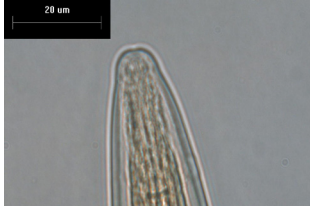


TRI-OLOGY

A PUBLICATION OF THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF PLANT INDUSTRY
 ADAM H. PUTNAM, COMMISSIONER
 RICHARD D. GASKALLA, DIVISION DIRECTOR

DACS-P-00124 Volume 54, Number 2, March - April 2015

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



Longidorus orientalis (a needle nematode) female from Arizona
 Photograph courtesy of J. D. Stanley, DPI



Baldulus tripsaci, eastern gammagrass leafhopper
 Photograph courtesy of Susan E. Halbert, DPI



Kordyana tradescantiae, a fungal pathogen, causes these typical leaf spots on the foliage of *Tradescantia ohiensis*.
 Photograph courtesy of M. L. Schubert



Tradescantia ohiensis (Ohio spiderwort; bluejacket)
 Photograph courtesy of Michael Drummond
<http://florida.plantatlas.usf.edu/photo.aspx?ID=2089>

Highlights

***Longidorus orientalis*, 1982, a needle nematode**, was found infecting the roots of date palm, *Phoenix dactylifera*. The presence of this infection led to interest in finding more information about this nematode on palms. A needle nematode survey was conducted in date palm orchards in California, on shipments from Arizona when they arrived in Florida and imported date palms that had been transplanted in Florida for no less than two years. Nematologists from the Florida Department of Agriculture and Consumer Services conducted a morphological and molecular study of these needle nematode populations, in cooperation with nematologists from other areas. The results of this survey indicate that these needle nematodes are able to survive in the humid Florida environment, but at low densities.

***Baldulus tripsaci*, eastern gammagrass leafhopper, a new Florida State record**. This species is a vector of corn pathogens. Its host, *Tripsacum dactyloides*, is a relative of corn.

***Kordyana tradescantiae*, a leaf spot pathogen**, was found on Ohio spiderwort (*Tradescantia ohiensis*). *Kordyana* first appeared in 2009 in North America, it reappeared meagerly in the next season, and then seemingly disappeared until 2014 when it showed up again in a few locations in North Florida. It has returned for the second consecutive year.

***Tradescantia ohiensis* Rafinesque** (Ohio spiderwort; bluejacket) is perennial, herbaceous species is native from Ontario, Canada, southward through much of the eastern half of the United States, and in Florida, it is frequently found from northern counties through the central peninsula. This species hybridizes readily and many cultivars that are sold include this species in their parentage. *Tradescantia ohiensis* is often seen along roadsides, fields and railroad tracks and can be an attractive addition to home landscapes and woodland gardens.

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Photograph courtesy of Jeff Lotz, DPI

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We welcome your suggestions for improvement of TRI-OLOGY. Please feel free to contact me or [Dr. Patti Anderson](#), Managing Editor, with your comments.

[Dr. Greg S. Hodges](#), Editor
 Assistant Director, DPI



Botany Section

Compiled by [Patti J. Anderson, Ph.D.](#)

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

A sample received for identification is discussed below:

Tradescantia ohiensis Rafinesque (Ohio spiderwort; bluejacket) from a genus of about 70 species native to temperate and tropical areas of the New World. Commelinaceae. This perennial, herbaceous species is native from Ontario, Canada, southward through much of the eastern half of the United States, and in Florida, it is frequently found in northern counties through the central peninsula. The erect or ascending stems grow from 15-115 cm tall and are usually glabrous. The sessile leaves are spirally arranged, with linear to linear-lanceolate blades that range from 5-45 cm in length. Inflorescences are always terminal, but can be both terminal and axillary. The inflorescence includes leaf-like bracts and umbel-like cymes. The flowers have glabrous pedicels 0.7-3 cm long and sepals that are 4-15 mm long and may be glabrous or have an apical tuft of eglandular hairs. The three deep blue to rose-colored petals are broadly ovate and 0.8-2 cm long. Occasionally, individuals with white petals are seen. The six stamens are all fertile and have distinctively bearded filaments. This species hybridizes readily and many cultivars that are sold include this species in their parentage. *Tradescantia ohiensis* is often seen along roadsides, fields and railroad tracks and can be an attractive addition to home landscapes and woodland gardens. (Manatee County; B2015-179; James E. (Eddie) Anderson; 12 March 2015 and Clay County; B2015-233; Sol F. Looker; 13 January 2015.) (Mabberley 2008; Wunderlin and Hansen 2011; http://efloras.org/florataxon.aspx?flora_id=1&taxon_id=133268 [accessed 2015 May 5]; <http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=r820> [accessed 2015 May 6]).

References

Mabberley, D.J. 2008. Mabberley's plant-book: a portable dictionary of plants, their classification and uses, 3rd edition. Cambridge University Press, New York, New York. 1,021 p.

Wunderlin, R. P. and B. F. Hansen. 2011. Guide to the vascular plants of Florida, 3rd edition. University Press of Florida, Gainesville, Florida. 783 p.

The following table provides information about samples identified during the time period of the current issue. The table is organized alphabetically by plant species, but with new county records listed before all other entries.

Sample Submissions

| | March April | Year to date |
|---|----------------|-----------------|
| Samples submitted by other DPI sections | 1,139 | 1,918 |
| Samples submitted for botanical identification only | 168 | 309 |
| Total Samples Submitted | 1,307 | 2,227 |
| Specimens added to the herbarium | 41 | 138 |



Tradescantia ohiensis (Ohio spiderwort; bluejacket)
Photograph courtesy of Michael Drummond
<http://florida.plantatlas.usf.edu/photo.aspx?ID=2089>



Tradescantia ohiensis (Ohio spiderwort; bluejacket) white form
Photograph courtesy of Bob Upcavage
<http://florida.plantatlas.usf.edu/photo.aspx?ID=2089>

| New County Record | Plant Species | Common Name | 1st Collector | 2nd Collector | County | Sample Number | Collection Date |
|-------------------|-----------------------------------|----------------------------|---------------------------|-----------------|------------|---------------|-----------------|
| * | <i>Allium canadense</i> | meadow garlic | Linda G. McRay | | Pinellas | 2015-286 | 21 Apr 2015 |
| * | <i>Ardisia crenata</i> | coralberry | Sol F. Looker | | Putnam | 2015-241 | 3 Apr 2015 |
| * | <i>Canna flaccida</i> | bandanna of the Everglades | Sol F. Looker | | Clay | 2015-271 | 15 Apr 2015 |
| * | <i>Cinnamomum camphora</i> | camphortree | Sol F. Looker | | Flagler | 2015-253 | 8 Apr 2015 |
| * | <i>Echinochloa crus-galli</i> | barnyardgrass | Jason B. Sharp | | Manatee | 2015-297 | 17 Apr 2015 |
| * | <i>Freesia laxa</i> | false freesia | Lisa M. Hassell | | Duval | 2015-146 | 3 Mar 2015 |
| * | <i>Ligustrum sinense</i> | Chinese privet | Sol F. Looker | | Putnam | 2015-299 | 24 Apr 2015 |
| * | <i>Lonicera japonica</i> | Japanese honeysuckle | Sol F. Looker | | Putnam | 2015-260 | 10 Apr 2015 |
| * | <i>Malva viscus penduliflorus</i> | Turkscap mallow | Linda G. McRay | | Pinellas | 2015-155 | 10 Mar 2015 |
| * | <i>Nephrolepis cordifolia</i> | sword fern | Sol F. Looker | | Putnam | 2015-259 | 13 Apr 2015 |
| * | <i>Prunus serotina</i> | black cherry | Sol F. Looker | | Putnam | 2015-176 | 10 Mar 2015 |
| * | <i>Pueraria montana</i> | kudzu | Sol F. Looker | Cheryl A. Jones | Putnam | 2015-235 | 2 Apr 2015 |
| * | <i>Richardia grandiflora</i> | largeflower Mexican clover | Linda G. McRay | | Pinellas | 2015-287 | 21 Apr 2015 |
| * | <i>Sapium sebiferum</i> | Chinese tallow tree | Sol F. Looker | | Flagler | 2015-272 | 15 Apr 2015 |
| * | <i>Solanum carolinense</i> | Carolina horsenettle | M. 'Janie' Echols | | Union | 2015-301 | 27 Apr 2015 |
| * | <i>Solanum viarum</i> | tropical soda-apple | Sol F. Looker | | Putnam | 2015-206 | 20 Mar 2015 |
| * | <i>Tradescantia ohiensis</i> | Ohio spiderwort | James E. (Eddie) Anderson | | Manatee | 2015-179 | 12 Mar 2015 |
| * | <i>Tradescantia ohiensis</i> | Ohio spiderwort | Sol F. Looker | | Clay | 2015-233 | 1 Apr 2015 |
| * | <i>Utricularia resupinata</i> | lavender bladderwort | Jason B. Sharp | | Manatee | 2015-195 | 19 Mar 2015 |
| | <i>Abutilon permolle</i> | coastal Indian mallow | Ana L. Ochoa | | Miami-Dade | 2015-221 | 24 Mar 2015 |
| | <i>Acacia</i> sp. | | Anthony Gubler | | Brevard | 2015-242 | 3 Apr 2015 |
| | <i>Acacia</i> sp. | | Roberto Delcid | | Miami-Dade | 2015-214 | 21 Mar 2015 |
| | <i>Albizia lebeck</i> | woman's tongue tree | LeAnn M. West | | Martin | 2015-304 | 24 Apr 2015 |
| | <i>Alternanthera ficoidea</i> | Joseph's-coat | Haylett Cruz-Escoto | | Miami-Dade | 2015-164 | 10 Mar 2015 |
| | <i>Amaranthus blitum</i> | purple amaranth | Kaleigh Hire | | Duval | 2015-294 | 21 Apr 2015 |
| | <i>Ardisia crenata</i> | coralberry | Sol F. Looker | | Clay | 2015-144 | 26 Feb 2015 |
| | <i>Ardisia</i> sp. | | Bryce J. Merritt | | Orange | 2015-307 | 27 Apr 2015 |
| | <i>Ardisia</i> sp. | | Roberto Delcid | | Miami-Dade | 2015-217 | 21 Mar 2015 |
| | <i>Asparagus setaceus</i> | common asparagus fern | Jake M. Farnum | | Monroe | 2015-226 | 27 Mar 2015 |
| | <i>Asparagus setaceus</i> | common asparagus fern | James A. Pernsteiner | | Palm Beach | 2015-183 | 9 Mar 2015 |
| | <i>Balduina angustifolia</i> | coastalplain honeycombhead | Jason B. Sharp | | Manatee | 2015-198 | 19 Mar 2015 |

| New County Record | Plant Species | Common Name | 1st Collector | 2nd Collector | County | Sample Number | Collection Date |
|-------------------|----------------------------------|------------------------------|---------------------|-------------------|------------|---------------|-----------------|
| | <i>Bauhinia divaricata</i> | butterfly orchid tree | Haylett Cruz-Escoto | | Miami-Dade | 2015-166 | 10 Mar 2015 |
| | <i>Beaumontia grandiflora</i> | herald's trumpet | Richard T. Bloom | Scott D. Berryman | Highlands | 2015-239 | 1 Apr 2015 |
| | <i>Bejaria racemosa</i> | tar-flower | Anthony Gubler | | Brevard | 2015-289 | 17 Apr 2015 |
| | <i>Berlandiera subacaulis</i> | Florida greeneyes | Theresa R. Estok | Cheryl A. Jones | Levy | 2015-295 | 23 Apr 2015 |
| | <i>Blutaparon vermiculare</i> | samphire | Bobbe A. Rose | | Pinellas | 2015-266 | 14 Apr 2015 |
| | <i>Borrchia frutescens</i> | sea oxeye | Bobbe A. Rose | | Pinellas | 2015-267 | 14 Apr 2015 |
| | <i>Callisia repens</i> | creeping inchplant | Haylett Cruz-Escoto | | Miami-Dade | 2015-163 | 10 Mar 2015 |
| | <i>Callisia repens</i> | creeping inchplant | Lane M. Smith | | Broward | 2015-186 | 11 Mar 2015 |
| | <i>Carex longii</i> | Long's sedge | Jason B. Sharp | | Manatee | 2015-197 | 19 Mar 2015 |
| | <i>Castilleja indivisa</i> | entireleaf Indian paintbrush | Cheryl A. Jones | | Alachua | 2015-275 | 16 Apr 2015 |
| | <i>Chromolaena odorata</i> | Jack-in-the-bush | Phellicia P. Perez | | Miami-Dade | 2015-159 | 8 Mar 2015 |
| | <i>Cichorium endivia</i> | endive | Mary C. Sellers | | Lake | 2015-281 | 16 Apr 2015 |
| | <i>Cinnamomum burmannii</i> | Malaysian cinnamon | Scott D. Krueger | | Collier | 2015-180 | 11 Mar 2015 |
| | <i>Cirsium</i> sp. | thistle | W. Wayne Bailey | | Suwannee | 2015-170 | 9 Mar 2015 |
| | <i>Citharexylum caudatum</i> | juniper berry | Olga Garcia | | Miami-Dade | 2015-222 | 26 Mar 2015 |
| | <i>Citrus</i> sp. | citrus | Jake M. Farnum | | Miami-Dade | 2015-149 | 5 Mar 2015 |
| | <i>Citrus</i> sp. | citrus | Jake M. Farnum | | Miami-Dade | 2015-204 | 20 Mar 2015 |
| | <i>Citrus</i> sp. | possibly sweet orange | Kaleigh Hire | | Duval | 2015-200 | 12 Mar 2015 |
| | <i>Coccinia grandis</i> | ivy gourd | Matt W. Brodie | | Collier | 2015-261 | 10 Apr 2015 |
| | <i>Coccoloba diversifolia</i> | pigeon plum | Antonio I. Perez | | Palm Beach | 2015-203 | 17 Mar 2015 |
| | <i>Commelina benghalensis</i> | tropical spiderwort | Theresa R. Estok | | Alachua | 2015-283 | 21 Apr 2015 |
| | <i>Commelina erecta</i> | whitemouth dayflower | Theresa R. Estok | Cheryl A. Jones | Levy | 2015-296 | 23 Apr 2015 |
| | <i>Cornus florida</i> | flowering dogwood | William J. Salway | | Pinellas | 2015-265 | 14 Apr 2015 |
| | <i>Crotalaria pumila</i> | low rattlebox | Jake M. Farnum | | Miami-Dade | 2015-191 | 17 Mar 2015 |
| | <i>Cupaniopsis anacardioides</i> | carrotwood | Antonio I. Perez | | Palm Beach | 2015-274 | 8 Apr 2016 |
| | <i>Dicliptera sexangularis</i> | sixangle foldwing | Roberto Delcid | | Collier | 2015-142 | 27 Feb 2015 |
| | <i>Dolichandra unguis-cati</i> | catclaw vine | Edgardo Vargas | | Orange | 2015-153 | 3 Mar 2015 |
| | <i>Dyschoriste humistrata</i> | swamp snakeherb | Cheryl A. Jones | Kelly Douglas | Alachua | 2015-262 | 14 Apr 2015 |
| | <i>Elaeocarpus sylvestris</i> | woodland Elaeocarpus | Steven Reams | | Orange | 2015-237 | 1 Apr 2015 |
| | <i>Epipremnum aureum</i> | golden pothos | James C. Lee | | Palm Beach | 2015-223 | 27 Mar 2015 |
| | <i>Eragrostis ciliaris</i> | gophertail lovegrass | Jason B. Sharp | | Manatee | 2015-150 | 5 Mar 2015 |
| | <i>Erigeron quercifolius</i> | oakleaf fleabane | Karen R. Destefano | Diana E. Bozeman | Pasco | 2015-277 | 16 Apr 2015 |

| New County Record | Plant Species | Common Name | 1st Collector | 2nd Collector | County | Sample Number | Collection Date |
|-------------------|----------------------------------|---------------------------|---------------------|-------------------|--------------|---------------|-----------------|
| | <i>Erythrina herbacea</i> | Cherokee bean | Dagne A. Vasquez | | Brevard | 2015-273 | 16 Apr 2015 |
| | <i>Eugenia luschnathiana</i> | Pitomba | Olga Garcia | | Miami-Dade | 2015-188 | 17 Mar 2015 |
| | <i>Fraxinus caroliniana</i> | pop ash | Cheryl A. Jones | Kelly Douglas | Gilchrist | 2015-263 | 14 Apr 2015 |
| | <i>Fraxinus profunda</i> | pumpkin ash | Stephen R. Jenner | Stacey S. Simmons | Citrus | 2015-201 | 16 Mar 2015 |
| | <i>Fraxinus</i> sp. | ash | Jason M. Spiller | | Hillsborough | 2015-303 | 27 Apr 2015 |
| | <i>Fraxinus</i> sp. | ash | Stephen R. Jenner | Stacey S. Simmons | Citrus | 2015-202 | 16 Mar 2015 |
| | <i>Fuirena pumila</i> | dwarf umbrellasedge | Jason B. Sharp | | Manatee | 2015-196 | 19 Mar 2015 |
| | <i>Galactia regularis</i> | downy milkpea | Jason B. Sharp | | Manatee | 2015-298 | 23 Apr 2015 |
| | <i>Galactia volubilis</i> | downy milkpea | Lane M. Smith | | Broward | 2015-185 | 11 Mar 2015 |
| | <i>Galium</i> sp. | bedstraw | Linda G. McRay | | Pinellas | 2015-156 | 10 Mar 2015 |
| | <i>Geranium carolinianum</i> | Carolina cranesbill | Jake M. Farnum | | Miami-Dade | 2015-178 | 12 Mar 2015 |
| | <i>Gleditsia aquatica</i> | water locust | Scott D. Berryman | | Hardee | 2015-181 | 9 Mar 2015 |
| | <i>Halleria lucida</i> | tree fuchsia | Roberto Delcid | | Miami-Dade | 2015-216 | 21 Mar 2015 |
| | <i>Heterocentron floribundum</i> | trailing princess flower | Roberto Delcid | | Miami-Dade | 2015-212 | 21 Mar 2015 |
| | <i>Hibiscus rosa-sinensis</i> | hibiscus | Jake M. Farnum | | Miami-Dade | 2015-220 | 25 Mar 2015 |
| | <i>Holmskioldia sanguinea</i> | Chinese-hat plant | Haylett Cruz-Escoto | | Miami-Dade | 2015-161 | 10 Mar 2015 |
| | <i>Hypericum hypericoides</i> | St. Andrew's-cross | William J. Salway | | Hillsborough | 2015-245 | 7 Apr 2015 |
| | <i>Ipomoea</i> sp. | morning glory | Lauren L. Dorval | | Volusia | 2015-182 | 11 Mar 2015 |
| | <i>Juncus</i> sp. | rush | Lane M. Smith | | Palm Beach | 2015-256 | 10 Apr 2015 |
| | <i>Lasiacis divaricata</i> | smallcane | Jake M. Farnum | | Monroe | 2015-225 | 27 Mar 2015 |
| | <i>Leucophyllum frutescens</i> | Texas sage | Haylett Cruz-Escoto | | Miami-Dade | 2015-165 | 10 Mar 2015 |
| | <i>Ligustrum sinense</i> | Chinese privet | Cheryl A. Jones | Michael Bentley | Leon | 2015-276 | 16 Apr 2015 |
| | <i>Linaria canadensis</i> | blue toadflax | Lane M. Smith | | Palm Beach | 2015-193 | 18 Mar 2015 |
| | <i>Lupinus diffusus</i> | sky-blue lupine | Diana E. Bozeman | | Pasco | 2015-171 | 10 Mar 2015 |
| | <i>Lupinus texensis</i> | Texas bluebonnet | Lisa M. Hassell | | Duval | 2015-251 | 8 Apr 2015 |
| | <i>Macroptilium lathyroides</i> | wild bushbean | Scott D. Berryman | Keith Clanton | Hardee | 2015-247 | 6 Apr 2015 |
| | <i>Malpighia coccigera</i> | miniature holly | Haylett Cruz-Escoto | | Miami-Dade | 2015-162 | 10 Mar 2015 |
| | <i>Malvaviscus arboreus</i> | Texas waxmallow | Haylett Cruz-Escoto | | Miami-Dade | 2015-160 | 10 Mar 2015 |
| | <i>Melaleuca decora</i> | white feather honeymyrtle | Thomas S. Lastrapes | | Pinellas | 2015-175 | 11 Mar 2015 |
| | <i>Melilotus indicus</i> | annual yellow sweetclover | Linda G. McRay | | Pinellas | 2015-231 | 31 Mar 2015 |
| | <i>Melothria pendula</i> | creeping cucumber | Jeanie P. Frechette | Dagne A. Vasquez | Brevard | 2015-292 | 22 Apr 2015 |

| New County Record | Plant Species | Common Name | 1st Collector | 2nd Collector | County | Sample Number | Collection Date |
|-------------------|---------------------------------|-----------------------|----------------------|------------------|--------------|---------------|-----------------|
| | <i>Michelia champaca</i> | champaca | Gay Durrance | | Polk | 2015-143 | 25 Feb 2015 |
| | <i>Mikania micrantha</i> | climbing hempweed | Jake M. Farnum | | Miami-Dade | 2015-305 | 27 Apr 2015 |
| | <i>Millettia pinnata</i> | karum tree | Mark J. Aubry | | Palm Beach | 2015-172 | 11 Mar 2015 |
| | <i>Moringa oleifera</i> | horseradish tree | James A. Pernsteiner | | Palm Beach | 2015-258 | 6 Apr 2015 |
| | <i>Nasturtium officinale</i> | watercress | Linda G. McRay | Mark A. Spearman | Pinellas | 2015-173 | 11 Mar 2015 |
| | <i>Nephrolepis biserrata</i> | giant sword fern | Jake M. Farnum | | Monroe | 2015-187 | 13 Mar 2015 |
| | <i>Nephrolepis cordifolia</i> | sword fern | Shelly M. Wayte | | Marion | 2015-290 | 20 Apr 2015 |
| | <i>Oplismenus</i> sp. | basketgrass | Nermaret Canales | | Orange | 2015-238 | 30 Mar 2015 |
| | <i>Oxalis</i> sp. | sorrel | Kaleigh Hire | | Duval | 2015-293 | 21 Apr 2015 |
| | <i>Pachira glabra</i> | French peanut | Junior L. Williams | | Palm Beach | 2015-189 | 17 Mar 2015 |
| | <i>Packera glabella</i> | butterweed | Lane M. Smith | | Palm Beach | 2015-154 | 5 Mar 2015 |
| | <i>Parietaria praetermissa</i> | clustered pellitory | Jason M. Spiller | | Hillsborough | 2015-227 | 31 Mar 2015 |
| | <i>Parthenium hysterophorus</i> | Santa Maria feverfew | Lane M. Smith | | Palm Beach | 2015-240 | 3 Apr 2015 |
| | <i>Pennisetum</i> sp. | purple fountain grass | Haylett Cruz-Escoto | | Miami-Dade | 2015-167 | 10 Mar 2015 |
| | <i>Persea americana</i> | avocado | Steven Reams | | Orange | 2015-224 | 26 Mar 2015 |
| | <i>Persea borbonia</i> | redbay | Richard L. Blaney | | Charlotte | 2015-254 | 6 Apr 2015 |
| | <i>Persea palustris</i> | swamp bay | Esteban Godinez | | Miami-Dade | 2015-157 | 10 Mar 2015 |
| | <i>Persea palustris</i> | swamp bay | Esteban Godinez | | Miami-Dade | 2015-158 | 10 Mar 2015 |
| | <i>Physalis walteri</i> | Walter's groundcherry | Lisa M. Hassell | | Duval | 2015-250 | 8 Apr 2015 |
| | <i>Piper magnificum</i> | lacquered pepper | Roberto Delcid | | Miami-Dade | 2015-211 | 21 Mar 2015 |
| | <i>Pityopsis graminifolia</i> | narrowleaf silkgrass | P. Karen Coffey | | Volusia | 2015-219 | 23 Mar 2015 |
| | <i>Polygala violacea</i> | showy milkwort | William J. Salway | | Hillsborough | 2015-244 | 7 Apr 2015 |
| | <i>Polyscias fruticosa</i> | ming aralia | Mary C. Sellers | | Lake | 2015-210 | 20 Mar 2015 |
| | <i>Pteridium aquilinum</i> | western brackenfern | Kaleigh Hire | | St. Johns | 2015-308 | 27 Apr 2015 |
| | <i>Ptilimnium capillaceum</i> | mock bishopsweed | Linda G. McRay | | Pinellas | 2015-230 | 31 Mar 2015 |
| | <i>Pyrus calleryana</i> | callery pear | Cheryl A. Jones | | Santa Rosa | 2015-177 | 11 Mar 2015 |
| | <i>Quercus glauca</i> | ring-cupped oak | M. 'Janie' Echols | | Baker | 2015-151 | 5 Mar 2015 |
| | <i>Radermachera hainanensis</i> | golden tree jasmine | Roberto Delcid | | Miami-Dade | 2015-213 | 21 Mar 2015 |
| | <i>Rhaphiolepis umbellata</i> | yedda hawthorn | Haylett Cruz-Escoto | | Miami-Dade | 2015-168 | 10 Mar 2015 |
| | <i>Rhododendron</i> | hybrid azalea | M. 'Janie' Echols | | Baker | 2015-218 | 20 Mar 2015 |
| | <i>Rhus copallinum</i> | winged sumac | Kaleigh Hire | | St. Johns | 2015-309 | 27 Apr 2015 |

| New County Record | Plant Species | Common Name | 1st Collector | 2nd Collector | County | Sample Number | Collection Date |
|-------------------|---------------------------------|----------------------------|----------------------|-------------------|------------|---------------|-----------------|
| | <i>Rhynchospora caduca</i> | anglestem beaksedge | Linda G. McRay | | Pinellas | 2015-288 | 21 Apr 2015 |
| | <i>Rhynchospora colorata</i> | starrush whitetop | Karen R. Destefano | Diana E. Bozeman | Pasco | 2015-278 | 16 Apr 2015 |
| | <i>Rorippa teres</i> | southern marsh yellowcress | Lane M. Smith | | Palm Beach | 2015-192 | 18 Mar 2015 |
| | <i>Rubus cuneifolius</i> | sand blackberry | Cheryl A. Jones | | Marion | 2015-236 | 3 Apr 2015 |
| | <i>Rudbeckia hirta</i> | black-eyed Susan | Karen R. Destefano | Diana E. Bozeman | Pasco | 2015-279 | 16 Apr 2015 |
| | <i>Rumex verticillatus</i> | swamp dock | Linda G. McRay | | Pinellas | 2015-229 | 31 Mar 2015 |
| | <i>Sabatia stellaris</i> | rose of Plymouth | Jake M. Farnum | | Miami-Dade | 2015-306 | 27 Apr 2015 |
| | <i>Salix</i> sp. | willow | Maria C. Acosta | | Miami-Dade | 2015-300 | 16 Apr 2015 |
| | <i>Salvia misella</i> | southern river sage | Mark A. Spearman | | Pinellas | 2015-190 | 17 Mar 2015 |
| | <i>Saururus cernuus</i> | lizard's tail | Sol F. Looker | | Flagler | 2015-246 | 3 Apr 2015 |
| | <i>Schefflera actinophylla</i> | schefflera | Jeanie P. Frechette | Dagne A. Vasquez | Brevard | 2015-291 | 22 Apr 2015 |
| | <i>Schefflera elegantissima</i> | false aralia | Mary C. Sellers | | Lake | 2015-207 | 20 Mar 2015 |
| | <i>Schefflera elegantissima</i> | false aralia | Mary C. Sellers | | Lake | 2015-208 | 20 Mar 2015 |
| | <i>Schefflera elegantissima</i> | false aralia | Mary C. Sellers | | Lake | 2015-209 | 20 Mar 2015 |
| | <i>Senna latifolia</i> | | George D. Warden | | Orange | 2015-152 | 3 Mar 2015 |
| | <i>Senna obtusifolia</i> | sicklepod | Jessica V. Tromer | | Pinellas | 2015-285 | 21 Apr 2015 |
| | <i>Sesbania</i> sp. | riverhemp | Kaleigh Hire | | St. Johns | 2015-248 | 7 Apr 2015 |
| | <i>Solanum carolinense</i> | Carolina horsenettle | M. 'Janie' Echols | | Union | 2015-302 | 27 Apr 2015 |
| | <i>Solanum viarum</i> | tropical soda-apple | Theresa R. Estok | | Alachua | 2015-252 | 9 Apr 2015 |
| | <i>Solidago sempervirens</i> | salt-marsh goldenrod | Bobbe A. Rose | | Pinellas | 2015-145 | 3 Mar 2015 |
| | <i>Solidago</i> sp. | Canada goldenrod | Lisa M. Hassell | | Duval | 2015-264 | 14 Apr 2015 |
| | <i>Sphagneticola trilobata</i> | creeping oxeye | Bobbe A. Rose | | Pinellas | 2015-268 | 14 Apr 2015 |
| | <i>Spiranthes vernalis</i> | spring ladiestresses | Stephen R. Jenner | | Hernando | 2015-284 | 21 Apr 2015 |
| | <i>Tephrosia rugelii</i> | Rugel's hoarypea | Jason B. Sharp | | Manatee | 2015-234 | 30 Mar 2015 |
| | <i>Thunbergia fragrans</i> | whitelady | Bobbe A. Rose | | Pinellas | 2015-269 | 14 Apr 2015 |
| | <i>Tithonia diversifolia</i> | Mexican sunflower | Gay Durrance | | Polk | 2015-270 | 14 Apr 2015 |
| | <i>Tradescantia ohimensis</i> | Ohio spiderwort | Kaleigh Hire | | Duval | 2015-199 | 17 Mar 2015 |
| | <i>Typha</i> sp. | cattail | Kaleigh Hire | | St. Johns | 2015-249 | 7 Apr 2015 |
| | <i>Urtica chamaedryoides</i> | heartleaf nettle | Mary C. Sellers | | Lake | 2015-184 | 11 Mar 2015 |
| | <i>Urtica chamaedryoides</i> | heartleaf nettle | Sharon Garrett | Jaimie Canto | Polk | 2015-147 | 4 Mar 2015 |
| | <i>Vaccinium darrowii</i> | Darrow's blueberry | Richard T. Bloom | Scott D. Berryman | | 2015-280 | 15 Apr 2015 |
| | <i>Vaccinium stamineum</i> | deerberry | Terrence D. Williams | | Osceola | 2015-232 | 31 Mar 2015 |

| New County Record | Plant Species | Common Name | 1st Collector | 2nd Collector | County | Sample Number | Collection Date |
|--------------------------|-------------------------------|---------------------------|----------------------|----------------------|---------------|----------------------|------------------------|
| | <i>Viburnum odoratissimum</i> | sweet arrowwood | Haylett Cruz-Escoto | | Miami-Dade | 2015-169 | 10 Mar 2015 |
| | <i>Vicia acutifolia</i> | fourleaf vetch | Lane M. Smith | | Palm Beach | 2015-194 | 18 Mar 2015 |
| | <i>Vicia acutifolia</i> | fourleaf vetch | William R. Stokes | | Hillsborough | 2015-174 | 9 Mar 2015 |
| | <i>Vitis shuttleworthii</i> | calloose grape | Scott D. Berryman | Keith Clanton | De Soto | 2015-257 | 9 Apr 2015 |
| | <i>Youngia japonica</i> | oriental false hawksbeard | Jake M. Farnum | | Miami-Dade | 2015-205 | 19 Mar 2015 |
| | <i>Zephyranthes simpsonii</i> | redmargin zephyrlily | Linda G. McRay | | Pinellas | 2015-228 | 31 Mar 2015 |
| | <i>Ziziphus mauritiana</i> | Indian jujube | Michael L. Cartrett | | Palm Beach | 2015-148 | 25 Feb 2015 |

Sample/Specimen Submissions

| March | |
|----------------------|--------|
| Samples Submitted | 639 |
| Specimens Identified | 12,144 |
| April | |
| Samples Submitted | 612 |
| Specimens Identified | 12,729 |
| Year to Date | |
| Samples Submitted | 2,121 |
| Specimens Identified | 39,545 |



Baldulus tripsaci, eastern gammagrass leafhopper
 Photograph courtesy of Susan E. Halbert, DPI



Abandoned galls of *Contarinia citrina* on *Tilia americana* stem
 Photograph courtesy of Kevin A. Williams, DP

Entomology Section

Compiled by [Susan E. Halbert, Ph.D.](#)

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

***Baldulus tripsaci*, eastern gammagrass leafhopper, a new Florida State record.** This species is a vector of corn pathogens (Granados and Whitcomb 1971). Its host, *Tripsacum dactyloides* is a relative of corn. (Miami-Dade County; E2015-1330; Olga Garcia; 23 March 2015.) (Dr. K. G. Andrew Hamilton, Agriculture and Agri-Food Canada and Dr. Susan E. Halbert.)

***Contarinia citrina*, linden twig gall gnat, a new Florida State record.** American linden (*Tilia americana*) is a primarily northeastern tree whose range extends southward to Texas and Florida. The linden twig gall gnat (*Contarinia citrina*) can be recognized by its unique gall shape on American linden. This midge apparently occurs throughout the range of its host, including Florida, but had not been recorded previously by DPI. This is likely because American linden is not an agricultural commodity and is not common in Florida. Additionally, the adult flies themselves are small and inconspicuous. (Citrus County; E2015-1262; Brian D. Sanders, Stacey S. Simmons and Stephen R. Jenner; 16 March 2015.) (Dr. Kevin A. Williams.)

REFERENCES

Granados, R.R. and R.F. Whitcomb. 1971. Transmission of corn stunt mycoplasma by the leafhopper *Baldulus tripsaci*. *Phytopathology* 61: 240-241.

Entomology Specimen Report

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

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

| Plant Name | Plant Common Name | Arthropod | Arthropod Common Name | County | Records |
|----------------------------|--|----------------------------------|--------------------------|------------|---------------------------|
| <i>Cichorium endivia</i> | endive, escarole, frisee | <i>Nothodelphax consimilis</i> | a delphacid planthopper | Escambia | INTERDICTION INTERCEPTION |
| <i>Citrus sinensis</i> | sweet orange, navel orange | <i>Megacocta cribraria</i> | bean plataspid | Lake | COUNTY |
| <i>Citrus</i> sp. | | <i>Hibana velox</i> | yellow ghost spider | St. Johns | COUNTY |
| <i>Citrus x paradisi</i> | grapefruit | <i>Cacoleptus kacka</i> | a dermestid beetle | Lee | COUNTY |
| <i>Citrus x paradisi</i> | grapefruit | <i>Suillia quinquepunctata</i> | a heliomyzid fly | Polk | COUNTY |
| <i>Coccoloba uvifera</i> | seagrape | <i>Chrysomya megacephala</i> | a blow fly | Miami-Dade | COUNTY |
| <i>Cupressus</i> sp. | cypress | <i>Leptoglossus occidentalis</i> | western conifer seed bug | Escambia | INTERDICTION INTERCEPTION |
| <i>Cupressus</i> sp. | cypress | <i>Rhipidothrips brunneus</i> | a thrips | Escambia | NOTABLE FIND |
| <i>Dracaena braunii</i> | lucky bamboo, Belgian evergreen, ribbonplant | <i>Lepidosaphes chinensis</i> | an armored scale | Orange | INTERDICTION INTERCEPTION |
| <i>Dracaena braunii</i> | lucky bamboo, Belgian evergreen, ribbonplant | <i>Lepidosaphes</i> sp. | an armored scale | Miami-Dade | REGULATORY INCIDENT |
| <i>Eriobotrya japonica</i> | loquat, Japanese plum | <i>Choropleca terpsichorella</i> | dancing moth | Polk | COUNTY |
| <i>Eriobotrya japonica</i> | loquat, Japanese plum | <i>Polistes annularis</i> | paper wasp | Polk | COUNTY |
| <i>Fragaria x ananassa</i> | garden strawberry | <i>Chaetosiphon fragaefolii</i> | strawberry aphid | Suwannee | INTERDICTION INTERCEPTION |
| <i>Fragaria x ananassa</i> | garden strawberry | <i>Chaetosiphon fragaefolii</i> | strawberry aphid | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Atomoscelis onustus</i> | an atriplex bug | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Autographa californica</i> | alfalfa looper | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Bactericera</i> sp. | a psyllid | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Pinellas | REGULATORY INCIDENT |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia californica</i> | a leafhopper | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia longula</i> | a leafhopper | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia longula</i> | a leafhopper | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Ceratagallia</i> sp. | a leafhopper | Pinellas | REGULATORY INCIDENT |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Deltocephalus fuscinosus</i> | a leafhopper | Suwannee | INTERDICTION INTERCEPTION |

| Plant Name | Plant Common Name | Arthropod | Arthropod Common Name | County | Records |
|-------------------------------|--|---------------------------------|--------------------------|------------|---------------------------|
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Deltocephalus fuscinosus</i> | a leafhopper | Pinellas | REGULATORY INCIDENT |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Deltocephalus fuscinosus</i> | a leafhopper | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Liriomyza langei</i> | California pea leafminer | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Liriomyza langei</i> | California pea leafminer | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Lygus elisus</i> | pale legume bug | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Lygus elisus</i> | pale legume bug | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Lygus elisus</i> | pale legume bug | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Lygus</i> sp. | a lygus bug | Escambia | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Metopolophium dirhodum</i> | rose grass aphid | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Nothodelphax consimilis</i> | a delphacid planthopper | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Phytoliriomyza</i> | a leaf miner fly | Suwannee | INTERDICTION INTERCEPTION |
| <i>Lactuca sativa</i> | lettuce, romaine lettuce, leaf lettuce | <i>Tuberculatus quercifolii</i> | an oak aphid | Suwannee | INTERDICTION INTERCEPTION |
| Palmae | palm | <i>Phoenicococcus marlatti</i> | red date scale | Escambia | INTERDICTION INTERCEPTION |
| <i>Pelargonium tomentosum</i> | herb-scent geranium, peppermint geranium, pennyroyal pelargonium | <i>Acyrtosiphon malvae</i> | an aphid | Miami-Dade | REGULATORY INCIDENT |
| <i>Pelargonium tomentosum</i> | herb-scent geranium, peppermint geranium, pennyroyal pelargonium | <i>Bryobia</i> sp. | a spider mite | Miami-Dade | REGULATORY INCIDENT |
| <i>Persea americana</i> | avocado; alligator pear; aguacate | <i>Abgrallaspis aguacatae</i> | an avocado armored scale | Escambia | INTERDICTION INTERCEPTION |
| <i>Persea americana</i> | avocado; alligator pear; aguacate | <i>Abgrallaspis aguacatae</i> | an avocado armored scale | Escambia | INTERDICTION INTERCEPTION |
| <i>Persea americana</i> | avocado; alligator pear; aguacate | <i>Abgrallaspis aguacatae</i> | an avocado armored scale | Suwannee | INTERDICTION INTERCEPTION |
| <i>Persea americana</i> | avocado; alligator pear; aguacate | <i>Clavaspis persea</i> | an avocado armored scale | Escambia | INTERDICTION INTERCEPTION |
| <i>Persea americana</i> | avocado; alligator pear; aguacate | <i>Toxotrypana curvicauda</i> | papaya fruit fly | Hendry | COUNTY |
| <i>Petroselinum crispum</i> | parsley | <i>Cavariella aegopodii</i> | carrot aphid | Escambia | INTERDICTION INTERCEPTION |
| <i>Phoenix dactylifera</i> | date palm | <i>Phoenicococcus marlatti</i> | red date scale | Suwannee | INTERDICTION INTERCEPTION |
| <i>Phoenix dactylifera</i> | date palm | <i>Phoenicococcus marlatti</i> | red date scale | Suwannee | INTERDICTION INTERCEPTION |
| <i>Phoenix dactylifera</i> | date palm | <i>Phoenicococcus marlatti</i> | red date scale | Suwannee | INTERDICTION INTERCEPTION |
| <i>Phoenix dactylifera</i> | date palm | <i>Phoenicococcus marlatti</i> | red date scale | Suwannee | INTERDICTION INTERCEPTION |
| <i>Pittosporum tobira</i> | pittosporum, Japanese pittosporum, Japanese cheesewood | <i>Cacopsylla tobirae</i> | pittosporum psyllid | Escambia | INTERDICTION INTERCEPTION |
| <i>Polygala</i> sp. | | <i>Lehmannia valentiana</i> | three-banded garden slug | Seminole | REGULATORY INCIDENT |

| Plant Name | Plant Common Name | Arthropod | Arthropod Common Name | County | Records |
|---|--------------------------------------|--------------------------------------|------------------------------|--------------|---------------------------|
| <i>Protea cynaroides</i> | king protea | <i>Delottococcus confusus</i> | a mealybug | Miami-Dade | REGULATORY INCIDENT |
| <i>Protea cynaroides</i> | king protea | <i>Ochetellus glaber</i> | an ant | Miami-Dade | REGULATORY INCIDENT |
| <i>Proteaceae</i> | | <i>Badumna longiqua</i> | a cribellate sheetweaver | Broward | NOTABLE FIND |
| <i>Proteaceae</i> | | <i>Forficula auricularia</i> | European earwig | Broward | REGULATORY INCIDENT |
| <i>Psychotria nervosa</i> | wild-coffee, Seminole balsamo | <i>Tenuipalpus dasples</i> | false spider mite | Palm Beach | HOST |
| <i>Quercus alba</i> | white oak | <i>Xyleborus glabratus</i> | redbay ambrosia beetle | Escambia | COUNTY |
| <i>Quercus chapmanii</i> | Chapman's oak | <i>Neuroterus quercusirregularis</i> | gall wasp | Marion | COUNTY |
| <i>Quercus</i> sp. | oak | <i>Hemiptera: Anthocoridae</i> | a minute pirate bug | Miami-Dade | COUNTY |
| <i>Quercus</i> sp. | oak | <i>Hentzia mitrata</i> | a jumping spider | Lee | COUNTY |
| <i>Sedum</i> sp. | | <i>Lehmannia valentiana</i> | three-banded garden slug | Alachua | REGULATORY INCIDENT |
| <i>Tilia americana</i> | American basswood, American linden | <i>Contarinia citrina</i> | linden twig gall gnat | Citrus | STATE |
| <i>Tripsacum dactyloides</i> | eastern gamagrass, Fakahatchee grass | <i>Baldulus tripsaci</i> | eastern gamagrass leafhopper | Miami-Dade | STATE |
| <i>Tripsacum dactyloides</i> | eastern gamagrass, Fakahatchee grass | <i>Delphacodes</i> sp. | a delphacid planthopper | Miami-Dade | HOST |
| <i>Tripsacum dactyloides</i> | eastern gamagrass, Fakahatchee grass | <i>Reventazonia lawsoni</i> | a leafhopper | Miami-Dade | COUNTY |
| <i>Undetermined, but suspect fennel</i> | | <i>Cavariella aegopodii</i> | carrot aphid | Escambia | INTERDICTION INTERCEPTION |
| | | <i>Acizzia</i> sp. | a psyllid | Collier | COUNTY |
| | | <i>Agrius fallax</i> | a buprestid beetle | Hillsborough | COUNTY |
| | | <i>Amorbia concavana</i> | a leafroller moth | Palm Beach | COUNTY |
| | | <i>Bassaniana floridana</i> | a crab spider | Lake | COUNTY |
| | | <i>Cithaeron praedonius</i> | swift ground spider | Orange | COUNTY |
| | | <i>Eustigmaeus</i> sp. | a stigmatid mite | Alachua | HOST |
| | | <i>Hylocurus rudis</i> | a scolytid beetle | Alachua | COUNTY |
| | | <i>Loxosceles rufescens</i> | Mediterranean recluse spider | Orange | NOTABLE FIND |
| | | <i>Loxosceles rufescens</i> | Mediterranean recluse spider | Orange | NOTABLE FIND |
| | | <i>Loxosceles rufescens</i> | Mediterranean recluse spider | Orange | NOTABLE FIND |
| | | <i>Otala lactea</i> | milk snail | Pinellas | NOTABLE FIND |
| | | <i>Pomacea maculata</i> | island apple snail | Flagler | COUNTY |
| | | <i>Xyleborus intrusus</i> | a scolytid beetle | Lee | COUNTY |

Nematology Section

Compiled by [Jason D. Stanley, M.S.](#), [Renato N. Insera, Ph.D.](#), [Leroy A. Whilby, Larry L. Violett](#) 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.

Nematodes of Special Interest

***Longidorus orientalis*, 1982, a needle nematode**, was found infecting the roots of date palm, *Phoenix dactylifera*. (Orange County; N13-01355; Larry L. Violett; 5 December 2013.)

Since 1989, needle nematode populations, *Longidorus* sp. with either elongated or hemispherical tails have been found in samples collected in the root balls of date palms imported from California into Florida. Specimens with an elongate-conoid tail were identified as *L. africanus*, a species occurring on vegetables in California. The specimens with a hemispherical tail were tentatively identified as *Longidorus belloi*, *L. belondiroides* and *L. orientalis*; however, these identifications were not validated by molecular and supplemental morphological analyses. In recent years, there has been an increase in the detection of needle nematodes on date palm shipments at Florida inspection stations. The documentation accompanying these date palm shipments indicates that the origin of these nematodes are Yuma County in Arizona and Imperial and Riverside counties in California. Since there are no reports of needle nematodes on date palms in Arizona and California, a needle nematode survey was conducted in date palm orchards in California. It was not possible to collect samples directly in date palm orchards in Arizona, therefore, shipments from Arizona were sampled when they arrived in Florida. The survey was extended to imported date palms that had been transplanted in Florida for no less than two years.

Nematologists from the Florida Department of Agriculture and Consumer Services conducted a morphological and molecular study of these needle nematode populations from Arizona, California and Florida, in cooperation with other nematologists from California, Greece, Iran and Spain. The results of this study have confirmed the association in the sampled needle nematode populations of specimens with both elongated-conoid and hemispherical tails. The needle nematode populations with elongate-conoid tails were morphologically and molecularly identified as *L. africanus* validating previous identifications made in Florida. The examination of populations with hemispherical tails indicated that they have morphological and molecular characteristics that match those of *L. orientalis*, rather than those of *L. belloi* and *L. belondiroides*. They differed from *L. belloi* by the shorter body length (3840-4554 (AZ) and 3580-4840 (CA) vs 5000-8600 μm) and symmetrically bilobed vs asymmetrically bilobed amphidial fovea and from *L. belondiroides* by a bilobed vs pouch-like, non-bilobed amphidial fovea. These findings confirm an unverified previous report of *L. orientalis* made by Esser in 1995 based on a date palm shipment from California. This new record validates the occurrence of *L. orientalis* in the United States and the Americas.

Sample Submissions

| | March April | Year to date |
|-------------------------------|----------------|-----------------|
| Morphological Identifications | 2,278 | 3,557 |
| Molecular Identifications | 166 | 407 |
| Total Samples Submitted | 2,444 | 3,964 |

Certification and Regulatory Samples

| | March April | Year to date |
|--|----------------|-----------------|
| Multistate Certification for National and International Export | 1,761 | 2,699 |
| California Certification | 235 | 483 |
| Pre-movement (Citrus Nursery Certification) | 24 | 62 |
| Site or Pit Approval (Citrus Nursery and Other Certifications) | 99 | 101 |

Other Samples

| | March April | Year to date |
|--------------------------------|----------------|-----------------|
| Identifications (invertebrate) | 3 | 10 |
| Plant Problems | 17 | 22 |
| Intrastate Survey, Random | 139 | 183 |
| Molecular Identifications* | 166 | 407 |

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



Longidorus orientalis (a needle nematode) female from Arizona Top: Anterior region. Bottom: Posterior region. Note the hemispherical tail terminus. (Body width at guiding ring = 20,5 μ m. Body width at anus = 33 μ m). Photography courtesy of J. D. Stanley, DPI

Longidorus orientalis is a species native to the arid environment of Middle East where it has been reported on date palms in Iran, Iraq and Saudi Arabia. It occurs also on grapevines in Greece (Crete) and Spain. Needle nematode samples from California indicated that both *L. africanus* and *L. orientalis* occurred in 30% of date palm orchards. *Longidorus orientalis* densities ranged 1-30 specimens/100 cm³ of soil. Seventy-eight date palm shipments from Arizona were sampled at Florida inspection stations. *Longidorus orientalis* and *L. africanus* were detected in 43% and 5% of these samples, respectively. *Longidorus orientalis* densities were low, 1-3/100 cm³ of soil. The majority of 258 samples collected from Arizona and California date palm trees established in Florida were free of *Longidorus* species. *Longidorus orientalis* and *L. africanus* were detected in 5.8% and 1.2% of the samples, respectively. Soil densities were less than 1 specimen/ 100 cm³ of soil. The results of this survey indicate that these needle nematodes are able to survive in the humid Florida environment, but at low densities. Studies are in progress to determine the ability of this population of root-knot nematode to reproduce on pecan, and also to determine the phylogenetic relations between *M. partityla* individuals infecting oaks with those reported on pecan.

Collectors submitting five or more samples that were processed for nematological analysis during March - April

| | | | |
|------------------------|-----|--------------------------|-----|
| Anderson, James E. | 7 | Ochoa, Ana L. | 119 |
| Bailey, W. Wayne | 11 | Said Gonzalez, Roaida C. | 9 |
| Burgos, Frank A. | 187 | Sharp, Jason B. | 8 |
| Clanton, Keith B. | 125 | Smith, Larry W. | 11 |
| Echols, M. Janie | 7 | Spriggs, Charles L. | 139 |
| Flores, Mary Ann | 8 | Terrell, Mark R. | 51 |
| LeBoutillier, Karen W. | 243 | Violett, Larry L. | 130 |
| Llanos, Jose L. | 5 | Wallace, Howard L. | 30 |
| Merced, Daniel | 9 | | |

REFERENCES

- Dixon, W.N. and P.J. Anderson (eds.). 2014. Nematology. Tri-ology. Volume 53(2): 8. http://www.freshfromflorida.com/content/download/39051/859848/Triology_March-April_2014.pdf [accessed 2015 May 19].
- Subbotin, S. A., J. D. Stanley, A. T. Ploeg, Z. Thana-Maafi, E. A. Tzortzakakis, J. J. Chitambar, J. E. Palomares-Rius, P. Castillo and R. N. Inserra. 2015. Characterisation of populations of *Longidorus orientalis* Loof, 1982 (Nematoda: Dorylaimida) from date palm (*Phoenix dactylifera* L.) in the USA and other countries and incongruence of phylogenies inferred from ITS1 rRNA and *coxI* genes. Nematology 17: 459–477.

Plant Pathology Section

Compiled by [Timothy S. Schubert, Ph.D.](#)

The Plant Pathology section provides plant disease diagnostic services for 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.

Several items during this two-month period deserve special mention:

***Kordyana tradescantiae* on Ohio spiderwort.** The prominent leaf spots caused by this pathogen in the Exobasidiales are hard to overlook. When *Kordyana* first appeared in 2009 in North America, it reappeared meagerly in the next season, and then seemingly disappeared until 2014 when it showed up again in a few locations in North Florida. Whereas at one time establishment of this new pathogen may have been questionable, present circumstances indicate otherwise. (Putnam County; P-83890; Sol F. Looker and Cheryl A. Jones; 10 April 2015).

New *Eucalyptus* foliar pathogen discovered in North America. The red gum eucalyptus (*Eucalyptus camaldulensis*) is one of the more widely planted Australian-native eucalypts, prized for aesthetic, timber and land remediation values. Several mature specimens at the St. Johns Agricultural Center in St. Augustine have survived occasional light freezes and are growing well. This spring for the first time, a foliar pathogen recently described from South Africa was found infecting foliage of the trees at the Agricultural Center. Since the fungus is relatively new to science and its geographical range largely undetermined, it is too early to know how the pathogen got to North America. The source of the original trees planted years ago in St. Augustine has not been determined. (St. John's County; P-83703; Robert M. Leahy, USDA and Bradley A. Danner; 12 March 2015.)

Revised phenology of the foliar disease caused by *Hinomyces moricola*. In the September-October 2014 edition of Tri-ology, a mention was made about the predictable appearance of the zonate leaf spot pathogen *Hinomyces moricola* (sexual stage *Grovesinia pyramidalis*) in the wet, hot weather of late summer. Surprisingly, a spring appearance of the disease was recorded on *Vitis rotundifolia* growing wild in a natural area in Alachua County, although the spring weather in North Florida has not been noticeably different from others in recent memory. We should no longer associate the arrival of late summer with the appearance of this disease. (Alachua County; P-84258; Timothy S. Schubert; 23 April 2015.)

Sample Submissions

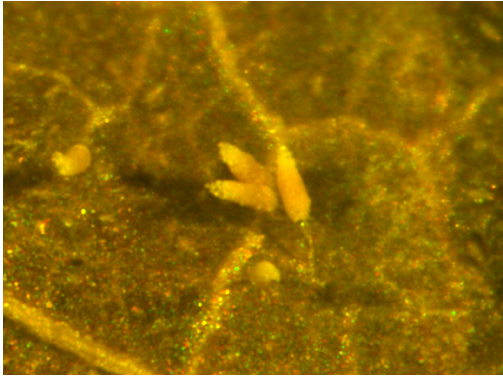
| | March April | Year to date |
|-----------------------------------|----------------|-----------------|
| Citrus black spot | 20 | 41 |
| Citrus canker | 31 | 117 |
| Citrus greening / HLB | 98 | 228 |
| Honeybees | 0 | 1 |
| Interdictions | 1 | 2 |
| Laurel wilt | 10 | 13 |
| Pathology, general | 646 | 1,119 |
| Soil | 2 | 11 |
| Sudden oak death | 1 | 3 |
| Sweet orange scab-like disease | 0 | 0 |
| Texas Phoenix palm decline | 1 | 3 |
| Water | 0 | 0 |
| Miscellaneous | 3 | 5 |
| Total | 813 | 1,543 |



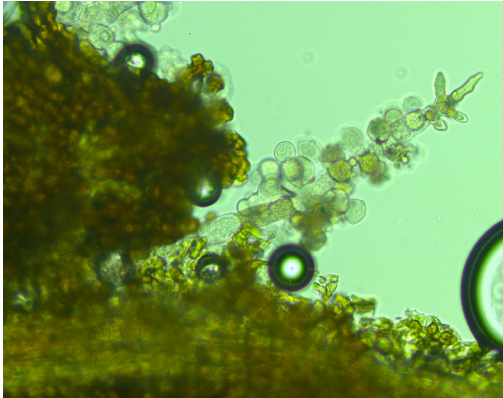
Kordyana tradescantiae, a fungal pathogen, causes these typical leaf spots on the foliage of *Tradescantia ohioensis*.
Photograph courtesy of M. L. Schubert



Hinomyces moricola causing zonate leaf spot on muscadine grape foliage



Hinomyces moricola pyramidal conidiophores, visible with hand lens, ≈40x



Hinomyces moricola conidiophores, 400x
Photographs by T. S. Schubert, DPI

Boxwood blight arrives in Florida. *Cylindrocladium pseudonaviculatum*, the pathogen that causes boxwood blight, apparently has been plaguing the United Kingdom since the mid 20th century. When the disease showed up in New Zealand in 2002, the pathogen was formally named and described for the first time. In the fall of 2011, the disease appeared in Connecticut, constituting the first known record in the Western Hemisphere. Since that time has been spreading gradually through the United States to include Ohio, Oregon, Maryland, North Carolina, New York, Rhode Island, Pennsylvania and Virginia, plus the three Canadian provinces of British Columbia, Ontario and Quebec. In the last few days of this reporting period, samples with convincing symptoms of boxwood blight came into the clinic from Gadsden County, Florida, and we fully expect to add Florida to the list of states where the disease has appeared. This incident may turn out to be a regulatory incident with the disease restricted to recently acquired plants from an infested state, but only time will tell. (Gadsden County; P-84135; Michael A. Bentley; 29 April 2015.)

REFERENCES

- Crous, P.W., J.Z.Groenwald and C.F.Hill. 2002.** *Cylindrocladium pseudonaviculatum* sp. nov. from New Zealand, and new *Cylindrocladium* records from Vietnam. *Sydowia* 54: 23-34.
- Henricot, B. and A.Culham. 2002.** *Cylindrocladium buxicola*, a new species affecting *Buxus* spp. and its phylogenetic status. *Mycologia* 94: 980-987.
- Piepenbring, M., J.Espinoza, L.Saldana and O.Caceres. 2010.** New records, host plants, morphological and molecular data of Exobasidiales (Basidiomycota) from Panama. *Nova Hedwigia* 91: 231-242.
- Summerell, B.A., J.Z.Groenwald, A.Carnegie, R.C.Summerbell and P.W.Crous. 2006.** *Eucalyptus* microfungi known from culture. 2. *Alysidiella*, *Fusculina*, and *Phlogicylindrium* genera nova, with notes on some other poorly known taxa. *Fungal Diversity* 23: 323-350.

| Plant Species | Plant Common Name | Casual Agent | Disease Name | Location Type | Specimen Number | County | Collector | Date | New Records | Comments |
|---------------------------------|-------------------------------------|--|----------------------|---------------------|-----------------|------------|--|-----------|-------------|--|
| <i>Ardisia crenata</i> | coralberry, coral ardisia | <i>Sphaerobolus stellatus</i> | glebal masses | Residence | 83914 | Osceola | Terrence D. Williams, USDA | 3/31/2015 | Host | Reproductive structures from this saprophytic fungus are splashed onto foliage of plants. The structures resemble small scale insects and can result in erroneous phytosanitary rejection. |
| <i>Buxus sempervirens</i> | boxwood | <i>Cylindrocladium pseudonaviculatum</i> | boxwood blight | Nursery | 84135 | Gadsden | Michael A. Bentley | 4/29/2015 | State | This disease has been active in states north of Florida for several years. More on this new state record in future reports. |
| <i>Commelina communis</i> | Asiatic dayflower | <i>Potyvirus Commelina mosaica potyvirus</i> | Commelina mosaic | Weed in nursery | 83815 | Citrus | Training class # 86 | 3/25/2015 | | This virus is restricted to the Commelinaceae and is transmitted by aphids. |
| <i>Eucalyptus camaldulensis</i> | Red gum | <i>Alysidiella parasitica</i> | leaf spot | Agricultural Center | 83703 | St. John's | Robert M. Leahy, USDA; Bradley A. Danner | 3/12/2015 | Continent | This leaf spot pathogen has not been reported previously in the Western Hemisphere. The host is native to Australia; the pathogen was recently descibed from diseased trees in South Africa. |
| <i>Hylocereus sp.</i> | night-blooming cereus, dragon fruit | <i>Phomopsis sp.</i> | fruit spots | Farm | 83628 | Polk | Suzi C. Distelberg | 3/19/2015 | Host | This unusual sub-tropical to tropical fruit does not have a large disease record in Florida. Though <i>Phomopsis</i> fruit spots are newly reported in Florida, they are not unexpected. |
| <i>Leucophyllum frutescens</i> | cenizo, Texas-sage | <i>Nectriella pironii</i> | stem gall | Nursery | 83834 | Hernando | Training class # 86 | 3/24/2015 | | The anamorph stage of the pathogen (<i>Kutilakesa pironii</i>) was sporulating heavily on the galls. This host is especially susceptible to this fungal gall pathogen. |
| <i>Nerium oleander</i> | oleander | <i>Xylella fastidiosa</i> | oleander leaf scorch | Nursery | 83731 | Miami-Dade | Jake M. Farnum | 3/18/2015 | | A particular strain of <i>X. fastidiosais</i> responsible for oleander leaf scorch. |

| Plant Species | Plant Common Name | Casual Agent | Disease Name | Location Type | Specimen Number | County | Collector | Date | New Records | Comments |
|--------------------------------|-----------------------------------|-------------------------------|------------------|-------------------------------|-----------------|------------|--------------------------------|-----------|-------------|---|
| <i>Rosmarinus officianalis</i> | rosemary | <i>Nectriella pironii</i> | stem gall | Nursery | 83860 | Miami-Dade | Haylett Cruz-Escoto | 4/1/2015 | | Another case of <i>Nectriella</i> stem gall in the <i>Kutilakesa</i> stage. Spring appears to be an optimal time to encounter sporulation in the galls. |
| <i>Sapium sebiferum</i> | Chinese tallow tree, popcorn tree | <i>Thielaviopsis basicola</i> | root rot | Experimental planting in pots | 83988 | Alachua | Susan A. Wright, USDA | 4/7/2015 | Host | Root rot on this hardy invasive plant grown in containers for biocontrol research was due to pathogen-contaminated commercial soil mix. A soil bait of unopened bags of product confirmed the contamination, probably from poor quality peat or compost in the mix. |
| <i>Tradescantia ohiensis</i> | Ohio spiderwort | <i>Kordyana tradescantiae</i> | leaf spot | Wildflower in yard | 83890 | Putnam | Sol F. Looker, Cheryl A. Jones | 4/10/2105 | | This marks two years running that this pathogen has appeared plentifully on spiderwort in the North Florida area. After appearing for the first time in North America in 2009, detection had been spotty with several years of absence. |
| <i>Vitis rotundifolia</i> | muscadine grape | <i>Hinomyces moricola</i> | zonate leaf spot | Natural area | 84258 | Alachua | Timothy S. Schubert | 4/23/2015 | | Normally appearing in late summer, this pathogen made a surprise appearance in spring. |