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TRI-OLOGY

A PUBLICATION FROM THE DIVISION OF PLANT INDUSTRY, BUREAU OF ENTOMOLOGY, NEMATOLOGY, AND PLANT PATHOLOGY

Division Director, Trevor R. Smith, Ph.D.



BOTANY

Providing information about plants:
native, exotic, protected and weedy



ENTOMOLOGY

Identifying arthropods, taxonomic
research and curating collections



NEMATOLOGY

Providing certification programs and
diagnoses of plant problems



PLANT PATHOLOGY

Offering plant disease diagnoses
and information



Florida Department of Agriculture and Consumer Services • Division of Plant Industry



Scaptodrosophila latifasciaeformis (Duda) collected in Jacksonville.
Photo by Jessica Diaz, FDACS-DPI

ABOUT TRI-LOGY

The Florida Department of Agriculture and Consumer Services-Division of Plant Industry's (FDACS-DPI) Bureau of Entomology, Nematology, and Plant Pathology (ENPP), including the Botany Section, produces TRI-LOGY four times a year, covering three 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.

HOW TO CITE TRI-LOGY

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We welcome your suggestions for improvement of TRI-LOGY. Please feel free to contact the [helpline](#) with your comments at 1-888-397-1517.

Thank you,

Gregory Hodges, Ph.D.

Editor

Assistant Director, Division of Plant Industry

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Cover Photo

Dactyloctenium aegyptium, crownfoot grass, inflorescence.
Photo from iNaturalist



HIGHLIGHTS



1 *Dactyloctenium ctenioides* (Steud.) Bosser. (crowfoot grass), from a genus of 13 species, native to Africa, Asia and Australia, including islands of the western Indian Ocean. Before this sample was identified by an Indian botanist, the species had never been recognized in the Western Hemisphere. The sample was collected in 2024 but identified and verified this quarter. It represents a **new Hemisphere record**.



1 - *Dactyloctenium ctenioides*, crowfoot grass, inflorescence.
Photo by Quentin Groom, iNaturalist

2 *Cosmopterix abnormalis* Walsingham, a cosmopterigid moth, a new U.S. Continental record. Specimens were first identified from samples collected by DPI and USDA. One specimen collected in Gainesville in 1968 was subsequently found in the Florida State Collection of Arthropods. After a hiatus of 45 years, one was caught in a light trap in 2013, and thereafter, records in southern Florida increased.



2 - *Cosmopterix abnormalis* Walsingham collected in Pasco County in 2022.
Photo by James Hayden, FDACS-DPI

3 *Meloidogyne hispanica* (Hirschmann, 1986) was found infecting the roots of sugar beet (*Beta vulgaris*) collected from a farm in South Florida. **This is a new County record.**

4 *Fusarium musae* Van Hove, Waalwijk, Munaut, Logrieco & Moretti (Hypocreales, Nectriceae) (a postharvest disease and human pathogenic fungus), was found on imported bananas (*Musa* sp.) at a supermarket in Alachua County, Florida. The fruit were showing "black center syndrome" which is a dark red or black discoloration in the center of the banana.



3 - Ripe beetroot, *Beta vulgaris*.
Photo from Shutterstock



4 - *Fusarium musae* symptoms on *Musa* sp.
Photo by Patricia Soria, FDACS-DPI





BOTANY

Compiled by Patti J. Anderson, Ph.D. and Alex de la Paz, B.S.

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 19,000 plants and 1,400 vials of seeds. In addition, over 3,000 pollinaria specimens collected, but not curated, by Dr. Robert L. Dressler are also housed in collaboration with the Botany Section.

QUARTERLY ACTIVITY REPORT

	APRIL - JUNE	2025 - YEAR TO DATE
Samples Submitted by Other DPI Sections	1,457	2,509
Samples Submitted for Botanical Identification Only	367	615
Total Samples Submitted	1,824	3,124
Specimens Added to the Herbarium	331	538



1 - *Dactyloctenium aegyptium* (left) and *Dactyloctenium ctenioides* (right) comparing caryopses (grains/seeds) of the two species (mm scale).
Photo by Alex de la Paz, FDACS-DPI

Some of the samples submitted recently are described below.

1 *Dactyloctenium ctenioides* (Steud.) Bosser. (crowfoot grass), from a genus of 13 species, native to Africa, Asia and Australia, including islands of the western Indian Ocean, in the plant family Gramineae/Poaceae. Before this sample was identified by an Indian botanist, the species had never been recognized in the Western Hemisphere. The botanist, Dr. Shahid Nawaz Landge of St. Xavier's College in Mumbai, India, saw a DPI circular as he conducted research for a revision of the genus. He thought the photographs in the circular were not of the species of commonly found grass, *Dactyloctenium aegyptium* (L.) Willd. (Durban crowfootgrass), as the circular indicated and requested additional photographs. By chance, a sample of this genus was later sent as an Entomology sample. The sample was photographed as requested and eventually determined to be *D. ctenioides*. A recent article (Nawaz et al., 2025) provides a key to the species of this genus and also corrects the spelling of the species epithet from *ctenoides* (an error originating in 1968 and perpetuated in major herbaria) to the prior *ctenioides*. This species is native to western Africa, from Kenya to Mozambique and several western Indian Ocean islands, including Madagascar, Mauritius and the Seychelles. Although this species is quite similar to the well-known Durban crowfootgrass, several notable differences help to distinguish them. For example, the new article provides the following comparisons:



***Dactyloctenium ctenioides* D. ctenioides**

- Flower spikes 1.3–3.3 cm long; widely spreading, not in a compact head.
- Surface texture of caryopses (grain/seed) granular.

***Dactyloctenium ctenioides* D. aegyptium**

- Flower spikes 0.5–2.0 (–2.9) cm long; arranged in a sub-globose, compact head.
- Surface texture of caryopses (grain/seed) transversely rugose.

This sample, collected in 2024, was identified and verified this quarter. It represents a **new Hemisphere record**. (Broward County; LIST 05232024-05485; Mark Zenoble; 23 May 2024). Re-sampled (Broward County; LIST 05082025-04345; Mark Zenoble; 8 May 2025). (Nawaz et al., 2025); ccmedia.fdacs.gov/content/download/101472/file/Identifying-Grasses-Circular.pdf [accessed 12 May 2025]; [Dactyloctenium ctenoides \(Steud.\) Bosser | Plants of the World Online | Kew Science](#) [accessed 12 May 2025]; [Dactyloctenium - FNA](#) [accessed 12 May 2025].

2 *Dypsis lutescens* (H.Wendl.) Beentje & J.Dransf. also known as *Chrysalidocarpus lutescens* H.Wendl. (golden cane palm, areca palm, yellow palm, butterfly palm or bamboo palm), from a genus native to Madagascar in the plant family Palme/Aracaceae. This species provides an excellent example of name changes in botany, why they become necessary and why so many have occurred in recent decades since DNA research has become widespread. In Dransfield and Beentje (1995), the eminent palm expert, Dr. John Dransfield, noted in his discussion of the genus *Dypsis*, including “massive palms of the forest canopy” to “minute undergrowth palmlets...” “we wish that this now cumbersome genus could be divided up satisfactorily into smaller units, but there are so many intermediates... we have had to abandon any attempt at a formal division, based on our current knowledge.” And then came more and more techniques for studying the genetic differences among species until fine distinctions could be made to distinguish evolutionary relationships of the 165 (or 174) palms in this genus. Based on the molecular evidence, combined with morphological distinctions, botanists have recently (2022) come to understand differences, allowing the genus to be split into six genera. This division allows a clearer understanding of the relationships among the species but also requires some name changes for some old familiar palms. ***Chrysalidocarpus lutescens* H.Wendl. (golden cane palm, areca palm, yellow palm, butterfly palm or bamboo palm)** is from a genus of 54 species, mainly from Madagascar. The areca palm has multiple, clustering stems, up to 7 m tall and 12 cm in diameter, sometimes bulging at the base, with conspicuous leaf scars. The pinnate leaves are up to 3 m long, usually with a yellow petiole and linear leaflets along a yellow or yellow-orange rachis, each with a prominent yellowish midrib. The inflorescences can be as much as 1 m long, branched to three orders. Yellow male and female flowers are borne on the same plants. The spherical fruits are about 2.5 cm in diameter and turn from yellow to purple when ripe. This palm has previously been found naturalized (growing on its own without human cultivation) in five Florida counties, mainly along the southeastern coast. This sample, collected at Manatee Cove Park in Merritt Island, brings the number to six as a new record for Brevard County. (Brevard County; LIST 05012025-04002; Jennifer McKeever; 5 May 2025.) (Dransfield and Beentje, 1995;



2a - *Dypsis lutescens* (= *Chrysalidocarpus lutescens*), areca palm, butterfly palm, in a landscape planting.
Photo from Shutterstock



2b - *Dypsis lutescens* (= *Chrysalidocarpus lutescens*), areca palm, butterfly palm, leaflets.
Photo by Patti Anderson, FDACS-DPI



Eiserhardt, et al., 2022; Mabberley, 2017; Wunderlin and Hansen, 2011; Zona, 2020; [Identifying Commonly Cultivated Palms](https://idtools.org/palm_id/#D) (https://idtools.org/palm_id/#D) [accessed 8 May 2025].

3 *Pinckneya bracteata* (W. Bartram) Raf. (fevertree), from a genus of one species of the southeastern United States, in the plant family Rubiaceae. This species is a small tree or large shrub native to the coastal plain of southern South Carolina, Georgia and northern Florida where it grows in margins of acidic, peaty blackwater swamps, creeks and bayheads, as well as in seepage ecotones and other boggy habitats. It was originally described by William Bartram in 1791 as *Bignonia bracteata* from a collection near Fort Barrington in McIntosh County, Georgia. Due to the poor communication among botanists at the time, André Michaux found the same species and described it as *Pinckneya pubens* in 1803. The genus *Pinckneya* was named in honor of Charles Cotesworth Pinckney (1746-1825), an American statesman of South Carolina, a Revolutionary War veteran and a delegate to the Constitutional Convention, who helped Michaux in his travels through South Carolina. Constantine Samuel Rafinesque realized the two descriptions were of the same species and the species did not belong in the genus *Bignonia*. He recognized Michaux's monotypic genus *Pinckneya*, but the specific epithet *bracteata* had priority over *pubens*, so he made the necessary change and described it as *Pinckneya bracteata* in 1827. These woody plants grow to 3-7 m (ca. 10-23 ft) tall with several vertical trunks and a narrow, rounded crown composed of several horizontal branches. Young twigs of the current year, petioles, inflorescence axes, floral tubes and other perianth parts are densely soft-pubescent. Limbs, trunks and fruits have obvious gray, wart-like lenticels. The opposite leaves are ovate to elliptic with pubescent surfaces. Flowers are few in loose terminal cymose inflorescences. One or two of the five sepals of at least one flower (usually several) of each cyme are greatly enlarged, petaloid and ranging in color from a pure cream white to a deep rose pink. These large, petaloid "bracts" are beautiful and distinctive features of this species. The trumpet shaped, five-lobed corolla is an obscure yellowish-green color, mottled with maroon-red spots. In addition, the flower includes five exserted stamens and an inferior ovary with an exserted style and a two-lobed, capitate stigma. The fruit is a two-valved, woody capsule, dehiscent to release numerous seeds. Flowering is often in spring through fall, with seed release in fall through winter. This species is listed as threatened in Florida. Ruby-throated hummingbirds (*Archilochus colubris*) and bumblebees (*Bombus* spp.) appear to be the primary pollinators. *Pinckneya* is a close relative of the South American *Cinchona* tree used in the antimalarial drug quinine. The bark of *Pinckneya* has similarly been used medicinally to treat malaria and fevers by North American Indians, early southern settlers and the Confederate Army. It was thought *Pinckneya* also contained quinine or similar alkaloids, but studies did not find any cinchona alkaloids or beneficial effects. More study is needed regarding its medicinal potential. *Pinckneya bracteata* was documented for the first time in Nassau County this quarter. (Nassau County; LIST 05062025-04210; Lisa Tyler; 5 May 2025.) (Rountree, 1996; Weakley and Southeastern Flora Team, 2025; Wunderlin and Hansen, 2011).



3 - *Pinckneya bracteata* in flower.
Photo by Alan M. Cressler



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BOTANY IDENTIFICATION TABLE

The following table provides information about new county records submitted in the reported quarter. The table is organized alphabetically by collector name. The full version with more complete data is downloadable as a [PDF](#) or an [Excel](#) spreadsheet, also organized by collector name, except new county records are listed first.

COLLECTOR NAME	COLLECTOR 2	LIST NUMBER	PLANT NAME	COUNTY
Alec Nash		5949	<i>Enterolobium contortisiliquum</i>	Hernando
Alec Nash		4927	<i>Lantana montevidensis</i>	Pasco
Alexander Tasi	Victoria Benjamin	6160	<i>Physalis angulata</i>	Brevard
Chase Groninger		5114	<i>Cenchrus setaceus</i>	Volusia
Christina Huetcher		2743	<i>Brassica juncea</i>	Pasco
Christina Huetcher		5953	<i>Helianthus annuus</i>	Hernando
Christina Huetcher		5894	<i>Ipomoea cairica</i>	Pasco
Christina Huetcher		5959	<i>Typha latifolia</i>	Hernando
Cynthia Blattenberger		4104	<i>Cercis canadensis</i>	Pasco
Cynthia Blattenberger		5454	<i>Commelina benghalensis</i>	Pasco
Cynthia Blattenberger		2787	<i>Kalanchoe x houghtonii</i>	Hernando
Cynthia Blattenberger	Gary Webb	5375	<i>Tradescantia pallida</i>	Pasco
Diane McColl		4995	<i>Dolichandra unguis-cati</i>	Putnam
Diane McColl		4986	<i>Emilia praetermissa</i>	Putnam
Gary Webb		5958	<i>Portulaca amilis</i>	Hernando
Helen Beiriger	William Piwowarek	4973	<i>Mollugo verticillata</i>	Bradford
Jeanie Frechette		5467	<i>Amaranthus blitum ssp. emarginatus</i>	St. Lucie
Jennifer Hesse		2986	<i>Ruellia blechum</i>	Flagler
Jennifer Hesse	Randi Shreve	2999	<i>Scutellaria racemosa</i>	Flagler
Jennifer Hesse		2985	<i>Wisteria sinensis</i>	Flagler
Jennifer McKeever		4002	<i>Dypsis lutescens</i>	Brevard
Jennifer McKeever		3961	<i>Epipremnum pinnatum</i>	Brevard
Jimmy Hernandez	Nora Marquez	5128	<i>Atalantia buxifolia</i>	Marion



COLLECTOR NAME	COLLECTOR 2	LIST NUMBER	PLANT NAME	COUNTY
John Zito		3039	<i>Broussonetia papyrifera</i>	Palm Beach
Lisa Tyler		4210	<i>Pinckneya bracteata</i>	Nassau
Logan Cutts		4297	<i>Asclepias lanceolata</i>	Hamilton
Logan Cutts		4729	<i>Asimina angustifolia</i>	Hamilton
Logan Cutts		2848	<i>Bignonia capreolata</i>	Gilchrist
Logan Cutts		4725	<i>Canna flaccida</i>	Suwannee
Logan Cutts		4828	<i>Gladiolus dalenii</i>	Gilchrist
Logan Cutts		2841	<i>Lyonia lucida</i>	Suwannee
Logan Cutts		4293	<i>Pontederia cordata</i>	Gilchrist
Logan Cutts		5150	<i>Ptilimnium capillaceum</i>	Gilchrist
Logan Cutts		2835	<i>Rhododendron canescens</i>	Gilchrist
Logan Cutts		4295	<i>Sagittaria lancifolia ssp. lancifolia</i>	Hamilton
Logan Cutts		4721	<i>Saururus cernuus</i>	Suwannee
Logan Cutts		2838	<i>Wisteria sinensis</i>	Baker
Logan Cutts		2845	<i>Zephyranthes atamasca var. atamasca</i>	Columbia
Mark Laurint		4406	<i>Campsis radicans</i>	Clay
Mark Zenoble		3240	<i>Bothriochloa bladhii</i>	Broward
Mark Zenoble		5027	<i>Dactyloctenium ctenoides</i>	Palm Beach
Mark Zenoble		6205	<i>Herissantia crispa</i>	Broward
Mark Zenoble		5029	<i>Pilea microphylla</i>	Palm Beach
Mark Zenoble		5039	<i>Taraxacum officinale</i>	Palm Beach
Matthew Flanagan		4703	<i>Juglans nigra</i>	Suwannee
Nora Marquez		5591	<i>Dioscorea alata</i>	Lake
Nora Marquez		6049	<i>Morus alba</i>	Sumter
Nora Marquez		5755	<i>Tetrapanax papyrifer</i>	Sumter
Nora Marquez		5542	<i>Yucca aloifolia</i>	Sumter
Patricia McGill		4814	<i>Indigofera spicata</i>	Hendry
Riccardo Tordi		3291	<i>Cyperus involucratus</i>	Bay
Scott Berryman		4893	<i>Eulophia graminea</i>	Desoto
Scott Berryman		4898	<i>Passiflora incarnata</i>	Desoto
Shanelle Mulrooney		5954	<i>Cynodon dactylon</i>	Hernando
Teresa Ortelli	Jeanie Frechette	3691	<i>Ruellia blechum</i>	St. Lucie
Vaden Edmondson		5103	<i>Bignonia capreolata</i>	Pasco
Vaden Edmondson		4634	<i>Habranthus robustus</i>	Pasco
Vaden Edmondson		3281	<i>Tradescantia fluminensis</i>	Pasco
Vaden Edmondson		4894	<i>Washingtonia robusta</i>	Pasco
Vincent Barrios		4111	<i>Ipomoea leucantha</i>	Levy
William Hangen		4692	<i>Ageratum conyzoides</i>	Sumter
William Hangen		5084	<i>Ageratum conyzoides</i>	Lake
William Hangen		4693	<i>Arachis glabrata</i>	Sumter
William Hangen		5415	<i>Arachis glabrata</i>	Lake
William Hangen		5184	<i>Cyclosporum leptophyllum</i>	Lake
William Hangen		6017	<i>Kallstroemia maxima</i>	Sumter
William Hangen		5666	<i>Ligustrum sinense</i>	Sumter
William Hangen		5607	<i>Parthenium hysterophorus</i>	Lake
William Hangen		5945	<i>Phyllanthus tenellus</i>	Pasco
William Hangen		4733	<i>Pouzolzia zeylanica</i>	Hernando
William Hangen		3865	<i>Richardia grandiflora</i>	Sumter
William Hangen		4175	<i>Richardia grandiflora</i>	Hernando
William Hangen		2940	<i>Ruellia blechum</i>	Sumter
William Hangen		4731	<i>Spermacoce verticillata</i>	Hernando





ENTOMOLOGY

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 12.5 million specimens), and investigates the biology, biological control and taxonomy of arthropods.

	APRIL - JUNE	2025 - YEAR TO DATE
Samples Submitted	2,003	3,490
Lots Identified	3,432	5,833

1 *Cosmopterix abnormalis* Walsingham, a cosmopterigid moth, a new Continental USA record. Specimens of this moth were identified first from samples collected by DPI and USDA. One specimen collected in Gainesville in 1968 was subsequently found in the Florida State Collection of Arthropods. After a hiatus of 45 years, one was caught in a light trap in 2013, and thereafter, records in southern Florida increased. This species is not known to be a pest, and its host plants are not known. Described from Haiti, *C. abnormalis* also occurs in Jamaica and the Cayman Islands (Koster, 2010). In 2019, Mr. Steve Nanz commented that a photo on BugGuide (Rateman, 2018) might be *C. abnormalis*, but it was not confirmable without a specimen in hand. Dr. J.C. Koster confirmed the identification from photographs. This species can be diagnosed by the absence of yellow on the wings and presence of three complete silver bands. (Broward County; E2013-3435-23; Julio Garcia and Michelle DaCosta; 8 May 2013; Miami-Dade County; E2519-01-06062025-05335; Scott Weihman; 9 May 2016; Pasco County; E2514-01-06062025-05329; James Hayden; 19 September 2022; Hernando County; E2520-01-06062025-05336; James Hayden; 9 May 2024). (Dr. James E. Hayden.)



1 - *Cosmopterix abnormalis* Walsingham collected in Pasco County in 2022.
Photo by James E. Hayden, FDACS-DPI

2 *Scolothrips brevipilis* Priesner, a predatory thrips, a new Continental USA record. *Scolothrips brevipilis* is an African species. The first description was based on a specimen collected in Sudan, but the species was eventually found in South Africa, Reunion Island, Republic of Congo, Chad and Togo (described again under the name *Scirtothrips hartwigi* Priesner) and from Yemen (Mound, 2011). More recently (Aguiar and Cravo, 2024), the species was reported from the island of Madeira (Portugal) with identifications based on material collected in 1994 and 2001. Members of the genus *Scolothrips* are predators of mites and scales; they are not plant pests. *Scolothrips brevipilis* is easy to distinguish from other members of the genus reported from Florida (*Scolothrips sexmaculatus* Pergande), *Scolothrips pallidus* (Beach) and *Scolothrips asura* Ramakrishna and Margabhandu) by being the only species with the trunk nearly completely yellow, except for brown shading on the thorax, and by the absence of the postero-

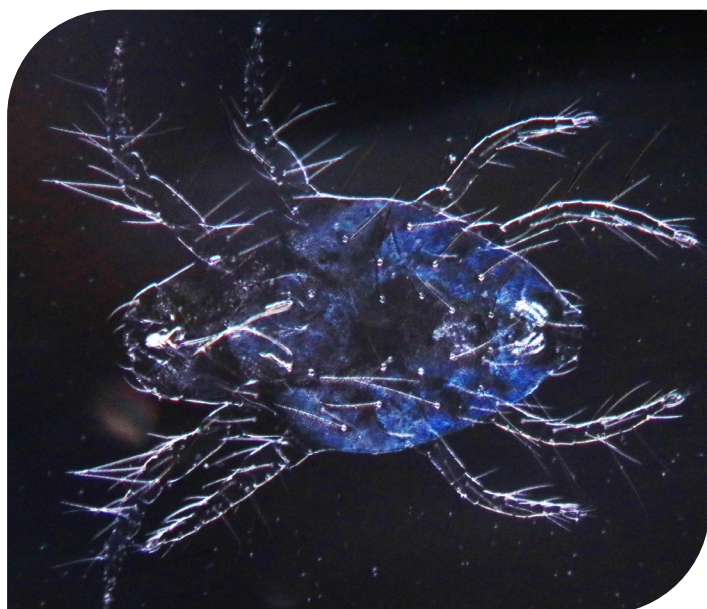


2 - *Scolothrips brevipilis* Priesner female.
Photo by Isabelle Atchia, FDACS-DPI



medial discal setae on the pronotum. This is the second adventive species of *Scolothrips* reported from Florida in three years. (Broward County; E1742-03-04242025-03800; Mark Zenoble; 18 April 2025.) (Dr. Felipe N. Soto-Adames.)

3 *Oligonychus macrostachyus* Baker & Tuttle, a mite, a new Florida State and Host record. This is a very rare mite that was known only from *Setaria macrostachya* (bristleglass) in Arizona, and there only appears to be one record of its collection until now. With this new state record, the mite has been recovered from another grass species, *Tripsacum dactyloides* (L.) (common name: Fakahatchee grass or eastern gamagrass). This mite is unlikely to have any regulatory significance, and it seems likely the damage observed in association with this mite was caused by another agent (probably either abiotic or a pathogen). The extreme rarity of this mite throughout the United States suggests it is not a cause for concern (Orange County; E1488-04142025-03304; Ron Levin; 7 April 2025.) (Dr. Samuel Bolton.)



3 - *Oligonychus macrostachyus* Baker & Tuttle.
Photo by Samuel J. Bolton, FDACS-DPI

4 *Pseudonapomyza asiatica* Spencer, an agromyzid fly, a new Florida State record. Agromyzid fly pupae were collected from sea oats (*Uniola paniculata*) where their feeding damage presented as black spots at the top of leaf blades. Sea oats are a protected Florida plant, and this feeding damage was an annually recurring issue at the collection site. These pupae were identified by COI barcodes because no adult flies were collected. COI sequence data revealed the flies were *Pseudonapomyza asiatica* Spencer (Agromyzidae). The veracity of the molecular identification was confirmed morphologically by Canadian dipterist Valerie Levesque-Beaudin of the Centre for Biodiversity Genomics, University of Guelph, who posted a matching sequence. This species was described originally from specimens collected in Singapore and India. *Pseudonapomyza asiatica* is geographically widespread, occurring in Asia, the Palearctic and Afrotropics. The species has been reported on various grasses and is considered a minor pest of rice in Taiwan. (Desoto County; E6287-12182024-12233; Lyle Buss; 3 December 2024.) (Matthew R. Moore and Dr. Erick J. Rodriguez.)



4 - *Pseudonapomyza asiatica* Spencer collected in Arcadia, Florida.
Photo by Erick J. Rodriguez, FDACS-DPI

5 *Scaptodrosophila latifasciaeformis* (Duda), a drosophilid fly, a new Florida State record. Adults were collected from yellow-legged hornet bycatch survey in Jacksonville. These specimens were identified morphologically and confirmed molecularly by COI barcodes. This species is native to Africa, and it has been introduced to the Americas. It occurs in Mexico, Brazil and the Galapagos Islands. It has been reported from Alabama (Bombin and Reed, 2016) and previously collected by Werner et al. (2025) in Florida without locality data. The species has been reported on various fruit plants collected from the ground in natural forest in Brazil (Mata et al., 2025). It is not reported as a plant pest. (Duval County; E5311-10022024-10117 and M0187-10022024-10117; Lisa Tyler; 1 October 2024.) (Dr. Erick J. Rodriguez and Matthew R. Moore.)



5 - *Scaptodrosophila latifasciaeformis* (Duda) collected in Jacksonville.
Photo by Jessica Diaz, FDACS-DPI

6 *Bactrocera carambolae* Drew and Hancock, carambola fruit fly, a regulatory incident. A single male specimen was captured in a Jackson trap baited with methyl eugenol, hung in a loquat tree (*Eriobotrya japonica*) in Palm Bay. Increased trap densities in a 56-square-mile area around the detection site were maintained, and traps were monitored closely for two life cycles. No additional flies were found, and the delimitation program was concluded on July 24, 2025. (Brevard County; E2216-01-05202025-04763; Chase Groninger, FDACS-DPI; 20 May 2025.) (Dr. Erick J. Rodriguez.)



6 - *Bactrocera carambolae* Drew and Hancock collected in Palm Bay.
Photo by Erick J. Rodriguez, FDACS-DPI

7 *Bactrocera dorsalis* (Hendel), Oriental fruit fly, a regulatory incident. A single male specimen was captured in a Jackson trap baited with methyl eugenol, hung in a beauty leaf tree (*Calophyllum inophyllum*) in Boynton Beach. Increased trap densities in a 64-square-mile area around the detection site were maintained and traps were monitored closely for two life cycles. No additional flies were found, and the delimitation program was concluded on July 22, 2025. (Palm Beach County; E2271-01-05222025-04867; Ellen Tannehill, FDACS-DPI; 21 May 2025.) (Dr. Erick J. Rodriguez.)



7 - *Bactrocera dorsalis* (Hendel) collected in Boynton Beach.
Photo by Erick J. Rodriguez, FDACS-DPI

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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 reporting 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 with no plant information included are organized by arthropod name.

PLANT SPECIES	PLANT COMMON NAME	ARTHROPOD GENUS AND SPECIES	ARTHROPOD COMMON NAME	COLLECTOR	RECORD
<i>Abelmoschus esculentus</i>	okra	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Carly Dodgen	First in county
<i>Ambrosia artemisiifolia</i>	ragweed	<i>Chlamydatus suavis</i>	a plant bug	Mark Zenoble	First in county
<i>Amorpha herbacea</i>	clusterspike indigobush	<i>Digrammia eremiata</i>	three-lined angle moth	Paul Skelley	New Florida host record
<i>Annona squamosa</i>	sugar apple	<i>Matsumurasca insularis</i>	an annona leafhopper	Douglas Restom-Gaskill	First in county
<i>Anthurium</i> sp.	anthurium	<i>Acutaspis umbonifera</i>	an armored scale	Diane McColl	Regulatory significance
<i>Anthurium</i> sp.	anthurium	<i>Aleurotulus anthuricola</i>	anthurium whitefly	Shanelle Mulrooney	Regulatory significance
<i>Arundo donax</i>	giant reed	<i>Melanaphis donacis</i>	arundo aphid	Riccardo Tordi	First in county
<i>Baccharis halimifolia</i>	salt bush	<i>Ochyromera ligustri</i>	ligustrum weevil	Riccardo Tordi	First in county
<i>Beta vulgaris</i>	Swiss chard	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Beta vulgaris</i>	Swiss chard	<i>Deltocephalus fuscinosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Bidens alba</i>	beggarticks	<i>Phenacoccus miruku</i>	a mealybug	Ethan Gamble	First in county
<i>Bidens alba</i>	beggarticks	<i>Phenacoccus miruku</i>	a mealybug	Ethan Gamble	First in county
<i>Bothriochloa pertusa</i>	pitted bluestem	<i>Hysteroneura setariae</i>	rusty plum aphid	Mark Zenoble	New Florida host record
<i>Brassica rapa</i>	yumai choy	<i>Acyrtosiphon lactucae</i>	lettuce aphid	Dyrana Russell, James Howard, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Brassica rapa</i>	yumai choy	<i>Brachycaudus rumexicolens</i>	an aphid	Dyrana Russell, James Howard, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
Bromeliaceae	a bromeliad	<i>Acutaspis umbonifera</i>	an armored scale	Stefan Hartz	Regulatory significance
<i>Calliandra haematocephala</i>	powderpuff	<i>Umbonia crassicornis</i>	thorn bug	David Brown	First in county
<i>Calophyllum inophyllum</i>	beauty leaf	<i>Bactrocera dorsalis</i>	Oriental fruit fly	Ellen Tannehill	Regulatory significance
<i>Capsicum annuum</i>	bell pepper	<i>Bactericera cockerelli</i>	potato psyllid	Justin Anto, Jakira Davis	Regulatory significance
<i>Capsicum annuum</i>	poblano pepper	<i>Bactericera cockerelli</i>	potato psyllid	Logan Cutts	Regulatory significance
<i>Capsicum annuum</i>	jalapeño	<i>Bactericera cockerelli</i>	potato psyllid	Cheryl Jones, Renee Shiska, Dyrana Russell, Logan Cutts	Regulatory significance
<i>Capsicum annuum</i>	Anaheim pepper	<i>Bactericera cockerelli</i>	potato psyllid	Renee Shiska	Regulatory significance
<i>Capsicum annuum</i>	Anaheim pepper	<i>Bactericera cockerelli</i>	potato psyllid	Dyrana Russell, Riccardo Tordi, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Casuarina cunninghamiana</i>	Australian pine	<i>Flatodinus punctatus</i>	a flatid planthopper	Alexander Tasi	First in county
<i>Chenopodium nuttalliae</i>	huauzontle, hairy amaranth	<i>Lygus mexicanus</i>	a lygus bug	Justin Anto, Jakira Davis	Regulatory significance
<i>Cichorium endivia</i>	escarole	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Cichorium endivia</i>	endive	<i>Deltocephalus fuscinosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Cichorium endivia</i>	escarole	<i>Deltocephalus fuscinosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Cicuta maculata</i>	water hemlock	<i>Aphis impatientis</i>	an aphid	Chase Groninger	New Florida host record
<i>Cirsium nuttallii</i>	Nuttall's thistle	<i>Capitophorus elaeagni</i>	a thistle aphid	Caroline Pride, Samuel Smith	First in county
<i>Citrullus lanatus</i>	watermelon	<i>Thrips parvispinus</i>	short spine thrips	Matthew Brodie, Charles Gonzalez, Mary Graham	First in county
<i>Coriandrum sativum</i>	coriander	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Coriandrum sativum</i>	cilantro	<i>Metopolophium dirhodum</i>	rose grass aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Dactyloctenium aegyptium</i>	African crowfootgrass	<i>Antonina graminis</i>	Rhodes grass mealybug	Mark Zenoble	New Florida host record



PLANT SPECIES	PLANT COMMON NAME	ARTHROPOD GENUS AND SPECIES	ARTHROPOD COMMON NAME	COLLECTOR	RECORD
<i>Dactyloctenium aegyptium</i>	African crowfootgrass	<i>Aspidiella sacchari</i>	sugarcane scale	Mark Zenoble	New Florida host record
<i>Echinodorus</i> sp.	Amazon sword plant	<i>Opiconsiva anacharsis</i>	a delphacid planthopper	Jimmy Hernandez	Regulatory significance
<i>Emilia praetermissa</i>	pale tasselflower	<i>Myzus persicae</i>	green peach aphid	Samuel Smith, Alexander Tasi	New Florida host record
<i>Eriobotrya japonica</i>	loquat	<i>Bactrocera dorsalis</i>	Oriental fruit fly	Chase Groninger	Regulatory significance
<i>Eucalyptus</i> sp.	eucalyptus	<i>Ctenarytaina spatulata</i>	rose gum psyllid	Renee Shiska, Logan Cutts	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Ceratagallia californica</i>	a leafhopper	Chase Groninger	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Chaetosiphon fragaefolii</i>	strawberry aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Chaetosiphon fragaefolii</i>	strawberry aphid	Dyrana Russell, Kayla Walker, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Chaetosiphon fragaefolii</i>	strawberry aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Chaetosiphon fragaefolii</i>	strawberry aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Chaetosiphon fragaefolii</i>	strawberry aphid	Mary Jane Echols	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Chaetosiphon fragaefolii</i>	strawberry aphid	Dyrana Russell, Riccardo Tordi, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Chaetosiphon fragaefolii</i>	strawberry aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Lygus elisus</i>	pale legume bug	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Lygus hesperus</i>	a western lygus bug	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Lygus</i> sp.	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Lygus</i> sp.	a western lygus bug	Justin Anto, Jakira Davis	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Scolopostethus tropicus</i>	a seed bug	Chase Groninger	Regulatory significance
<i>Fragaria x ananassa</i>	strawberry	<i>Scolopostethus tropicus</i>	a seed bug	Justin Anto, Jakira Davis	Regulatory significance
<i>Helianthus annuus</i>	sunflower	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Douglas Restom-Gaskill	New Florida host record
<i>Hibiscus sabdariffa</i>	roselle	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Carly Dodgen	New Florida host record
<i>Impatiens</i> sp.	impatiens	<i>Scolothrips brevipilis</i>	long haired predatory thrips	Mark Zenoble	New Continental USA record
<i>Inga</i> sp.	ice cream bean tree	<i>Eucropsylla russoi</i>	an inga psyllid	Teresa Ortelli	First in county
<i>Jasminum multiflorum</i>	star jasmine, windmill jasmine	<i>Petrusa epilepsis</i>	seagrape flatid planthopper	Mark Zenoble	New Florida host record
<i>Lactuca sativa</i>	lettuce	<i>Autographa californica</i>	alfalfa looper	Dyrana Russell, James Howard, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Autographa californica</i>	alfalfa looper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	organic iceberg lettuce	<i>Ceratagallia californica</i>	a leafhopper	Logan Cutts	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	green leaf lettuce	<i>Ceratagallia californica</i>	a leafhopper	Renee Shiska	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	Romaine hearts	<i>Deltocephalus fuscinevrosus</i>	a leafhopper	Renee Shiska	Regulatory significance
<i>Lactuca sativa</i>	organic iceberg lettuce	<i>Deltocephalus fuscinevrosus</i>	a leafhopper	Logan Cutts	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinevrosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinevrosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinevrosus</i>	a leafhopper	Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	Romaine lettuce	<i>Deltocephalus fuscinevrosus</i>	a leafhopper	Renee Shiska	Regulatory significance



PLANT SPECIES	PLANT COMMON NAME	ARTHROPOD GENUS AND SPECIES	ARTHROPOD COMMON NAME	COLLECTOR	RECORD
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Dyrana Russell, Kayla Walker, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Dyrana Russell, James Howard, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	green leaf lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Renee Shiska	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Deltocephalus fuscinervosus</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Dikraneura rufula</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Dysaphis aucupariae</i>	an aphid	Dyrana Russell, Riccardo Tordi, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Empoasca ulusa</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Empoasca ulusa</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Euschistus conspersus</i>	a brown stink bug	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Liriomyza langei</i>	California pea leafminer	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Liriomyza langei</i>	California pea leafminer	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	Romaine lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Dyrana Russell, Kayla Walker, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	Romaine hearts	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Renee Shiska	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Erika Lozano, Elhansville Hector, Ryan Tesone, Bryan Rojas, Stefan Hartz, La Tanya Richards	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Dyrana Russell, James Howard, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Logan Cutts	Regulatory significance
<i>Lactuca sativa</i>	green leaf lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Renee Shiska	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nothodelphax consimilis</i>	a delphacid planthopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nothodelphax consimilis</i>	a delphacid planthopper	Justin Anto, Jakira Davis	Regulatory significance



PLANT SPECIES	PLANT COMMON NAME	ARTHROPOD GENUS AND SPECIES	ARTHROPOD COMMON NAME	COLLECTOR	RECORD
<i>Lactuca sativa</i>	lettuce	<i>Nothodelphax consimilis</i>	a delphacid planthopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Lagerstroemia indica</i>	crape myrtle	<i>Acanthococcus lagerstroemiae</i>	crape myrtle bark scale	Lauren Goldsby	First in county, Regulatory significance
<i>Lantana strigocamara</i>	lantana	<i>Harmostes serratus</i>	a rhopalid bug	Riccardo Tordi	First in county
<i>Magnolia</i> sp.	magnolia	<i>Tortistilus lateralis</i>	a treehopper	Cynthia Blattenberger	First in county
<i>Malvaviscus penduliflorus</i>	turkscap hibiscus	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Theresa Badurek	New Florida host record
<i>Mentha</i> sp.	mint	<i>Frankliniella bruneri</i>	a thrips	Renee Shiska, Dyrana Russell, Logan Cutts	Regulatory significance
<i>Mentha</i> sp.	organic mint	<i>Ovatus crataegarius</i>	mint aphid	Renee Shiska	Regulatory significance
<i>Moringa oleifera</i>	moringa	<i>Aphis craccivora</i>	cowpea aphid	Lisa Tyler	New Florida host record
<i>Persea americana</i>	avocado	<i>Chrysomphalus pinnulifer</i>	an armored scale	Dyrana Russell, Logan Cutts	Regulatory significance
<i>Persea americana</i>	avocado	<i>Davidsonaspis aguacate</i>	an armored scale	Justin Anto, Jakira Davis	Regulatory significance
<i>Persea americana</i>	avocado	<i>Sinomegoura citricola</i>	an aphid	Lindsey Lewis	New Florida host record; First in county
<i>Persea americana</i>	avocado	<i>Smicronyx perpusillus</i>	a weevil	Lindsey Lewis	First in county
<i>Petroselinum crispum</i>	parsley	<i>Caviariella aegopodii</i>	carrot aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Petroselinum crispum</i>	parsley	<i>Caviariella aegopodii</i>	carrot aphid	Dyrana Russell, Renee Shiska	Regulatory significance
<i>Petroselinum crispum</i>	parsley	<i>Ceratagallia californica</i>	a leafhopper	Justin Anto, Jakira Davis	Regulatory significance
<i>Physalis philadelphica</i>	tomatillo	<i>Bactericera cockerelli</i>	potato psyllid	Julian Cordo	Regulatory significance
<i>Physalis philadelphica</i>	tomatillo	<i>Bactericera cockerelli</i>	potato psyllid	Julian Cordo	Regulatory significance
<i>Physalis philadelphica</i>	tomatillo	<i>Bactericera cockerelli</i>	potato psyllid	Julian Cordo	Regulatory significance
<i>Physalis philadelphica</i>	tomatillo	<i>Bactericera cockerelli</i>	potato psyllid	Julian Cordo	Regulatory significance
<i>Physalis philadelphica</i>	tomatillo	<i>Bactericera cockerelli</i>	potato psyllid	Logan Cutts	Regulatory significance
<i>Physalis philadelphica</i>	tomatillo	<i>Bactericera cockerelli</i>	potato psyllid	Dyrana Russell, James Howard, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Physalis philadelphica</i>	tomatillo	<i>Bactericera cockerelli</i>	potato psyllid	Dyrana Russell, Riccardo Tordi, Jakira Davis, Renee Shiska, Logan Cutts, Justin Anto	Regulatory significance
<i>Physalis philadelphica</i>	tomatillo	<i>Bactericera cockerelli</i>	potato psyllid	Mark Zenoble	Regulatory significance
<i>Physalis philadelphica</i>	tomatillo	<i>Bactericera cockerelli</i>	potato psyllid	Keith Zugar	Regulatory significance
<i>Physalis philadelphica</i>	tomatillo	<i>Bactericera cockerelli</i>	potato psyllid	Justin Anto, Jakira Davis	Regulatory significance
<i>Pimpinella anisum</i>	anise	<i>Caviariella aegopodii</i>	carrot aphid	Justin Anto, Jakira Davis	Regulatory significance
<i>Pittosporum tobira</i>	pittosporum	<i>Deroceras reticulatum</i>	gray garden slug	Karianne Rivera and K-9	Regulatory significance
<i>Podocarpus macrophyllus</i>	Japanese yew	<i>Litoprosopus linea</i>	a palm moth	Diane McColl	First in county
<i>Portulaca oleracea</i>	purslane	<i>Ctenarytaina</i> sp.	a eucalyptus psyllid	Renee Shiska, Logan Cutts	Regulatory significance
<i>Rhynchospora fascicularis</i>	fascicled beaksedge	<i>Hysteroneura setariae</i>	rusty plum aphid	Alexander Tasi	New Florida host record
<i>Rosa</i> sp.	rose	<i>Phyllocoptes fructiphilus</i>	rose rosette virus mite	Lisa Tyler	Regulatory significance
<i>Rosa</i> sp.	rose	<i>Phyllocoptes fructiphilus</i>	rose rosette virus mite	Mark Laurent	Regulatory significance
<i>Rosa</i> sp.	rose	<i>Phyllocoptes fructiphilus</i>	rose rosette virus mite	Lisa Tyler	Regulatory significance
<i>Rosa</i> sp.	rose	<i>Phyllocotes fructiphilus</i>	rose rosette virus mite	Caroline Pride	Regulatory significance
<i>Rosa</i> sp.	rose	<i>Phyllocotes fructiphilus</i>	rose rosette virus mite	Vincent Barrios	Regulatory significance
<i>Rosa</i> sp.	rose	<i>Phyllocotes fructiphilus</i>	rose rosette virus mite	Vincent Barrios	Regulatory significance
<i>Rubus</i> sp.	blackberry	<i>Rhinacloa forticornis</i>	western plant bug	Justin Anto, Jakira Davis	Regulatory significance
<i>Schizachyrium sanguineum</i>	crimson bluestem	<i>Tetraneura nigriabdoninalis</i>	a root aphid	Mark Zenoble	New Florida host record
<i>Sesamum indicum</i>	sesame	<i>Nesidiocoris tenuis</i>	tomato bug	Douglas Restom-Gaskill	New Florida host record
<i>Solanum lycopersicum</i>	tomato	<i>Dicyphus hesperus</i>	a mirid bug	Renee Shiska, Dyrana Russell, Logan Cutts	Regulatory significance
<i>Solanum melongena</i>	eggplant	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Carly Dodgen	First in county
<i>Solanum melongena</i>	eggplant	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Scott Weihman	First in county
<i>Solanum melongena</i>	eggplant	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Krystal Ashman	First in county



PLANT SPECIES	PLANT COMMON NAME	ARTHROPOD GENUS AND SPECIES	ARTHROPOD COMMON NAME	COLLECTOR	RECORD
<i>Solanum melongena</i>	eggplant	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Scott Weihman	First in county
<i>Solanum melongena</i>	eggplant	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Scott Weihman	First in county
<i>Solanum melongena</i>	eggplant	<i>Jobertus chrysoelectrus</i>	a mirid bug	Scott Weihman	First in county
<i>Sonchus oleraceus</i>	common sowthistle	<i>Hyperomyzus carduellinus</i>	an Asian sowthistle aphid	Haffner Castrillo	First in county
<i>Tradescantia</i> sp.	spiderwort	<i>Creontiades rubrinervis</i>	a plant bug	Logan Cutts	First in county
<i>Tripsacum dactyloides</i>	Fakahatchee grass	<i>Oligonychus macrostachyus</i>	a mite	Roi Levin	New Florida state record, Regulatory significance, new Florida host record
<i>Uniola paniculata</i>	sea oats	<i>Pseudonapomyza asiatica</i>	an agromyzid fly	Employee	New Florida state record
<i>Urena lobata</i>	Caesar weed	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Douglas Restom-Gaskill	New Florida host record
<i>Verbesina virginica</i>	white crownbeard, frostweed	<i>Uroleucon rurale</i>	an aphid	Nora Marquez	First in county
<i>Vitis</i> sp.	grapes	<i>Planococcus ficus</i>	a mealybug	Helen Beiriger, William Piwowarek	Regulatory significance
	multiple potted plants imported from California	<i>Ambigolimax valentianus</i>	three-banded garden slug	Scott Krueger	Regulatory significance
		<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Mona Lisa Payne	First in county
		<i>Aseum striatum</i>	a longhorn beetle	Allison Finch	First in county
		<i>Atta mexicana</i>	chicatana leafcutter ant	Chantelle Viloría, Julia Chapman, Karianne Rivera, Ethan Beesley, and K-9	Regulatory significance
		<i>Belionota prasina</i>	a buprestid beetle	James Anderson	First in county
		<i>Blastopsylla occidentalis</i>	a eucalyptus psyllid	Scott Weihman	First in county
		<i>Cosmopterix abnormalis</i>	cosmopterigid moth	Julio Garcia, Michelle DaCosta	New Continental USA record
		<i>Cosmopterix abnormalis</i>	cosmopterigid moth	James Hayden	First in county
		<i>Cosmopterix abnormalis</i>	cosmopterigid moth	Scott Weihman	First in county
		<i>Cosmopterix abnormalis</i>	cosmopterigid moth	Ayiana Rivera Robles, Robert Denoux, Jennifer McKeever, Ariadna Gonzalez, Yamiley Guia, Reinaldo Casanas, Maria Gonzalez Leyva, Jonathan Bremer, Mo Violett, Sara Restrepo, James Hayden	First in county
		<i>Cyrtolobus maculifrontis</i>	a treehopper	Vincent Barrios	First in county
	mixed	<i>Esperanza texana</i>	a broadheaded bug	Mark Zenoble	First in county
		<i>Glyptoscelis pubescens</i>	a leaf beetle	Justin Anto, Jakira Davis	First in county
		<i>Gyponana germari</i>	a leafhopper	Julia Laur	First in county
		<i>Isorhipis obliqua</i>	a beetle	Darly Dodgen, Robert Leahy	First in county
		<i>Nysius tenellus</i>	a seed bug	Douglas Restom-Gaskill	First in county
		<i>Orthotylus flavosparus</i>	a plant bug	Robert Leahy	First in county
		<i>Phereoeca allutella</i>	Neotropical plaster bagworm	IFAS Extension client	First in county
		<i>Phloeotribus texanus</i>	a scolytid beetle	Scott Weihman	First in county
		<i>Scaptodrosophila latifasciaformis</i>	a vinegar fly	Lisa Tyler	New Florida state record
		<i>Sinomegoura citricola</i>	an aphid	Julia Laur	First in county
		<i>Spartidelphax detectus</i>	a delphacid planthopper	Julia Laur	First in county
		<i>Spartocera diffusa</i>	a coreid bug	Chantelle Viloría	First in county
		<i>Telmaysylla minuta</i>	minute black mangrove psyllid	Douglas Restom-Gaskill	First in county
		<i>Typocerus badius</i>	a longhorn beetle	Robert Leahy	First in county





NEMATOLOGY

Compiled by Janete Brito, Ph.D., and Denis Gitonga, Ph.D.

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.

QUARTERLY ACTIVITY REPORT

	APRIL - JUNE	2025 - YEAR TO DATE
Morphological Identifications	4,467	8,661
Molecular Identifications *	248	554

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

Nematode of Special Interest

1 *Meloidogyne hispanica* (Hirschmann, 1986) was found infecting the roots of sugar beet (*Beta vulgaris*) collected from a farm in South Florida (Hendry County; 02132025-01280; anonymous collector; 12 February 2025). **This is a new County record.**

Meloidogyne hispanica was first reported in Florida in 2022 from *Caladium x hortulanum*, *Urena lobata*, and *Eupatorium capillifolium*. Since its initial detection, this root-knot nematode has been found sporadically in a few ornamental nurseries. A sugar beet root sample was sent to the Division of Plant Industry for phytopathological analysis. Several galls and egg masses were observed on the roots, resembling those induced by root-knot nematode infections (*Meloidogyne* spp.). Accurate identification of this nematode species was obtained using real-time polymerase chain reaction (qPCR) assays, DNA sequencing, enzymatic, morphological and morphometrics analyses. The morphology of the perineal patterns of the females and morphometrics of the second-stage juveniles of the root-knot nematode infecting sugar beet matched those reported in the original population of *M. hispanica* described by Hirschmann (1986) collected from peach roots in Seville, Spain. Additionally, the results of the molecular analyses obtained from the mitochondrial DNA (mtDNA) sequence data revealed the presence of three variants of *M. hispanica* in Florida. One of these variants matched *M. hispanica* reported from Portugal (Landa et al., 2008). The other variants matched those reported from South Carolina in 2021 (Skantar et al., 2021). A confounding feature of *M. hispanica* is its variable isozyme phenotypes (EST: MDH). In Florida, there is evidence of a S2-M1:N3 population (from *Beta vulgaris*) and an A2:N1 population (from *Ulmus parvifolia* cv. Drake). This differs from the malate



1 - Beet, *Beta vulgaris*, roots.
Photo from Shutterstock



dehydrogenase phenotype in the original description of *M. hispanica* (MDH=N1) but matched the esterase (EST= S2-M1). Additional molecular studies, including phylogenetic analyses, are in progress as an attempt to compare the population of *M. hispanica* infecting sugar beet with other populations of this nematode species found in Florida.

Acknowledgments

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SAMPLES FOR MOLECULAR ANALYSIS

	APRIL - JUNE	2025 - YEAR TO DATE
Regulatory Purposes	170	311
Other Purposes	0	0
Identifications	78	243
Surveys	0	0
Total	248	554

SAMPLES FOR MORPHOLOGICAL ANALYSIS

Certifications and Regulatory Purposes

	APRIL - JUNE	2025 - YEAR TO DATE
Multistate Certification involving California	1,144	2,038
Multistate Certification excluding California Certification	2,382	4,660
Citrus Certification (Citrus Nursery Certification, Site or Pit Approval)	38	116
Total	3,564	6,814

Other Purposes

	APRIL - JUNE	2025 - YEAR TO DATE
Identification (other organisms)	0	0
Identification (plant-parasitic nematodes)	18	18
Agricultural Interdiction Stations (AIS)	46	76
Plant Problems	14	44
Survey	44	156
Total	122	294





PLANT PATHOLOGY

Compiled by Claudia Paez, Ph.D., Hector Urbina, Ph.D., Jodi Hansen, M.S. and Taryn Griffith, B.S.

The Plant Pathology section provides plant disease diagnostic services for the department. The agency-wide goal of protecting the flora of Florida very often begins with accurate diagnoses of plant problems. Management recommendations are offered where appropriate and available. Our plant pathologists are dedicated to keeping informed about endemic plant diseases along with those diseases and disorders active outside Florida in order to be prepared for potential introductions of new pathogens to our area.

1 *Erysiphe quercicola* S. Takam. & U. Braun (Heliotales, Erysiphaceae), **a new Florida State record**, was found on *Quercus virginiana*, commonly known as live oak (Rosids, Fagales) in a residential neighborhood in Broward County, Florida, where one plant was affected. The identification of the fungus was based on micromorphology and analysis of the internal transcribed spacer (ITS) region of its ribosomal DNA. The sample presented signs of white powdery mildew on the leaves and stem. Powdery mildew disease can be caused by multiple other fungi in Erysiphaceae and presents as a powdery growth on the surface of young plant tissues. This obstruction can cause plant growth to be stunted. Powdery mildew caused by *E. quercicola* can negatively affect the yield of commercially grown trees, such as *Hevea brasiliensis* (rubber tree), *Mangifera indica* (mango), *Nephelium lappaceum* (Rambutan), *Anacardium occidentale* (cashew) and several species in *Citrus*. Although the fungus is widespread, this is the first formal case in Florida and is therefore a **new Florida State record**. (Broward County; P1014-04032025-03026; Mark Zenoble; 3 April 2025).

2 *Fusarium musae* Van Hove, Waalwijk, Munaut, Logrieco & Moretti (Hypocreales, Nectriceae) (**a postharvest disease and human pathogenic fungus**), was found on imported bananas (*Musa* sp.) (Zingiberales, Musaceae) at a supermarket in Alachua County, Florida. The fruit were showing “black center syndrome” which is a dark red or black discoloration in the center of the banana. The causal agent was identified as *F. musae* through morphological characteristics and DNA analysis of elongation factor (*TEF*) and beta-tubulin (*b-tubulin*) regions. Also, identification of the fungal pathogen was confirmed by Plant Pathogen Confirmatory Diagnostics Laboratory (PPCDL) of the United States Department of Agriculture (USDA) in Laurel, Maryland. *Fusarium musae* infections in bananas have been reported in Hungary, neotropical countries and the Philippines. Banana fruit is infected by fungal growth from infected flowers and necrotic leaves moving onto the top of the bunch (also known as the crown) during harvesting. Crown rot starts with mycelial establishment on the surface, followed by colonization of the interior of the fruit. Internal infection can affect the peduncle and whole fruit leading to blackening of the internal tissue and subsequent fruit softening. *Fusarium musae* is also a human pathogen, and infection by *Fusarium* species is known as fusariosis. This disease can cause skin infections, keratitis and systemic infections in immunocompromised patients. In 2011, *F. musae* was proposed and separated from the *F. verticillioides* and *F.*



1 - *Erysiphe quercicola* on *Quercus virginiana* leaves.
Photo by Mark Zenoble, FDACS-DPI

QUARTERLY ACTIVITY REPORT

	APRIL - JUNE	2025 - YEAR TO DATE
Citrus black spot	5	166
Citrus canker	345	609
Citrus greening / HLB	85	126
HLB certification for out-of-state shipping	1,889	2,764
Import inspections	12	15
Interdictions	67	110
Palm phytoplasma	5	9
Pathology, General	1,404	2,047
Soil	48	111
Totals	3,870	5,957



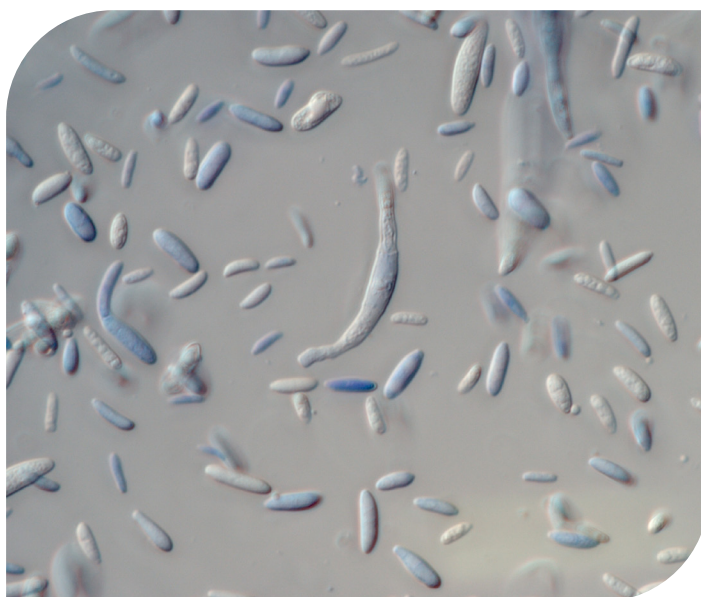
moniliforme species complexes. This reclassification clarified its distinct identity within the genus. Although this is not the first documented report of *F. musae* in the state, the presence of this fungal pathogen carries broad implications, primarily due to its recently confirmed status as a cross-kingdom pathogen, capable of infecting both plants and humans. Given its association with a widely consumed commodity like bananas, *F. musae* poses a potential public health concern. Further research is warranted to understand its prevalence in banana importations and its potential for transmission to human populations (Alachua County; P1414-05132025-04437; Cathy Daniels; 13 May 2025).

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2a - *Fusarium musae* symptoms on *Musae* sp.
Photo by Patricia Soria, FDACS-DPI



2b - Diversity of conidia types in *Fusarium musae*: macroconidia (banana shape) and microconidia (ellipsoid and cylindric in shape). Photo in cotton blue dye.
Photo by Hector Urbina, FDACS-DPI

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🔍 PLANT PATHOLOGY IDENTIFICATION TABLE

The following table provides information about samples identified between April - June 2025. The table is organized alphabetically by plant species, with new records listed on the right.

PLANT SPECIES	PLANT COMMON NAME	CAUSAL AGENT	DISEASE NAME	LOCATION TYPE	SPECIMEN #	COUNTY	COLLECTOR	DATE	NEW RECORDS
<i>Bothriochloa bladhii</i>	Australian beardgrass, Australian bluestem, Caucasian bluestem	<i>Puccinia duthiei</i>	rust fungus	roadside	P1083-04102025-03243	Broward	Mark Zenoble	4/7/25	Florida host record, state record
<i>Musa</i> sp.	plantain, banana	<i>Fusarium musae</i>	post harvest rot, human pathogen	supermarket	P1414-05132025-04437	Alachua	Cathy Daniels	5/13/25	None
<i>Platanus occidentalis</i>	sycamore	<i>Erysiphe platani</i>	powdery mildew	Port of Orlando airport	P1389-05082025-04323	Orange	Sherry Steele, David Ortiz, Rusty Noah, Chantelle Vilorio	5/8/25	state
<i>Quercus virginiana</i>	live oak, southern live oak	<i>Erysiphe quercicola</i>	powdery mildew	roadside	P1014-04032025-03026	Broward	Mark Zenoble	4/2/25	New Florida host record, state record





FROM THE EDITOR

By Patti Anderson

DPI herbarium history.

I don't know the reason the botanist for DPI has been the editor of Tri-ology for so long, but given it is a fact, you might be interested in some of the history of these botanist-editors.

The Botany Section is much younger than the division as a whole. In the early 1960s, Dr. Kenneth R. Langdon, a DPI nematologist who had expert knowledge of native and cultivated plants, began to receive more and more questions concerning botany, and in 1963, he was put in charge of a new Office of Systematic Botany. Dr. Langdon was born in 1928 in Cache, Oklahoma (Comanche County), a metropolis of 425 people (increasing to over 3,000 in a recent census). He received B.S. and M.S. degrees from Oklahoma State University and, in 1963, a Ph.D. in Plant Pathology with minor concentrations in nematology and botany from the University of Florida. In June 1964, Dr. Langdon established the DPI Herbarium to provide specimens for use in identifying and verifying plant samples. Before then, plant samples were sent to the University of Florida for identification. Dr. Langdon retired from DPI in 1991, and until his death in 2017, he continued to enjoy plants, collecting many unusual species for cultivation in his home landscape and greenhouses.

Dr. Nancy C. Coile, who took Langdon's place, was born in Elberton, Georgia (population about 6,000 in 1940) and attended Emmanuel University in Franklin Springs, Georgia. She began her botanical career working as a technician at the University of Georgia Herbarium in 1973 where she completed both a master's degree and a doctorate in botany and became the Curator of the University of Georgia Herbarium. She was also a faculty member of the Biology Department at North Georgia College in Dahlonega, before joining the division. At DPI, Dr. Coile carried out regulatory duties related to endangered plants and noxious weeds, conducted biodiversity studies and trained DPI plant inspectors. Field work was also important to her, including inventories she carried out to describe the vascular flora of St. Catherines Island, Georgia; Timucuan Ecological and Historical Preserve in Jacksonville, Florida; and Malabar Scrub Sanctuary, Brevard County, Florida. She was active in professional associations and served as secretary of the Association of Southeastern Biologists, president of the Southeastern Appalachian Botanical Society, and as a member of the Florida Exotic Pest Plant Council and *Castanea* editorial board. Dr. Coile retired in 2002 and was followed by Mr. Mark Garland.

Mr. Garland, unlike the other DPI botanists, was born in the big city of Alexandria, Virginia, grew up in a series of Army bases where he could roam around undeveloped areas and

Botany Section leadership



Kenneth R. Langdon 1964 – 1991



Nancy C. Coile 1991 - 2002



Mark A. Garland 2002 – 2004



get hooked on nature. His family's final move was to Georgia where he earned a bachelor's in botany from the University of Georgia, then attended graduate schools in Georgia, Florida State University and the University of Florida. Before moving to Gainesville and starting work with the division, he focused on wetlands at the Florida Department of Environmental Protection. His botanical research focused on the genera *Hieracium* and *Hymenocallis* (hawkweeds and spider-lilies). After two years with DPI, Mr. Garland moved on to the USDA Natural Resources Conservation Service.

Dr. Richard Weaver took over the Botany section in 2004 and then retired in 2010. Dr. Weaver was born in Richland, Pennsylvania in 1943 (population 934 in 1940). He received his bachelor's degree in 1965 from Millersville State College (Millersville, Pennsylvania) and his master's (1968) and Ph.D. (1970) in plant taxonomy from Duke University. He worked as a horticultural taxonomist and assistant curator at Harvard University's Arnold Arboretum, from 1970 to 1983, then started We-Du Nurseries in Marion, North Carolina. The nursery specialized in wildflowers from eastern North America and eastern Asia. Dr. Weaver lived in Puerto Rico from 1996 until he returned to the mainland and joined DPI in 2002. He retired in 2010, then passed away in Pennsylvania in 2020.

Today, the Botany Section is headed by Dr. Patti Anderson who assumed this position in 2010. She grew up outside Ellisville, Mississippi (population 3,579 in 1950). She graduated from Rice University in 1973 with majors in English and Sociology, then completed a master's degree in Sociology at Boston University in 1975. She later attended City University of New York and in 1993 received a master's degree in Plant Sciences, followed by a Ph.D. in Botany from the University of Florida in 1998. After a post-doctoral position at Pennsylvania State University, she worked as the Science Educator at Fairchild Tropical Botanical Garden and the Florida Museum of Natural History. She began work in the Botany Section of DPI in 2006 and was promoted to replace Dr. Weaver in 2010. During her years at DPI, she completed an interactive key to commonly cultivated palms for a USDA website. Her tasks include serving on the UF/IFAS Cultivar Release Committee, the Florida Noxious Weed Review Committee and as the managing editor of *Tri-ology*. She plans to retire in August 2025 and remain in Gainesville to enjoy the natural beauty and cultural opportunities here.

Surprisingly, DPI botanists are occasionally asked to assist with solving crimes. According to the January 1965 issue of the *DPI News Bulletin*, Dr. Langdon was asked by a Florida police department to identify a plant sample from a crime scene. He was able to let them know the plant was *Thelypteris ovata*, a common fern. In July 2024, DPI was again asked to provide crime scene plant information. This time, the evidence bag contained dried leaves of *Araucaria heterophylla*, Norfolk Island pine.

You can learn more about botany by visiting the DPI publications website. See [Plant Industry Publications / Publications / About Us / Home - Florida Department of Agriculture & Consumer Services](#) for circulars on a wide range of botanical topics, pest alerts and special publications including *Plants for Bees*. And keep reading *Tri-ology* to find out who's the next botanist at DPI.



Richard E. Weaver, Jr. 2004 - 2010



Patti J. Anderson 2010 - 2025



That's all, folks!





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