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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





Chionanthus virginicus, white fringetree,
a new record for Duval County.
Photo by Dennis Girard, Atlas of Florida Plants

ABOUT TRI-OLOGY

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-OLOGY 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-OLOGY

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

Thank you,

Gregory Hodges, Ph.D.
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Cover Photo

Psyllaephagus sp., an encyrtid wasp, a species new to science.
Description in progress.

Photo by Jonathan Bremer, FDACS-DPI



HIGHLIGHTS



1 *Tradescantia fluminensis* Vell. (small-leaf spiderwort), a new County record, is native to tropical South America from southern Brazil to northern Argentina. In Florida, it is introduced across the state and grows in disturbed areas, lawns, vacant lots, moist suburban woods and along streams. Frequently grown as a houseplant or in gardens, it has escaped cultivation in Florida and become naturalized.



1 - *Tradescantia fluminensis* Vell., small-leaf spiderwort, flower.
Photo from Shutterstock

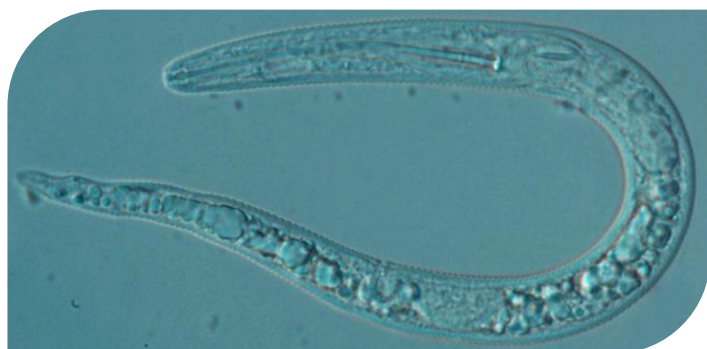
2 *Emmelina devriesi* (B. Landry & Gielis), a plume moth, a new Continental USA record. Three male moths were collected on a Jackson trap baited with CUE lure. This species is distributed in the Galapagos Islands and in the Caribbean Region.



2 - *Emmelina devriesi*, a plume moth.
Photo by James Hayden, FDACS-DPI

3 *Paratylenchus roboris* Álvarez-Ortega, Subbotin, Wang, Stanley, Vau, Crow & Inserra, 2023 was parasitizing the roots of live oak (*Quercus virginiana* Mill.) in a commercial nursery in North Florida. **This is a new taxonomic discovery.** This *P. roboris* population, extracted from the live oak rhizosphere, behaved as a sedentary ectoparasite and consisted of vermiform and motile females, males, quiescent juveniles and sedentary swollen females.

4 *Pleurostoma richardsiae* (Nannf.) Réblová & Jaklitsch (Pleurostomataceae, Sordariomycetes), a new host record, was found on *Olea europaea* L. (Oleaceae, Lamiales) at a nursery in Volusia County. The plant affected exhibited the following symptoms: wood discoloration, canker on the trunk and decline of canopy health. *Pleurostoma richardsiae* is a fungal pathogen.



3 - *Paratylenchus roboris*.
Photo by Silvia Vau, FDACS-DPI



4 - *Pleurostoma richardsiae* wood discoloration on *Olea europaea*.
Photo by Claudia Paez, FDACS-DPI





BOTANY

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

The Botany section of the Division of Plant Industry identifies plants for regulatory purposes as well as for other governmental agencies and private individuals. The section maintains a reference herbarium with over 18,000 plants and 1,400 vials of seeds.

QUARTERLY ACTIVITY REPORT

| | JANUARY - MARCH | 2024 - YEAR TO DATE |
|---|-----------------|---------------------|
| Samples Submitted by Other DPI Sections | 1,367 | 1,367 |
| Samples Submitted for Botanical Identification Only | 250 | 250 |
| Total Samples Submitted | 1,617 | 1,617 |
| Specimens Added to the Herbarium | 70 | 70 |

Some of the samples submitted recently are described below.

1 *Syagrus romanzoffiana* (Cham.) Glassman (queen palm), from a genus of 65 tropical and subtropical American species in the plant family Palmae/Arecaceae. This species is the closest relative of the coconut palm (*Cocos nucifera*) and was previously thought to be in the same genus, with the name *Cocos romanzoffiana* Cham (1822). This palm has a single, gray stem, ornamented with widely spaced leaf scars and encircled with matted fibers from old leaf bases, to 15 m tall and 15-45 cm in diameter, often swollen at variable points. The leaves have an arching rachis up to 5 m long and are divided into pinnate leaflets. The leaflets are usually dark green, but are somewhat variable in color, and spread into several planes. The 300-500 leaflets are irregularly clustered along the rachis in groups of two to seven and have drooping leaf tips. The inflorescence, bearing both male and female flowers, is 1-1.5 m long and is protected by a woody spathe until the white flowers emerge. The yellow to orange edible fruits are oblong to globose and 2-3 cm long. The queen palm is native to South America from Brazil to Argentina and Bolivia but has been frequently used as an ornamental in tropical and subtropical landscapes. The Florida Invasive Species Council (formerly known as Florida Exotic Pest Plant Council) lists this species as a Category II invasive: exotic plants increasing in abundance in natural areas but without proven disruption of native plant communities. In addition, this palm has been identified by the University of Georgia Center for Invasive Species and Ecosystem Health as an invasive species in California, Florida and Hawaii. In Florida, it has escaped cultivation to become naturalized in at least 15 mainly coastal counties from St. Johns to Broward on the Atlantic coast and from Pasco to Charlotte along the



1a - *Syagrus romanzoffiana*, queen palm, foliage and woody spathe protecting immature flowers.
Photo by Patti Anderson, FDACS-DPI



1b - *Syagrus romanzoffiana*, queen palm, old woody spathes and ripening fruit.
Photo by Patti Anderson, FDACS-DPI



Gulf. This sample represents a new county record. (Seminole County; 02262024-01705; Jennifer Hesse; 25 February 2024.) (Henderson et al., 1995; Noblick, 2017; Wunderlin and Hansen, 2011; [Syagrus romanzoffiana - Species Page - ISB: Atlas of Florida Plants \(usf.edu\)](#) [accessed 19 April 2024]; <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:246966-2> [accessed 19 April 2024].)

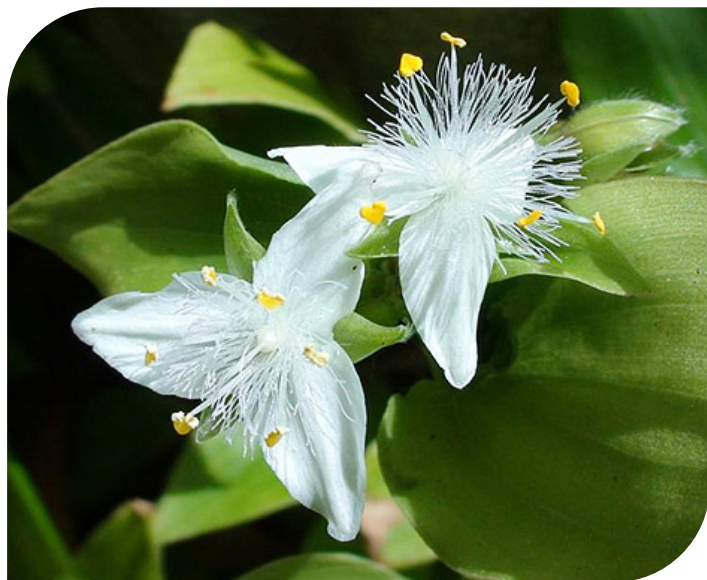
2 *Tradescantia fluminensis* Vell. (small-leaf spiderwort), from a genus of about 70 species of herbs from the New World, in the plant family Commelinaceae. This species is native to tropical South America from southern Brazil to northern Argentina. In Florida, it has been introduced across the state and grows in disturbed areas, lawns, vacant lots, moist suburban woods and along streams. It is frequently grown as a houseplant or in gardens, but it has escaped cultivation in Florida and become naturalized. It can form dense colonies of plants, completely taking over large areas of groundcover and outcompeting native vegetation for space and nutrients. It is listed as a Category 1 invasive species by the Florida Invasive Species Council (FISC). Plants are perennial herbs with creeping, fleshy stems, rooting at the nodes, with several green, fleshy, lanceolate-elliptic to ovate-lanceolate leaf blades arranged alternately along the stem. Inflorescences are terminal umbel-like pairs of cymes with a few small, white flowers. Each flower is distinctly pedicillate (with a stalk or stem that supports a single flower) and consists of three sepals; three white petals; six stamens, with white filaments densely bearded with white hairs; and a superior, three-locular ovary with one style and one stigma. The fruits are three-locular capsules with two seeds per locule. The genus name *Tradescantia* was chosen by Linnaeus to honor John Tradescant the Elder (1570-1638) and John Tradescant the Younger (1608-1662), English botanists and successive gardeners to Charles I of England, who introduced many new plants to European gardeners. The specific epithet '*fluminensis*' comes from the Latin '*flumen*' meaning river, likely a reference to the January River in Brazil, along which this species grows and is native. *Tradescantia fluminensis* was documented for the first time in Volusia County this quarter. (Volusia County; 02262024-01702; Jennifer Hesse, Deann Hansen, Randi Shreve and Laura Ureta; 24 February 2024.) (Faden, 2000; Weakley and Southeastern Flora Team, 2024; Wunderlin and Hansen, 2011).

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2a - *Tradescantia fluminensis*, small-leaf spiderwort, infestation.
Photo by Shirley Denton, [Atlas of Florida Plants](#)



2b - *Tradescantia fluminensis*, small-leaf spiderwort, flowers.
Photo by Rob Nykvist, [Atlas of Florida Plants](#)



🔍 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 | RECEIVED DATE | PLANT NAME | COUNTY |
|-------------------|---|-------------|---------------|-----------------------------------|--------------|
| Alexander Tasi | Victoria Benjamin | 1512 | 2/22/2024 | <i>Ardisia crenata</i> | Okeechobee |
| Angi Hutcherson | | 2942 | 3/29/2024 | <i>Wisteria floribunda</i> | Jackson |
| Caroline Pride | Alexander Tasi | 1725 | 2/29/2024 | <i>Cyperus rotundus</i> | Indian River |
| Caroline Pride | Alexander Tasi | 1724 | 2/29/2024 | <i>Lepidium didymum</i> | Indian River |
| Chase Groninger | | 2971 | 3/29/2024 | <i>Xanthosoma sagittifolium</i> | Brevard |
| Christine Podos | Matthew Brodie | 2308 | 3/14/2024 | <i>Solanum torvum</i> | Collier |
| David Brown | | 930 | 2/6/2024 | <i>Sphagneticola trilobata</i> | Putnam |
| Gary Webb | | 1172 | 2/13/2024 | <i>Chromolaena odorata</i> | Pasco |
| Harry Morrison | | 2869 | 3/27/2024 | <i>Acalypha arvensis</i> | Lake |
| Jennifer Hesse | | 549 | 1/25/2024 | <i>Ageratum conyzoides</i> | Volusia |
| Jennifer Hesse | | 2562 | 3/20/2024 | <i>Callisia fragrans</i> | Flagler |
| Jennifer Hesse | | 1710 | 2/27/2024 | <i>Callisia repens</i> | Seminole |
| Jennifer Hesse | | 1817 | 2/29/2024 | <i>Costus pulverulentus</i> | Volusia |
| Jennifer Hesse | | 2564 | 3/20/2024 | <i>Costus pulverulentus</i> | Flagler |
| Jennifer Hesse | | 722 | 2/1/2024 | <i>Cycas revoluta</i> | Volusia |
| Jennifer Hesse | | 224 | 1/12/2024 | <i>Cyperus involucratus</i> | Volusia |
| Jennifer Hesse | | 2072 | 3/11/2024 | <i>Justicia brandegeana</i> | Volusia |
| Jennifer Hesse | | 2558 | 3/20/2024 | <i>Phoenix reclinata</i> | Flagler |
| Jennifer Hesse | Randi Shreve, Deann Hansen, Laura Ureta | 1703 | 2/27/2024 | <i>Selenicereus pteranthus</i> | Volusia |
| Jennifer Hesse | | 276 | 1/17/2024 | <i>Stachytarpheta jamaicensis</i> | Volusia |
| Jennifer Hesse | | 1705 | 2/27/2024 | <i>Syagrus romanzoffiana</i> | Seminole |
| Jennifer Hesse | Randi Shreve, Deann Hansen, Laura Ureta | 1702 | 2/27/2024 | <i>Tradescantia fluminensis</i> | Volusia |
| Jennifer McKeever | Jesse Krok | 2702 | 3/29/2024 | <i>Ilex vomitoria</i> | Seminole |
| Jimmy Hernandez | | 1478 | 2/21/2024 | <i>Pseudosasa japonica</i> | Marion |
| Lisa Tyler | | 2916 | 3/29/2024 | <i>Chionanthus virginicus</i> | Duval |
| Lisa Tyler | | 2990 | 3/29/2024 | <i>Emilia sonchifolia</i> | Duval |
| Mark Laurint | | 1222 | 2/13/2024 | <i>Gibasis pellucida</i> | St. Johns |
| Mark Zenoble | | 1613 | 2/27/2024 | <i>Gamochoaeta pensylvanica</i> | Broward |
| Mark Zenoble | | 2724 | 3/25/2024 | <i>Lepidium didymum</i> | Broward |
| Mary Graham | Matthew Brodie | 1499 | 2/22/2024 | <i>Albizia lebbek</i> | Hendry |
| Nora Marquez | Jimmy Hernandez | 2454 | 3/15/2024 | <i>Syngonium podophyllum</i> | Marion |
| Patricia Mcgill | | 738 | 2/1/2024 | <i>Dalbergia sissoo</i> | Glades |
| Randi Shreve | Diane Mccoll | 1065 | 2/9/2024 | <i>Canna indica</i> | St. Johns |
| Randi Shreve | Diane Mccoll | 1067 | 2/9/2024 | <i>Emilia fosbergii</i> | St. Johns |
| Randi Shreve | Diane Mccoll | 428 | 1/23/2024 | <i>Emilia praetermissa</i> | Volusia |
| Randi Shreve | Diane Mccoll | 1066 | 2/9/2024 | <i>Emilia sonchifolia</i> | St. Johns |
| Randi Shreve | Diane Mccoll | 490 | 1/25/2024 | <i>Musa x paradisiaca</i> | Putnam |
| Randi Shreve | Diane Mccoll | 1063 | 2/9/2024 | <i>Syngonium podophyllum</i> | St. Johns |
| Samuel Smith | Caroline Pride, Alexander Tasi | 1884 | 3/6/2024 | <i>Eugenia uniflora</i> | Indian River |
| Scott Kreuger | | 40 | 1/5/2024 | <i>Melilotus indicus</i> | Collier |
| Vincent Barrios | | 2457 | 3/15/2024 | <i>Wisteria sinensis</i> | Dixie |
| Vincent Barrios | | 2527 | 3/19/2024 | <i>Wisteria sinensis</i> | Gilchrist |





ENTOMOLOGY

Compiled by Susan E. Halbert, Ph.D.

The Entomology Section provides the division's plant protection specialists and other customers with accurate identifications of arthropods. This 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.

| | JANUARY - MARCH | 2024 - YEAR TO DATE |
|-------------------|-----------------|---------------------|
| Samples Submitted | 1,487 | 1,487 |
| Lots Identified | 2,401 | 2,401 |

1 *Psyllaephagus* sp., an encyrtid wasp, a new Western Hemisphere record. A series of parasitoid wasps were reared from *Boreioglycaspis melaleucae* (Moore) (Hemiptera: Psyllidae) on *Melaleuca quinquenervia* (Cav.) S.T. Blake in St. Lucie County. *Boreioglycaspis melaleucae* was introduced as a biological control agent to control *M. quinquenervia*, but this parasitoid did not match any of the *Psyllaephagus* species known from North America. Because *M. quinquenervia* and *B. melaleucae* are both introduced from Australia, a study was conducted with Australian collaborators at Commonwealth Scientific and Industrial Research Organisation in Brisbane and the University of Adelaide to determine if the parasitoid is also an introduced species. Morphological and molecular data matched the Florida specimens to a *Psyllaephagus* species reared from *B. melaleucae* in Australia. This study determined it is a new species to science and its description is underway. (St. Lucie County; E2803-01-04142023-03806; Matthew Hentz, USDA, ARS; 8 April 2023).

2 *Emmelina devriesi* (B. Landry & Gielis), a plume moth, a new Continental USA record. Three male moths were collected on a Jackson trap baited with CUE lure. Dissection of the diagnostic male genitalia was necessary for identification. This species is distributed in the Galapagos Islands and in the Caribbean Region (Gielis, 2011). Congeners are associated with Convolvulaceae (morning glory family) as larvae, feeding on leaf shoots, flower buds and young foliage. Larvae of *E. devriesi* are specifically reported to feed on species of *Ipomoea* and *Merremia*, and are not known to be pests of *Ipomoea batatas* (sweet potato). (Broward County; E0324-01-01262024-00638; Liliana Jerez; 23 January 2024.) (Dr. James E. Hayden and Dr. Deborah Matthews, University of Florida.)



1 - *Psyllaephagus* sp., an encyrtid wasp.
Photo by Jonathan Bremer, FDACS-DPI



2 - *Emmelina devriesi*, a plume moth.
Photo by James Hayden, FDACS-DPI



3 *Saccharosydne viridis* Muir, a delphacid planthopper, a new Continental USA record. A single male specimen was collected in a short suction trap in Immokalee. This species is known from Guyana and Venezuela. It is not known to be a pest, but it is in the same genus as a common Neotropical pest of sugarcane occurring in Florida. (Collier County; E6278-01-11172023-11897; Monica Triana, University of Florida, IFAS, Southwest Florida Research and Education Center; 30 October 2023.) (Dr. Susan E. Halbert and Dr. Charles Bartlett, University of Delaware.)

4 *Agonoscelis puberula* Stål, African cluster bug, a new Florida State record. This species is originally from Africa. It is adventive in Mexico, several states in the western United States and in some Caribbean islands. The common host in the west is *Marrubium*, horehound, but apparently it will also colonize other plants in the mint family such as *Leonotis*, the host in Florida. So far, African cluster bug has not become a serious pest. (Orange County; E0152-01-01162024-00289; Shawn Kelly and Rachel Weavers, both University of Central Florida; 9 January 2024.) (Dr. Susan E. Halbert; Dr. Joseph E. Eger, FSCA Research Associate; and Sandor 'Shawn' Kelly and Rachel Weavers, University of Central Florida.)



3a - *Saccharosydne viridis*, a delphacid planthopper, dorsal view. Note the abdomen was removed to process male genitalia for identification. Photo by Susan Halbert, FDACS-DPI



3b - *Saccharosydne viridis*, a delphacid planthopper, lateral view of head. For comparison with *Saccharosydne saccharivora*, a pest in Florida sugarcane, see [Genus *Saccharosydne* Kirkaldy, 1907 - Planthoppers of North America \(udel.edu\)](http://Genus Saccharosydne Kirkaldy, 1907 - Planthoppers of North America (udel.edu)). Photo by Susan Halbert, FDACS-DPI



4 - *Agonoscelis puberula* Stål, African cluster bug, on *Leonotis*. Photo by Shawn Kelly, University of Central Florida



5 *Melanaphis donacis* (Passerini), *Arundo* aphid, a new Florida State record. This is the first Florida record for the *Arundo* aphid, detected for the first time in the southeastern United States in Georgia in late 2023. Its main host is *Arundo* (giant reed), but it also will colonize *Phragmites* and possibly bamboo. Likely native to the Middle East and Central Asia, this species is established in Europe, Africa and the New World, but it has not been reported as a pest. (Levy County; E0206-01-01192024-00406; Samuel Hart; 19 January 2024.) (Dr. Susan E. Halbert and Dr. Karen Harris-Schultz, USDA, Tifton, Georgia.)

6 *Pseudobourletiella spinata* (MacGillivray), a new Florida State record. *Pseudobourletiella spinata* is a species native to North America and is associated with lentic aquatic systems (Christiansen and Bellinger, 1998). The species displays several distinct morphological adaptations to living on the surface of the water, including many long, lateral setae on the dens of the furcula and an atypically wide and flat mucro. *Pseudobourletiella spinata* is also unique in having a so called “nasal organ” formed by a group of spines on the frons, and in showing strong sexual dimorphism expressed as an anteriorly bent small abdomen bearing hook-like spines. How the spines are used during courtship has not yet been described. The species was originally described from New York State, but it is now known to occur in at least 16 states, three Canadian provinces, Mexico, Europe, China, Korea and Australia (Christiansen and Bellinger, 1998; Bretfeld, 1998; Greenslade, 2018; Yong and Fu, 2000). The Eurasian and Australian populations are thought to represent recent introductions from North America. Among southern states, *Pseudobourletiella spinata* has been reported from Texas, Louisiana, Kentucky and North Carolina, but this is the first record from Florida. (Broward County; E0030-01-01042024-00059; Mark Zenoble; 4 January 2024.) (Dr. Felipe Soto-Adames.)

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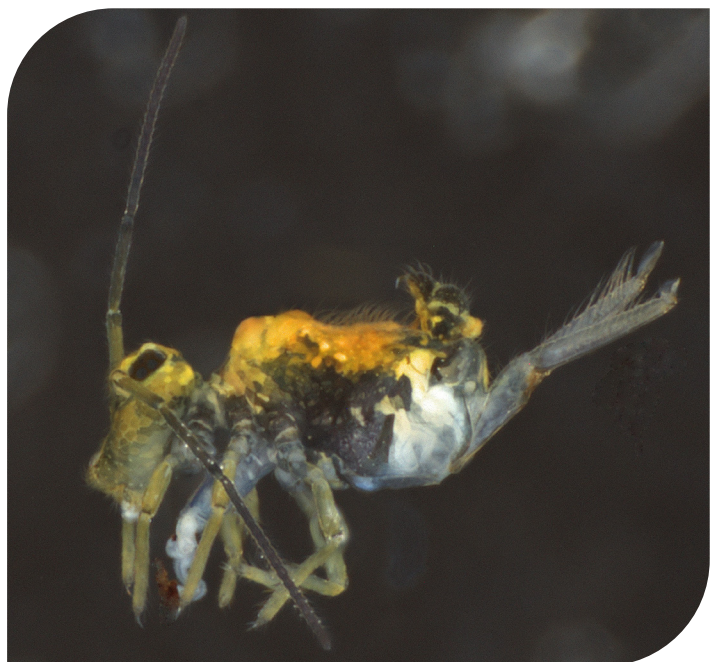
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5 - *Melanaphis donacis* (Passerini) colony on *Arundo donax*.
Photo by Karen Harris-Schultz, USDA, Tifton, Georgia



6a - *Pseudobourletiella spinata* (MacGillivray), aquatic globular springtail.
Male lateral view.
Photo by Christian Estevez, University of Florida



6b - *Pseudobourletiella spinata* (MacGillivray), aquatic globular springtail.
Male dorsal view.
Photo by Christian Estevez, University of Florida

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>Acer rubrum</i> | red maple | <i>Paraphlepsius attractus</i> | leafhopper | Alexander Tasi | First in county |
| <i>Allium</i> sp. | green onion | <i>Myzus</i> sp. | aphid | Chase Groninger | Regulatory significant |
| <i>Arundo donax</i> | giant reed, Spanish reed, wild cane | <i>Melanaphis donacis</i> | <i>Arundo</i> aphid | Sam Hart | New Florida record |
| <i>Baccharis halimifolia</i> | salt bush, groundsel bush, sea myrtle, eastern baccharis | <i>Aleurodicus rugioperculatus</i> | rugose spiraling whitefly | Erin Powell, Mark Zenoble | New Florida host record |
| <i>Bothriochloa bladhii</i> | Australian beardgrass, Australian bluestem, Caucasian bluestem | <i>Balclutha rubrostriata</i> | red streaked leafhopper | Solomon Hendrix, Susan Halbert | First in county |
| <i>Brassica oleracea</i> | cauliflower | <i>Bactericera cockerelli</i> | potato psyllid | Renee Shiska, Dyrana Russell, Logan Cutts | Regulatory significant |
| <i>Calliandra haematocephala</i> | powderpuff | <i>Planococcus minor</i> | mealybug | Mark Zenoble | New Florida host record |
| <i>Capsicum annuum</i> | bell pepper | <i>Bactericera cockerelli</i> | potato psyllid | Logan Cutts | Regulatory significant |
| <i>Capsicum annuum</i> | poblano pepper | <i>Prytanus oblongus</i> | seed bug | Logan Cutts, Dyrana Russell, Renee Shiska | Regulatory significant |
| <i>Cichorium endivia</i> | endive | <i>Rhinacloa forticornis</i> | Western plant bug | Renee Shiska, Dyrana Russell, Logan Cutts | Regulatory significant |
| <i>Cirsium horridulum</i> | purple thistle, horrid thistle | <i>Ochrinus mimulus</i> | seed bug | Harry Morrison, Nora Marquez, Abby Bartlett, Ayiana Rivera Robles, Mary Sellers | First in county |
| <i>Coccoloba uvifera</i> | seagrape | <i>Entomobrya citrensis</i> | springtail | Jeanie Frechette, Teresa Ortelli | First in county |
| <i>Coriandrum sativum</i> | cilantro | <i>Acyrtosiphon malvae</i> | aphid | Renee Shiska | Regulatory significant |
| <i>Crotalaria incana</i> | rattlebox, shakeshake | <i>Hyalopsallus diaphanus</i> | Crotalaria bug | Erin Powell, Mark Zenoble | First in county |
| <i>Cyperus</i> sp. | a sedge | <i>Parlatoria proteus</i> | proteus scale | Keith Zugar | New Florida host record |
| <i>Cyperus virens</i> | green flatsedge | <i>Kelisia curvata</i> | delphacid planthopper | Solomon Hendrix, Susan Halbert | New Florida host record |
| <i>Cyperus virens</i> | green flatsedge | <i>Stenocranus lautus</i> | delphacid planthopper | Solomon Hendrix, Susan Halbert | New Florida host record |
| <i>Dactyloctenium aegyptium</i> | crowfoot grass, Durban crowfoot grass, Egyptian crowfoot grass, Egyptian crabgrass | <i>Tetraneura nigriabdominalis</i> | root aphid | Mark Zenoble | New Florida host record |
| <i>Dimocarpus longan</i> | longan, dragon eye | <i>Emmelina devriesi</i> | plume moth | Liliana Jerez | New Continental USA record |
| <i>Diospyros digyna</i> | black sapote | <i>Fiorinia phantasma</i> | phantasma scale | Brandon Di Lella, Diere Hodges, & K-9 | New Florida host record |
| <i>Diospyros virginiana</i> | persimmon | <i>Ceroplastes feltyi</i> | Felty's wax scale | Susan Halbert | New Florida host record, First in county |
| <i>Eucalyptus</i> sp. | eucalyptus | <i>Ctenarytaina spatulata</i> | rose gum psyllid | Logan Cutts, Dyrana Russell, Renee Shiska | Regulatory significant |
| <i>Ficus aurea</i> | Florida strangler fig | <i>Trioxa myresae</i> | <i>Ficus aurea</i> psyllid | Mark Zenoble | First in county |
| <i>Foeniculum vulgare</i> | fennel | <i>Cavariella aegopodii</i> | carrot aphid | Jakira Davis, Justin Anto | Regulatory significant |
| <i>Gardenia jasminoides</i> | gardenia | <i>Thrips hawaiiensis</i> | Hawaiian flower thrips | Leann West, Matthew Miller | First in county |
| Gramineae | grass | <i>Sminthurus bivittatus</i> | springtail | Justin Anto, Jakira Davis | First in county |
| <i>Inga</i> sp. | ice cream bean | <i>Euceroptylla russoi</i> | inga psyllid | Mark Zenoble | First in county |



| PLANT SPECIES | PLANT COMMON NAME | ARTHROPOD GENUS AND SPECIES | ARTHROPOD COMMON NAME | COLLECTOR | RECORD |
|--------------------------------|---|-----------------------------------|---------------------------------|---|-------------------------------|
| <i>Ixora</i> sp. | ixora | <i>Petrusa epilepsis</i> | seagrape flatid planthopper | Mark Zenoble, homeowner | New Florida host record |
| <i>Lactuca sativa</i> | butter leaf lettuce | <i>Empoasca mexara</i> | Mexican leafhopper (in alfalfa) | Logan Cutts | Regulatory significant |
| <i>Lactuca sativa</i> | green and red leaf lettuce | <i>Nasonovia ribisnigri</i> | currant-lettuce aphid | Chase Groninger | Regulatory significant |
| <i>Lactuca sativa</i> | romaine hearts | <i>Nasonovia ribisnigri</i> | currant-lettuce aphid | Cheryl Jones, Justin Anto, Jakira Davis, Renee Shiska, Twylah Morelli, Alexia Simos, Diere Hodges, Gregg Farina, Karianne Rivera, Julio Rodriguez, Sherry Steele, Logan Cutts, Dyrana Russell | Regulatory significant |
| <i>Lactuca sativa</i> | little gem lettuce | <i>Nasonovia ribisnigri</i> | currant-lettuce aphid | Renee Shiska, Logan Cutts | Regulatory significant |
| <i>Lactuca sativa</i> | red artisan lettuce | <i>Nasonovia ribisnigri</i> | currant-lettuce aphid | Renee Shiska, Logan Cutts | Regulatory significant |
| <i>Lactuca sativa</i> | sweet gem lettuce | <i>Nasonovia ribisnigri</i> | currant-lettuce aphid | Renee Shiska, Logan Cutts | Regulatory significant |
| <i>Lactuca sativa</i> | lettuce | <i>Nasonovia ribisnigri</i> | currant-lettuce aphid | Justin Anto, Jakira Davis | Regulatory significant |
| <i>Lactuca sativa</i> | green leaf lettuce | <i>Rhinacloa forticornis</i> | Western plant bug | Logan Cutts | Regulatory significant |
| <i>Lavandula</i> sp. | lavender | <i>Eucarazzia elegans</i> | Mediterranean mint aphid | Emily Safran | Regulatory significant |
| <i>Lavandula</i> sp. | lavender | <i>Eupteryx decemnotata</i> | Ligurian leafhopper | Emily Safran | Regulatory significant |
| <i>Leonotis nepetifolia</i> | Christmas candlestick, annual lion's tail | <i>Agonoscelis puberula</i> | African cluster bug | Sandor Kelly, Rachel Weavers | New Florida record |
| <i>Mangifera indica</i> | mango | <i>Acanalonia excavata</i> | acanaloniid planthopper | Matthew Miller | First in county |
| <i>Mangifera indica</i> | mango | <i>Aleuroplatus vinsonioides</i> | whitefly | Eduardo Solis | New Florida host record |
| <i>Mangifera indica</i> | mango | <i>Gyponana germari</i> | leafhopper | Jeanie Frechette, Teresa Ortelli | First in county |
| <i>Melaleuca quinquenervia</i> | melaleuca | <i>Psyllaephagus</i> sp. | psyllid parasite | Matthew Hentz | New Western Hemisphere record |
| <i>Mentha</i> sp. | mint | <i>Ovatus crataegarius</i> | mint aphid | Caroline Pride, Alexander Tasi | Regulatory significant |
| <i>Mentha</i> sp. | spearmint | <i>Ovatus crataegarius</i> | mint aphid | Chase Groninger | Regulatory significant |
| <i>Mentha</i> sp. | sweet mint | <i>Ovatus crataegarius</i> | mint aphid | Chase Groninger | Regulatory significant |
| <i>Mentha</i> sp. | peppermint | <i>Ovatus crataegarius</i> | mint aphid | Jeanie Frechette, Teresa Ortelli | Regulatory significant |
| <i>Mentha</i> sp. | peppermint | <i>Ovatus crataegarius</i> | mint aphid | Jeanie Frechette | Regulatory significant |
| <i>Mentha</i> sp. | spearmint and peppermint | <i>Ovatus crataegarius</i> | mint aphid | Kacie Gmitter | Regulatory significant |
| <i>Mentha</i> sp. | peppermint | <i>Ovatus crataegarius</i> | mint aphid | Jeanie Frechette | Regulatory significant |
| <i>Mentha</i> sp. | spearmint | <i>Ovatus crataegarius</i> | mint aphid | Matthew Brodie, Mary Graham | Regulatory significant |
| <i>Mentha</i> sp. | mint | <i>Ovatus crataegarius</i> | mint aphid | Jeanie Frechette | Regulatory significant |
| <i>Mentha</i> sp. | mint | <i>Ovatus crataegarius</i> | mint aphid | Jeanie Frechette | Regulatory significant |
| <i>Mentha</i> sp. | mint | <i>Ovatus crataegarius</i> | mint aphid | Victoria Benjamin | Regulatory significant |
| <i>Mentha</i> sp. | mint | <i>Seira brasiliiana</i> | springtail | Employee | First in county |
| <i>Mimusops elengi</i> | Spanish cherry, medlar, bulletwood | <i>Ceroplastes stellifer</i> | stellate scale | Mark Zenoble | New Florida host record |
| mixed vegetation | mixed vegetation | <i>Cumora furcata</i> | leafhopper | Solomon Hendrix | First in county |
| <i>Myrcianthes fragrans</i> | Simpson's stopper, nakedwood, twinberry | <i>Chilocampyla</i> sp. 1 | leafminer | Christopher Grinter, James Hayden | First in county |
| <i>Ocimum basilicum</i> | sweet basil | <i>Ovatus</i> sp. | mint aphid | Mary Graham | Regulatory significant |
| Orchidaceae | orchid | <i>Pseudaulacaspis coloisuvae</i> | armored scale | Mark Zenoble | Regulatory significant |
| Orchidaceae | orchid | <i>Pseudaulacaspis coloisuvae</i> | armored scale | Mark Zenoble | Regulatory significant |
| <i>Origanum vulgare</i> | oregano | <i>Myzus ornatus</i> | violet aphid | Victoria Benjamin, Alexander Tasi | Regulatory significant |
| <i>Origanum vulgare</i> | oregano | <i>Myzus ornatus</i> | violet aphid | Chase Groninger | Regulatory significant |



| PLANT SPECIES | PLANT COMMON NAME | ARTHROPOD GENUS AND SPECIES | ARTHROPOD COMMON NAME | COLLECTOR | RECORD |
|--------------------------------|--|-------------------------------------|--------------------------|---|-------------------------|
| <i>Origanum vulgare</i> | oregano | <i>Myzus ornatus</i> | violet aphid | Victoria Benjamin | Regulatory significant |
| <i>Persea americana</i> | avocado | <i>Dagbertus semipictus</i> | mirid plant bug | Mark Zenoble | New Florida host record |
| <i>Persea americana</i> | avocado | <i>Davidsonaspis aguacatae</i> | Davidson's avocado scale | Dyrana Russell, Jakira Davis, Cheryl Jones, Twylah Morelli, Leticia Miranda Caetano, Matthew Meise, Kiley Epperson, Vishal Negi, Shelby Kernahan, Claudia Paez, James Fulton, Logan Cutts | Regulatory significant |
| <i>Persea americana</i> | avocado | <i>Davidsonaspis aguacatae</i> | Davidson's avocado scale | Renee Shiska, Dyrana Russell, Logan Cutts | Regulatory significant |
| <i>Persea americana</i> | avocado | <i>Davidsonaspis aguacatae</i> | Davidson's avocado scale | Twylah Morelli | Regulatory significant |
| <i>Persea americana</i> | avocado | <i>Davidsonaspis aguacatae</i> | Davidson's avocado scale | Renee Shiska, Alexia Craig, Cheryl Jones, Twylah Morelli, Justin Anto, Jakira Davis, Dyrana Russell, Sherry Steele, Karianne Rivera, Gregg Farina, Brandon Di Lella, Logan Cutts | Regulatory significant |
| <i>Persea americana</i> | avocado | <i>Davidsonaspis aguacatae</i> | Davidson's avocado scale | Renee Shiska | Regulatory significant |
| <i>Persea americana</i> | avocado | <i>Paracarniella cubana</i> | mirid plant bug | Mark Zenoble | First in county |
| <i>Phyla stoechadifolia</i> | southern matchsticks, capeweed, marsh phyla, southern fogfruit | <i>Phenacoccus parvus</i> | lantana mealybug | Mark Zenoble | New Florida host record |
| <i>Pluchea carolinensis</i> | cure-for-all, cough bush, wild tobacco, sourbush | <i>Pseudophacopteron gumbolimbo</i> | gumbo limbo psyllid | Mark Zenoble | First in county |
| <i>Podocarpus macrophyllus</i> | Japanese yew | <i>Argyrotaenia amatana</i> | pondapple leafroller | Lyle Buss | New Florida host record |
| <i>Salvia</i> sp. | salvia | <i>Frankliniella salviae</i> | thrips | Catherine Long | First in county |
| <i>Salvia</i> sp. | salvia | <i>Frankliniella salviae</i> | thrips | Leann West, Matthew Miller | First in county |
| <i>Setaria parviflora</i> | yellow bristlegrass | <i>Balclutha lucida</i> | leafhopper | Mark Zenoble | New Florida host record |
| <i>Setaria parviflora</i> | yellow bristlegrass | <i>Oebalus ypsilongriseus</i> | rice stink bug | Mark Zenoble | New Florida host record |
| <i>Smilax</i> sp. | smilax | <i>Scirtothrips citri</i> | thrips | Nicole Benda, Alyssa Lucas | First in county |
| <i>Spinacia oleracea</i> | spinach | <i>Chlorochroa uhleri</i> | Uhler's stink bug | Caleb Poock | Regulatory significant |
| <i>Sporobolus indicus</i> | smut grass | <i>Paradoxococcus mcdanieli</i> | Johnson grass mealybug | Trudi Deuel | New Florida host record |
| <i>Sporobolus tenuissimus</i> | tropical dropseed | <i>Balclutha saltuella</i> | leafhopper | Mark Zenoble | New Florida host record |
| <i>Taraxacum</i> sp. | dandelion | <i>Nasonovia ribisnigri</i> | currant-lettuce aphid | Renee Shiska | Regulatory significant |
| <i>Terminalia buceras</i> | black olive tree, oxhorn bucida | <i>Enigmogramma basigera</i> | pink-washed looper moth | Liliana Jerez | First in county |
| <i>Thymus</i> sp. | thyme | <i>Ovatus crataegarius</i> | mint aphid | Matthew Brodie, Mary Graham | Regulatory significant |
| <i>Triadica sebifera</i> | Chinese tallow tree | <i>Aphis craccivora</i> | cowpea aphid | Maya Frere | New Florida host record |
| <i>Viburnum rufidulum</i> | rusty blackhaw | <i>Aphis illinoisensis</i> | grapevine aphid | Mark Rothschild | New Florida host record |
| <i>Wodyetia bifurcata</i> | foxtail palm | <i>Fiorinia phantasma</i> | phantasma scale | Ryan Czaplewski | First in county |
| | | <i>Atractotomus miniatus</i> | mirid plant bug | Joan Paravassini | First in county |
| | | <i>Chinaola quercicola</i> | microphysid bug | Robert Leahy, Krystal Ashman | First in county |
| | | <i>Chionomus dissipatus</i> | delphacid planthopper | Douglas Restom-Gaskill | First in county |
| | | <i>Chionomus herkos</i> | delphacid planthopper | Douglas Restom-Gaskill | First in county |
| | | <i>Emblethis</i> sp. | dirt-colored seed bug | Robert Shim | Regulatory significant |
| | | <i>Gyponana germari</i> | leafhopper | Monica Triana | First in county |



| PLANT SPECIES | PLANT COMMON NAME | ARTHROPOD GENUS AND SPECIES | ARTHROPOD COMMON NAME | COLLECTOR | RECORD |
|---------------|-------------------|-----------------------------------|---------------------------|-------------------|----------------------------|
| | | <i>Gyponana germari</i> | leafhopper | Daniel Wilwerding | First in county |
| | | <i>Halyomorpha halys</i> | brown marmorated stinkbug | Robert Shim | Regulatory significant |
| | | <i>Peritropis saldaeformis</i> | mirid plant bug | Sara Furgeson | First in county |
| | | <i>Philaenus spumarius</i> | meadow spittlebug | Robert Shim | Regulatory significant |
| | | <i>Pissonotus muii</i> | delphacid planthopper | Mark Zenoble | First in county |
| | | <i>Pseudobourletiella spinata</i> | springtail | Mark Zenoble | New Florida record |
| | | <i>Saccharosydne viridis</i> | delphacid planthopper | Monica Triana | New Continental USA record |
| | | <i>Stethoconus praefectus</i> | lace bug predator | Teresa Ortelli | First in county |
| | | <i>Xanthochilus saturnius</i> | Mediterranean seed bug | Robert Shim | Regulatory significant |



NEMATODOLOGY

Compiled by Renato N. Inserra, Ph.D., Sergio Álvarez Ortega, Sergei A. Subbotin, Janie Echols, Silvia Vau, Ph.D. and Janete A. Brito, 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

| | JANUARY - MARCH | 2024 - YEAR TO DATE |
|-------------------------------|-----------------|---------------------|
| Morphological Identifications | 2,670 | 2,670 |
| Molecular Identifications * | 63 | 63 |

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

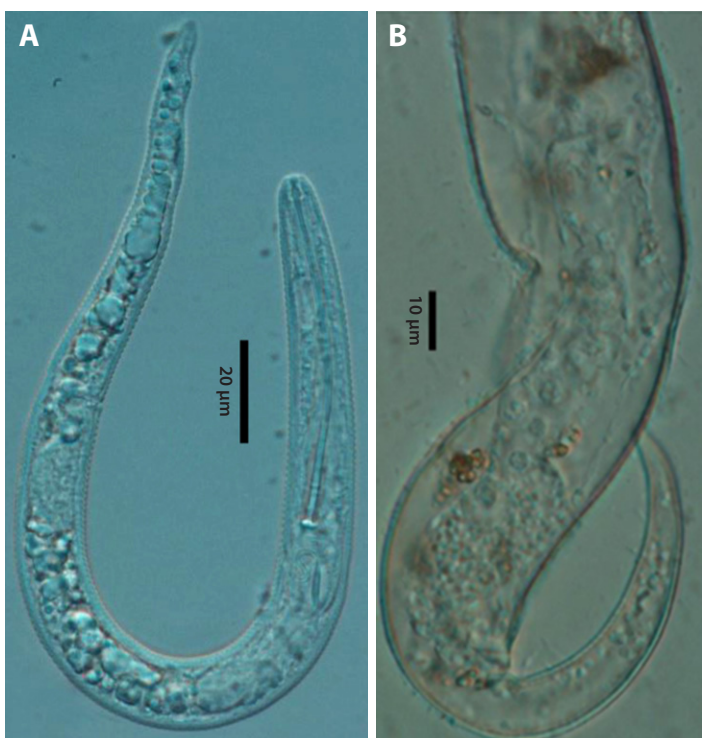
Nematode of Special Interest

1 *Paratylenchus roboris* Álvarez-Ortega, Subbotin, Wang, Stanley, Vau, Crow & Inserra, 2023 was parasitizing the roots of live oak (*Quercus virginiana* Mill.) in a commercial nursery in North Florida. **This is a new taxonomic discovery.** (Alachua County; N21-00211; Janie Echols; 24 February 2021.)

A long-term project, still in progress, on pin nematodes associated with cultivated and non-cultivated plants of Florida was initiated in 2019. Accurate identifications of the detected pin nematodes were provided by combining the findings of morphological analysis with those of the molecular character analysis of the examined species (Álvarez Ortega et al., 2023). The species identified included *Paratylenchus acti* Eroshenko, 1978, parasitizing broomsedge (*Andropogon virginicus* L.); *P. aquaticus* Merny, 1966, parasitizing St. Augustine grass, (*Stenotaphrum secundatum* (Walter) Kuntze); *P. minutus* Linford in Linford, Oliveira & Ishii, 1949, parasitizing daylily (*Hemerocallis* sp.) and *P. straeleni* (De Coninck, 1931) Oostenbrink, 1960 associated with live oak (*Quercus virginiana* Mill.). In this study, an additional population, extracted from the live oak rhizosphere was described as a new species and named *P. roboris*. This population behaved as a sedentary ectoparasite and consisted of vermiform and motile females, males, quiescent juveniles and sedentary swollen females. Vermiform females had a body curved ventrad and a stylet 65 µm long. These females were extracted from soil with males and juveniles. Obese and egg-laying females, attached permanently to the roots by the stylet, were dislodged using water sprays. The anterior portion of the body of the obese females was lemon shaped, and the posterior portion after the vulva was narrow and projecting like an opened sickle. Third and fourth stage juveniles were coiled, non-feeding and without a discernable stylet. These resistant stages



1a - *Quercus virginiana* Mill., live oak tree.
Photo by Bob Upcavage, [Atlas of Florida Plants](#)



1b - *Paratylenchus roboris*. A. Entire body of vermiform female; B. Posterior body of obese female. Note the terminal portion of the body projecting like an open sickle.
Photo by Silvia Vau, FDACS-DPI



persisted in the soil before molting into adults under favorable environmental conditions. The impact of the infestations of this pin nematode on oak growth has not been assessed. The discovery of this species enriches our knowledge of pin nematode biodiversity in Florida landscapes.

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Álvarez-Ortega, S., Subbotin, S.A., Wang, K.-H., Stanley, J.D., Vau, S., Crow, W.T. and Inserra, R.N. (2023). Morphological and molecular diversity among pin nematodes of the genus *Paratylenchus* (Nematoda: Paratylenchidae) from Florida and other localities and molecular phylogeny of the genus. *Plants* 12: 2770. <https://doi.org/10.3390/plants12152770>

SAMPLES FOR MORPHOLOGICAL ANALYSIS

Certifications and Regulatory Purposes

| | JANUARY - MARCH | 2024 - YEAR TO DATE |
|---|-----------------|---------------------|
| Multistate Certification involving California | 974 | 974 |
| Multistate Certification excluding California Certification | 1,580 | 1,580 |
| Citrus Certification (Citrus Nursery Certification, Site or Pit Approval) | 32 | 32 |
| Total | 2,586 | 2,586 |

Other Purposes

| | JANUARY - MARCH | 2024 - YEAR TO DATE |
|----------------------------------|-----------------|---------------------|
| Identification (other organisms) | 0 | 0 |
| Interdiction Station (AIS) | 24 | 24 |
| Plant Problems | 18 | 18 |
| Survey | 42 | 42 |
| Total | 84 | 84 |

SAMPLES FOR MOLECULAR ANALYSIS

| | JANUARY - MARCH | 2024 - YEAR TO DATE |
|---------------------|-----------------|---------------------|
| Regulatory Purposes | 15 | 15 |
| Other Purposes | 0 | 0 |
| Identifications | 48 | 48 |
| Surveys | 0 | 0 |
| Total | 63 | 63 |





PLANT PATHOLOGY

Compiled by Jodi Hansen, M.S.; Hector Urbina, Ph.D.; Kishore Dey, Ph.D.;
Patricia Soria, M.S.; Claudia Paez, Ph.D. and Vishal Negi, Ph.D.

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 *Pleurostoma richardsiae* (Nannf.) Réblová & Jaklitsch (Pleurostomataceae, Sordariomycetes), a new host record, was found on *Olea europaea* L. (Oleaceae, Lamiales) at a nursery in Volusia County. The affected plant exhibited the following symptoms: wood discoloration, canker on the trunk and decline of canopy health. *Pleurostoma richardsiae* is a fungal pathogen, previously identified as a causal agent of trunk and branch canker in olives trees, reported in California and several countries including Brazil, Croatia and Italy (Lawrence et al., 2021; Canale et al., 2019; Carlucci et al., 2013; Ivic et al., 2018). Mechanized planting and pruning may significantly influence the emergence and epidemiology of this fungal disease (Lawrence et al., 2021). Under favorable environmental conditions, these practices create wounds facilitating the entry of fungal pathogens. This is the first time *Pleurostoma richardsiae* has been isolated from canker lesions on *Olea europaea* in Florida. (Volusia County; 02082024-1091; Ray Jarrett and Kenneth Ellis; 11 March 2024.)

REFERENCES

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1a - *Pleurostoma richardsiae* canker symptoms on *Olea europaea*.
Photo by Kenneth Ellis, FDACS-DPI



1b - *Pleurostoma richardsiae* wood discoloration on *Olea europaea*.
Photo by Claudia Paez, FDACS-DPI



QUARTERLY ACTIVITY REPORT

| | JANUARY - MARCH | 2024 - YEAR TO DATE |
|---|-----------------|---------------------|
| Citrus black spot | 248 | 248 |
| Citrus canker | 114 | 114 |
| Citrus greening / HLB | 19 | 19 |
| HLB certification for out-of-state shipping | 1,096 | 1,096 |
| Import inspections | 7 | 7 |
| Interdictions | 25 | 25 |
| Palm phytoplasma | 4 | 4 |
| Pathology, General | 1,076 | 1,076 |
| Soil | 31 | 31 |
| Totals | 2,620 | 2,620 |



1c - *Pleurostoma richardsiae* culture on APDA (Acidified Potato Dextrose Agar).
Photo by Claudia Paez, FDACS-DPI

🔍 PLANT PATHOLOGY IDENTIFICATION TABLE

The following table provides information about samples identified between January-March 2024. 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 NUMBER | COUNTY | COLLECTOR | DATE | NEW RECORDS |
|----------------------------|-------------------|--------------------------------|-----------------|---------------|-------------------------|---------|----------------------------|---------|-------------|
| <i>Farfugium japonicum</i> | leopard plant | <i>Alternaria cinerariae</i> | leaf spot | nursery | P0471-02162024-01416 | Alachua | Paola Ramos Perez | 2/16/24 | state |
| <i>Olea europaea</i> | olive | <i>Xenoacremonium falcatum</i> | wood decomposer | nursery | P0362-02-02082024-01089 | Volusia | Kenneth Ellis, Ray Jarrett | 2/6/24 | state |
| <i>Olea europaea</i> | olive | <i>Pleurostoma richardsiae</i> | canker | nursery | PO363-02082024-01091 | Volusia | Kenneth Ellis, Ray Jarrett | 2/6/24 | host |





FROM THE EDITOR

By Patti Anderson

Lost and Found: one endangered plant

***Sabal miamiensis* Zona** is a palm species found only in pinelands of Miami-Dade County from the time it was first described as a species and given a name, it has been at risk of extinction. Since the species has not been collected from the wild in over 30 years, it was presumed to be lost, except for individuals protected for conservation in botanical gardens and the nursery trade. This year, a new discovery of this palm was published. A small population in the wild appeared healthy and included plants of varying ages, offering hope for the survival of this rare species, although habitat loss to development in South Florida limits possible future expansion of this lone population.

This palm, found in South Florida pinelands on limestone soil, was thought to be *S. etonia* (scrub palmetto) or a hybrid of *S. etonia* and *S. palmetto* (cabbage palm), but it occurs outside the range of *S. etonia* (scrub lands found on the Lake Wales and Atlantic Coast Ridges), making hybridization less likely. *Sabal miamiensis* differs from *S. palmetto*, which does grow in South Florida, by having an underground stem and much larger fruit than either of the two other species. Although *S. etonia* also has an underground stem, the Miami palmetto has flowers in clusters (inflorescences) branching three times, whereas the scrub palmetto inflorescences branch only twice. Of course, plant morphology, habitats and distributions can change over long time periods making an ancient hybridization event possible; however, the isolation of this species and the consistency of its characteristics indicate it is a well-defined species and deserves protection. Because this species was thought to be extinct before it could be listed as endangered, it has never been listed as a regulated plant by the state. To remedy this neglect, the Endangered Plant Advisory Council will include consideration of this species for listing as endangered at its next meeting in October 2024. (Griffith, et al., 2021; Tucker, et al., 2024; Zona, 1985.)

REFERENCES

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1a - *Sabal miamiensis*, Miami palmetto, herbarium specimen
Photo from Atlas of Florida Plants



1b - *Sabal miamiensis*, Miami palmetto, leaf and fruit
Photo from wikipedia





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