.S. Geological Survey, Reston, Virginia. (www.epa.gov/wed/pages/ecoregions/ar_eco.htm).
- YATSKIEVYCH, G.** 1999. Steyermark's Flora of Missouri, vol. 1. The Missouri Department of Conservation, Jefferson City, Missouri and The Missouri Botanical Garden Press, St. Louis, Missouri.
- YATSKIEVYCH, G.** 2006. Steyermark's Flora of Missouri, vol. 2. The Missouri Botanical Garden Press, St. Louis, Missouri and The Missouri Department of Conservation, Jefferson City, Missouri.
- ZIMMERMAN, A.D.** and **B.D. PARFITT.** 2003. *Coryphantha*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. Oxford University Press, New York and Oxford. 4:220–237.
- ZOBACK, M.D.** and **M.L. ZOBACK.** 1981. State of stress and intraplate earthquakes in the United States. *Science* 213:96–104.



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The accepted scientific names of vascular plants known to occur in Arkansas are given in [**bold Roman type**]. Family scientific names are given in [**BOLD CAPS**]. Synonyms as used by Smith (1988, 1994) or in the *Checklist* (AVFC 2006) are given in [*italics*]. Unless otherwise explained in Appendix IV or V, in cases where the name used by Smith or in the *Checklist* represents a misapplication of the name, it is followed by “(misapp.)” and the correctly applied name for the Arkansas taxon. In cases where the name used by Smith is an orthographic variant (unaccepted variation in spelling) or a typographical error, the name is followed by “(orth. var.)” and the accepted spelling. In one instance, an unpublished and therefore unavailable name used by Smith is followed by “(unpubl.)” and the correctly applied name. Scientific names of taxa reported but unconfirmed for the state, as well as taxa previously reported but now excluded from the state flora are given in [Roman type]. Common names are given in [SMALL CAPS]. In cases where the common name is the same as the generic name, the common name follows the generic name. Major Group names are given in [**BOLD CAPS**]. Proper names, places, and terms found in the Introduction are given in [Roman type].

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dumosus = *Symphotrichum dumosum*
ericoides = *Symphotrichum ericoides* var. *ericoides*
 var. *prostratus* = *Symphotrichum ericoides* var. *ericoides*
fragilis
 var. *subdumosus* = *Symphotrichum racemosum*
laevis = *Symphotrichum laevis*
lanceolatus = *Symphotrichum lanceolatum*
lateriflorus = *Symphotrichum lateriflorum*
linariifolius = *Ionactis linariifolia*
novae-angliae = *Symphotrichum novae-angliae*
oblongifolius = *Symphotrichum oblongifolium*
ontarionis = *Symphotrichum ontarionis*
oolentangiensis = *Symphotrichum oolentangiense*
paludosus
 subsp. *hemisphericus* = *Eurybia hemispherica*
parviceps = *Symphotrichum parviceps*
patens = *Symphotrichum patens*
pilosus = *Symphotrichum pilosum* var. *pilosum*
 var. *pilosus* = *Symphotrichum pilosum* var. *pilosum*
praealtus = *Symphotrichum praealtum*
 var. *praealtus* = *Symphotrichum praealtum*
prealtus (orth. var.) = *A. praealtus*
 var. *prealtus* (orth. var.) = *A. praealtus*
 var. *praealtus*
sericeus
 var. *microphyllus* = *Symphotrichum pratense*
 var. *sericeus* = *Symphotrichum sericeum*
shortii = *Symphotrichum shortii*
subulatus
 var. *ligulatus* = *Symphotrichum subulatum* var. *ligulatum*
 var. *subulatus* = *Symphotrichum subulatum* var. *subulatum*
turbinellus = *Symphotrichum turbinellum*
umbellatus (misapp.) = *Doellingeria sericocarpoides*

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