TRI-OLOGY

A Publication of the Florida Department of Agriculture and Consumer Services, Division of Plant Industry
Adam H. Putnam, Commissioner — Richard D. Gaskalla, Division Director

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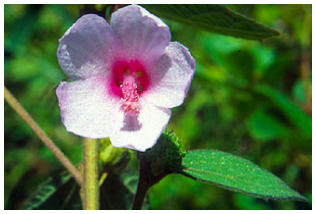
DPI's Bureau of Entomology, Nematology and Plant Pathology (the botany section is included in this bureau) produces TRI-OLOGY six times a year, covering two months of activity in each issue. The report includes detection activities from nursery plant inspections, routine and emergency program surveys, and requests for identification of plants and pests from the public. Samples are also occasionally sent from other states or countries for identification or diagnosis.



***Urena lobata* L. (Caesar weed)**
Photograph courtesy of Roger Hammer, Atlas of Florida Vascular Plants
http://florida.plantatlas.usf.edu/Photo.aspx?id=2119

***Nacoleia charesalis*, a crambid moth**, male (mm scale at top of image)
Photograph courtesy of James E. Hayden, DPI

***Brachyodina metzi*, a soldier fly**
Photograph courtesy of Gary J. Steck, DPI

***Echinacea purpurea* (coneflower).**
Leaves showing symptoms induced by an infestation of *Aphelenchoides besseyi.*
Photograph courtesy of R.N. Inserra and J.W. Lotz, DPI.

Highlights

***Urena lobata* L. (Caesar weed, Congo jute, bur mallow)**, Malvaceae. In areas with freezing temperatures, this perennial shrub can die back in winter to return from the roots in spring.
This species grows well in disturbed sites, including wetland areas where it can form thickets. It is included on the Florida Exotic Pest Plant Council (FLEPPC) Invasive Species List-Category I list (exotic plants that have altered native plant communities).

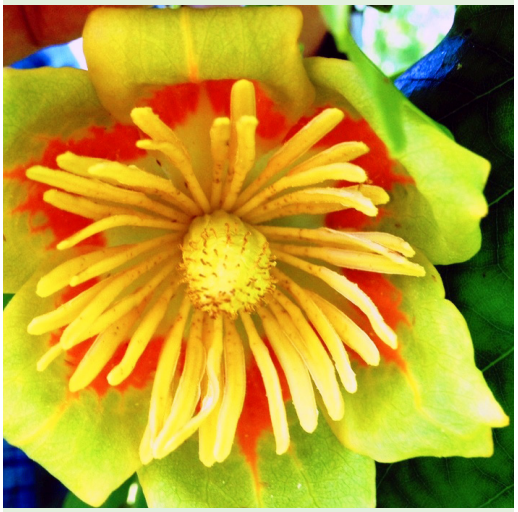
***Nacoleia charesalis*, a crambid moth, a new Western Hemisphere record.** This brown moth is widely distributed in Asia. Since the initial detection in 2012, it has become widely distributed in Florida. Some reports were delayed until the type specimen could be borrowed to confirm the specific identification.

***Brachyodina metzi*, a soldier fly, a new Continental USA record.** This species was previously known only from Jamaica. Its biology is unknown. Larvae of most species in this genus occur under bark of dead trees, and some of them are predaceous on bark beetles.

***Aphelenchoides besseyi* Christie, 1942, the rice white-tip nematode,** was detected in foliar tissues of the flowering herb, *Echinacea purpurea* (coneflower). Foliar nematodes of the genus *Aphelenchoides* are common parasites of ornamentals in Florida. The rice white-tip nematode, *A. besseyi*, which is a major pest in many rice-producing countries, is frequently detected on ornamentals grown in Florida such as African violet, rubber plant and verbena. This detection expands the range of hosts of this nematode in Florida.

Grovesinia pyrimidalis (anamorph Hinomyces moricola), a pathogen causing zonate leaf spots on a wide range of broadleaf plants in the hot, wet summer months, is most commonly found in Florida on *Lagerstroemia indica* (crape-myrtle). This season, the pathogen appeared on two new hosts, *Hibiscus sabdariffa* (roselle) and *Phaseolus vulgaris* (Blue Lake pole bean).

Section Reports



***Liriodendron tulipifera* (tuliptree, yellow poplar)**
Photograph courtesy of Patti J. Anderson, DPI

How to cite Tri-ology:
Dixon, W.N. and P.J. Anderson. (Editors). year. Section. Tri-ology Volume(number): page. [date you accessed site] website address For example: Dixon, W.N. and P.J. Anderson. (Editors). 2012. Entomology section. Tri-ology 47(5): 8. [accessed July 5, 2013] http://www.freshfromflorida.com/content/download/12542/151552/triology_5101.pdf

Acknowledgements:
The editors would like to acknowledge the work of all those who contributed information and explanations by providing data, photographs or text and by carefully reading early drafts. We also thank Reid Carswell for his skillful use of web authoring tools to produce this report.

We welcome your suggestions for improvement of TRIOLOGY. Please feel free to contact me or Dr. Patti Anderson with your comments.
Dr. Wayne N. Dixon, Editor,
Assistant Director, DPI

Botany Section

Compiled by Patti J. Anderson, Ph.D.

This section identifies plants for the Division of Plant Industry, as well as for other governmental agencies and private individuals. The Botany Section maintains a reference herbarium with over 11,000 plants and nearly 1,400 vials of seeds.

Some of the samples received for identification are discussed below:

***Ampelopsis arborea* (L.) Kochne (peppervine),** from a genus of 25 temperate and subtropical species. Vitaceae. This woody vine has herbaceous growth until very late in the season. The old, woody stems, to 6-7 cm in diameter, are somewhat swollen at the older nodes and climb by means of scattered, forked tendrils. The alternate, compound leaves are deciduous, with blades more or less triangular in outline, and with bi-pinnate, ternate, or partially tri-pinnate leaflets. The leaflets are 1-6 cm long, ovate, with bases rounded, truncate, or shortly tapered and margins prominently few-toothed. The leaf axes, leaflet stalks and major veins of the lower surfaces of leaflets are sparsely shaggy-pubescent. Inflorescences are Y-shaped compound cymes, borne opposite the leaves. Flowers are very small, with arched petals. The fruit is a lustrous black berry, oblate to subglobose, mostly 8-14 mm across. These fruits are eaten by raccoons and other wildlife. This species is found along stream banks, floodplain forests, in marshes, cypress swamps, moist to wet hammocks, fence and hedge rows from Maryland to southern Illinois and Missouri and west to New Mexico, generally southward through all the southeastern states to Florida, including almost every county in Florida. (Putnam County; B2014-767; Sol F. Looker; 6 October 2014 and Pasco County; B2014-835; Diana E. Bozeman; 22 October 2014.) (Godfrey 1988; Mabberley 2008; Miller and Miller 2005.)

***Heterotheca subaxillaris* (Lam.) *Britton & Rusby* (camphorweed, camphor daisy)**, from a genus of 28 species native to North America, but only one species in Florida. Compositae/Asteraceae. This is a weedy and variable species that has been divided into several species or included in another genus, *Chrysopsis*, until recent taxonomic studies concluded that recognizing a single, variable species was most appropriate. This species is native to most states south of a line from New York to California and to northern Mexico and is common nearly throughout Florida in sandhills and dunes. The common name is derived from the strong camphor odor produced when its leaves are crushed. This plant can be an annual or persist from its taproot to become a small, woody shrub to 2 m tall, but it is usually less than 1 m tall. The leaves are also variable, having ovate to oblong blades that are sparsely to densely covered with stalked glands and with serrate or entire margins. The basal leaves often have petioles, while those above the midpoint of the stem are more or less clasping. The flower heads may be single or clustered with yellow ray and disc florets. The fruits of the disc and ray florets differ, although both are maroon achenes, 2-3 mm long. Those from the ray florets are glabrous, without a pappus, while those from the disc florets are densely silky with a double pappus. (Pinellas County; B2014-720; Bobbe A. Rose; 16 September 2014 and Pasco County; B2014-873; Karen R. Destefano; 28 October 2014.) (Wunderlin and Hansen. 2011; http://efloras.org/florataxon.aspx?flora_id=1&taxon_id=242416651 [accessed 2014 November 18]; https://uwaterloo.ca/astereae-lab/heterotheca-subaxillaris-ssp-subaxillaris [accessed 2014 November 18].)

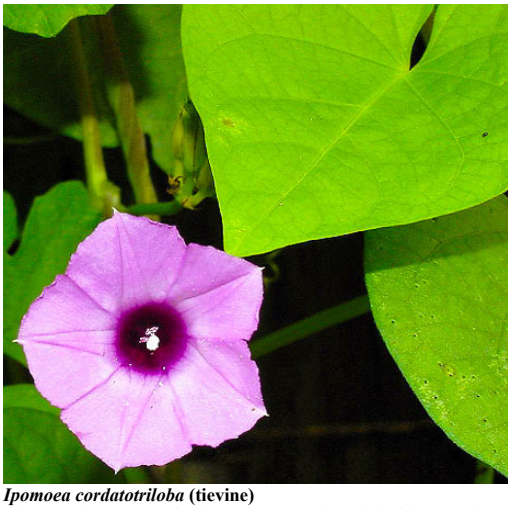
Sample Submissions

	September October	Year to date
Samples submitted by other DPI sections	1,352	**6,714**
Samples submitted for botanical identification only	220	**885**
Total Samples Submitted	1,572	**7,599**
Specimens added to the herbarium	38	**274**

***Ampelopsis arborea* (peppervine)**
Photograph courtesy of Fred Nation, Atlas of Florida Vascular Plants http://florida.plantatlas.usf.edu/Photo.aspx?id=3700

***Heterotheca subaxillaris* (camphorweed)** inflorescence
Photograph courtesy of Paul L. Redfearn, Jr., Atlas of Florida Vascular Plants
http://florida.plantatlas.usf.edu/Photo.aspx?id=985

***Heterotheca subaxillaris* (camphorweed)** (two types of achenes (left, disc floret achene; right, ray floret achenes)
Photograph courtesy of Steve Hurst, hosted by the USDA-NRCS PLANTS Database



***Ipomoea cordatotriloba* (tievine)**
Photograph courtesy of Allen Boatman, Atlas of Florida Vascular Plants
http://florida.plantatlas.usf.edu/Photo.aspx?id=1069

***Tristellateia australasiae* (shower of gold climber)**
Photograph courtesy of Top Tropicals
http://toptropicals.com/catalog/uid/Tristellateia_australasiae.htm

***Ipomoea cordatotriloba* Dennst. (tievine, sharp-pod morning-glory),** from a genus of 650 species from tropical and warm temperate areas in the Americas and Europe. Convolvulaceae. This herbaceous vine has alternate leaves 4-9 cm long and 2-5 cm wide with cordate to sagittate bases and may be entire or lobed. The funnel-shaped flowers occur singly or in groups of three and range from pale lavender-pink to purple with a darker throat. The sepals of this species are subequal. The corolla is 3-8 cm long, which helps distinguish it from the smaller-flowered noxious weed, *I. triloba*, with a corolla not longer than 2.5 cm. This is a vine found mainly in the coastal plain from North Carolina to Florida and westward to Texas. In Florida, this native vine is found in disturbed sites where it blooms all year and provides nectar for butterflies. (Pasco County; B2014-844; Diana E. Bozeman; 23 October 2014; Pasco County; B2014-863; Diana E. Bozeman; 27 October 2014; and Hillsborough County; B2014-871; Karen R. Destefano; 28 October 2014). (Wunderlin and Hansen 2011; Miller and Miller 2005).

***Tristellateia australasiae* A.Rich. (shower of gold climber, galphimia vine, Australian gold vine, maiden's jealousy),** from a genus of about 20 species, with a native range from Africa and Madagascar to Australia and New Caledonia. Malpighiaceae. This species is widely cultivated in tropical Asia, where it is also native, and is suitable for planting in South Florida (USDA Plant Hardiness Zones 10-11). This woody vine can grow to 10 m or more in length and has simple, opposite leaves, 6-12 × 4-7 cm, with stipules and two glands attached to the petiole. The inflorescences may be terminal or axillary racemes with flowers having five clawed petals, five sepals without glands or with very minute glands. The dry fruits are samaras. It has been recommended as a good plant for an arbor or fence-covering. (Miami-Dade County; B2014-722; Jake M. Farnum; 17 September 2014.) (Llamas 2003; http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=242414547 [accessed 2014 November 18]; http://herbarium.lsa.umich.edu/malpigh/BunClade/Tristellateia/Trist1.html [accessed 2014 November 18].)

***Urena lobata* L. (Caesar weed, Congo jute, bur mallow),** from a genus of six to eight tropical and warm temperate species.) Malvaceae. In areas with freezing temperatures, this perennial shrub, 0.5-2 m tall, can die back in winter to return from the roots in spring. Leaves are alternate, ovate and usually with finely serrate margins. The petioles are roughly equal in length to the leaf blades, and the palmately-veined blades may have three or no lobes. Leaves and stems have stellate hairs. The five-merous flowers, about 1.5 cm long, arise from the leaf axils. Corollas are pink, but darker rose at the base. The fruit matures to 1 cm across with bristles that can attach to hair or clothing for dispersal. These fruits split into five segments, each containing a single, dark brown seed. This species grows well in disturbed sites, including wetland areas where it can form thickets. It is included on the Florida Exotic Pest Plant Council (FLEPPC) Invasive Species List-Category I (exotic plants that have altered native plant communities). (Osceola County; B2014-821; Susan C. Distelberg; 21 October 2014; Pasco County; B2014-821; Diana E. Bozeman; 23 October 2014; Martin County; B2014-852; Jorge P. Gomez; 20 October 2014; Pasco County; B2014-864; Diana E. Bozeman; 27 October 2014 and Hernando County; B2014-866; Carrie L. Karppe; 28 October 2014) (Godfrey and Wooten 1981; Hall *et al*. 2011; http://www.fleppc.org/list/FLEPPCPlantList2013-PRINTABLEwithlinkstoCAIPpages.pdf [accessed 2014 November 18].)

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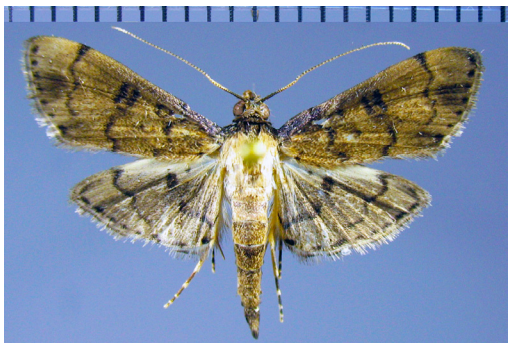
***Urena lobata* L. (Caesar weed)**
Photograph courtesy of Roger Hammer, Atlas of Florida Vascular Plants
http://florida.plantatlas.usf.edu/Photo.aspx?id=2119

Sample/Specimen Submissions

September	
Samples Submitted	**740**
Specimens Identified	**15, 430**
October	
Samples Submitted	**729**
Specimens Identified	**15,450**
Year to Date	
Samples Submtted	**7,586**
Specimens Identified	**141,773**



***Nacoleia charesalis*, a crambid moth**, male (mm scale at top of image)
Photograph courtesy of James E. Hayden, DPI

***Brachyodina metzi*, a soldier fly**
Photograph courtesy of Gary J. Steck, DPI

***Hedriodiscus* sp., a soldier fly**
Photograph courtesy of Gary J. Steck, DPI

Entomology Section

Compiled by Susan E. Halbert, Ph.D.

This section provides the division's plant protection specialists and other customers with accurate identifications of arthropods. The entomology section also builds and maintains the arthropod reference and research collection (the Florida State Collection of Arthropods with over 9 million specimens), and investigates the biology, biological control and taxonomy of arthropods.

***Nacoleia charesalis*, a crambid moth, a new Western Hemisphere record.** This brown moth is widely distributed in Asia. Since the initial detection in 2012, it has become widely distributed in Florida. Some reports were delayed until the type specimen could be borrowed to confirm the specific identification. In the Old World, the larvae feed in rotting fruit, leaf mulch and boring in stems of turmeric. Adults are attracted to light and molasses bait. The closely related Australasian *Nacoleia octasema* is a pest of banana fruit, but no economic damage has been confirmed yet in Florida for *N. charesalis*. (Miami-Dade County; E2012-4519; Andrew I. Derksen; 12 June 2012.) (Dr. James E. Hayden.)

***Brachyodina metzi*, a soldier fly, a new Continental USA record.** This species was previously known only from Jamaica. Its biology is unknown. It is a member of the subfamily Pachygastrinae, many of which are small, polished black flies with silvery hairs arranged in distinctive patterns. Adults are attracted to freshly fallen or cut trees where females oviposit. Larvae of most species occur under bark of dead trees, and some of them are predacious on bark beetles. (Miami-Dade County; E2014-6735; Elena Kej; 22 September 2014.) (Dr. Gary J. Steck.)

***Dasyhelea azteca*, a biting midge, a new Continental USA record.** *Dasyhelea azteca* was described in 2006 from specimens collected from Mexico in the states of Jalisco and Morelos. (Collier County; E2014-6956; Scott D. Croxton, University of Florida Southwest Florida Research and Extension Center; 9 September 2014.) (Dr. William L. Grogan, Jr.)

***Dasyhelea bifida*, a biting midge, a new Continental USA record.** Biting midges of the genus *Dasyhelea* (Diptera: Ceratopogonidae) are common inhabitants wet fresh, saline and tidal habitats with over 600 species worldwide. The three species reported here also have similar morphological characteristics. Adult females have reduced, vestigial mandibles, and therefore, do not bite humans or other vertebrates. However, adult males and females consume flower nectar as an energy source and can pollinate some plant species. *Dasyhelea bifida* is a rarely collected Holarctic species previously known from Europe, Algeria and in Canada from Ontario, Nova Scotia and the Yukon. (Collier County; E2014-6955; Scott D. Croxton, University of Florida Southwest Florida Research and Extension Center; 25 April 2014.) (Dr. William L. Grogan, Jr.)

***Hedriodiscus* sp., unknown species a soldier fly, a new Continental USA record.** This fly has a distinctive color pattern that clearly distinguishes it from the six other species of *Hedriodiscus* presently known to occur in the United States. Numerous other members of this genus occur in the Neotropics. Adults typically have bright yellow or green markings and can be found at flowers. Larvae are usually in aquatic habitats. (Palm Beach County; E2014-6835; Vince Golia, FSCA Research Associate; 8 June 2014.)

***Schrankia sp.,* a fungus-feeding noctuoid moth, a new Continental USA record.** This is an unidentified species of *Schrankia* (Erebidae or Noctuidae *sensu lato*). It is similar to the native *Schrankia macula*, but lighter in color and with genitalic differences. Its COI DNA sequence matches unidentified specimens from Central America. Larvae of *Schrankia* are poorly known. *Schrankia macula* has been reared on bracket fungus, and the Old World and Hawaiian species feed underground on plant roots. The host of this species is unknown, and it is unlikely to be an economic pest. The first specimen was collected at the same site in October 2013, but it might be more widely distributed in southern Florida. (Broward County; E2014-6199; Julio C. Garcia; 26 August 2014.) (Dr. James E. Hayden.)

***Schrankia* sp., a fungus-feeding noctuoid moth** (mm scale)
Photograph courtesy of James E. Hayden, DPI

***Xyleborinus artestriatus*, a scolytid beetle,a new Florida State record.** *Xyleborinus artestriatus* (Eichhoff) is an exotic ambrosia beetle native to Southeast Asia. In the United States, it was first reported from Georgia and Texas in 2011. Nothing is currently known about its biology outside of its native range. Notable hosts included *Syzygium cumini* (*Eugenia jambolana), Ficus religiosa, Heritiera fomes, Juglans regia, Magifera indica* and *Phyllanthus emblica*. This find is the first time the beetle has been reported from Florida. (Duval County; E2014-6151; Bradley A. Danner, CAPS, and Robert M. Leahy, USDA; 11 March 2014.) (Katherine E. Okins.)

***Xyleborinus artestriatus*, a scolytid beetle**
Photograph courtesy of Katherine E. Okins, DPI

Entomology Specimen Report
Following are tables with entries for records of new hosts or new geographical areas for samples identified in the current volume's time period as well as samples of special interest. An abbreviated table, with all the new records, but less detail about them, is presented in the body of this web page and another version with more complete data is downloadable as a PDF or an Excel spreadsheet.

The tables are organized alphabetically by plant host if the specimen has a plant host. Some arthropod specimens are not collected on plants and are not necessarily plant pests. In the table below, those entries that have no plant information included are organized by arthropod name.

Plant Name	Plant Common Name	Arthropod	Arthropod Common Name	County	Records
Albizia julibrissin	mimosa	*Acizzia jamatonica*	a mimosa psyllid	Jefferson	COUNTY
Ananas comosus	pineapple	*Steneotarsonemus comosus*	pineapple multiple crown mite	Escambia	INTERDICTION INTERCEPTION
Ananas comosus	pineapple	*Steneotarsonemus comosus*	pineapple multiple crown mite	Escambia	INTERDICTION INTERCEPTION
Ananas comosus	pineapple	*Steneotarsonemus comosus?*		Escambia	INTERDICTION INTERCEPTION
Berberis thunbergii	Japanese barberry	*Deroceras reticulatum*	gray garden slug	Hillsborough	REGULATORY INCIDENT
Bidens alba	beggarticks, romerillo, Spanish needle	*Homaemus proteus*	a scutellerid bug	Highlands	COUNTY
Brassica oleracea	kale, decorative kale, flowering kale, flowering cabbage, collards, cole, borecole	*Bagrada hilaris*	Bagrada bug	Broward	REGULATORY INCIDENT
Brassica oleracea	kale, decorative kale, flowering kale, flowering cabbage, collards, cole, borecole	*Bagrada hilaris*	Bagrada bug	Escambia	INTERDICTION INTERCEPTION
Brassica oleracea	kale, decorative kale, flowering kale, flowering cabbage, collards, cole, borecole	*Linyphantes pualla*	a sheetweb weaver	Escambia	REGULATORY INCIDENT
Brassica oleracea	broccoli, cauliflower	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Brassica oleracea	kale, decorative kale, flowering kale, flowering cabbage, collards, cole, borecole	*Liriomyza langei*	California pea leafminer	Orange	REGULATORY INCIDENT
Brassica oleracea	kale, decorative kale, flowering kale, flowering cabbage, collards, cole, borecole	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Brassica oleracea	kale, decorative kale, flowering kale, flowering cabbage, collards, cole, borecole	*Liriomyza langei*	California pea leafminer	Broward	REGULATORY INCIDENT
Brassica rapa	pe-tsai, chinese cabbage, napa cabbage	*Bagrada hilaris*	Bagrada bug	Suwannee	REGULATORY INCIDENT
Brassica rapa	pak-choi, bok-choi, pak-choy, bok-choy, chinese mustard, celery mustard	*Bagrada hilaris*	Bagrada bug	Escambia	INTERDICTION INTERCEPTION
Brassica rapa	pe-tsai, chinese cabbage, napa cabbage	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Brassica rapa	pak-choi, bok-choi, pak-choy, bok-choy, chinese mustard, celery mustard	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Brassica rapa	pak-choi, bok-choi, pak-choy, bok-choy, chinese mustard, celery mustard	*Lygus elisus*	pale legume bug	Escambia	INTERDICTION INTERCEPTION
Brugmansia sp.		*Tetranychus ludeni*	spider mite	Putnam	HOST
Capsicum annuum	pepper	*Bactericera cockerelli*	potato psyllid	Palm Beach	REGULATORY INCIDENT
Capsicum annuum	pepper	*Bactericera cockerelli*	potato psyllid	Palm Beach	REGULATORY INCIDENT
Cichorium endivia	cultivated endive	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Citrus sinensis	sweet orange, navel orange	*Euthera tentatrix*	a tachinid fly	Seminole	COUNTY
Citrus x *paradisi*	grapefruit	*Nacoleia charesalis*	a crambid moth	Orange	COUNTY
Clerodendrum sp.		*Calacarus speciosissmum*	eriohyid mite	Monroe	COUNTY
Cynara cardunculus	cardoon, artichoke, globe artichoke	*Lygus* sp.	a lygus bug	Escambia	INTERDICTION INTERCEPTION
Dracaena sanderiana	Belgian evergreen; lucky bamboo	*Lepidosaphes chinensis*	an armored scale	Alachua	REGULATORY INCIDENT
Dracaena sanderiana	Belgian evergreen; lucky bamboo	*Lepidosaphes chinensis*	an armored scale	Alachua	REGULATORY INCIDENT
Dracaena sanderiana	Belgian evergreen; lucky bamboo	*Lepidosaphes chinensis*	an armored scale	Alachua	REGULATORY INCIDENT
Eriobotrya japonica	loquat, Japanese plum	*Aphis eugeniae*	an aphid	Hernando	COUNTY
Eruca vesicaria	rocketsalad, arugula	*Rhinachloa forticornis*	a plant bug	Escambia	INTERDICTION INTERCEPTION
Erythrina variegata	coral tree; sunshine tree	*Quadrastichus erythrinae*	erythrina gall wasp	Martin	COUNTY
Eupatorium capillifolium	dogfennel	*Texananus excultus*	leafhopper	Hillsborough	COUNTY
Euthamia caroliniana	slender flattop goldenrod, coastal plain goldentop	*Asteromyia euthamiae*	a gall midge	Putnam	COUNTY
Euthamia caroliniana	slender flattop goldenrod, coastal plain goldentop	*Craspedolepta* sp.	a psyllid	Indian River	COUNTY
Ficus sp.	fig	*Nacoleia charesalis*	a crambid moth	Miami-Dade	HEMISPHERE
Fraxinus sp.	ash	*Urocerus taxodii*	horntail	Hendry	COUNTY
Guapira discolor	longleafblolly; beeftree	*Catorhintha viridipes*	a coreid bug	Monroe	HOST
Hemerocallis sp.	daylily	*Ophiomyia kwansonis*	daylily leafminer	Taylor	COUNTY
Hibiscus sp.		*Toxomerus boscii*	a syrphid fly	Leon	COUNTY
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Acyrthosiphon lactucae*	lettuce aphid	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Acyrthosiphon lactucae*	lettuce aphid	Escambia	INTERDICTION INTERCEPTION

Plant Name	Plant Common Name	Arthropod	Arthropod Common Name	County	Records
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Autographa californica*	alfalfa Looper	Suwannee	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Bactericera cockerelli*	potato psyllid	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Deltocephalus fuscinervosus*	a leafhopper	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Manatee	REGULATORY INCIDENT
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Lactuca sativa	romaine lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Manatee	REGULATORY INCIDENT
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Liriomyza langei*	California pea leafminer	Suwannee	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Lygus hesperus*	a western lygus bug	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Nasonovia ribisnigri*	currant-lettuce aphid	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Nasonovia ribisnigri*	currant-lettuce aphid	Escambia	INTERDICTION INTERCEPTION
Lactuca sativa	lettuce, romaine lettuce, leaf lettuce	*Tychius picirostris*	clover seed weevil	Nassau	INTERDICTION INTERCEPTION
Mangifera indica	mango	*Brachyodina metzi*	a soldier fly	Miami-Dade	CONTINENTAL USA
Mangifera indica	mango	*Cyrtophora citricola*	a tentweb weaver	Martin	COUNTY
Melaleuca quinquenervia	melaleuca; cajeput; punktree; paper-bark; white bottlebrush tree	*Forelius mccooki*		Lake	COUNTY
Merremia dissecta	noyau vine; alamo vine	*Tetranychus tumidus*	tumid spider mite	Martin	HOST
Olea europaea	olive	*Bactrocera oleae*	olive fruit fly	Orange	REGULATORY INCIDENT
Panicum virgatum	switchgrass	*Cedusa obscura*	a derbid planthopper	Highlands	COUNTY
Paspalum notatum	bahia grass	*Dasymutilla occidentalis*	velvet ant	Lake	COUNTY
Persea americana	avocado; alligator pear; aguacate	*Abgrallaspis aguacatae*	an armored scale	Escambia	INTERDICTION INTERCEPTION
Persea americana	avocado; alligator pear; aguacate	*Clastoptera* sp.	a spittlebug	Highlands	COUNTY
Persea americana	avocado; alligator pear; aguacate	*Liriomyza langei*	California pea leafminer	Escambia	INTERDICTION INTERCEPTION
Petroselinum crispum	parsley	Cavariella aegopodii	carrot aphid	Escambia	INTERDICTION INTERCEPTION
Phoenix dactylifera	date palm	*Solenopsis xyloni*	southern fire ant	Escambia	INTERDICTION INTERCEPTION
Phoenix dactylifera	date palm	*Solenopsis xyloni*	southern fire ant	Broward	REGULATORY INCIDENT
Pinus clausa	sand pine	*Cnestus mutilatus*	camphor shoot borer	Sumter	COUNTY
Pinus sp.	pine	*Ambrosiophilus atratus*	a scolytid beetle	Escambia	COUNTY

Plant Name	Plant Common Name	Arthropod	Arthropod Common Name	County	Records
Pinus sp.	pine	*Cyrtinus pygmaeus*	a longhorn beetle	Hamilton	COUNTY
Pinus sp.	pine	*Phymatodes amoenus*	a longhorn beetle	Suwannee	COUNTY
Pinus sp.	pine	*Pseudopityophthorus pubescens*	a scolytid beetle	Hamilton	COUNTY
Podocarpus macrophyllus	Japanese yew	*Neophyllaphis varicolor*	muliticolored podocarpus aphid	Hernando	COUNTY
Podocarpus macrophyllus	Japanese yew	*Neophyllaphis varicolor*	muliticolored podocarpus aphid	Flagler	COUNTY
Protea cynaroides	king protea	*Delottococcus confusus*	a mealybug	Miami-Dade	REGULATORY INCIDENT
Protea cynaroides	king protea	*Delottococcus confusus*	a mealybug	Miami-Dade	REGULATORY INCIDENT
Protea cynaroides	king protea	*Delottococcus confusus*	a mealybug	Miami-Dade	REGULATORY INCIDENT
Protea cynaroides	king protea	*Delottococcus confusus*	a mealybug	Miami-Dade	REGULATORY INCIDENT
Protea cynaroides	king protea	*Delottococcus confusus*	a mealybug	Miami-Dade	REGULATORY INCIDENT
Protea cynaroides	king protea	*Ochetellus glaber*	an ant	Miami-Dade	REGULATORY INCIDENT
Protea cynaroides	king protea	*Ochetellus glaber*	an ant	Miami-Dade	REGULATORY INCIDENT
Protea cynaroides	king protea	*Pseudaulacaspis brimblecombei*	an armored scale	Miami-Dade	REGULATORY INCIDENT
Pueraria montana	kudzu; kudzu vine; foot-a-night-vine; vine-that-ate-the-south; ko-hemp	*Megacopta cribraria*	bean plataspid	Gulf	COUNTY
Pyrus sp.	pear	*Aphis eugeniae*	an aphid	Orange	COUNTY
Quercus hemisphaerica	Darlington's oak; laurel oak	*Diphyllaphis microtrema*	a woolly oak aphid	Alachua	COUNTY
Quercus sp.	oak	*Acrolophus walsinghami*	a grass tubeworm moth	Pinellas	COUNTY
Quercus sp.	oak	*Amphiareus obscuriceps*	a minute pirate bug	Hendry	COUNTY
Quercus sp.	oak	*Anasaitis canosa*	a jumping spider	Hendry	COUNTY
Quercus sp.	oak	*Clastoptera* sp.	a spittlebug	Glades	COUNTY
Quercus sp.		*Diploschizia kimballi*	a sedge moth	Hillsborough	COUNTY
Quercus sp.	oak	*Pseudopityophthorus pubescens*	a scolytid beetle	Suwannee	COUNTY
Quercus sp.	oak	*Trischidias georgiae*	a scolytid beetle	Collier	COUNTY
Quercus virginiana	live oak	*Xyleborinus andrewesi*	a scolytid beetle	Seminole	COUNTY
Randia aculeata	white indigoberry	*Aleuroplatus cococolus*	a whitefly	Miami-Dade	HOST
Rosa sp.		*Deroceras reticulatum*	gray garden slug	Nassau	INTERDICTION INTERCEPTION
Taxodium distichum	bald cypress	*Taxodiomyia cupressiananassa*	a gall midge	Suwannee	COUNTY
Tillandsia usneoides	Spanish moss	*Camponotus sericeiventris*	carpenter ant	Escambia	INTERDICTION INTERCEPTION
Tillandsia usneoides	Spanish moss	*Tychius* sp.	a weevil	Escambia	INTERDICTION INTERCEPTION
		Achatina fulica	giant African land snail	Broward	COUNTY
		Adaina simplicius	a plume moth	Marion	COUNTY
		Amaurochrous dubius	a terrestrial turtle bug	Collier	COUNTY
		Atherigona reversura	bermudagrass stem maggot	Polk	COUNTY
		Atherigona reversura	bermudagrass stem maggot	Collier	COUNTY
		Cardiocondyla wroughtonii	myrmicine ant	Broward	COUNTY
		Chalcis flebilis	parasitic wasp	Hillsborough	COUNTY
		Chrysis angolensis	cuckoo wasp	Orange	COUNTY
		Clastoptera sp.	a spittlebug	Lake	COUNTY
		Cryptognathus sp.	a mite	Hillsborough	COUNTY
		Curculionidae	a broad-nosed weevil	Miami-Dade	REGULATORY INCIDENT
		Cyclosa walckenaeri	an orbweaver	Hillsborough	COUNTY
		Dasyhelea azteca	a biting midge	Collier	CONTINENTAL USA
		Dasyhelea bifida	a biting midge	Collier	CONTINENTAL USA
		Dasyhelea borgmeiri	a biting midge	Monroe	CONTINENTAL USA
		Dicymolomia grisea	a crambid moth	Broward	COUNTY
		Diphleps unica	a jumping tree bug	Hillsborough	COUNTY
		Diphthera festiva	hieroglyphic moth	Suwannee	COUNTY
		Euwallacea interjectus	a scolytid beetle	Nassau	COUNTY
		Faiditus americanus	a kleptoparasitic spider	Palm Beach	COUNTY

Plant Name	Plant Common Name	Arthropod	Arthropod Common Name	County	Records
		Habronattus calcaratus	a jumping spider	Hillsborough	COUNTY
		Hedriodiscus sp.	a soldier fly	Palm Beach	CONTINENTAL USA
		Heteropsylla flexuosa	an acacia psyllid	Polk	COUNTY
		Liriomyza commelinae	a leafminer	Broward	COUNTY
		Loxosceles rufescens	Mediterranean recluse spider	Nassau	SIGNIFICANT FIND
		Loxosceles sp.	a recluse spider	Indian River	SIGNIFICANT FIND
		Lupaeus sp.	a mite	Hillsborough	COUNTY
		Microthyris lelex	a crambid moth	Miami-Dade	COUNTY
		Nacoleia charesalis	a crambid moth	Levy	COUNTY
		Nacoleia charesalis	a crambid moth	Monroe	COUNTY
		Peucetia viridans	green lynx spider	Hendry	COUNTY
		Schrankia sp.	a fungus-feeding noctuoid moth	Broward	CONTINENTAL USA
		Schrankia sp.	a fungus-feeding noctuoid moth	Miami-Dade	COUNTY
		Sephina gundlachi	coreid bug	Manatee	COUNTY
		Tetragnatha elongata	a longjawed orbweaver	Hillsborough	COUNTY
		Tetragonoderus laevigatus	a carabid beetle	Hillsborough	COUNTY
		Thrips madronii	a flower thrips	Broward	REGULATORY INCIDENT
		Verrucosa arenata	an orbweaver	Palm Beach	COUNTY
		Vryburgia trionymoides	a mealybug	Duval	REGULATORY INCIDENT
		Xanthaciura chrysura	a fruit fly	Alachua	COUNTY
		Xyleborinus artestriatus	a scolytid beetle	Duval	STATE

Nematology Section

Compiled by Jason D. Stanley, M.S., Renato N. Inserra, Ph.D., Janete A. Brito, Ph.D. and Theresa R. Estok, B.S.

This section analyzes soil and plant samples for nematodes, conducts pest detection surveys and provides diagnoses of plant problems, in addition to completing identification of plant parasitic nematodes involved in regulatory and certification programs. State of Florida statutes and rules mandate the predominant regulatory activities of the section. Analyses of plant and soil samples include those from in-state programs, plant shipments originating in Florida destined for other states and countries, as well as samples intercepted in Florida from outside the United States.

Nematodes of Special Interest

***Aphelenchoides besseyi* Christie, 1942, the rice white-tip nematode,** was detected in foliar tissues of the flowering herb, *Echinacea purpurea* (coneflower or echinacea). (Alachua County; N14-01351; Theresa R. Estok; 10 October 2014). This is a new host record for this foliar nematode.

Foliar nematodes of the genus *Aphelenchoides* are common parasites of ornamentals in Florida. The rice white-tip nematode, *A. besseyi*, which is a major pest in many rice-producing countries, is frequently detected on ornamentals grown in Florida such as African violet, rubber plant and verbena. This detection expands the range of hosts of this nematode in Florida. Foliar nematodes are able to parasitize a large number of plants. There are reports from Europe of infestations of another foliar nematode, the chrysanthemum foliar nematode, *Aphelenchoides ritzemabosi* (Schwartz, 1911) Steiner & Buhrer, 1932, on *Echinacea purpurea* (Walton in Goodey, 1940). However, according to DPI records, this is the first known report of *A. besseyi* on this plant.

Echinacea purpurea is a popular herb commonly used to treat influenza and colds. It is in the family Asteraceae which includes many daisies. Echinacea was commonly used by Native Americans and quickly became a popular herbal remedy for many Europeans that settled in America. It is believed that Echinacea extracts stimulate the immune system and reduce many symptoms of respiratory ailments. Echinacea can be purchased over the counter as teas, liquid extracts, dried plant material or tablets. This species is native to eastern and central North America and grows well in prairies and woodlands.

The symptoms observed on the nematode-infested plants included extended leaf discoloration; blotches and necrosis of leaf areas between the veins in the upper-side of the leaves. Angular lesions were commonly visible on leaf surfaces due to nematode feeding and migration. The movement and leaf penetration of foliar nematodes is facilitated by high humidity and water condensation on plants. Ornamental plants that are infected with foliar nematodes become unmarketable. Cultural practices such as use of clean stock, reduction of excess moisture on the foliage by avoiding the use of overhead irrigation, good aeration of the plants and rigorous sanitation practices can prevent outbreaks of nematode infestations in nursery operations. Plants obtained from unverified sources should be kept isolated for at least four weeks to observe potential foliar nematode symptoms.

Sample Submissions

	September October	Year to date
Morphological Identifications	1,911	**10,259**
Molecular Identifications	375	**1,336**
Total Samples Submitted	2,286	**11,595**

Certification and Regulatory Samples

	September October	Year to date
Multistate Certification for National and International Export	1,385	**7,057**
California Certification	204	**1,545**
Pre-movement (Citrus Nursery Certification)	50	**220**
Site or Pit Approval (Citrus Nursery and Other Certifications)	0	**141**

Other Samples

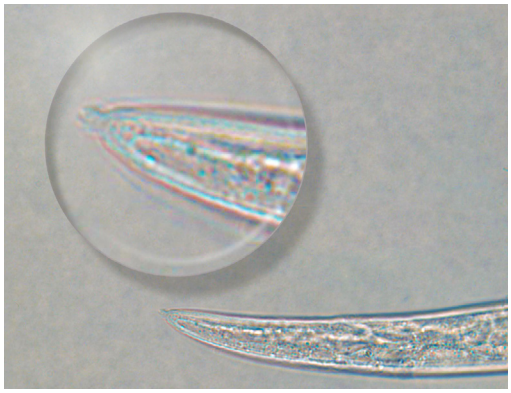
	September October	Year to date
Identifications (invertebrate)	1	26
Plant Problems	13	**126**
Intrastate Survey, Random	258	**1,144**

* The majority of these analyses involved root-knot nematode species.

Healthy plants of ***Echinacea purpurea*** **(coneflower)**
Photograph courtesy of wikipedia
http://upload.wikimedia.org/wikipedia/commons/c/c4/Rudbeckia_purpurea.jpg

Leaves of ***Echinacea purpurea*** **(coneflower)** showing symptoms induced by *Aphelenchoides besseyi* infestation
Photograph courtesy of R.N. Inserra and J.W. Lotz, DPI

Female ***Aphelenchoides besseyi*** **(the rice white-tip nematode)** collected from the infected plant *Echinacea purpurea* (coneflower)
Photography courtesy of J. D. Stanley, DPI



Aphelenchoides besseyi **(the rice white-tip nematode)**, posterior portion of the body ending in a small branched spike.
Photograph courtesy of J. D. Stanley and J. Reid Carswell, DPI.

Collectors submitting five or more samples that were processed for nematological analysis during September - October.

Anderson, J. Mikaela	20		LeBoutillier, Karen W.	109
Bailey, W. Wayne	19		Ochoa, Ana L.	64
Blaney, Richard L.	26		Southerland, Lane P.	11
Burgos, Frank A.	176		Spriggs, Charles L.	164
Clanton, Keith B.	151		Terrell, Mark R.	18
Golden, Walter W.	5		Violett, Larry L.	84
Keen, Emily I.	24		Welch, Johanna	12
Kreger, Scott D.	12		Wolfe, C. David	30

References

Goodey, T. 1940. The nematode parasites of plants catalogued under their hosts. Imperial Bureau of Agricultural Parasitology (Helminthology), St. Albans, England. 80 p.

Stokes. D. E. 1979. Some plant symptoms associated with *Aphelenchoides* spp. in Florida. Nematology Circular No. 49. Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Gainesville, Florida. 2 p.

Plant Pathology Section

Compiled by Timothy S. Schubert, Ph.D. and David A. Davison

This section provides plant disease diagnostic services and conducts a citrus germplasm introduction program. The agency-wide goal of protecting Florida agriculture very often begins with accurate diagnoses of plant problems. Disease management recommendations are offered where appropriate and available. Our plant pathologists are dedicated to keeping informed about plant diseases outside Florida in order to be prepared for potential introductions of new pathogens.

The Late Summer Leaf Spot Pathogen (*Hinomyces moricola*) Appears On-Time

For many years, our clinic traditionally has marked the late summer stage of the growing season with anticipation of the unusual fungal leaf spot pathogen *Grovesinia pyrimidalis* (anamorph *Hinomyces moricola*). This pathogen causes zonate leaf spots on a wide range of broadleaf plants in the hot, wet summer months, especially as the season wears on. The most common host in Florida year in and year out seems to be *Lagerstroemia indica* (crape-myrtle). This season, the pathogen appeared on two new hosts, *Hibiscus sabdariffa* (roselle) and *Phaseolus vulgaris* (Blue Lake pole bean). A sample of zonate leaf spot on *Halesia diptera* (two-wing silverbell) was submitted to DPI with this disease for only the second time.

The conidiophores of the zonate leaf spot pathogen are distinctive. During wet weather, the small white pyramidal structures can be seen with a hand lens on the surface of the lesions and on surrounding healthy tissue. These structures detach easily, and disappear within a few days after the wet weather ends. The conidiophores are illustrated below. A photograph of the typical zonate leaf spot as it appeared on the new host, roselle, is also included below. (Alachua County; P2014-81815; Robert M. Leahy, USDA/CAPS; Bradley A. Danner, DPI/CAPS; Rebecca L. Barocco, University of Florida; 23 September 2014.)

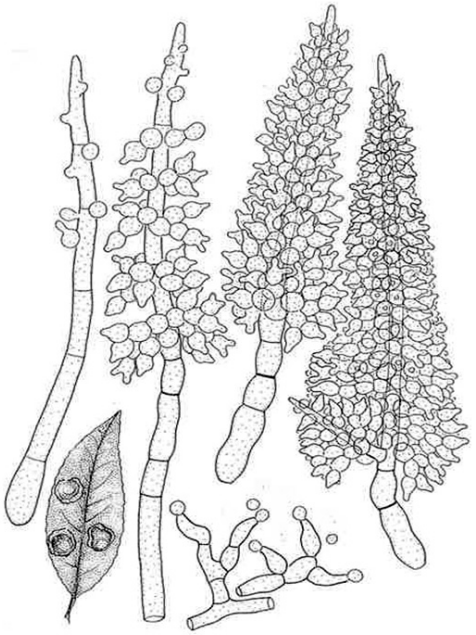
REFERENCES

Seifert, K., G. morgan-Jones, W. Gams and B. Kendrick. 2011. The genera of Hyphomycetes. CBS Biodiversity Series 9, CBS-KNAW Fungal Biodiversity Centre. Utrecht, The Netherlands. 997 p.

Sample Submissions

	September October	Year to date
Citrus black spot	7	55
Citrus canker	233	1,011
Citrus greening / HLB	42	1,526
Honeybees	17	37
Interdictions	9	45
Laurel wilt	17	77
General Pathology	497	2,411
Soil	3	20
Sudden oak death	0	13
Sweet orange scab-like disease	2	10
Texas Phoenix palm decline	0	32
Water	0	9

Grovesinia pyrimidalis (anamorph *Hinomyces moricola*) showing typical zonate leaf spots caused by the fungal pathogen on *Hibiscus sabdariffa* (roselle).
Photograph courtesy of Timothy S. Schubert, DPI



Grovesinia pyrimidalis with distinctive conidiophores and conidia of the anamorph state (*Hinomyces moricola*) of the zonate leaf spot pathogen
Illustration from Seifert *et al.* 2011

Plant Species	Plant Common Name	Causal Agent	Disease Name	Location Type	County	Sample Number	Collector	Date	New Records	
Boerhavia erecta	erect spiderling	*Wilsonia platensis*	white rust on foliage	weed in citrus orchard	81755	Polk	Timothy S. Schubert	9/18/2014		This white rust pathogen was formerly classified in the genus *Albugo*.
Bromeliaceae (probable *Vriesea* hybrid)	probably 'Galaxia'	Cylindrocladium parasiticum	leaf and crown rot	commercial nursery	81606	Orange	George A. Warden	9/17/2014		Approximately 1/10 of a large crop was suffering from lower leaf decay and crown rot.
Buxus sempervirens	common boxwood	*Thielaviopsis basicola*	black root rot	commercial nursery	82112	Gadsden	Michael A. Bentley	10/14/2014	Host	The black root rot pathogen has not been reported from boxwood in Florida before. This plant was also infected with *Volutella buxi* stem blight and *Pythium* root rot.
Citrus sinensis	sweet orange	*Candidatus* Liberibacter asiaticus	huanglongbing, citrus greening	dooryard	81746	Nassau	Certified arborist	9/19/2014	County	First record on cultivated, in-ground citrus in Nassau County
Citrus unshiu	satsuma	*Candidatus* Liberibacter asiaticus	huanglongbing, citrus greening	dooryard	81598	Clay	Cheryl A. Jones	9/19/2014	County	This represents the first detection of HLB in established citrus in Clay County. (There have been previous detections in nursery stock at Clay County retail outlets.)
Cordia sebestena	geiger tree	*Diatractium cordianum*	leaf spot	on dead-end street	81738	Palm Beach	Scott A.Tedford	9/22/2014	US	Searches of the literature so far indicate this to be a new record for the continental US.
Croton glandulosus	Simpson's croton	Pyrenochaeta sp.	leaf spot	weed on edge of cotton field	82075	Levy	Robert M. Leahy, USDA/ CAPS; Brad A. Danner, DPI/ CAPS; Rebecca L. Barocco, UF	10/8/2014	Host	This common opportunistic fungus has not been previously reported from this weed in Florida.
Gossypium hirsutum	Marie Galante cotton	*Pleospora* sp.	leaf spot	commercial farm	81584	Hamilton	Robert M. Leahy, USDA/ CAPS; Brad A. Danner, DPI/ CAPS	9/3/2014	Host	This fungus was among several other common fungal genera occupying leaf spots.
Hibiscus sabdariffa	roselle	*Grovesinia pyrimidalis*	target leaf spot	student garden at UF	81815	Alachua	Robert M. Leahy, USDA/ CAPS; Brad A. Danner, DPI/ CAPS; Rebecca L. Barocco, University of Florida	9/23/2014		This pathogen of hot, wet weather was active on many hosts this summer in Gainesville. Anamorph is *Hinomyces moricola*, formerly known as *Cristulariella pyrimidalis*.

Plant Species	Plant Common Name	Causal Agent	Disease Name	Location Type	County	Sample Number	Collector	Date	New Records	
Mangifera indica	mango	*Fusarium mangiferae*	mango malformation	dooryard fruit fly trap site	82111	Miami-Dade	Duraid I. Hanna	10/14/2014		This species of *Fusarium* is one of six known worldwide that are capable of inducing this malfomation syndrome on mango. All are part of the *Gibberella fujikuroi* complex.
Polystichum sp.	polystichum fern, a holly fern	*Myrothecium roridum*	leaf spot	commercial nursery	81845	Lake	Mary C. Sellers	10/7/2014	Host	This represents our first DPI record of *Myrothecium roridum* on *Polystichum* fern.
Sesamum indicum	sesame	*Pseudocercospora sesame*	leaf spot	UF/IFAS North Florida Research and Education Center - Suwannee Valley	81744	Suwannee	Robert M. Leahy, USDA/ CAPS; Brad A. Danner, DPI/ CAPS	9/17/2014		Another example of an uncommon late season cercosporoid fungal leaf spot
Spondias dulcis	otaheite, ambarella, golden apple	*Phomopsis* sp.	black spots on fruit	dooryard	81695	Miami-Dade	Haylett Cruz-Escoto	9/16/2014	Host	*Phomopsis* sp. are commonly encountered as fruit spoters and post-harvest fruit rotters. This is the first report in DPI files on this host however.