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TRI-OLOGY

A PUBLICATION FROM THE DIVISION OF PLANT INDUSTRY, BUREAU OF ENTOMOLOGY, NEMATOTOLOGY, 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



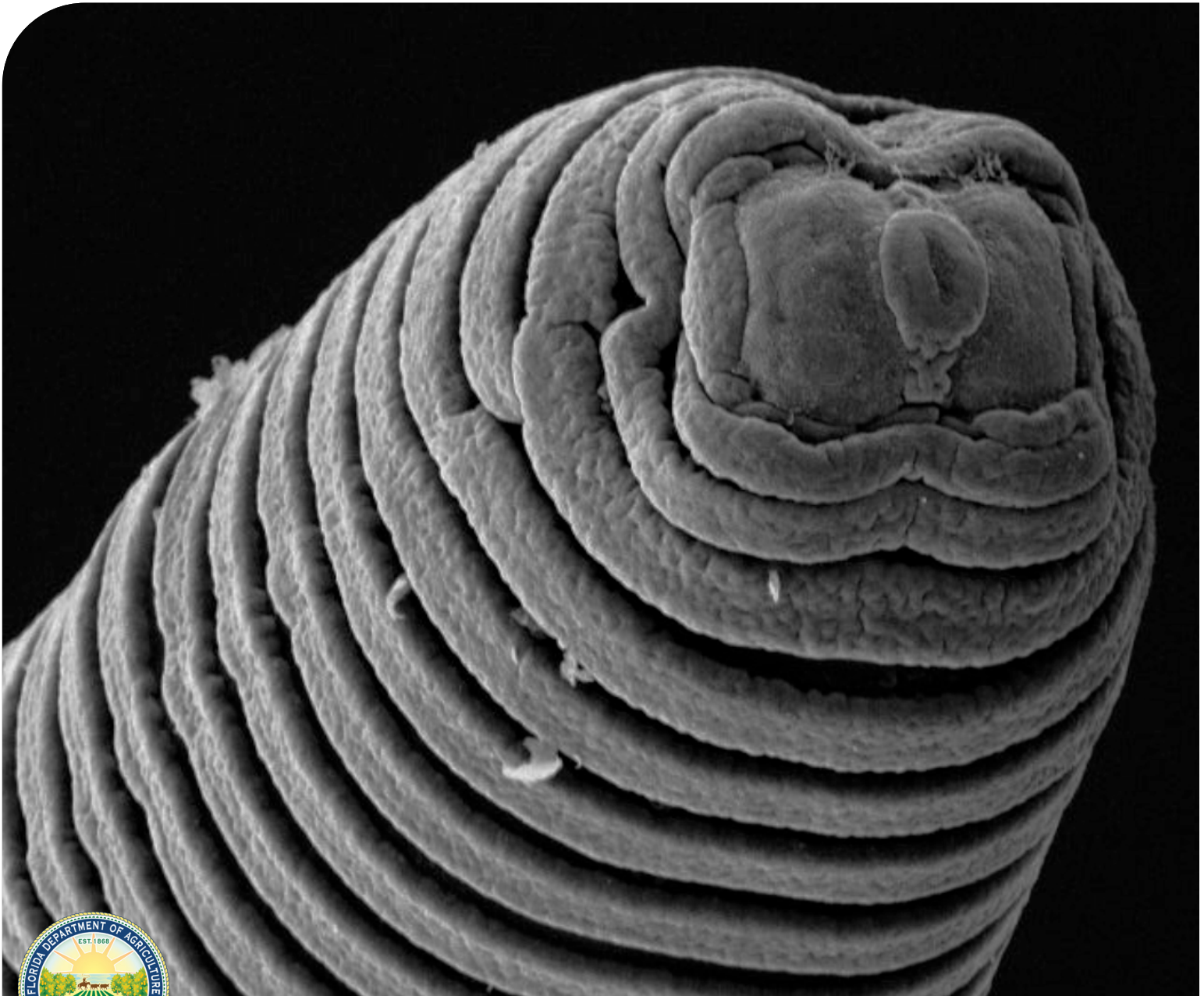
NEMATOTOLOGY

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



Zephyranthes atamasca.
Photo by Shirley Denton, Atlas of Florida Plants

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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Copies of TRI-LOGY are kept on the FDACS website for two years. To obtain older copies, contact the FDACS-DPI Library at (352) 395-4722 or PlantIndustry@FDACS.gov.

ACKNOWLEDGEMENTS

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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

Patti J. Anderson, Ph.D.

Managing Editor

Botanist, Division of Plant Industry

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Hemicycliophora silvestris sp. n.
Photo by Sergio Álvarez-Ortega, Universidad Rey Juan Carlos, Madrid



HIGHLIGHTS



1 *Tillandsia balbisiana* Schultes f. (southern needleleaf, inflated wild pine), is in a large and popular genus of epiphytic herbs commonly referred to as “airplants.” The plants are perennial, epiphytic herbs growing alone or in clusters with purple flowers emerging from the red or green floral bracts creating a striking and beautiful contrast of colors.

2 *Pseudaulacaspis rubra* (Green), an armored scale, a new Western Hemisphere record. Specimens were collected from the stems of mature mango trees (*Mangifera indica* L.) in suburban Miami.

3 *Hemicycliophora silvestris* Álvarez-Ortega et al., 2025, a new sheath nematode species, was detected in a regulatory soil and root sample collected from *Phoenix sylvestris*, the wild date palm, in a commercial nursery in North Florida. **This is a new taxonomic discovery.**

4 *Erysiphe* (= *Microsphaera*) *abbreviata* (Peck) U. Braun & S. Takamsu (Helotiales, Erysiphaceae) a new Florida State record, was found on *Quercus laevis* Walt. (turkey oak) at a residential site in Volusia County, Florida, on a single tree. The sample exhibited white, powdery patches on either side of the leaves. These patches can inhibit normal shoot and leaf development.



1 - *Tillandsia balbisiana*, southern needleleaf, inflorescence.
Photo by Ken Marks, [Atlas of Florida Plants](#)



2 - *Pseudaulacaspis rubra*, adult females on *Mangifera indica* in Miami, Florida.
Photo by Erin Powell, FDACS-DPI



3 - *Hemicycliophora silvestris*, a new sheath nematode species, entire body.
Photo by Silvia Vau, FDACS-DPI



4 - *Quercus laevis*, turkey oak, healthy leaves with acorns.
Photo by Keith Bradley, [Atlas of Florida Plants](#)





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.

QUARTERLY ACTIVITY REPORT

	JANUARY - MARCH	2025 - YEAR TO DATE
Samples Submitted by Other DPI Sections	1,052	1,052
Samples Submitted for Botanical Identification Only	248	248
Total Samples Submitted	1,300	1,300
Specimens Added to the Herbarium	207	207



1a - *Taraxacum officinale*, common dandelion, flower and leaves in basal rosette.
Photo from Shutterstock

Some of the samples submitted recently are described below.

1 *Taraxacum officinale* Weber ex F. H. Wiggers (common dandelion), from a genus native to temperate regions with about 60 species and over 2,000 microspecies (recognizable variants not considered to be distinct species) in the plant family Compositae/Asteraceae. This weedy annual or perennial is native to Eurasia, but it has become naturalized (growing on its own without cultivation) on every continent except Antarctica. Dandelions can be found growing along roadsides and in lawns, pastures, sidewalks and other disturbed areas. In Florida, it has been documented in 41 counties, mainly in the northern two-thirds of the state along with a few scattered counties in South Florida. This sample represents a new Broward County record.

Very short, underground stems develop a “basal rosette” composed of a spiral of leaves, 5-15 cm long, low to the ground. Scapes (hollow leafless flower stalks growing from the root) to 0.5 m tall, exude milky latex when injured. Leaves are narrow, lance-shaped, oblong or obovate, 5-40 cm long, with margins deeply divided into many acute lobes or large teeth. Some leaves have no petiole (leaf stalk) and are sessile. When the leaves have a petiole, it can sometimes have a narrow wing (a thin band of tissue) along its length. Numerous (50-150) flowers, each tubular (ligulate) and almost always yellow, are held in a capitulum (or “head,” typical of this family). The dry fruits are attached to a pappus of numerous, white bristles, 4-8 mm long, with tiny barbs along the margins. These weedy pests of home landscapes were likely introduced by Europeans as a source of early spring salad greens, a medicine for several ailments and a base for making wine. (Broward County;



1b - *Taraxacum officinale*, common dandelion, dispersing seeds.
Photo from Shutterstock



02132025-01291; Keith Zugar; 7 February 2025.) (Mabberley, 2017; Spellenberg and Zucher, 2019; Wunderlin and Hansen, 2011; Wunderlin et al., 2020; <https://www.fs.usda.gov/database/feis/plants/forb/taroff/all.html> [Accessed 31 March 2025].)

2 *Tillandsia balbisiana* Schultes f. (southern needleleaf, inflated wild pine), from a genus of about 650 species of southern North America and South America, in the plant family Bromeliaceae. The genus *Tillandsia* was described by Linnaeus in 1754 and named for the Swedish botanist Elias Tillandz (1640-1693). It is a large and popular genus of epiphytic herbs commonly referred to as “airplants.” The plants were given this name because they grow on the branches or trunks of trees, not in the ground, and obtain nutrients and water from the rain and wind, not soil. Airplants often grow in plant communities containing orchids, ferns and other epiphytes. Their uncommon habit, morphology and ecology make this genus popular among plant enthusiasts, collectors and gardeners. *Tillandsia balbisiana* is native from peninsular Florida southward to the West Indies, Mexico, Central America and South America where it grows on trees in hammocks, swamps and scrub. The plants are perennial, epiphytic herbs, growing alone or in clusters, and have short stems with numerous reflexed, twisted, linear, spirally arranged, gray leaves. The bases of the leaves are conspicuously inflated, forming a small pseudobulb, with the leaf tips narrowing. The inflorescence emerges from the center of the plant on an erect scape with compressed, bipinnate, linear spikes at the apex. Each spike contains 5-30 tubular, purple flowers enclosed behind imbricate, distichously arranged, green to red floral bracts. The purple flowers emerging from the red or green floral bracts is a striking and beautiful contrast of colors. Each flower has six exerted stamens and a superior ovary with an exerted stigma. The fruit is a dehiscent, cylindric capsule opening to expose numerous seeds with a plumose, white, basal appendage, apparently helping the seeds disperse in the wind. This species is distinguished by its pseudobulbous base and long, reflexed, twisted leaves. *Tillandsia balbisiana* was documented for the first time in Brevard County this quarter. (Brevard County; LIST 02172025-01419; Chase Groninger; 17 February 2025.) (Luther and Brown, 2000; Weakley and Southeastern Flora Team, 2025; Wunderlin and Hansen, 2011).

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- Wunderlin, R.P., Hansen, B.F. and Franck, A.R. (2020).** *Flora of Florida, volume VII: dicotyledons, Orobanchaceae through Asteraceae*. University Press of Florida. Gainesville, Florida.



2 - *Tillandsia balbisiana*, southern needleleaf
Photo by John R. Park, [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
Christina Huetcher		2743	4/1/2024	<i>Brassica juncea</i>	Pasco
Cynthia Blattenberger		2787	4/1/2024	<i>Kalanchoe x houghtonii</i>	Hernando
Logan Cutts		2835	4/1/2024	<i>Rhododendron canescens</i>	Gilchrist
Logan Cutts		2838	4/1/2024	<i>Wisteria sinensis</i>	Baker
Logan Cutts		2841	4/1/2024	<i>Lyonia lucida</i>	Suwannee
Logan Cutts		2845	4/1/2024	<i>Zephyranthes atamasca</i> var. <i>atamasca</i>	Columbia
Logan Cutts		2848	4/1/2024	<i>Bignonia capreolata</i>	Gilchrist
Jennifer Hesse		2985	4/4/2024	<i>Wisteria sinensis</i>	Flagler
Jennifer Hesse		2986	4/4/2024	<i>Ruellia blechum</i>	Flagler
Jennifer Hesse	Randi Shreve	2999	4/4/2024	<i>Scutellaria racemosa</i>	Flagler
William Hangen		2940	4/4/2024	<i>Ruellia blechum</i>	Sumter
John Zito		3039	4/8/2024	<i>Broussonetia papyrifera</i>	Palm Beach
Mark Zenoble		3240	4/14/2024	<i>Bothriochloa bladhii</i>	Broward
Vaden Edmondson		3281	4/15/2024	<i>Tradescantia fluminensis</i>	Pasco
Ricardo Tordi		3291	4/15/2024	<i>Cyperus involucratus</i>	Bay
Teresa Ortelli	Jeanie Frechette	3691	4/25/2024	<i>Ruellia blechum</i>	St. Lucie



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	2025 - YEAR TO DATE
Samples Submitted	1,211	1,211
Lots Identified	2,105	2,105

1 *Pseudaulacaspis rubra* (Green), an armored scale, a new Western Hemisphere record. Specimens were collected from the stems of mature mango trees (*Mangifera indica* L.) in suburban Miami. This species was previously known from only India and Sri Lanka. Most specimens were parasitized upon collection, and it is unknown whether this species has pest potential in Florida. It joins three other species of *Pseudaulacaspis* presently known in Florida. The external morphology of these species is all very similar, and specimens should be slide-mounted to confirm identification. (Miami-Dade County; E0139-01152025-00305; Stephanie Paz; 15 January 2025.) (Dr. Erin C. Powell.)



1 - *Pseudaulacaspis rubra*, adult females on *Mangifera indica* in Miami, Florida.
Photo by Erin Powell, FDACS-DPI

2 *Tinea murariella* Staudinger, a case-making clothes moth, a new Continental USA record. Two moths were collected in a residence on a commercial glue trap for clothes moths. *Tinea murariella* Staudinger is a member of the *Tinea pellionella* complex of case-making clothes moths. It was described from Europe and has also been recorded in North Africa, South America and Australia. This moth is a synanthropic pest of woolen fabric, hides, hooves, insect specimens and similar matter. *Tinea murariella* is very similar to *T. translucens* Meyrick, the most abundant member of this group in Florida. Both species thrive in humidity, their genitalic differences require high magnification to observe and COI (cytochrome c oxidase I) should be sequenced. The COI from these specimens matched specimens of *T. murariella* from Malta, Portugal and Western Australia. Another lot submitted from Marion County in 2008 might be the same species, but DNA could not be amplified from the old specimens. To echo Robinson (1979), "[t]his species may be a commoner and more frequently carried pest than is presently realized." (St. Johns County; E-0245-01-01272025-00543; Jennifer Leggett, Lindsey Pest Services; 24 January 2025.) (Dr. James E. Hayden and Matthew R. Moore.)



2 - *Tinea murariella*, scale in mm.
Photo by Sidney Bennett, FDACS-DPI



3 *Paraclemensia acerifoliella* (Fitch), maple leafcutter moth, a new Florida State record. Two specimens were collected at light on March 12 and 19, 2025, on the edge of a natural area in Gainesville. Dissection and the DNA barcode indicate the specimens are *Paraclemensia acerifoliella* (Fitch) (Incurvariidae), a new Florida State record for the family, genus and species. The population is probably native to Florida but is rarely collected. Another specimen, collected in 1990 from the Richloam Wildlife Management Area, was found in the FSCA, and Mr. Belmont had two additional collections of this species in 2023. These specimens are somewhat divergent with a COI distance of about 1% from the population in northern North America. In addition, the scales of the head are black and dark brown rather than orange, perhaps meriting subspecific recognition. The moths are less abundant in southern states, but more DNA samples are needed from the southern populations to determine if the small genetic distance holds up. *Paraclemensia acerifoliella* is a pest of sugar maple (*Acer saccharum*) in the northern United States and Canada, and sometimes also attacks beech (*Fagus* sp.), elm (*Ulmus* sp.) and hornbeam (*Carpinus* sp.). The moths emerge for a week in early March to mate and lay eggs. The young caterpillars mine leaves in the spring; in summer, the older larvae cut mobile, protective cases out of the leaves, from which they feed by skeletonizing the leaves. The larvae have not yet been observed locally, but similar behavior and phenology are predicted. (Alachua County; E1145-01-30212025-02553; Robert Belmont, FSCA Research Associate; 19 March 2025.) (Dr. James E. Hayden and Matthew R. Moore.)



3 - *Paraclemensia acerifoliella*, scale in mm.
Photo by James Hayden, FDACS-DPI

REFERENCE

Robinson, G.S. (1979). Clothes-moths of the *Tinea pellionella* complex: a revision of the world's species (Lepidoptera: Tineidae). *Bulletin of the British Museum (Natural History)* 38: 57-128.



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>Achyranthes aspera</i> var. <i>pubescens</i>	devil's horsewhip	<i>Phenacoccus parvus</i>	a mealybug	Chase Groninger	New Florida host Record
<i>Bambusa multiplex</i>	hedge bamboo	<i>Bambusaspis minuta</i>	minute bamboo pit scale	Teresa Ortelli	First in County, Regulatory significance
<i>Bambusa multiplex</i>	hedge bamboo	<i>Bambusaspis minuta</i>	minute bamboo pit scale	Chase Groninger	First in County
<i>Brassica rapa</i>	bok choy	<i>Neotriozella pyrifolii</i>	a psyllid	Jakira Davis, Justin Anto	Regulatory significance
<i>Capsicum annuum</i>	sweet pepper	<i>Rhinacloa forticornis</i>	western plant bug	Jakira Davis, Justin Anto	Regulatory significance
<i>Daucus carota</i>	carrot	<i>Caviarella aegopodii</i>	carrot aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Eriobotrya japonica</i>	loquat	<i>Elaphria agrotina</i>	a noctuid moth	Robert Longtin	First in County
<i>Glandularia x hybrida</i>	garden verbena	<i>Phenacoccus miruku</i>	a mealybug	Catherine Long	New Florida host record
Gramineae	a grass	<i>Baldulus tripsaci</i>	eastern gammagrass leafhopper	Jeanie Frechette, Teresa Ortelli	First in County
<i>Lactuca sativa</i>	lettuce	<i>Abstrusomyzus phloxae</i>	an aphid	Jakira Davis, Justin Anto	New Florida host record
<i>Lactuca sativa</i>	Romaine lettuce	<i>Caviarella aegopodii</i>	carrot aphid	Logan Cutts	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Circulifer tenellus</i>	beet leafhopper	Jakira Davis, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Megalopsallus sparsus</i>	a plant bug	Jakira Davis, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	Romaine lettuce	<i>Megalopsallus sparsus</i>	a plant bug	Renee Shiska	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Lactuca sativa</i>	lettuce	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Lyonia fruticosa</i>	coastalplain staggerbush	<i>Aphis aurantii</i>	black citrus aphid	Samuel Smith, Caroline Pride	New Florida host record
<i>Mangifera indica</i>	mango	<i>Pseudaulacaspis rubra</i>	an armored scale	Stephanie Paz	New Western Hemisphere record
<i>Mentha</i> sp.	mint	<i>Frankliniella auripes</i>		Renee Shiska, Jakira Davis, Justin Anto, Dyrana Russell, Logan Cutts	Regulatory significance
<i>Mentha</i> sp.	mint	<i>Ovatus crataegarius</i>	a mint aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Mentha</i> sp.	mint	<i>Ovatus crataegarius</i>	a mint aphid	Renee Shiska, Jakira Davis, Justin Anto, Dyrana Russell, Logan Cutts	Regulatory significance
Orchidaceae	an orchid	<i>Dichromothrips corbeti</i>	vanda thrips	Caroline Pride	First in County
<i>Physalis philadelphica</i>	tomatillo	<i>Melanoliarius</i> sp.	a cixiid planthopper	Jakira Davis, Justin Anto	Regulatory significance
<i>Quercus nigra</i>	water oak	<i>Diphyllaphis microtrema</i>	a woolly oak aphid	Felipe Soto-Adames	New Florida host record
<i>Rubus</i> sp.		<i>Amphorophora</i> sp.	an aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Rubus</i> sp.	raspberry	<i>Amphorophora</i> sp.	an aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Rubus</i> sp.	blackberry	<i>Amphorophora</i> sp.	an aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Rubus</i> sp.	blackberry	<i>Aphis ruborum</i>	permanent blackberry aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Rubus</i> sp.	raspberry	<i>Nasonovia ribisnigri</i>	currant-lettuce aphid	Jakira Davis, Justin Anto	Regulatory significance
<i>Solanum melongena</i>	eggplant	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Scott Weihman	First in County



PLANT SPECIES	PLANT COMMON NAME	ARTHROPOD GENUS AND SPECIES	ARTHROPOD COMMON NAME	COLLECTOR	RECORD
<i>Spartina</i> sp.	spartina	<i>Spartidelphax detectus</i>	a delphacid planthopper	Mark Zenoble	First in County
<i>Spermacoce verticillata</i>	shrubby false buttonweed, whitehead broom, baton blanco	<i>Acanthococcus mesotrichus</i>	middle seta eriococcin	Mark Zenoble	New Florida host record, First in County, Regulatory significance
		<i>Acizzia convector</i>	earpod acacia psyllid	Scott Weihman	First in County
		<i>Americodema nigrolineatum</i>	a plant bug	Scott Weihman	First in County
		<i>Americodema nigrolineatum</i>	a plant bug	Douglas Restom-Gaskill	First in County
		<i>Americodema nigrolineatum</i>	a plant bug	Douglas Restom-Gaskill	First in County
	near tomato and sunflower	<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Julia Laur	First in County
		<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Joseph Hanus, James Bouie	First in County
		<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Julia Laur	First in County
		<i>Amrasca biguttula</i>	two-spot cotton leafhopper	Carly Dodgen	First in County
		<i>Atractotomus miniatus</i>	a mirid bug	Scott Weihman	First in County
		<i>Atractotomus miniatus</i>	a mirid bug	Robert Leahy, Krystal Ashman	First in County
		<i>Atractotomus miniatus</i>	a mirid bug	Ethan Kelly	First in County
		<i>Atractotomus miniatus</i>	a mirid bug	Douglas Restom-Gaskill	First in County
		<i>Atractotomus miniatus</i>	a mirid bug	Robert Leahy, Krystal Ashman	First in County
		<i>Atractotomus miniatus</i>	a mirid bug	Mona Lisa Payne	First in County
		<i>Barce fraterna</i>	a thread-legged assassin bug	Douglas Restom-Gaskill	First in County
		<i>Besciva</i> sp. 2	south Florida <i>Besciva</i>	Mary Yong Cong	First in County
		<i>Blastopsylla occidentalis</i>	a eucalyptus psyllid	Douglas Restom-Gaskill	First in County
		<i>Ceratocapsus pumilus</i>	a plant bug	Jakira Davis, Justin Anto	First in County
		<i>Chionomus dissipatus</i>	a delphacid planthopper	Jeanie Frechette, Caroline Pride	First in County
		<i>Chlamydatus suavis</i>	a plant bug	Logan Cutts, Dyrana Russell	First in County
		<i>Corticeus thoracicus</i>	a tenebrionid beetle	Scott Weihman	First in County
		<i>Corticoris signatus</i>	a plant bug	Sara Furegeson	First in County
		<i>Corticoris signatus</i>	a plant bug	Scott Weihman	First in County
		<i>Corticoris signatus</i>	a plant bug	Scott Weihman	First in County
		<i>Corticoris signatus</i>	a plant bug	Robert Leahy	First in County
		<i>Dagbertus fasciatus</i>	a plant bug	Michael Gilson	First in County
		<i>Deraeocoris sayi</i>	a mirid bug	Scott Weihman	First in County
		<i>Diolcus chrysorrhoeus</i>	a shield-backed bug	Joseph Hanus, James Bouie	First in County
		<i>Diphleps unica</i>	a jumping tree bug	Robert Leahy, Krystal Ashman	First in County
		<i>Diphleps unica</i>	a jumping tree bug	Bobby Cahal	First in County
		<i>Diphleps unica</i>	a jumping tree bug	Scott Weihman	First in County
		<i>Empoasca bicuspidata</i>	a leafhopper	Monica Triana	First in County
		<i>Eurychiloptera luridula</i>	a mirid plant bug	Robert Leahy, Krystal Ashman	First in County
		<i>Eurychiloptera luridula</i>	a plant bug	Diane McColl	First in County
		<i>Eurychiloptera luridula</i>	a plant bug	Scott Weihman	First in County
		<i>Eustictus grossus</i>	a plant bug	Twylah Morelli	First in County
		<i>Eustictus grossus</i>	a plant bug	Angi Hutcherson	First in County
		<i>Gonoporum mirificus</i>	a plant bug	Douglas Restom-Gaskill	First in County
		<i>Gonoporum mirificus</i>	a plant bug	Scott Weihman	First in County
		<i>Gonoporum mirificus</i>	a plant bug	Michael Gilson	First in County



PLANT SPECIES	PLANT COMMON NAME	ARTHROPOD GENUS AND SPECIES	ARTHROPOD COMMON NAME	COLLECTOR	RECORD
		<i>Hamatophylus guttulosus</i>	live oak mirid	Krystal Ashman, Robert Leahy	First in County
		<i>Hamatophylus guttulosus</i>	live oak mirid	Diane McColl	First in County
		<i>Hamatophylus guttulosus</i>	live oak mirid	Douglas Restom-Gaskill	First in County
		<i>Haplaxius neopusillus</i>	a cixiid planthopper	Monica Triana	First in County
		<i>Heteropsylla huasachae</i>	a psyllid	Douglas Restom-Gaskill	First in County
		<i>Hoplistoscelis sordidus</i>	a damsel bug	Monica Triana	First in County
		<i>Hylocurus flaglerensis</i>	a bark beetle	Logan Cutts, Dyrana Russell	First in County
		<i>Idiocerus taxodium</i>	a leafhopper	Joseph Hanus, James Bouie	First in County
		<i>Idona minuenda</i>	avocado leafhopper	Scott Weihman	First in County
		<i>Illinigina illinoiensis</i>	a leafhopper	Joseph Hanus, James Bouie	First in County
		<i>Liogenys suturalis</i>	a scarab beetle	David Ortiz, Chantelle Vilorio	Regulatory significance
		<i>Microtechnites bractatus</i>	garden fleahopper	Robert Leahy	First in County
		<i>Microtechnites bractatus</i>	garden fleahopper	Jakira Davis	First in County
		<i>Mitropsylla cubana</i>	a psyllid	Julia Laur	First in County
		<i>Muellerianella laminalis</i>	a delphacid planthopper	Mary Yong Cong	First in County
		<i>Myiommia cixiiforme</i>	a plant bug	Robert Leahy	First in County
		<i>Myiommia cixiiforme</i>	a plant bug	Scott Weihman	First in County
		<i>Neomegamelanus elongatus</i>	a delphacid planthopper	Julia Laur	First in County
		<i>Nysius tenellus</i>	a seed bug	Douglas Restom-Gaskill	First in County
		<i>Oncocephalus geniculatus</i>	an assassin bug	Monica Triana	First in County
		<i>Paraclemensia acerifoliella</i>	maple leaf cutter moth	James Hayden, Robert A. Belmont	New Florida record
		<i>Pendarus avicephalus</i>	a leafhopper	Monica Triana	First in County
		<i>Peritropis saldaeformis</i>	a plant bug	Krystal Ashman, Robert Leahy	First in County
		<i>Peritropis saldaeformis</i>	a plant bug	Robert Leahy	First in County
		<i>Pilophorus heidemanni</i>	a plant bug	Douglas Restom-Gaskill	First in County
		<i>Polymerus basalis</i>	a mirid plant bug	David Miller	First in County
		<i>Proba distant</i>	a plant bug	Mona Lisa Payne	First in County
		<i>Pseudoferrisia floridana</i>	a mealybug	Mark Zenoble	First in County
		<i>Pseudopityophthorus pruinosus</i>	a bark beetle	Scott Weihman	First in County
		<i>Pycnoderes vanduzeei</i>	commelina bug	Douglas Restom-Gaskill	First in County
		<i>Semium hirtum</i>	a plant bug	Michael Gilson	First in County
		<i>Spanagonicus albofasciatus</i>	plant bug	Scott Weihman	First in County
		<i>Spodoptera pulchella</i>	Caribbean armyworm	David St. John, Jr.	First in County
		<i>Taedia heidemanni</i>	a plant bug	Robert Leahy	First in County
		<i>Taylorilygus apicalis</i>	a mirid plant bug	Robert Leahy	First in County
		<i>Taylorilygus apicalis</i>	a mirid plant bug	Michael Gilson	First in County
		<i>Tinea murariella</i>	wall clothes moth	Jennifer Leggett	New Continental USA record
		<i>Trichosiphonaphis polygonifoliae</i>	a <i>Persicaria</i> aphid; Asian honeysuckle-knotgrass aphid	Julia Laur	First in County
		<i>Trypanalebra maculata</i>	a leafhopper	Jeanie Frechette, Caroline Pride	First in County
		<i>Tytthus parviceps</i>	a plant bug	Michael Gilson	First in County
		<i>Xerophloea viridis</i>	a leafhopper	Alexander Tasi	First in County
		<i>Xystrologa grenadella</i>	a bark boring moth	Jason Rivera	First in County





NEMATOLOGY

Compiled by Renato N. Inserra, Ph.D.; Silvia Vau, Ph.D. and Janete 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

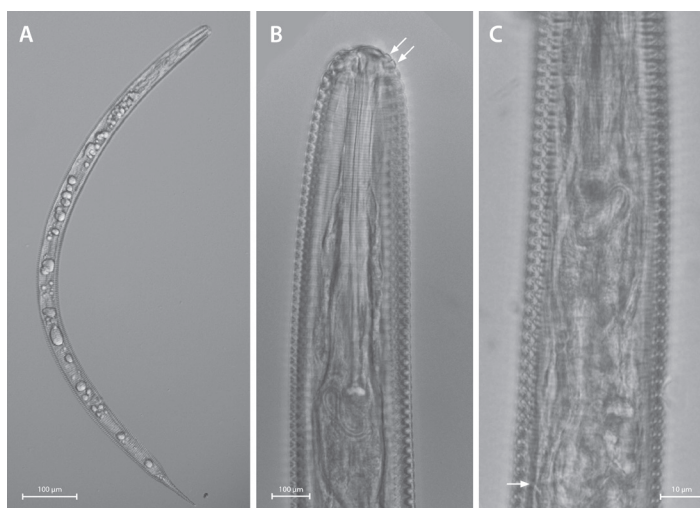
	JANUARY - MARCH	2025 - YEAR TO DATE
Morphological Identifications	4,194	4,194
Molecular Identifications *	306	306

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

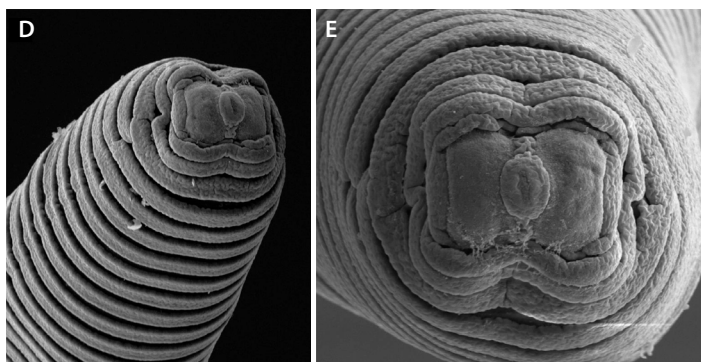
Nematode of Special Interest

1 *Hemicycliophora silvestris* Álvarez-Ortega et al., 2025, a new sheath nematode species, was detected in a regulatory soil and root sample collected from *Phoenix sylvestris*, the wild date palm, in a North Florida commercial plant nursery (Dixie County; 01262024-00672; Vincent Barrios; 26 January 2024). **This is a new taxonomic discovery.**

Two genera of nematode species are commonly known as sheath nematodes (Maggenti, 1981) because the females have an extra layer in their cuticle. These genera are *Hemicaloosia* and *Hemicycliophora*, and they have a wide geographical distribution, including Florida. They parasitize both cultivated and wild plants. During routine nematological analysis conducted by the DPI Nematology Section, a population of sheath nematodes was found. The identification of this population was very challenging because it consisted of only females with appressed cuticles and lacked males. In the absence of males, it is very difficult to determine the generic status of females of sheath nematodes because males possess the most distinct characters of diagnostic value. *Hemicaloosia* males have straight spicules, but male *Hemicycliophora* have sickle-shaped spicules. In this case, the identification of sheath nematode females requires a combination of morphological and molecular analyses as was used in this study. The results of these analyses indicated the population from North Florida is a new member of the genus *Hemicycliophora*. Morphologically, this new species, called *Hemicycliophora silvestris* sp. n., has an average body 1147.0 (979.0-1226.0) μm long and stylet 96.3 (94.0-100.0) μm long. The labial region shows a rectangular labial plate with amphids covered by the lateral lip sectors. Lip annuli consist of incomplete third and second lip annuli and a complete first lip annulus. Although body annuli are smooth,



1a-c - *Hemicycliophora silvestris* sp. n., light microscope. A. Entire body. B. Anterior body showing lip annuli (arrowed). C. Posterior body. Note the elongate tail. Photos by Silvia Vau, FDACS-DPI



1d-e - *Hemicycliophora silvestris* sp. n., micrographs. D. Anterior body showing smooth annuli. E. Labial region *en face* view showing a rectangular labial plate and incomplete lip annuli. (Scale bars in D = 10 μm and in E = 5 μm). Images by Sergio Álvarez-Ortega, Universidad Rey Juan Carlos, Madrid. Photos from *Nematology*; assembled by Scott Burton, FDACS-DPI



the lateral fields include breaks and diagonal connections with transverse striae. This new species belongs to the group of *Hemicycliophora* species characterized by the codes A4 and U4 (Chitambar & Subbotin, 2014) for having an elongate conoid tail, tapering gradually then more abruptly in the posterior third to quarter. The distal portion of the tail is distinctly offset, becoming narrower and elongate to somewhat attenuated with a narrowly rounded terminus. The description of this new species increases the number of *Hemicycliophora* species reported from Florida (Lehman, 2002 and Van den Berg et al., 2018) from 18 to 19. So far, *H. silvestris* sp. n. has been detected only in the proximity of hard wood forests of North Florida where the wild date palm nursery was located.

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SAMPLES FOR MOLECULAR ANALYSIS

	JANUARY - MARCH	2025 - YEAR TO DATE
Regulatory Purposes	141	141
Other Purposes	0	0
Identifications	165	165
Surveys	0	0
Total	306	306

SAMPLES FOR MORPHOLOGICAL ANALYSIS

Certifications and Regulatory Purposes

	JANUARY - MARCH	2025 - YEAR TO DATE
Multistate Certification involving California	894	894
Multistate Certification excluding California Certification	2,278	2,278
Citrus Certification (Citrus Nursery Certification, Site or Pit Approval)	78	78
Total	3,250	3,250

Other Purposes

	JANUARY - MARCH	2025 - YEAR TO DATE
Identification (other organisms)	0	0
Interdiction Station (AIS)	30	30
Plant Problems	30	30
Survey	112	112
Total	172	172





PLANT PATHOLOGY

Compiled by Jodi Hansen, M.S.; Hector Urbina, Ph.D.; Kishore Dey, Ph.D.; Patricia Soria, M.S.,
Shelby Kernahan, B.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 *Erysiphe* (= *Microsphaera*) *abbreviata* (Peck) U. Braun & S. Takamsu (Helotiales, Erysiphaceae) a **new Florida State record**, was found on *Quercus laevis* Walt. (Fagales, Fagaceae) at a residential site in Volusia County, Florida, where one plant was affected. The identification of the fungus was based on the DNA sequences of the ITS region showing a 99.62% match to the species in GenBank database. The sample exhibited white, powdery patches on either side of the leaves (leading to the common name “powdery mildew”). These patches can inhibit normal shoot and leaf development, causing deformed leaves (Holonec et al., 2011). The fungus thrives in warmer temperatures and humidity, especially during periods of rain preceded by drought (Holonec et al., 2007). Soil quality and fertilization may increase resistance to this disease (Oroian et al., 2013; Man et al., 2012). *Erysiphe abbreviata* has also been observed on other *Quercus* species, such as *Quercus bicolor* and *Quercus pagoda*. While previously reported in the United States on *Quercus laevis* in North Carolina, this is the first documented occurrence of *E. abbreviata* on *Quercus laevis* in Florida. (Volusia County; P0018-01022025-00036; Jennifer Hesse; 2 January 2025).



1 - *Erysiphe abbreviata* symptoms on *Quercus laevis*.
Photo by Jennifer Hesse, FDACS-DPI

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QUARTERLY ACTIVITY REPORT

	JANUARY - MARCH	2025 - YEAR TO DATE
Citrus black spot	161	161
Citrus canker	264	264
Citrus greening / HLB	41	41
HLB certification for out-of-state shipping	865	865
Import inspections	3	3
Interdictions	43	43
Palm phytoplasma	4	4
Pathology, General	643	643
Soil	63	63
Totals	2,087	2,087



🔍 PLANT PATHOLOGY IDENTIFICATION TABLE

The following table provides information about samples identified between January - March 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>Citrus sinensis</i> 'Valencia'	sweet orange	<i>Phyllosticta citricarpa</i>	citrus black spot	grove	P0226-01-01282025-00595	Desoto	Brandon Summerville, Phillip Lamb	1/28/25	county
<i>Cyrtosstachys renda</i>	sealing wax palm, lipstick palm, pinang rajah palm	<i>Zasmidium</i> sp.	leaf spot	nursery	P0163-01222025-00434	Miami-Dade	Sean Brown	1/17/25	host
<i>Quercus laevis</i>	turkey oak	<i>Erysiphe abbreviata</i>	powdery mildew	residential	P0018-01022025-00036	Volusia	Jennifer Hesse	1/2/25	state, host
<i>Rhizophora mangle</i>	red mangrove	<i>Rugonectria rugulosa</i>	galls	ecological preserve	P0039-01062025-00073	Lee	external collector	1/3/25	host



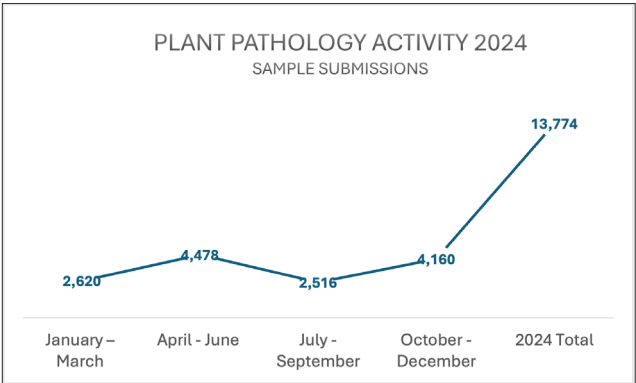
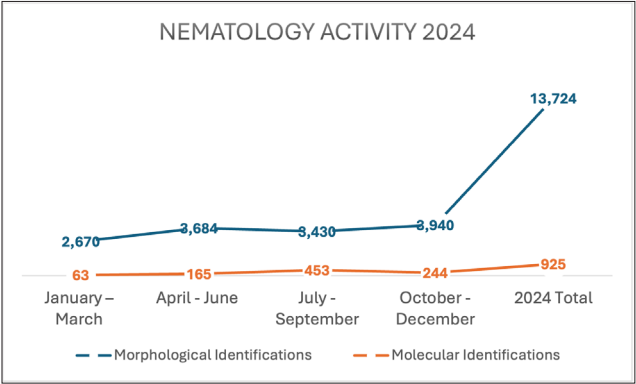
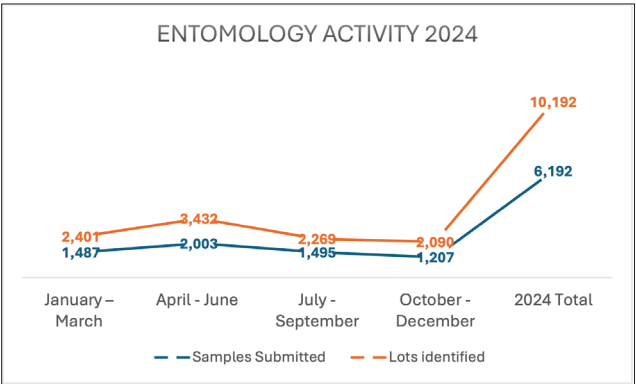
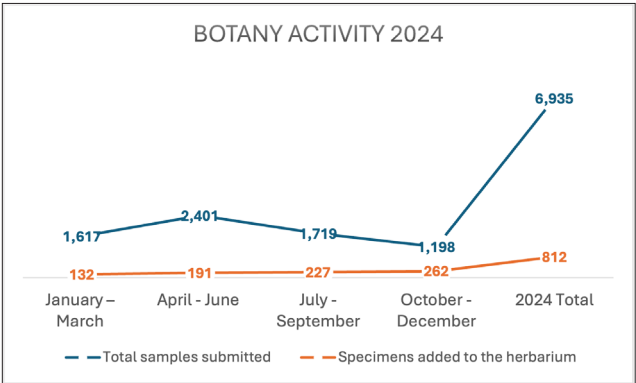


FROM THE EDITOR

By Patti Anderson

Inquiring minds want to know...

This report covers the first quarter of 2025, but we might like to look back at the previous year to find out what was happening in a few sections of our bureau. Just in terms of sample submissions, 2024 was a busy year for ENPP. Botany handled almost 7,000 samples; Entomology identified over 10,000 lots; and interestingly, both Nematology and Plant Pathology had just over 13,700 samples submitted for identification. We wonder what the coming year will bring.





TRI-LOGY

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