

ANNOTATED CHECKLIST OF THE VASCULAR FLORA OF THE JACK GORE BAYGALL AND NECHES BOTTOM UNITS OF THE BIG THICKET NATIONAL PRESERVE, TYLER, JASPER, AND HARDIN COUNTIES, TEXAS

Larry E. Brown

*Spring Branch Science Center Herbarium
8856 Westview Drive
Houston, Texas 77055, U.S.A.
larry-theplantman@att.net*

Barbara R. MacRoberts &
Michael H. MacRoberts

*Bog Research, 740 Columbia
Shreveport, Louisiana 71104, U.S.A.
and Herbarium, Museum of Life Sciences
Louisiana State University in Shreveport
Shreveport, Louisiana 71115, U.S.A.*

Warren W. Pruess & I. Sandra Elsik

*Department of Ecology & Evolutionary Biology
Rice University
Houston, Texas 77005, U.S.A.*

Stanley Jones

*Botanical Research Center Herbarium
P.O. Box 6717
Bryan, Texas 77805, U.S.A.*

ABSTRACT

An annotated, vouchered checklist is provided of the vascular plant taxa of the Jack Gore Baygall and Neches Bottom Units of the Big Thicket National Preserve in Tyler, Jasper, and Hardin counties, Texas. Together they total 5,379 hectares. Documented for the units are 739 taxa (but only 734 species due to multiple varieties in some native species), of which 89 taxa (12.1%) are exotics.

RESUMEN

Se presenta una lista anotada, incluyendo colecciones botánicos, de plantas vasculares en las unidades de Jack Gore Baygall y de Neches Bottom del Big Thicket National Preserve, en los condados de Tyler, Jasper y Hardin en Texas. Juntos estos condados suman 5,379 hectáreas. Se documentan 739 taxones en las unidades (de estas solamente hay 734 especies, esto debido a las múltiples variedades de algunas especies nativas) de los cuales 89 taxones (12.1%) son exóticas.

INTRODUCTION

This is the 8th part of an inventory, based on available voucher specimens, of the vascular flora of the Big Thicket National Preserve in southeastern Texas. In previous papers, we provided annotated checklists of the Hickory Creek, Turkey Creek, Big Sandy Creek, Lance Rosier, Beech Creek, Loblolly, and Menard Creek Units (MacRoberts et al. 2002; Brown et al. 2005, 2006a, 2006b, 2008a, 2008b, 2009). In this paper, we provide an annotated checklist of the Jack Gore Baygall and Neches Bottom Units since they are continuous and occupy the same habitat.

SITE AND METHODS

The Big Thicket National Reserve is located in the West Gulf Coastal Plain in southeastern Texas (see Diggs et al. 2006) for literature and description). It consists of units ranging from 222 to 10,000 hectares and of about 40,100 hectares scattered over seven counties (Fig. 1). The Jack Gore Baygall and Neches Bottom Units straddle the Neches River in Tyler, Jasper, and Hardin counties and total 5,379 hectares (Peacock 1994). Latitude extends from 30°47.933'N at the B.A. Steinhagen Lake dam at Town Bluff south to 30°15.055'N at juncture with the Beaumont Unit. Longitude extends from 94°10.723' at Highway 2937 in Hardin County east to 94°03.660 at Sally Withers Lake in Jasper County. These units are located on Deweyville, Lissie, and modern alluvial soil series (Deshotsels 1978; Aranow 1981). The Jack Gore Baygall and Neches Bottom are among the most diverse units in the Preserve in that they contain upper-slope, mid-slope, and lower-slope forests as well as floodplain hardwood forest, wetland baygall, and cypress-tupelo swamp (Harcombe & Marks 1979; Marks & Harcombe 1981).

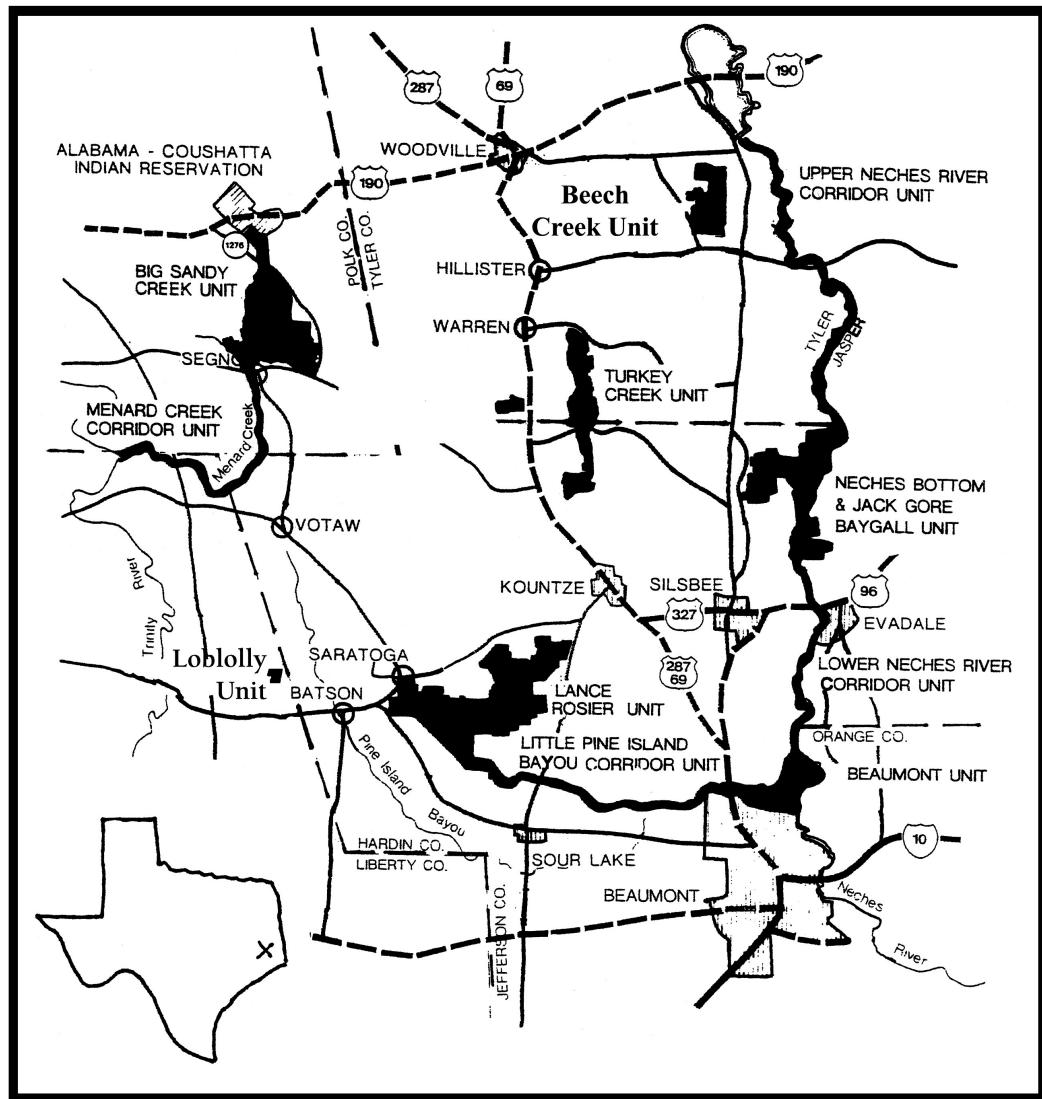


Fig. 1. Location of the Jack Gore Baygall and Neches Bottom units of the Big Thicket National Preserve, Texas.

Elevation ranges from a high of 33 meters in the small portion of the Jack Gore Baygall Unit adjacent to Highway 2937 to 3 meters at the junction of the Neches River Corridor Unit with the Beaumont Unit.

Like all units of the Big Thicket Biological Preserve, excluding the recent floristic inventories of the above cited units, the Jack Gore Baygall and Neches Bottom units had not previously been the subject of a detailed floristic inventory.

Because our purpose is to produce a list of taxa known to occur in the Jack Gore Baygall and Neches Bottom units, a voucherized specimen was considered to be the only evidence acceptable for inclusion in the list. In all, 1304 + herbarium specimens form the data for this report. Larry Brown annotated all specimens.

Larry Brown collected 716 specimens during 25 field days beginning in June 2008 and ending in November 2009. Stanley Jones collected 338 specimens in the mid 2000s. Geraldine Watson collected 51

specimens over several years in the late 1970s and early 1980s. The MacRoberts collected 31 specimens. Sandra Elsik and Warren Pruess together collected 105 specimens and Warren Pruess singly collected 57 specimens. Collection totals for the few others are 12. All collectors and collection numbers are designated by appropriate abbreviations below.

In most cases, the current family nomenclature follows Chester et al. (2009) and A.S. Weakley (2007). Species nomenclature for the most part follows Jones et al. (1997), Kartesz (1999), and Diggs et al. (2006). In cases of multiple collections, no more than four are listed for each taxon.

RESULTS

The following is an annotated list of the Jack Gore Baygall Unit and Naches Bottom Units taxa. Abbreviations used are given below:

CL = C. Liu. His one collection is at TAES.

PH = Paul Harcombe. His one collection is at TAES.

PR = Paul Roling. His specimens are at TAES.

GW = Geraldine Watson. Her specimens are at TAES.

JL = Joe Liggio. He collected with LB and those specimens are at TAES.

SJ = Stanley Jones. His specimens are at TAES.

LB = Larry Brown. His specimens are at TAES, except for the few that are at SBSC indicated by (SBSC) after a collection number.

MM = Barbara and Michael MacRoberts. Their specimens are at TAES.

SH = Shawn Harper (Grandson of LB).

A collection number followed by (J) is from Jasper County and a collection number followed by (T) is from Tyler County. All others are from Hardin County.

Acanthaceae

Justicia ovata (Walter) Lindau var. *lanceolata* (Chapm.) R.W. Long, WP 144

Ruellia carolinensis (J.F. Gmel.) Steud., SJ 14204; LB 34575

Ruellia humilis Nutt., GW 2953; LBRH 34645

Ruellia pedunculata Torr. ex A. Gray, LB 34606

Aceraceae (see Sapindaceae)

Adoxaceae

Sambucus nigra L. subsp. *canadensis* (L.) Bollii, SJ 14306

Viburnum acerifolium L., SJ 14619

Viburnum dentatum L., SJ 14132; LBRH 33905

Viburnum nudum L. var. *nudum*, SEWP 460; LB 35106

Agavaceae

Yucca louisianensis Trel., LB 34235

Alismataceae

Echinodorus cordifolius (L.) Griseb., SJ 14288; LBSH 34723

Sagittaria latifolia Willd., LBSH 34184

Sagittaria papillosa Buchenau, WP 105

Sagittaria platyphylla (Engelm.) J.G. Smith, LBJL 34018

Alliaceae

Allium canadense L. var. *mobilense* (Regel) Ownbey, LB 34521

Nothoscordum bivalve (L.) Britton, SJ 14429

Altingiaceae

Liquidambar styraciflua L., LBSM 33728

Amaranthaceae

**Alternanthera philoxeroides* (Mart.) Griseb., LBSH 34104

SM = Sam Harper (Grandson of LB).

SE = Sandra Elsik. Her specimens are at TAES.

WP = Warren Pruess. His specimens are at TAES.

EK = Eric Keith. His one collection is at TAES.

RH = Roland Harper (Grandson of LB).

DK = Dale Kruse. His one collection is at TAES.

NIX = Elray Nixon. His collections are at ASTC with some duplicates at SBSC.

WRC = Bill Carr. His collections are at TX.

* = exotic

+ = see note at end of list

+**Alternanthera sessilis* (L.) R. Br. ex DC., LB 34310

Froelichia floridana SJ 14411

Dysphania ambrosioides (L.) Mosyakin & Clemants, SJ 14516; LB 35034

Anacardiaceae

Rhus copallina L., SEWP 222

Toxicodendron pubescens Mill., LB 34595

Toxicodendron radicans (L.) Kuntze, WP 142; SJ 14621

Toxicodendron vernix (L.) Kuntze, LBJL 34036, 34031

Annonaceae

Asimina parviflora (Michx.) Dunal, GW 2948; LBRH 33900; LBSH 34191; LB 34610

Apiaceae (see Araliaceae for Hydrocotyle)

Centella erecta (L.f.) Fernald, MM 8012; SEWP 196

Chaerophyllum tainturieri Hook. var. *dasyacarpum* Hook. ex S. Watson, LBSH 34393 (J)

**Cyclospurm leptophyllum* (Pers.) Sprague ex Britton & P. Wilson, WP 131

Eryngium prostratum Nutt. ex DC., SEWP 206; LBSH 34713

Limnosciadium pumilum (Engelm. & A. Gray) Mathias & Constance, LB 34577

Ptilimnium capillaceum (Michx.) Raf., SJ 14194a, 14134, 14194; LB 34589

Sanicula canadensis L., WP 136; LBSH 33826

**Torilis nodosa* (L.) Gaertn., LB 34520

Apocynaceae

Asclepias amplexicaulis Michx., SJ 14311

Asclepias obovata Elliott, SEWP 188; GW 2960

- Asclepias perennis* Walter, SJ 14337; LBSH 34954
+Gonolobus suberosus (L.) R.Br. var. *granulatus* (Scheele) Krings & O.Y. Xiang SJ 14146, 14305; LB 34529, 34986
Trachelospermum difforme (Walter) A. Gray, SJ 14340; LB 35088
- Aquifoliaceae**
Ilex ambigua (Michx.) Torr., SJ 14436, 14422, 14618; LBSH 34942
Ilex coriacea (Pursh) Chapm., WP 161; LB 35104
Ilex decidua Walter, LBSM 33720; LB 34257
Ilex longipes Chapm. ex Trelease, LBRH 33893
Ilex opaca Aiton, WP 156; LB 35075
Ilex vomitoria Aiton, SJ 14502
- Araceae**
Arisaema triphyllum (L.) Schott., GW 717
- Araliaceae**
Aralia spinosa L., SJ 14421; LBJL 34028
Hydrocotyle umbellata L., SJ 14366; LB 34211, 34316
Hydrocotyle verticillata Thunb., LB 34527
- Aristolochiaceae**
Aristolochia reticulata Jacq., SEWP 189
Aristolochia serpentaria L., LB 19218; SJ 14341
- Asclepiadaceae** (see Apocynaceae)
- Aspleniaceae**
Asplenium platyneuron (L.) Britton, Sterns & Poggenb., SJ 3217
- Asteraceae**
Acmella repens (Walter) Rich., SJ 14319; LB 34975
Ambrosia artemisiifolia L., MM 8038; LB 34237
Ambrosia psilostachya DC., LBJL 34010
Ambrosia trifida L., LB 34217
Artemisia ludoviciana Nutt., GW n18
Baccharis halimifolia L., GW 3297; LBJL 34015
Berlandiera pumila (Michx.) Nutt. var. *scabrella* Nesom & B.L. Turner, SJ 14190a; LBSH 33830; LB 34597
+Bidens aristosa (Michx.) Britton, SJ 14376; LBRH 34060; LB35071, 35184
Bidens bipinnata L., LBJL 34014
Bidens laevis (L.) Britton, Sterns & Poggenb., LBSH 34097
Boltonia diffusa Elliott, SEWP 191; LB 35068
Bradburia pilosa (Nutt.) Semple, SJ 14418; LB 35019
Chrysopsis mariana (L.) Elliott, SEWP 295; LBRH 33888; LB 34224
Cirsium horridulum Michx., WP 080
Conoclinium coelestinum (L.) DC., MM 8024; SJ 14321
Conyza bonariensis (L.) Cronquist, LB 34159
Conyza canadensis (L.) Cronquist var. *canadensis*, SEWP 213; LBJL 34027
Conyza canadensis (L.) Cronquist var. *pusilla* (Nutt.) Cronquist, SJ 14414
Coreopsis tinctoria Nutt., SJ 14228
Croptilon divaricatum (Nutt.) Raf., SEWP 390; LBRH 33899
Croptilon rigidifolium (E.B. Smith) E.B. Smith, LBSH 34951
Echinacea sanguinea Nutt., SJ 14210
Eclipta prostrata (L.) L., SEWP 311; LBSM 33764
Elephantopus carolinianus Raeusch., MM 8021
Elephantopus nudatus A. Gray, LBSH 34182a; LB 35103
Elephantopus tomentosus L., MM 8011; SJ 14420; LBRH 33885; LBJL 34040
Erechtites hieraciifolia (L.) Raf., MM 8070
Erigeron annuus (L.) C.P. Person, LB 34988
Erigeron philadelphicus L., WP 122; LB 34294
Erigeron strigosus Muhl. ex Willd., SJ 14205; LBJL 34001
Erigeron tenuis Torr. & A. Gray, WP 081
Eupatorium capillifolium (Lam.) Small, LBRH 33884
Eupatorium lancifolium (Torr. & A. Gray) Small, SEWP 220; LBSH 33828; LB 35004
Eupatorium perfoliatum L., LBSM 33765
Eupatorium x pinnatifidum Elliott, WRC 12489; LBRH 34051; LB 35158
Eupatorium rotundifolium L. var. *rotundifolium*, MM 8017; SJ 14500; LBSH 33827
Eupatorium semiserratum DC., LBSM 33757a; LBRH 33909; LBJL 34023; LBSH 34188
Eupatorium serotinum Michx., LBSM 33718a; LB 34217a
Euthamia leptcephala (Torr. & A. Gray) Greene, LB 34519
**Facelis retusa* (Lam.) Sch.-Bip., LB 34615
Gaillardia pulchella Foug., SEWP 197; LB 35100
Gamochaeta antillana (Urb.) Anderb., LB 34306
**Gamochaeta coarctata* (Willd.) Kerguelen, SEWP 456
Gamochaeta purpurea (L.) Cabrera, SJ 14221; LBSH 34411; LB 34540
Gamochaeta pensylvanica (Willd.) Cabrera, LB 34306a
Helenium amarum (Raf.) Rock var. *amarum*, WP 160
Helenium flexuosum Raf., LB 34619
Helianthus angustifolius L., SJ 14378; LB 34220
Heterotheca subaxillaris (Lam.) Britton & Rusby, LBSH 34086
Hieracium gronovii L., GW 2954; LBRH 33906
Hymenopappus artemisiifolius DC., SJ 14281
**Hypochoeris microcephala* (Sch. Bip.) Cabrera, LB 34546
+Iva asperifolia Less. var. *angustifolia* (Nutt. ex DC.) B.L. Turner, SEWP 468; LBJL 33997
Iva annua L., SEWP 467; LBJL 34009
Krigia cespitosa (Raf.) K.L. Chambers var. *cespitosa*, LB 34550
Krigia virginica (L.) Willd., WP 125
Krigia wrightii (A. Gray) K.L. Chambers ex K.J. Kim, LB 34314; LBSH 34396 (J)
Lactuca canadensis L., LBRH 33891
Lactuca floridana (L.) Gaertn., SEWP 309
Liatris acidota Engelm. & A. Gray, SJ 14396
Liatris elegans (Walter) Michx. var. *elegans*, SEWP 280; LB 35005
Liatris squarrosa (L.) Michx. var. *glabrata* (Rydb.) Gaiser, GW 3507, 2975; LBSH 34928, LB 34993
+Liatris squarrosa (L.) Michx. var. *squarrosa*, LBSH 34928; LB 34993, 35006
Mikania scandens (L.) Willd. LBSM 33741
Packera obovata (Michx. ex Willd.) Weber & Á. Löve, GW 3323; LB 34278
Pityopsis graminifolia (Michx.) Nutt. SEWP 193; LBSH 34180
Pluchea camphorata (L.) DC., LBSM 33762
Pluchea foetida (L.) DC., MM 8030; SJ 14384; LBJL 34033

- +*Pseudognaphalium luteoalbum* (L.) Hillard & B.L. Burtt, LB 34299
Pseudognaphalium obtusifolium (L) Hillard & Burtt, LB 34240,35022
Pyrrhopappus carolinianus (Walter) DC., SJ 14282; GW 2913
Pyrrhopappus pauciflorus DC., LB 34578
Rudbeckia hirta L., SJ 14217; LB 35098
Silphium asteriscus L. var. *asteriscus*, LB 35073
Smallanthus uvedalia (L.) Mack., SEWP 315; LBRH 33894
Solidago altissima L., LBRH 34058
Solidago nitida Torr. & A. Gray, SJ 14361; LB 35070
Solidago odora Aiton, SEWP 279
Solidago rugosa Mill. var. *asper* (Aiton) Fernald, SEWP 304, 297;
 LBSM 33752; LBRH 34049
Solidago stricta Aiton subsp. *stricta*, SEWP 465; LBSH 34186
 **Soliva anthemifolia* Kunth, SJ 14142; LB 34304; LBRH 34642
 **Soliva sessilis* Ruiz & Pavon, LB 34534
Sonchus asper (L.) Hill, LBRH 34641
Sonchus oleraceus L., LBSM 33753; LB 34576
+*Symphyotrichum divaricatum* (Nutt.) G.L. Nesom, LBJL 34042;
 LBSM 34102; LB 34216
Symphyotrichum dumosum (L.) G.L. Nesom, LBSH 34190; LB
 34212, 34215
Symphyotrichum lateriflorum (L.) Å. Löve & D. Löve, LB 34222,
 34605, 35116, 35154
Symphyotrichum racemosum (Elliott) G.L. Nesom, WP 135;
 LBSH 34166
Tetragonotheeca ludoviciana (Torr. & A. Gray) A. Gray ex Hall,
 SJ 14470
Verbesina virginica L., LBRH 34053
+*Vernonia gigantea* (Walter) Trel. ex Banner & Coville, LBSM
 33768; LBRH 33887
Vernonia missurica Raf., SJ 26102; LBSH 33842
Vernonia texana (A. Gray) Small, LBSH 33825; LB 34992,
 35003
**Youngia japonica* (L.) DC., WP 108; LB 34281
Xanthium strumarium L., LBSH 34964
- Balsaminaceae**
Impatiens capensis Meerb., PR s.n.; SJ 14144
- Berberidaceae**
Podophyllum peltatum L., SE 4001
- Betulaceae**
Betula nigra L., LBSH 34079
- Carpinus caroliniana** Walter, LBSM 33718; LBSH 34079a; LB
 34556
- Ostrya virginiana* (Mill.) K. Koch, SJ 14131; LBRH 34061
- Bignoniaceae**
Bignonia capreolata L., WP 072
- Campsis radicans* (L.) Seem. ex Bureau, LBSH 33833
- Blechnaceae**
Woodwardia areolata (L.) T. Moore, SJ 14283; LBJL 34034
Woodwardia virginica (L.) J.E.Smith, SEWP 377; LBSH 34410
- Boraginaceae**
**Heliotropium indicum* L., LBSH 34965
Heliotropium procumbens Mill., SJ 14455; LB 34343
- Myosotis macrosperma* Engelm., LBSH 34402 (J)
- Brassicaceae**
**Cardamine flexuosa* With. subsp. *debilis* O.E. Schultz. D. Don,
 LB 34312
- Lepidium virginicum* L., SJ 14208
Rorippa palustris Besser, LB 34302
Rorippa sessiliflora (Nutt.) Hitchc., LB 34313; LBSH 34392 (J)
- Bromeliaceae**
Tillandsia usneoides (L.) L., SJ 14206; LB 34261
- Buddlejaceae** (see *Tetrachondraceae* for *Polypremum*)
- Burmanniaceae**
Apteria aphylla (Nutt.) Barnhart ex Small, SJ 14181a
- Cactaceae**
Opuntia humifusa (Raf.) Raf., LBSH 33834a; LB 34611
- Campanulaceae**
Lobelia appendiculata A. DC., LB 34541
Lobelia cardinalis L., LBSH 34174
Lobelia flaccidifolia Small, SJ 14397
Lobelia puberula Michx., SEWP 296; LBRH 34047
Triodanis biflora Greene, LBSH 34398 (J), 34650 (J); LB 34539
Triodanis perfoliata (L.) Nieuwl., GW 3234
**Wahlenbergia marginata* (Thunb.) A. DC., CL s.n., LBSH 33839;
 LB 34292
- Cannabaceae**
Celtis laevigata Willd., LBSH 34406 (J)
- Caprifoliaceae** (see *Adoxaceae* for *Sambucus* and *Viburnum*)
**Lonicera japonica* Thunb., LBSM 33770
- Caryophyllaceae**
**Cerastium glomeratum* Thuill., LB 34285
Silene antirrhina L., LBRH 34635
- Chenopodiaceae** (see *Amaranthaceae* for *Dysphanis*)
- Cistaceae**
Helianthemum carolinianum (Walter) Michx., LB 34288
Helianthemum georgianum Chapm., WP 167; LBSH 33837,
 34199
- Lechea mucronata* Raf., SJ 14483, 14189
+*Lechea minor* L., LB 34601, 35011 (SBSC); LBSH 34929
- Cleomaceae**
**Cleome hassleriana* Chodat, GW 188
- Clethraceae**
Clethra alnifolia L., LB 19220; SJ 14472, 14431; LBJL 34029
- Commelinaceae**
Commelinia erecta L., SJ 14137, 14185; LB 34604, 34982
Commelinia virginica L., SJ 14313, 14524; LB 35079
Tradescantia ohiensis Raf., LB 34315; LBSH 34397 (J)
Tradescantia reverchonii Bush, SJ 14186
- Convolvulaceae**
Cuscuta compacta Choisy, SEWP 302
Cuscuta gronovii Willd., LB 34207
Dichondra carolinensis Michx., LBSH 34412
Ipomoea cordatotriloba Dennst., SEWP 277; LBSM 33777

- Ipomoea lacunosa* L., LB 35090, 35113
Ipomoea pandurata (L.) G. Mey., LBSH 34943
Jacquemontia tamnifolia (L.) Griseb., SEWP 304
- Cornaceae** (see *Nyssaceae* for the genus *Nyssa*)
Cornus florida L., SEWP 3005; LB 34289; WP 083 (SBSC)
Cornus foemina Mill., LB 34231
- Crassulaceae** (see *Penthoraceae* for the genus *Penthorum*)
- Cucurbitaceae**
Cayaponia quinqueloba (Raf.) Shinners, SJ 14522; LBSH 34710
**Citrullus vulgaris* Schrad. ex Eckl. & Zeyh., LB 35161
**Cucumis melo* L., LB 35114
Melothria pendula L., LBSH 33736
- Cupressaceae**
Juniperus virginiana L. var. *virginiana*, LBJL 34005
Taxodium distichum (L.) Rich. var. *distichum*, LBSH 33845
- Cuscutaceae** (see *Convolvulaceae* for the genus *Cuscuta*)
- Cyperaceae**
Bulbostylis barbata (Rottb.) Clarke, SJ 14428
Bulbostylis ciliatifolia (Elliott.) Fernald var. *coarctata* (Elliott) Kral, SJ 14129, 14469; LBRH 33902; LB 35036
Carex abscondita Mack., SJ 14127; LB 34579; LBSH 34648 (J)
Carex atlantica L.H. Bailey subsp. *capillacea* (L.H. Bailey) Reznicek, LBJL 33995
Carex brevior (Dewey) Mack. ex Lunell, LBSH 34395 (J); LB 34528
Carex cherokeensis Schwein., LB 34978
Carex complanata Torr. & Hook., LBSH 34413a
Carex debilis Michx., LB 34545
Carex digitalis Schkuhr ex Willd. var. *floridana* (L.H. Bailey) Naczi & Bryson, SJ 14595
Carex flaccosperma Dewey, LBSH 34394 (J); LB 34549
Carex frankii Kunth, LB 34581
Carex gigantea Rudge, SJ 14147
Carex glaucescens Elliott, LBSH 34037
Carex joorii L.H. Bailey, NIX 15988; SJ 14473; LBSM 33756
Carex leptalea Wahlenb. subsp. *harperi* (Fernald.) W. Stone, SJ 14145; LBJL 33996
Carex nigromarginata Schwein. var. *floridana* (Schwein.) Kük., SJ 13708; LB 34283
Carex reniformis (L.H. Bailey) Small, LB 34536, 34586
Carex tribuloides Wahlenb. var. *sangamonensis* Clokey, SJ 14136
Carex verrucosa Muhl., SEWP 376, 375
Cladium jamaicense Crantz, LBSH 34667
Cyperus acuminatus Torr. & Hook. ex Torr., LB34602
Cyperus compressus L., SJ 14486
Cyperus croceus Vahl, SJ 14487, 145124; LBJL 340342; LBRH 34637
Cyperus elegans L., SEWP 463; LB 35101
**Cyperus entrerianus* Bockeler, LBSM 33743
Cyperus erythrorhizos Muhl., SJ 14440, 14457; LB 35085, 35089
**Cyperus esculentus* L., SJ 14441; LBSH 34163
Cyperus flavescens L., LBRH 34059
- Cyperus grayoides* Mohlenbr., SJ 14479
Cyperus haspan L., SEWP 369; LBSM 33760
Cyperus hystricinus Fernald, SJ 14471, 14491; LB 34221
**Cyperus iria* L., SJ 14494
Cyperus odoratus Vahl, SJ 14442; LBSH 34078, 34163a, 34970
Cyperus polystachyos Rottb., SJ 14443; LBSH 34162
Cyperus pseudovegetus Steud., SJ 14344; LBSM 33748; LBSH 34960
Cyperus retroflexus Buckley, SJ 14490; LBSH 34958; LB 35016
Cyperus retrorsus Buckley, SJ 14330; LBSM 33740; LBJL 34030
Cyperus squarrosus L., SJ 14451a
Cyperus strigosus L., SJ 14379
Cyperus surinamensis Rottb., SJ 14444; LBSH 34100; LB 35112
Cyperus virens Michx., SJ 14316
Eleocharis microcarpa Torr., MM 8022; LBSH 33831
Eleocharis montana (Kunth) Roem. & Schult., LBSH 34183
Eleocharis obtusa (Willd.) Schult., SJ 14314
Eleocharis tuberculosa (Michx.) Romer & Schult., SEWP 374
Fimbristylis autumnalis (L.) Roem. & Schult., SJ 14446
Fimbristylis dichotoma (L.) Vahl, SJ 14365
**Fimbristylis miliacea* (L.) Vahl, NIX 16005 (SBSC); LB 35031
Fimbristylis vahlii (Lam.) Link, DK 1614; LBSH 34962
Fuirena breviseta (Coville) Coville, SJ 14395
Kyllinga pumila (Torr.) Spreng., SEWP 312; LBSH 33820; LB 34563, 35030
Rhynchospora caduca Elliott, LBRH 34630; LBSH 34664
Rhynchospora colorata (L.) H. Pfeiff., LB 34660
Rhynchospora corniculata (Lam.) A. Gray; MM 8025, SJ 14474, 14318, 14149
Rhynchospora elliotii Elliott, SJ 14390
Rhynchospora globularis (Chapm.) Small var. *globularis*, SEWP 446; LB 34599
Rhynchospora glomerata (L.) Vahl, SJ 14405, 14355; LBJL 34043; LBSH 34938
Rhynchospora grayi Kunth, SJ 14480a, 14480
Rhynchospora inexpansa (Michx.) Vahl, SJ 14404; LBSM 33759
Rhynchospora latifolia (Bald. ex Elliott) Thomas, SJ 14391
Rhynchospora mixta Britton, LB 19218b, 19221; SJ 14150
Rhynchospora recognita (Gale) Kral, LBRH 34644; LBSH 34665
Schoenoplectus californicus (Meyer) Sojak, SJ 14153
Scirpus cyperinus L., LBJL 34000
+*Scirpus divaricatus* Elliott, GW 3495; SEWP 320; LBSM 33766; LB 34980
Scleria ciliata Michx. var. *ciliata*, LB 34600
Scleria oligantha Michx., LB 34552
Scleria pauciflora Muhl. ex Willd., SEWP 294
Scleria triglomerata Michx., SJ 14357
- Cyrillaceae**
Cyrilla racemiflora L., SJ 14230
- Dennstaedtiaceae**
Pteridium aquilinum (L.) Kuhn var. *pseudocaudatum* (Clute) Heller, GW 2953; LBSH 34179
- Dioscoreaceae**
Dioscorea villosa L., SEWP 314

Droseraceae

- Drosera brevifolia* Pursh, LB 34596
Drosera capillaris Poir., SJ 14398

Dryopteridaceae (see Woodsiaceae for *Athyrium* and Onocleaceae for *Onoclea*)

- Dryopteris ludoviciana* (Kunze) Small, GW 678; SJ 14285; LBJL 34021

Polystichum acrostichoides (Michx.) Schott, LBSM 33751

Ebenaceae

- Diospyros virginiana* L., LBSM 33725

Equisetaceae

- Equisetum hyemale* L., GW 3352

Ericaceae

- Lyonia ligustrina* (L.) DC., SJ 14562
Rhododendron canescens (Michx.) Sweet, SJ 13709; LB 34282

Rhododendron viscosum (L.) Torr., SJ 14289

Vaccinium arboreum Marsh., SJ 14503

Vaccinium corymbosum L., SJ 14358

Vaccinium elliottii Chapm., LB 34296

Vaccinium stamineum L., SEWP 192

Euphorbiaceae (see Phyllanthaceae for *Phyllanthus*)

Acalypha gracilens A. Gray var. *gracilens*, SJ 14413; LB 34991

Acalypha virginica L., LBSH 34167; LB 34233

**Caperonia palustris* A. St-Hil., LB 35109

Chamaesyce humistrata (Engelm. ex A. Gray) Small, LBRH 33892

Chamaesyce maculata (L.) Small, LBSH 34192, 34949, 34969

Chamaesyce nutans (Lag.) Small, GW 2951; LB 35062

Chamaesyce serpens (Kunth) Small, LBJL 34016; LBSH 34662

Cnidoscolus texanus (Muell. Arg.) Small, LB 34229

Croton capitatus Michx., MM 8015; SJ 14482

Croton glandulosus L. var. *glandulosus*, SEWP 286; LBSH 34932

Croton michauxii Webster, SJ 14415; LBSH 33838

Croton monanthogynus Michx., SEWP 471; LBJL 34008

Croton willdenowii Webster, SJ 14478; LB 34238, 35029

Euphorbia corollata L., MM 8033; SJ 14220; LB 35152

**Manihot grahamii* Hook., GW 446

Sebastiania fruticosa (Bartr.) Fernald, SJ 14126

Stillingia sylvatica L., SJ 14495

Tragia smallii Shinners, LB 34591

Tragia urens L., SJ 14195; LB 35076

Tragia urticifolia Michx., LBRH 33883; LB 35188

**Triadica sebiferum* (L.) Small, LBSH 33832

Fabaceae

**Aeschynomene indica* L., LB 34209, 35111

**Albizia julibrissin* Durazzini, LBSM 33718

Amorpha fruticosa L., LBSH 338411; LBRH 34640; LB 35169

Astragalus leptocarpus Torr. & A. Gray, LB 34297

Centrosema virginianum (L.) Benth., SJ 14184; LBRH 33897

Cercis canadensis L. var. *canadensis*, LB 34561

Chamaecrista fasciculata (Michx.) Greene, SJ 14187

Chamaecrista nictitans (L.) Moench, LBSH 33850

Clitoria mariana L., SJ 14424; LBSM 33727

Crotalaria sagittalis L., SJ 14212, 14483a

Dalea phleoides (Torr. & A. Gray) Shinners var. *phleoides*, GW 2919

Dalea villosa (Nutt.) K. Spreng. var. *grisea* (Torr. & A. Gray) Barneby, SJ 14209

Desmanthus illinoensis (Michx.) B. L. Rob. & Fernald, SJ 14427

Desmodium ciliare (Willd.) DC., SJ 13967; GW 3313b; LBSH, 33824, 34089

+*Desmodium fernaldii* B.G. Schub., LB 35021

Desmodium glabellum (Michx.) DC., LB 35061

Desmodium laevigatum (Nutt.) DC., LBSH 33840, 34927; LB 35083

Desmodium lineatum DC., LB 35063

Desmodium obtusum (Muhl. ex Willd.) DC., LBSH 34090

Desmodium paniculatum (L.) DC., GW 3416, 2957; LBSM 33735, 33772

+*Desmodium viridiflorum* (L.) DC., LBSH 33852; LB 35033; LBRH 34065; PR s.n. (T)

Erythrina herbacea L., WP 159

+*Galactia regularis* (L.) Britton, Sterns, & Poggenb., SJ 14416; LBRH 33901; SEWP 454; LBJL 34017

Gleditsia aquatica Marshall, SJ 14448; LBSH 34400 (J)

Glottidium vesicarium (Jacq.) Harper, SEWP 300; LB 34076

**Indigofera suffruticosa* Mill., LBSH 34725

**Kummerowia striata* (Thunb. ex Murray) Schindl., LB 34264

+*Lackeya multiflora* (Torr. & A. Gray) Fortuna, L.P. Queiroz & C.P. Lewis, LBSM 33730; LB 34590; LBRH 34633

Lespedeza hirta (L.) Hornem. subsp. *hirta*, SJ 14199, 14475; LBSH 33836; LB 34236

Lespedeza repens (L.) Bart., LBSM 33737

**Medicago lupulina* L., WP 084

Mimosa hystricina (Small) Turner, LB 34543

Mimosa strigillosa Torr. & A. Gray, SJ 14409

Neptunia pubescens Benth., LBSH 34661

**Pueraria montana* (Lour.) Merrill var. *lobata* (Willd.) Van der Maesen & Almeida, SJ 14335

Rhynchosia difformis (Elliott) DC., SJ 14498; LBSH 34722

Rhynchosia latifolia Nutt. ex Torr. & A. Gray, SJ 14123; LB 35018

Rhynchosia reniformis DC., SEWP 285; LB 34557

Senna occidentalis (L.) Link, WP 153

Sesbania drummondii (Rydb.) Cory, LBSH 33846

Sesbania herbacea (Mill.) McVaugh, LBRH 33910

Strophostyles helvela (L.) Elliott, LBSH 34076a

Strophostyles leiosperma (Torr. & A. Gray) Piper, LBSH 34716

Strophostyles umbellata (Willd.) Britton, MM 8037; SEWP 301; GW 3417; LBSH 34935

Stylosanthes biflora (L.) Britton, Sterns & Poggenb., MM 8035; SJ 14218; LB 35008

Tephrosia onobrychoides Nutt., SJ 14383

Tephrosia virginiana (L.) Pers., SJ 14222; LB 34594

**Trifolium campestre* Schreb., LB 34298, 34574

**Trifolium repens* L., WP 123

Vicia ludoviciana Nutt. subsp. *ludoviciana*, LB 34295

Vicia minutiflora A. Dietr., LB 34256, 34585; LBSH 34405 (J)

Wisteria frutescens (L.) Poir., SJ 14568, 14343

Fagaceae

- Castanea pumila* (L.) Mill., WP 140; SJ 14329; LB 34989
Fagus grandifolia Ehrh., MM 8036; SJ 13704; LBRH 33024
Quercus alba L., WP 141; LBRH 34052
Quercus falcata Michx., SEWP 199
Quercus hemisphaerica W. Bartram ex Willd., SJ 14331; LBSM 33719
Quercus incana W. Bartram, SJ 14468; LB 34593
Quercus laurifolia Michx., SEWP 319; LBJL 34003; LBSM 34092
Quercus lyrata Walter, WP 151; LBSM 33722
Quercus margareta (Ashe) Ashe, SJ 14139; LBSH 34073
Quercus michauxii Nutt., WP 146
Quercus nigra L., WP 152
Quercus velutina Lam., LB 34243
Quercus virginiana Mill., SJ 14504, 14327

Gelsemiaceae

- Gelsemium sempervirens* (L.) Aiton f., SEWP 3015

Gentianaceae

- **Centaurium pulchellum* (Sw.) Druce, WP 075; LB 34562
Sabatia angularis (L.) Pursh, SJ 14388
Sabatia campestris Nutt., LB 34559

Geraniaceae

- Geranium carolinianum* L., WP 079

Grossulariaceae (see Iteaceae for *Itea*)**Haloragaceae**

- Proserpinaca palustris* L., SJ 14181

Hamamelidaceae (see Altingiaceae for *Liquidambar*)
Hamamelis virginiana L., SJ 14433; LB 35013**Hydrocharitaceae**

- Limnobium spongia* (Bosc.) Rich. ex Steud., LB 35170

Hydroleaceae

- Hydrolea ovata* Nutt., MM 8014; SJ 14374
Hydrolea uniflora Raf., LB 34981

Hydrophyllaceae (see Hydroleaceae)**Hypericaceae**

- Hypericum densiflorum* Pursh, SJ 14438
Hypericum drummondii (Grev. & Hook.) Torr. & A. Gray, LBRH 33881; LB 35007a
Hypericum galiooides Lam., SJ 14375; LBSH 34936
Hypericum gentianoides (L.) Britton, Sterns & Poggenb., LBSH 33848; LB 35007
Hypericum gymnanthum Engelm. & A. Gray, SJ 14214; GW 160
Hypericum hypericoides (L.) Crantz, MM 8027
Hypericum mutilum L., LBSM 33754
Triadenium walteri (J. G. Gmel.) Gleason, SJ 14403
Triadenium tubulosum (Walter) Gleason, GW 2993; LBSH 34646 (J); LB 34985, 35168

Hypoxidaceae

- Hypoxis curtissii* Rose, SJ 14345; LB 34219
Hypoxis wrightii (Baker) Brackett, WP 073; LB 35077

Iridaceae

- Alophia drummondii* (Graham) Foster, LBSM 33771; SJ 14188
Sisyrinchium atlanticum E.P. Bicknell, LB 34566
Sisyrinchium rosulatum E.P. Bicknell, GW 1035b; LB 34535

Iteaceae

- Itea virginica* L., WP 137

Juglandaceae

- Carya aquatica* (Michx. f.) Nutt., LBSH 33844; LBRH 34625; WP 174 (J) at SBSC
Carya cordiformis (Wang.) K. Koch, GW 2950; LBSH 34093, 34649 (J); LB 34580
Carya glabra (Mill.) Sweet, LBSH 34072, 34419
Carya texana Buckley, LBRH 34046
Carya tomentosa (Lam.) Nutt., SJ 14300; LBSH 33817 LBRH 34639

Juncaceae

- Juncus acuminatus* Michx., LBSM 33746; LB 34565; LBRH 34632
**Juncus capitatus* Weigel, WRC 12488
Juncus coriaceus Mack., SJ 14356
Juncus dichotomus Elliott, LBSH 34663
Juncus diffusissimus Buckley, LBSH 34164, 34707
Juncus effusus L., WP 106
Juncus marginatus Rostk., LB 34609
Juncus repens Michx., LBSM 33757
Juncus tenuis Willd., LB 34308
Juncus validus Coville, SEWP 464

Lamiaceae

- Callicarpa americana* L., MM 8031; SJ 141
Hyptis alata (Raf.) Shinners, MM 8028; SJ 14426
Lycopus rubellus Moench., MM 8000; SEWP 310; LB 35105
Lycopus virginicus L., LBSH 34189, 34173
Monarda punctata L var. *lasiodonta* A. Gray, SJ 14459a; LBRH 33896
**Perilla frutescens* (L.) Britton, LBSM 33775
Prunella vulgaris L., SJ 14225
Pycnanthemum albescens Torr. & A. Gray, LBSM 33774
Pycnanthemum tenuifolium Schrad., WP 166; SJ 14227, 14351; LBSH 34934
Salvia lyrata L., LBSM 33773; LBJL 34020; LB 34533
Scutellaria elliptica Muhl., LB 34277, 34553
Scutellaria integrifolia L., SEWP 308; LB 34608
Teucrium canadense L., SJ 14138; LBSH 34649 (J)
Trichostema dichotomum L., LBRH 34064
**Vitex negundo* L. var. *intermedia* (Péi) Moldenke, SJ 14350

Lauraceae

- **Cinnamomum camphora* (L.) J. Presl, LB 35182
Persea borbonia (L.) Spreng., LBRH 33898
Persea palustris (Raf.) Sarg., WP 158; LBJL 34041; LB 35107
Sassafras albidum (Nutt.) Nees, SEWP 208

Lentibulariaceae

- Utricularia radiata* Small, SJ 14429

Linaceae

- Linum medium* (Planch.) Britton var. *texanum* (Planch.) Fernald SJ 14362
Linum striatum Walter, SJ 14211

Linderniaceae

**Lindernia crustacea* (L.) F. von Muell., LBSH 33821
Lindernia dubia (L.) Penn., SJ 14342, 14449; LBSH 33821

Loganiaceae (see Gelsemiaceae for *Gelsemium*)

Mitreola petiolata (J. F. Gmel.) Torr. & A. Gray, MM 8016; SJ 14224; LBSM 33764

Lycopodiaceae

Lycopodiella appressa (Chapm.) Cranfill, LB 34279

Lygodiaceae

**Lygodium japonicum* (Thunb. ex Murray) Sw., MM 8019; WP 163

Lythraceae

Ammannia x coccinea Rottb., SJ 14452

**Cuphea carthagenensis* (Jacq.) J. F. Macbr., WRC 12487; LBRH 33911

Lythrum alatum Pursh var. *lanceolatum* (Elliott) A. Gray, LBSH 34717

Rotala ramosior (L.) Koehne, LBRH 33912; LB 35119

Magnoliaceae

Magnolia grandiflora L., SEWP 200

Magnolia virginiana L., LBSM 33744; SEWP 214

Malvaceae

Malvaviscus arboreus Dill ex Cav. var. *drummondii* (Torr. & A. Gray) Schery, LB 35038

Modiola caroliniana (L.) G. Don, LB 34531

Hibiscus laevis All., SJ 14453; LBSH 34172

Hibiscus moscheutos L., subsp. *lasiocarpus* (Cav.) O.J. Blanchard, SJ 14286

Sida rhombifolia L., SJ 14400, 14517; LBSH 34169

Tilia americana L., LBJL 34035; LB 34547

Melastomataceae

Rhexia mariana L. var. *mariana*, MM 8024; LBSM 33749; SJ 14410, 14338

Meliaceae

**Melia azedarach* L., WP 157

Molluginaceae

**Glinus radiatus* (Ruiz & Pav.) Rohrbach, SJ 14450; LB 35163

**Mollugo verticillata* L., SJ 14407, 14519; LBSH 34957

Moraceae

Morus rubra L., SEWP 210

Myricaceae

Morella caroliniensis Mill., SJ 13705; LB 35102

Morella cerifera (L.) Small, WP 104; LB 34287

Myrsinaceae

**Anagallis arvensis* L., WP 077

Lysimachia radicans Hook., LBSM 33729; WRC 11354; LBSH 34654 (J)

Nartheciaceae

Aletris aurea Walter, LBSH 34715

Nyssaceae

Nyssa aquatica L., SEWP 380; LB 35037

Nyssa biflora Walter, SEWP 325; LBJL 33998

Nyssa sylvatica Marsh., SEWP 324; LBJL 34038

Oleaceae

Chionanthus virginicus L., SJ 13713; LB 35012

Forestiera acuminata (Michx.) Poir., LBSH 34081; SJ 13711

Fraxinus americana L., LBSH 34177

Fraxinus caroliniana Mill., SJ 14336; LBSM 33758; LB 35024, 35166

Fraxinus pennsylvanica Marsh., SJ 14620

**Ligustrum sinense* Lour., SEWP 205

Onagraceae

Gaura longiflora Spach, GW 2983; LBJL 34011

Ludwigia alternifolia L., LBSM 33734; SJ 14461

Ludwigia decurrens Walter, MM 8013; SJ 14464; LB 35032

Ludwigia glandulosa Walter, LBSM 33748; LBSH 34718; SEWP 224; LB 35153

Ludwigia linearis Walter, MM 8026

Ludwigia octovalvis (Jacq.) P.H. Raven, SJ 14352; LBSH 34098

Ludwigia palustris (L.) Elliott, WP 145

Ludwigia pilosa Walter, SEWP 322; LBJL 34019, 34979

Oenothera biennis L., LBRH 33895

Oenothera laciniata Hill, WP 107

Oenothera speciosa Nutt., LB 34560

Onocleaceae

Onoclea sensibilis L.var. *sensibilis*, LB 34208

Ophioglossaceae

Botrychium biternatum (Savigny) Underwood, GW 835

Orchidaceae

Hexalectris spicata (Walter) Barnhart, LB 19219 (SBSC); GW 3472, 3483

Listeria australis Lindl., GW 919

Spiranthes laciniata (Small) Ames, SJ 14152

Spiranthes odorata (Nutt.) Lindl., SEWP 391; LBSH 34170

Spiranthes praecox (Walter) S. Watson, LB 34525

Orobanchaceae

Epifagus virginiana (L.) Bart., WP 130

Agalinis heterophylla (Nutt.) Small ex Britton, SEWP 225

Agalinis purpurea (L.) Penn., SEWP 281; LBSH 34198; LB 35099

Aureolaria flava (L.) Farwell, LBSH 33829

Osmundaceae

Osmunda cinnamomea L., LBJL 34020

Osmunda regalis L. var. *spectabilis* (Willd.) A. Gray, WP 110; LBSH 34945

Oxalidaceae

+*Oxalis dillenii* Jacq., SJ 14226

+**Oxalis debilis* Kunth (DC.) Lourteig, WP 129

Oxalis violacea L., Brown 35187

Passifloraceae

Passiflora incarnata L., LB 34974, 35183

Passiflora lutea L., LBSM 33776; SJ 14328; LBRH 34627

Penthoraceae

Penthorum sedoides L., SJ 14401, LBSH 34956

Phrymaceae

Mimulus alatus Aiton, LBSH 34952

Phyllanthaceae

Phyllanthus caroliniensis Walter, LBSM 33755

**Phyllanthus urinaria* L., MM 8020

Phytolaccaceae

Phytolacca americana L., LBSM 33750

Pinaceae

Pinus echinata Mill, SEWP 194

**Pinus elliottii* Engelm., LBSH 34088

Pinus palustris Mill., LB 34226

Pinus taeda L., MM 8029; LBSM 33745

Plantaginaceae

Bacopa monnieri (L.) Penn., GW 2938; LBJL 34013

Gratiola brevifolia Raf, LB 34564; LBSH 34940

Mecardonia acuminata (Walter) Small, MM 7972; SEWP 283

Mecardonia procumbens (Mill.) Small, WP 085

Micranthemum umbrosum (J.F. Gmel.) S.F. Blake, SJ 14326

Nuttallanthus canadensis (L.) D.A. Sutton, LB 34290

Nuttallanthus texanus (Scheele) D.A. Sutton, WP 128; GW 3331, 3332

**Plantago major* L., LB 34266

Plantago virginica L., LBSH 34417; LB 34554

Veronica peregrina L. var. *peregrina*, LB 34305

Scoparia dulcis L., MM 8039; SEWP 440

Platanaceae

Platanus occidentalis L., LBSM 33778

Poaceae

Agrostis hyemalis (Walter) Britton, Sterns & Poggenb., LB 34613

Agrostis perennans (Walter) Tuck, LB 34214

Andropogon glomeratus (Walter) Britton, Sterns, & Poggenb., SEWP 448, 458, 367

Andropogon ternarius Michx., SEWP 453; LBSH 34178; LB 35074

Andropogon virginicus L., LBSH 34087

Anthenantia texana R. Kral, LBRH 34057a

Anthenantia villosa (Michx.) P. Beauv, SEWP 293; LBRH 34057b; LB 34225

Aristida lanosa Muhl. ex Elliott, LBSH 34077

Aristida longespica Poir. var. *geniculata* (Raf.) Fernald, LBRH 34056; LB 35155

Aristida longespica Poir. var. *longespica*, LBSH 34075

Aristida purpurascens Poir. var. *purpurascens*, SJ 14492; LBSH 34084; LB 35156

Aristida purpurascens Poir. var. *virgata* (Trin.) Allred, LBSH 34194

Arundinaria gigantea (Walter) Muhl., LB 34656 (J); PR s.n. (T); LB 35081

Axonopus compressus (Sw.) Beauv., LBSH 34933

Axonopus fissifolius (Raddi) Kuhlm., LBSM 33738; LBSH 34401 (J); LB 35001

Axonopus furcatus (Flüggé) Hitchc., LBSH 34168

**Bothriochloa bladhii* (Retz.) S.T. Blake, LB 35094

**Bothriochloa ischaemum* (L.) Keng var. *songarica* (Fish. & Mey.) Celarier & Harlan, SEWP 452

**Briza minor* L., LBSH 34414; LB 34538

**Bromus catharticus* Vahl, LB 34583

Cenchrus spinifex Cav., GW 2943

Chasmanthium latifolium (Michx.) H.O. Yates, LBSH 34657 (J)

Chasmanthium laxum (L.) H.O. Yates, SEWP 187

Chasmanthium sessiliflorum (Poir.) H.O. Yates, SJ 14309, 14521

**Cynodon dactylon* (L.) Pers., SEWP 457

**Dactyloctenium aegyptium* (L.) P. Beauv., LB 35095

Dichanthelium aciculare (Desv. ex Poir.) Gould & C.A. Clark var. *aciculare*, LBRH 33903, LBSH 34930

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. *acuminatum*, SJ 14128; LBSH 34416; LB 34612, 34617

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. *densiflorum* (E.L. Rand & Redfield) Gould & C.A. Clark, LB 34260; LBSH 34953

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. *lindheimeri* (Nash) Gould & C.A. Clark, LB 34587a; LBRH 34638; LBSH 34709

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. *longiligulatum* (Nash) Gould & C.A. Clark, LBSM 33726; LBSH 34655 (J)

Dichanthelium boscii (Poir.) Gould & C.A. Clark, SJ 14402, 14301; LBRH 34050; LB 34990

Dichanthelium commutatum (Schult.) Gould, SJ 14308; LBSM 33724; LB 34259, 34522

Dichanthelium dichotomum (L.) Gould subsp. *dichotomum*, LBSH 34647 (J), 34719

Dichanthelium dichotomum (L.) Gould subsp. *nitidum* (Lam.) Freckman & Lelong, LB 35014

Dichanthelium ensifolium (Baldwin ex Elliott) Gould subsp. *ensifolium*, LBSH 34939

Dichanthelium laxiflorum (Lam.) Gould, LBSM 33742

Dichanthelium oligosanthes (Schult.) Gould var. *oligosanthes*, LBRH 33904; LBSH 34415, LB 34603

Dichanthelium oligosanthes (Schult.) Gould var. *scribnerianum* (Nash) Gould, LB 34526; LBSH 34726

Dichanthelium ovale (Elliott) Gould subsp. *vilosissimum* (Nash) Freckmann & Lelong, LB 34598; LBSH 34724

Dichanthelium polyanthes Mohlenb., SJ 14223

Dichanthelium scoparium (Lam.) Gould, LB 34607

Dichanthelium sphaerocarpum (Elliott) Gould, LBSH 34399 (J); LB 34592

Dichanthelium tenue (Muhl.) Freckman & Lelong, LBSH 33823; LB 34555, 34598a

Dichanthium annulatum (Forsk.) Stapf, LB 35185

Digitaria bicornis (Lam.) Roem. & Schult., LBSH 34099; LB 35160

Digitaria ciliaris (Retz.) Koel., LBSM 33739, 34948; LBRH 34055; LBSH 34961

**Digitaria ischaemum* (Schreb.) Muhl., LBSM 33739a; LBSH 34103a; LB 34239, 35020

Digitaria villosa Walter, LBRH 34063; LBSH 34085

**Digitaria violascens* Link, LBSH 34176

**Echinochloa colonum* (L.) Link, SJ 14493

**Echinochloa crus-galli* (L.) Beauv., GW 3035

Echinochloa walteri (Pursh) Heller, SJ 14439; LBSH 34074; LB 351135

- **Eleusine indica* (L.) Gaertn., SJ 14489; LBSH 34094
Elymus virginicus L., LB 34584
Eragrostis elliottii S. Watson, LB 35108
Eragrostis hypnoides (Lam.) Britton, Sterns & Poggenb. SJ 14446; LBSH 34972
**Eragrostis japonica* (Thunb.) Trin., SJ 14462, 14458; LBSH 34103, 34867
Eragrostis refracta (Muhl.) Scribn., LBSH 34197, 34971; LB 34223
Eragrostis secundiflora J. Presl subsp. *oxylepis* (Torr.) S.D. Koch, SJ 14465; LBSH 34076
Eragrostis spectabilis (Pursh) Steud., LBSH 34105, 34175; LB 35015
**Eremochloa ophiuroides* (Munro) Hack., SEWP 466; SJ 14364; LB 35064
Eustachys petraea (Sw.) Desv., SEWP 451
+*Glyceria striata* (Lam.) Hitchc., LB 34544
Gymnopogon ambiguus (Michx.) Britton, Sterns, & Poggenb., SEWP 287
Leersia lenticularis Michx., SEWP 386; LB 35082
Leersia virginica Willd., LB 34206
**Lolium perenne* L., LB 34537
Muhlenbergia capillaris (Lam.) Trin., LB 35067
Muhlenbergia schreberi J.G. Gmel., LB 35186
Oplismenus hirtellus (L.) P. Beauv. subsp. *setarius* (Lam.) Mez ex Ekman, SJ 14435; LB 35017
Panicum anceps Michx., LBSH 33819; SJ 14133, 14347
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Panicum dichotomiflorum Michx., SJ 14291; LBSH 34161
Panicum gymnocarpon Elliott, SJ 14354; LB 35080
Panicum rigidulum Bosc. ex Nees, SJ 14346, 14324; LB 35086
Panicum verrucosum Muhl., LBRH 34062; LBSH 34196
**Paspalum dilatatum* Poir., LBSH 34721
Paspalum distichum L., LB 35093
Paspalum floridanum Michx., LBJL 34002
Paspalum laeve Michx., LBSH 34932
Paspalum langei (E. Fourn.) Nash, LB 34588, 35002; LBRH 34631
Paspalum lividum Trin., LBSH 34165
**Paspalum notatum* Flüggé, LBSH 33822
Paspalum minus E. Fourn., LBSH 34182
Paspalum plicatulum Michx., GW 2944; LB 34542
Paspalum repens P.J. Bergius, LB 34987, 35087
Paspalum setaceum Michx., SJ 14520
**Paspalum urvillei* Steud., LBSH 33818
Phalaris angusta Nees ex Trin., LB 34263
**Polygonum monspeliacum* (L.) Desf., LBSH 34666
**Phyllostachys aurea* Riv., SJ 14437
Piptochaetium avenaceum (L.) Parodi, SJ 14207
**Poa annua* L., LB 34255
Poa autumnalis Muhl. ex Elliott, LB 34280
Saccharum brevibarbe (Michx.) Pers. var. *brevibarbe*, EK 950
Saccharum baldwinii Spreng., SEWP 371; LB 35028
Saccharum giganteum (Walter) Pers., LBSH 34187
Sacciolepis striata (L.) Nash, SJ 14463
Schizachyrium scoparium (Michx.) Nash var. *divergens* (Hack.) Gould, SEWP 292; GW 3208; LB 35066
**Sorghum halepense* (L.) Pers., LB 34213
Sphenopholis longiflora (Vasey) Hitchc., LBSH 34404 (J); LB 34651 (J)
Sphenopholis obtusata (Michx.) Scribn., LB 34524
Sporobolus compositus (Poir.) Merr. var. *macer* (Trin.) Kartesz & Gandhi, SEWP 447
Sporobolus clandestinus (Biehler) Hitchc., LB 35010, 35065, 35157
Sporobolus indicus (L.) R. Br., LBRH 33882
Sporobolus junceus (P. Beauv.) Kunth, SEWP 443; LBRH 34048
Sporobolus silveanus Swallen, SEWP 290
Sporobolus vaginiflorus (Torr. & A. Gray) A.W. Wood, LB 35092
Tridens flavus (L.) A. S. Hitchc. var. *flavus*, SJ 14499
Tridens strictus (Nutt.) Nash, SEWP 438; LBSH 34181
Triplasis purpurea (Walter) Chapm., SJ 14497; LBSH 34091
Urochloa platyphylla (Munro ex C. Wright) R.D. Webster, LB 34210
Vulpia sciurea (Nutt.) Henrard, LBSH 34418; LB 34614
- ### **Polygalaceae**
- Polygala incarnata* L., SJ 14485
Polygala leptocaulis Torr. & A. Gray, SEWP 449
Polygala mariana Mill., SEWP 184
Polygala nana (Michx.) DC. SJ 14219, 14484
Polygala polygama L., SJ 14216
Polygala ramosa Elliott, SJ 14399
- ### **Polygonaceae**
- Brunnichia ovata* (Walter) Shinners, WP 154; LBSH 34973
Eriogonum longifolium Nutt. var. *longifolium*, SJ 14501
Polygonum densiflorum Meisn., LB 35165
Polygonum hydropiperoides Michx., SJ 14315
**Polygonum lapathifolium* L., LBSH 34101, 34966; LB 34309
Polygonum punctatum Elliott, SEWP 462; LBSH 34082; LB 35110
**Rumex crispus* L., LBRH 34626
Rumex hastatalus Baldw., GW 2940
- ### **Polypodiaceae**
- Peopeltis polypodioides* (L.) E.B. Andrews & Windham var. *michauchiana* (Weath.) E.B. Andrews & Windham, LBSH 34171
- ### **Pontederiaceae**
- **Eichhornia crassipes* (Mart.) Solms, PH 05016 (J)
- ### **Potamogetonaceae**
- Potamogeton pusillus* L., SJ 14430
- ### **Primulaceae**
- (see Myrsinaceae for *Anagallis* and *Lysimachia* and Theophrastaceae for *Samolus*)
- ### **Ranunculaceae**
- Anemone berlandieri* Pritz., GW s.n.
Clematis crispa L., LBSH 34390 (J)
**Ranunculus muricatus* L., LB 34254
Ranunculus pusillus Poir., LB 34301
- ### **Rhamnaceae**
- Berchemia scandens* Trel., LBSH 34391 (J); LB 35009
Frangula caroliniana (Walter) A. Gray, LBSM 33769; WP 132
- ### **Rosaceae**
- Agrimony microcarpa* Wallr., GW 680; LBRH 33890

- **Cotoneaster* sp., LBSH 34652 (J)
Crataegus marshallii Eggl., SJ 13714
Crataegus opaca Hook. & Arn. ex Hook., SJ 13710; LBRH 34629
Crataegus viridis L., LB 34293
+*Aronia arbutifolia* (L.) Pers., SJ 14287
+**Potentilla indica* (Andrews) T. Wolf, WP 109; LB 34262
Prunus caroliniana (Mill.) Aiton, SEWP 204; LB 35069
Prunus serotina Ehrh., SEWP 303; LB. 35189
Rubus argutus Link, WP 076
Rubus trivialis Michx., SEWP 450

Rubiaceae

- Cephaelanthus occidentalis* L., SJ 14380
Diodia teres Walter, SJ 14213; LBSH 34946
Diodia virginiana L., LBSM 33732; SJ 14229
**Galium aparine* L., LB 34265
Galium pilosum Aiton, SJ 14215
Galium tinctorium L., LB 34307; LBSH 34403 (J)
Galium uniflorum Michx., SEWP 198
Mitchella repens L., WP 124; LB 35151
Oldenlandia boscii (DC.) Chapm., LBRH 34054
Oldenlandia uniflora L., SEWP 381; LBSH 34096, 34941
**Richardia brasiliensis* Gomes, SJ 14417
**Richardia scabra* L., LBRH 33907; LB 35023

Rutaceae

- Zanthoxylum clava-herculis* L., LBSH 34950

Salicaceae

- Salix nigra* Nutt., WP 074

Salviniaceae

- **Salvinia minima* Baker, LBSH 34080; LB 35118

Sapindaceae

- Acer barbatum* Michx., SJ 14302; LB 34096
Acer rubrum L., LBSM 33731

Sapotaceae

- Sideroxylon lanuginosum* Michx. subsp. *oblongifolium* (Nutt.) T.D. Pennington, WP 139; SJ 14333; LBSH 34083

Saururaceae

- Saururus cernuus* L., LBSH 3384, 34185

- Scrophulariaceae** (all of our taxa are in the following families: Orobanchaceae (*Agalinis* and *Aureolaria*); Linderniaceae (*Lindernia*); Phrymaceae (*Mimulus*); Plantaginaceae (*Bacopa*, *Gratiola*, *Mecardonia*, *Micranthemum*, *Nuttallanthus*, *Veronica*, and *Scoparia*)

Selaginellaceae

- Selaginella apoda* (L.) Spreng., PR s.n.

Smilacaceae

- Smilax bona-nox* L., LBSH 34407 (J), 34653 (J); LB 34984
Smilax glauca Walter, SEWP 217, 207; LBSH 34413
Smilax laurifolia L., LBJL 34005
Smilax pumila Walter, MM 8019; SEWP 278
Smilax rotundifolia L., SEWP 215
Smilax smallii Morong, SEWP 216; LB 34230, 34258; LBSH 34944
Smilax walteri Pursh, SJ 14561; LB 35025

Solanaceae

- Physalis heterophylla* Nees, LB 34228
Physalis pubescens L., SJ 14451; GW 2956; LBSH 34095
Solanum carolinense L., SJ 14201
Solanum ptycanthum Dun., SJ 14203; LB 35167

Sphenocleaceae

- **Sphenoclea zeylandica* Gaertn., LB 34983

Styraceae

- Halesia diptera* Ellis, LBSM 33723; SJ 14140, 14339
Styrax americana Lam., SJ 14382, 13715; LBSH 33843; LB 34248

Symplocaceae

- Symplocos tinctoria* (L.) L'Her., LBSM 33763; SJ 13712

Tetrachondraceae

- Polypteron procumbens* L., SEWP 461, 203; SJ 14197

Thelypteridaceae

- Thelypteris kunthii* (Desv.) Morton, MM 8032; SJ 14307; GW 829

Theophrastaceae

- Samolus valerandi* L. subsp. *parviflorus* (Raf.) Hultén, LBRH 34643

Tiliaceae (see Malvaceae for *Tilia*)**Typhaceae**

- Typha latifolia* L., WP 162

Ulmaceae (see Cannabaceae for *Celtis*)

- Planera aquatica* (Walter) J. F. Gmel., WP 155
Ulmus alata Michx., SEWP 289
Ulmus americana L., SJ 14303

Urticaceae

- Boehmeria cylindrica* (L.) Sw., LBJL 34037

Valerianaceae

- Valerianella radiata* (L.) Dufr., WP 082; LB 34551, 34582

Verbenaceae (see Lamiaceae for *Callicarpa* and *Vitex*)

- **Glandularia pulchella* (Sweet) Trons., SEWP 190
Phyla lanceolata (Michx.) Small, LB 35162
Phyla nodiflora (L.) Greene, GW 2934
**Verbena brasiliensis* Vell., SJ 14202; GW 2932
Verbena halei Small, GW 2922; LB 34532
**Verbena rigida* Spreng., LBJL 34012
Verbena scabra Vahl, GW 2959; LB 35164

Violaceae

- Viola lanceolata* L., LB 34291

- Viola sororia* Willd. var. *missouriensis* (Greene) McKinney, LB 34286

- Viola sororia* Willd. var. *sororia*, LB 34548

- Viola palmata* L., LB 34276

Vitaceae

- Amelopsis arborea* (L.) Koehne, WP 143; LBRH 33908
Parthenocissus quinquefolia (L.) Planch., SJ 14304
Vitis aestivalis Michx., SEWP 211; LBRH 34636; LB 34616
Vitis cinerea (Engelm.) Engelm. ex Millardet var. *cineraria*, SJ 14460a, 14408

Vitis palmata Vahl, LBSM 33721; LBSH 34708

Vitis rotundifolia Michx., WP 134; LB 34523

Woodsiaceae

Athyrium filix-femina subsp. *asplenoides* (Michx.) Hultén, SEWP 442; LBJL 34039

Xyridaceae

Xyris ambigua Bey. ex Kunth, SJ 14394

Xyris difformis Chapm., var. *diformis*, LB 35026

Xyris jupicai L. Rich., GW 2961b; LBJL 34026

Xyris laxifolia Mart. var. *iridifolia* (Chapm) Karl, SEWP 459; GW 2961a, 2973; LBJL 33999

NOTES

Alternanthera sessilis. Brown and Marcus (1998) first reported this invasive species new to Texas from Liberty County and later it was found in Brazoria County (Brown et al. 2007). It is now known from Hardin County where it was collected on a sandy, drawn-down site along the Neches River.

Gonolobus suberosus var. **granulatus**. The genus *Gonolobus* is recognized as distinct from *Matelea* and *G. suberosus* has priority over *G. gonocarpus*. (Weakley 2007)

Bidens aristosa. We include *Bidens polylepis* under this taxon following Lipscomb and Smith (1977), Smith (1994), and Diggs et al. (1999).

Iva asperifolia var. **angustifolia**. Turner (2009) has combined our common sumpweed (*Iva angustifolia*) with a taxon known from Gulf Coastal Mexico.

Liatris squarrosa var. **squarrosa**. This variety was not mapped in Texas (Nesom 2006). It is distinguished by the pubescent stems and leaves in contrast to the glabrous stems and leaves of variety *glabra*.

Sympyotrichum divaricatum. We are following Nesom (2005) by using the specific rank and not *Sympyotrichum subulatum* var. *ligulatum* the varietal rank. See Nesom (2009) for further information.

Vernonia gigantea. Turner et al. (2003) mapped it only in Montgomery and Polk counties. Our Hardin County collection is apparently a new county record.

Lechea minor. First reported new to Texas from the Lance Rosier Unit (Brown et al. 2007). Only one non-flowering plant was noted in that Unit. In the Jack Gore Baygall and Neches Bottom Units, collections of vegetative and flowering plants are from a small population on an upland sandy soil under a telephone right of way on the north side of the entrance to the Jack Gore Baygall Unit along Timber Slough Road. Currently, Texas collections of this species are only from these two Big Thicket Units.

Scirpus divaricatus. Turner et al. (2003) and Diggs et al. (2006) mapped this sedge only in Hardin County. The first Texas collection was from the Jack Gore Baygall but no location details were provided (Nixon and Ward 1982). Collections made for this study were from two locations in the Jack Gore Baygall. One was collected in a small shallow woodland pool on the north side of Franklin Lake Road at 30°28.00'N; 94°08.4'W. Collections made there were LBSM 33766 and LB 34980. At this location, the plants were common in a ca 0.4 ha. site. The label data on GW 3495 was Zig Zag Road, however the road sign along Highway 2937 is Youngblood Road. The first author has observed this species in a woodland depression along this road but did not collect it. It is probable that the only Texas collections are from these two sites.

Desmodium fernaldii. Turner et al. (2003) and Jones et al. (1997) did not list for species for Texas. Our single collection, from an arid sandyland at the pipeline right of way along Timber Slough Road, best fits the description and key in Gleason and Cronquist (1991) who reported it in Texas.

Desmodium viridiflorum. We merge *D. nuttallii* with this species following Gleason and Cronquist (1991, page 296).

Galactia regularis. In most floras, this species is called *Galactia volubilis*. As currently understood *G. volubilis* does not occur in Texas. See Ward and Hall (2004).

Lackeya multiflora. This species, formerly named *Dioclea multiflora*, is not mapped in Hardin County

(Turner et al. 2003). This legume vine, bearing rather large leaflets, was common on sandy soil along the Neches River in Hardin County. Our three collections are from sites that we were able to access.

Aronia arbutifolia. When *Aronia* and *Photinia* are combined, *Aronia* has priority because it is older. (Weakley 2007).

Oxalis dillenii. See Nesom (2009a) regarding this name and a significant revision of the other caulescent *Oxalis*.

Oxalis debilis. See Nesom (2009b) regarding this name and a significant revision of the other acaulescent *Oxalis*.

Glyceria striata. Turner et al. (2003) mapped this common species of the more northern states largely in the Edwards Plateau with Lamar and Washington counties the only stations east of the Plateau. The Hardin County station is the most southern and eastern record for Texas. There was a small population along the Wagon Road Trail which is off of a pipeline right of way in the only portion of the Jack Gore Baygall Unit that contacts Highway 2937.

Potentilla indica. Formerly named *Duchesnea indica* (Andrews) Focke, molecular studies indicate it is better placed in *Potentilla* (Erickson et al. 1998).

Pseudognaphalium luteoalbum. The only record east of the Edwards Plateau for this invasive species was Liberty County (Brown et al. 2007). Our Hardin County collection, from a draw-down site along the Neches River, is the second record east of the Plateau.

DISCUSSION

There are 133 families and 379 genera for the 734 (645 native) species and 739 taxa (650 native) recorded for the Jack Gore Baygall and Neches Bottom Units. Seven families: Poaceae (114 taxa), Asteraceae (95 taxa), Cyperaceae (69 taxa), Fabaceae (52 taxa), Euphorbiaceae (21 taxa), Lamiaceae (15 taxa), and Fagaceae (13 taxa) account for 51% of all taxa collected. The genera with 10 or more taxa are *Cyperus* (21 taxa), *Dichanthelium* (19 taxa), *Carex* (17 taxa), *Quercus* (11 taxa), and *Juncus* (10 taxa). As are all floras, our list is incomplete but we believe that we have collected over 90 % of the taxa. Of the eight units inventoried so far, the following 28 taxa were found only in the Jack Gore and Neches Bottom units: *Alternanthera philoxeroides*, *Torilis nodosa*, *Bidens laevis*, *Croptilon rigidifolium*, *Pseudognaphalium luteoalbum*, *Solidago stricta*, *Tetragonothera ludoviciana*, *Vernonia gigantea*, *Scirpus divaricatus*, *Impatiens capensis*, *Cucumis melo*, *Schoenoplectus californicus*, *Equisetum hyemale*, *Astragalus leptocarpus*, *Desmodium fernaldii*, *Desmodium lineatum*, *Limnobium spongia*, *Glinus radiatus*, *Hexalectris spicata*, *Spiranthes laciniata*, *Saccharum brevibarbe* var. *brevibarbe*, *Sporobolus vaginiflorus*, *Potamogeton pusillus*, *Eichhornia crassipes*, *Potamogeton pusillus*, *Anemone berlandieri*, *Richardia brasiliensis*, and *Vitex negundo* var. *intermedia*.

ACKNOWLEDGMENTS

This study was supported in part by an All Taxa Biological Inventory grant (ATBI) from the Big Thicket Association of Saratoga, Texas. We appreciate Michael W. Palmer, Eric L. Keith and an anonymous reviewer for their careful reading of the paper. We also thank Frank Gregg and Mary Pritchett of the Outdoor Nature Club of Houston who have mounted 9,000+ plants from the currently surveyed Big Thicket Units. This volunteer work occurred most months of the year and only for a few hours on Wednesday mornings. The first author also wishes to thank his wife, Ruby Brown, for some computer help for our Big Thicket papers.

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