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

Highlights

Following are a few of the notable entries from this volume of TRI-OLOGY. These entries are reports of interesting plants or unusual pests, some of which may be problematic. See Section Reports for complete information.

Cissus verticillata (L.) Nicolson & C.E. Jarvis (seasonvine, possum grape, princess vine), a native vine that is sometimes cultivated as an ornamental, but can also become an aggressive intruder given good growing conditions in South Florida. This species was submitted four times for identification in May, with additional submission of photographs in later months. Although anecdotal, this activity might suggest an increased presence or popularity of the species.



Beta vulgaris (Swiss chard) infected with Meloidogyne incognita. Photograph courtesy of Mariana P. Beckman and Janete A. Brito, DPI

Meloidogyne incognita (Kofoid and White, 1919) Chitwood, 1949, also known as the southern root-knot nematode,

causes severe damage to many crops in temperate

and tropical areas of the world as well as in greenhouse operations. In Florida, this nematode has been reported parasitizing agronomic and vegetable crops, ornamental plants and weeds.

Ambrosiodmus minor, a Western Hemisphere record.

This is an Asian scolytid beetle, not recorded previously from the Western Hemisphere.

The native range is southern and southeastern Asia. Its pest potential is unknown, but probably minimal.



Cissus verticillata

vine) foliage

TopTropicals

(possum grape, princess

Photograph courtesy of

Ambrosiodmus minor Photograph courtesy of Michael C. Thomas, DPI

Section Reports

Botany Entomology Nematology **Plant Pathology**

Our Mission...getting it done

The mission of the Division of Plant Industry (DPI) is to protect Florida's native and commercially grown plants and the State's apiary industry from harmful pests and diseases. Perhaps you'd be interested how we use biological control techniques to help carry out our mission.

Biocontrol helps growers reduce reliance on chemical controls, while still growing the high-quality produce for which Florida is famous. Biocontrol is the use of parasites, predators and pathogens for the control or stabilization of pest populations and is an effective, environmentally-safe strategy for managing agricultural and urban pests. We conduct several ongoing programs that rear insects which are natural enemies of many pest insects.

Euwallacea interjectus, a



Euwallacea interjectus Photograph courtesy of Michael C. Thomas, <u>DPI</u>

Western Hemisphere record. This is an Asian scolytid beetle, not recorded previously from the Western Hemisphere. The native range is southern and southeastern Asia. Its pest potential is unknown, but probably minimal.

Aleuroplatus
cococolus, a
Continental USA
record. Two samples of
this whitefly were

collected from *Coccoloba diversifolia* in a parking-lot in Miami-Dade County. This species probably is native to the Caribbean or Central America, where it is known from a wide diversity of plant species, some of which are economically important fruit species, although this whitefly does not appear to be an economic pest.



Aleuroplatus cococolus Photograph courtesy of Ian C. Stocks, <u>DPI</u>



Holoplagia guamensis Photograph courtesy of Gary J. Steck, <u>DPI</u>

Holoplagia guamensis, a Continental USA record. This species, a minute black scavenger fly, is not a plant pest. This is the first record for the Nearctic region. It is recorded previously from the South Pacific, Africa and Central America.

Phenacoccus multicerarii, a Continental USA record. This mealybug species

has subsequently been identified from two nurseries. The second, in Apopka, was on fern material (*Polystichum* sp.) acquired from the Jacksonville nursery where the Continental record was discovered. In the Jacksonville nursery, it was present in high numbers with all life stages present.



Phenacoccus multicerariiPhotograph courtesy of Ian C.
Stocks, <u>DPI</u>

<u>Amitus granulosus</u>, a <u>State record</u>. This species is a parasitoid of <u>Tetraleurodes perileucae</u>. It is known previously only from Texas. The genus <u>Amitis</u> is known only to parasitize whiteflies.

<u>Chrysobothris acutipennis</u>, a <u>State record</u>. This species is a metallic wood-boring beetle or jewel beetle (Buprestidae). It is native from central Texas to South America. Larvae have been found in Texas ebony, *Pithecellobium flexicaule*.

Hahncappsia neomarculenta, a State record.

This crambid snout moth was found in a Cooperative Agricultural Pest Survey pheromone trap for light brown apple moth in Leon County. Subsequent examination of similar LBAM traps yielded numerous records as far south as De Soto

The Bureau of Methods Development and Biological Control develops and implements new ideas, techniques and methods for the survey, detection, control and eradication of plant pests. It also oversees the Biological Control Rearing Facility (BCRF) in Gainesville. This facility is a 15,000-square foot building dedicated to the mass-rearing of various natural enemies and their hosts for research and release. The bureau is also responsible for two biocontrol mass-rearing facilities located in Ft. Pierce and Dundee. Gainesville's DPI complex houses mass-rearing facilities which produce Caribbean fruit flies and Diaprepes root weevils for research, along with many biocontrol insects for a large number of pests and weeds, including the imported fire ant, Asian citrus psyllid, pink hibiscus mealybug, citrus leaf miner, Asian cycad scale and tropical soda apple.

DPI also houses the Florida Accelerator Services & Technology (FAST) facility, an electron-beam linear accelerator, which treats many agricultural commodities and is used in the cactus moth sterile insect technique (SIT) program. Millions of cactus moths are reared at the BCRF, then sterilized in FAST before being released all along the Gulf coast in an effort to stop the westward expansion of this very damaging pest. The Sterile Insect Release Facility (SIRF) in Sarasota is a cooperative program between FDACS-DPI and USDA-APHIS which produces millions of sterile Mediterranean fruit flies for weekly release in high-risk



Hahncappsia neomarculenta Photograph courtesy of James E. Hayden, DPI

and St. Lucie counties. The larval hosts are not known, and it is not expected to be of economic importance.

Neorhegmoclemina bisaccata, a State record.

This species, a minute black scavenger fly, is not a plant pest. This species has been reported previously from New York.

Tessaropa tenuipes, a State record. This species is a longhorned wood-boring beetle (Cerambycidae). It is native to the central and eastern United States, but heretofore has never been collected in Florida. It is found in small dead branches of hardwoods (hickory, oak, walnut, beech) and is uncommon.

Neorhegmoclemina bisaccata Photograph courtesy of Gary J. Steck, DPI



areas throughout the state.

for improvement of TRI-

contact me or Dr. Patti

Assistant Director, DPI

OLOGY. Please feel free to

Dr. Wayne N. Dixon, editor

We welcome your suggestions

Anderson with your comments.

Melanaphis sorini Photograph courtesy of Lyle J. Buss, University of Florida

Melanaphis sorini, a State record for Georgia.

This Asian aphid species was discovered in Florida in 1996. The taxonomy of the genus was not in order, so this species did not have a valid name. Thus, the species was described from Florida and Asian specimens.

Uromyces transversalis (gladiolus rust) was reported in Florida for the first time this year. The first detection of *Uromyces* transversalis in the United States was made on *Gladiolus* x hortulanus (garden gladiolus) in Manatee County, Florida, in April 2006.



Uromyces transversalis Photograph courtesy of Wayne N. Dixon and Jeffrey W. Lotz, DPI

Acknowledgements:

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

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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 10,000 plants and nearly 1,400 vials of seeds. Some of the samples received for identification are discussed below:

Cissus verticillata (L.) Nicolson & C.E. Jarvis (seasonvine, possum grape, princess vine), from a genus of about 200 species in warm and tropical regions. Vitaceae. (Synonyms: C. sicyoides; C. ovata; C. pallida.) This native vine is sometimes cultivated as an ornamental, but can also become an aggressive intruder given good growing conditions in South Florida. The stem of this often rampant vine is slightly fleshy, sometimes warty and usually glabrous, growing up to 20 m long. Leaves are alternate, with simple, somewhat succulent and asymmetrical blades. The leaf blades are 5-15 cm long, variable in shape, with rounded, truncate or cordate bases, and may be densely pubescent to glabrous. The margins are finely serrate, at least toward the tip of the leaf blade, again being quite variable. The inflorescence is a many-branched cyme, with individual flowers having four pale yellow to yellow-green petals. The ripe fruit is a blue-black, 6-9 mm berry with a single seed. This species was submitted four times for identification in May, with additional submission of photographs in later months. Although anecdotal, this activity might suggest an increased presence or popularity of the species. In addition to Florida, the distribution of this species includes Mexico, Central America, South America and the West Indies. (Miami-Dade County; B2011-208; Maria C. Acosta; 4 May 2011; Broward County; B2011-209; Sue M. Alspach; 3 May 2011; Miami-Dade County; B2011-213; Jake M. Farnum; 4 May 2011; Miami-Dade County; B2011-213; Juan Garcia Lopez; 4 May 2011.) (Mabberley 2008; Correll and Correll 1982; http://www.hear.org, accessed 11 July 2011.)

Clematis terniflora DC (sweet autumn virginsbower, Japanese clematis), from a genus of about 320 species from Northern temperate regions, South America, Madagascar, Oceania and tropical African mountains. Ranunculaceae. This vine climbs grows rampantly over supporting vegetation or structures and is found in scattered counties throughout the Florida panhandle and as far south as Hillsborough and Pinellas counties. This species was introduced from Asia as an ornamental and has naturalized along roadsides, disturbed forests and woody creeksides throughout the eastern United States from New Hampshire to Texas. The opposite leaves are pinnately compound with three or five ovate to broadly lanceolate leaflets. The leaflets have entire margins and are glabrous or with sparse pubescence along the veins. The inflorescences have up to 12 bisexual or staminate flowers in axillary cymes or panicle-like clusters. The flowers consist of four slender, spreading white sepals with white tomentum along the abaxial margins; about 50 white stamens, with glabrous filaments; and 5-10 white pistils. The seeds are flattened, ovoid achenes

Sample Submissions May/ Year to June Date Samples 1,398 3,574 submitted by other DPI sections Samples 169 361 submitted for botanical identification only **Total Samples** 1,567 3.935

26

26

Submitted

Specimens added

to the herbarium



Cissus verticillata (possum grape, princess vine) foliage
Photograph courtesy of TopTropicals

with a conspicuous, persistent style covered with long, silky white hairs. The Florida Exotic Plant Council lists this vine as a Category II invasive species in Central and North Florida. This is defined as "Invasive exotics that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category I species. These species may become ranked Category I, if ecological damage is demonstrated." (Alachua County; B2011-269; Cheryl A. Jones; 4 May 2011.)

(http://www.efloras.org/accessed 11 July 2011;

http://www.duke.edu/~cwcook/trees/clte.html accessed 19 August 2011.)

Rauvolfia tetraphylla (be still tree, four-leaf devil-pepper) from a genus of about 80 tropical species. Apocynaceae. This evergreen shrub or small tree is native from Mexico to Brazil and has been cultivated as an ornamental and as a source of pharmaceutical chemicals throughout the tropics and some subtropical areas. In Florida, it grows only in far southern counties. The ovate or oblong leaves grow in whorls of three, four or five, often of unequal sizes. The small, inconspicuous flowers may have white, ivory or pinkish corollas. The fruits are globose drupes that ripen from red to black with a textured seed. Rauvolfia species have been used medicinally as emetics and expectorants, as well as for the antihypertensive drug, reserpine. Juice from the fruit of this species has been used as ink, found to be especially effective in marking the hands and fingers of plant identifiers who attempt to extract the seeds. (Miami-Dade County; B2011-349; Olga Garcia; 24 June 2011.) (Rao 1956; Adams 1972;

http://www.efloras.org/florataxon.aspx?flora_id=2&taxon_id=200018454 accessed 22 August 2011; http://nt.ars-

grin.gov/sbmlweb/OnlineResources/frsdfam/Index.cfm (photograph of seed)
accessed 22 August 2011.)

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Cissus verticillata (possum grape, princess vine) flowers and fruit Photograph courtesy of Kim and Forrest Starr, www.hear.org



Clematis terniflora DC (sweet autumn virginsbower, Japanese clematis)
Photograph courtesy of Will Cook, cwcook@duke.edu



Rauvolfia tetraphylla (be still tree, four-leaf devil-pepper)
Photograph courtesy of Mark Marathon,
Wikipedia

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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.

Ambrosiodmus minor, a Western Hemisphere record. This is an Asian scolytid beetle, not recorded previously from the Western Hemisphere. The native range is southern and southeastern Asia. Its pest potential is unknown, but probably minimal. (Nassau County; E2011-3015; Milton Lara, Department of Homeland Security; 31 March 2011.) (Dr. Robert J. Rabaglia, USDA Forest Service, Virginia and Katherine E. 'Kate' Okins.)

Euwallacea interjectus, a Western Hemisphere record. This is an Asian scolytid beetle, not recorded previously from the Western Hemisphere. The native range is southern and southeastern Asia. Its pest potential is unknown, but probably minimal. (Alachua County; E2011-3013; Paul E. Skelley; 6 March 2011.) (Dr. Robert J. Rabaglia, USDA Forest Service, Virginia.)

Aleuroplatus cococolus, a Continental USA record. Two samples of this whitefly were collected from Coccoloba diversifolia in a parking-lot in Miami-Dade County. This species probably is native to the Caribbean or Central America, where it is known from a wide diversity of plant species, some of which are economically important fruit species, although this whitefly does not appear to be an economic pest. The species epithet probably is derived from Cocos nucifera, the type host plant species, not Coccoloba, even though that species is also a known host. (Miami-Dade County; E2011-2842; Olga Garcia and Rebecca Sanders; 12 May 2011.) (Dr. Ian C. Stocks.)

Holoplagia guamensis, a Continental USA record. This species, a minute black scavenger fly, is not a plant pest. This is the first record for the Nearctic region. It is recorded previously from the South Pacific, Africa and Central America. (Monroe County; E2011-2875; Lawrence J. Hribar, Florida Keys Mosquito District; 7 April 2011.) (Dr. Herón Huerta, Instituto Nacional de Diagnóstico y Referencia Epidemiológicos, México.)

Phenacoccus multicerarii, a Continental USA record. This mealybug species has subsequently been identified from two nurseries. The second, in Apopka, was on fern material (Polystichum sp.) acquired from the Jacksonville nursery where the Continental record was discovered. This species was described in 2007 from a 60-year old museum specimen on an unknown host plant in Caracas, Venezuela. Thus far, the mealybug has been collected outside the United States from over a dozen host species in as many plant families. In the Jacksonville nursery, it was present in high

Sample/Specimen Submissions May

Samples Submitted	889
Specimens Identified	11,944

Julie	
Samples Submitted	844

Specimens Identified	11,063
Year to Date	

Samples Submitted	4,170
Specimens Identified	56,789



Ambrosiodmus minor Photograph courtesy of Michael C. Thomas,



Euwallacea interiectus Photograph courtesy of Michael C. Thomas,

numbers with all life stages present. (Nassau County; E2011-3818; Lisa M. Hassel; 15 June 2011.) (Dr. Ian C. Stocks.)

Amitus granulosus, a State record. This species is a parasitoid of *Tetraleurodes perileucae*. It is known previously only from Texas. The genus *Amitis* is known only to parasitize whiteflies. (Miami-Dade County; E2011-3098; Olga Garcia and Rebecca Sanders; 19 May 2011.) (Dr. Gregory A. Evans, USDA, Systematic Entomology Laboratory, Beltsville, Maryland.)

Chrysobothris acutipennis, a State record. This species is a metallic wood-boring beetle or jewel beetle (Buprestidae). It is native from central Texas to South America. Larvae have been found in Texas ebony, *Pithecellobium flexicaule*. (Hillsborough County; E2011-3417; F. Marcos Parilla, Department of Homeland Security; 17 April 2011.) (Katherine E. 'Kate' Okins.)

Hahncappsia neomarculenta, a State record. This crambid snout moth was found in a Cooperative Agricultural Pest Survey pheromone trap for light brown apple moth in Leon County. Subsequent examination of similar LBAM traps yielded numerous records as far south as De Soto and St. Lucie counties. This uncommon species was known previously from Maryland and Virginia to Illinois. The larval hosts are not known, and it is not expected to be of economic importance (Leon County; E2011-3545; Michael A. Bentley; 6 June 2011.) (Dr. James E. Hayden.)

Neorhegmoclemina bisaccata, a **State record.** This species, a minute black scavenger fly, is not a plant pest. This species has been reported previously from New York. (Monroe County; E2011-2882; Lawrence J. Hribar, Florida Keys Mosquito District; 12 March 2011.) (Dr. Herón Huerta, Instituto Nacional de Diagnóstico y Referencia Epidemiológicos, México.)

Tessaropa tenuipes, a **State record**. This species is a longhorned woodboring beetle (Cerambycidae). It is native to the central and eastern United States, but heretofore has never been collected in Florida. It is found in small dead branches of hardwoods (hickory, oak, walnut, beech) and is uncommon. (Duval County; E2011-2745; Milton Lara, Department of Homeland Security; 30 March 2011.) (Katherine E. 'Kate' Okins.)

Melanaphis sorini, a State record for Georgia. This Asian aphid species was discovered in Florida in 1996. The taxonomy of the genus was not in order, so this species did not have a valid name. Thus, the species was described from Florida and Asian specimens. Since then, it has been discovered in other parts of the United States and the world, including Great Britain, the Middle East, California and Arizona. It appears to be limited to Miscanthus and can be damaging to ornamental cultivars. (Spalding County, Georgia; E2011-3835; Daniel R. Suiter; 8 June 2011.) (Dr. Susan E. Halbert.)

Nipaecoccus viridis, a **Host record**. A new population of this potentially serious pest was discovered near Ft. Lauderdale. This species was first discovered in Florida near the town of Palm Beach in 2009. It was found in high abundance in a natural area. This caused concern that it could become a serious a pest in Florida, as it is in other parts of the world. However, study of the populations in both Palm Beach and Ft. Lauderdale revealed that a complex of predators and parasitoids had a dramatic biological-control effect on the populations. (Broward County; E2011-4050; Karolynne



Aleuroplatus cococolus Photograph courtesy of Ian C. Stocks, <u>DPI</u>



Holoplagia guamensis Photograph courtesy of Gary J. Steck, <u>DPI</u>



Phenacoccus multicerarii Photograph courtesy of Ian C. Stocks, <u>DPI</u>



Hahncappsia neomarculenta
Photograph courtesy of James E. Hayden, <u>DPI</u>

M. Griffiths, USDA/APHIS/PPQ, and Nury M. Marrone; 23 June 2011.) (Dr. Ian C. Stocks.)

Aleurocybotus sp., probably an undescribed species of whitefly. A sample from 1988, also from *Muhlenbergia capillaris*, was found in the FSCA slide collection. The inspector who collected the recent sample encountered a robust population. Specimens have been sent to Dr. Jon Martin, BMNH, for his examination and determination, if it is a known species. (Volusia County; E2011-3467; Raymond C. Jarrett; 2 June 2011.) (Dr. Ian C. Stocks.)

Neorhegmoclemina bisaccataPhotograph courtesy of Gary J. Steck, <u>DPI</u>

Melanaphis soriniPhotograph courtesy of Lyle J. Buss,
University of Florida

Entomology Specimen Report

Following are tables with entries for records of new hosts or new geographical areas for samples identified in the current volume's 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.

Download full spreadsheet in Microsoft Excel format

Plant Species Name	Plant Common Name	Arthropod Species Name	Arthropod Common Name	County	New Records
Acacia auriculiformis	earpod acacia; earleaf acacia	Stator limbatus	a bruchid beetle	Palm Beach	COUNTY
Acanthorhipsalis monacantha	cactus	Planococcus citri	citrus mealybug	Duval	REGULATORY INCIDENT
Adonidia merrillii	Christmas palm; Manila palm	Aleurodicus rugioperculatus	a whitefly	Miami-Dade	HOST
Alocasia cucullata	Chinese taro	Pseudococcus longispinus	longtailed mealybug	Seminole	HOST
Alocasia sp.		Tetranychus tumidellus	spider mite	Bradford	HOST
Alocasia sp.		Echinothrips americanus		Bradford	HOST
Bambusa sp.	bamboo	Bambusaspis bambusicola	Kuwana pit scale	Alachua	REGULATORY INCIDENT
Borrichia frutescens	sea oxeye, bushy seaside tansy	Asphondylia borrichiae	a gall midge	Duval	COUNTY
Casuarina equisetifolia	Australian-pine; beefwood; she-oak; horsetail tree; beach sheoak	Halyomorpha halys	Brown Marmorated Stink Bug	Palm Beach	REGULATORY INCIDENT

Casuarina equisetifolia	Australian-pine;	Pseudolynchia	a louse fly	Palm Beach	COUNTY	
	beefwood; she-oak;	canariensis				
	horsetail tree; beach					
	sheoak					

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Nematology Section

Compiled by <u>Jason D. Stanley, M.S., R. N. Inserra, Ph.D.</u>, and <u>Janete A.</u> Brito, Ph.D.

This section analyzes soil and plant samples for nematodes, conducts pest detection surveys and provides diagnosis 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 principal part of the regulatory activity 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

Meloidogyne incognita (Kofoid and White, 1919) Chitwood, 1949, a root-knot nematode, was found infecting the roots of *Beta vulgaris* (Swiss chard), a garden vegetable. (Alachua County; N2011-00696; Mark D. Gooch; 19 June 2011.)

Meloidogyne arenaria (Neal, 1889) Chitwood, 1949, a root-knot nematode, was found infecting the roots of the ornamental *Liriope muscari* (liriope, lilyturf). (Orange County; N2011-00660; Roi Levin, consultant; 3 May 2011.)

Meloidogyne incognita (Kofoid and White, 1919) Chitwood, 1949, also known as the southern root-knot nematode, causes severe damage to many crops in temperate and tropical areas of the world as well as in greenhouse operations. In Florida, this nematode has been reported parasitizing agronomic and vegetable crops, ornamental plants and weeds. Behavioral studies of Meloidogyne species and populations within a species indicate that M. incognita is one of the most variable species. Currently, four host races have been identified among the populations of M. incognita collected around the world. Race 1 is most widespread, while the races 2, 3 and 4 are less common, although race 3 is widespread in cotton fields in several parts of the world. The use of resistant cultivars has been recommended for integrated pest management programs to control this nematode in infested areas.

Collectors submitting five or more samples that were processed for nematological analysis in May - June 2011

Anderson, James L.	115
Bentley, Michael A.	86
Burgos, Frank A.	246
Edenfield, Carrie S.	56
LeBoutillier, Karen W.	278

Sample Submissions

	May/ June	Year to Date
Morphological Identifications	2,885	7,360
Molecular Identifications	99	157
Total Samples Submitted	2,984	7,517

Certification and Regulatory Samples

Multistate	2,041	5,382
Certification for		
National and		
International		
Export		
California	679	1425
Certification		
Pre-movement	54	170
(Citrus Nursery		
Certification)		
Site or Pit	5	67
Approval (Citrus		
Nursery and		
Other		
Certifications)		

Other Samples

Identifications (invertebrate)	1	6
Plant Problems	15	66
Intrastate Survey, Random	90	244
Molecular Identifications*	99	157

^{*}The majority of these analyses involved root-knot nematode species

Ochoa, Ana L.	228
Pate, Jo Ann	66
Qiao, Ping	232
Spriggs, Charles L.	91
Tannehill, Ellen J.	8
Toral, Angelina M.	22

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Beta vulgaris (Swiss chard) infected with Meloidogyne incognita. Whole plant showing root galling induced by this nematode.

Photography courtesy of Mariana P. Beckman and Janete A. Brito, <u>DPI</u>



Beta vulgaris (Swiss chard) infected with Meloidogyne incognita. Close up of the galls, a typical below ground symptom. Photography courtesy of Mariana P. Beckman and Janete A. Brito, <u>DPI</u>

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Plant Pathology Section

Compiled by David A. Davison

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

Groundnut Ringspot Tospovirus (groundnut ringspot virus), a plant pest relatively new to Florida, was found on Capsicum sp. (pepper). This is the first time a pepper sample has been sent to our laboratory infected with virus. (Collier County; P2011-48068; Scott D. Krueger; 28 April 2011.)

Uromyces transversalis (gladiolus rust) was reported in Florida for the first time this year. The first detection of Uromyces transversalis in the United States was made on Gladiolus x hortulanus (garden gladiolus) in Manatee County, Florida, in April 2006. (See DPI Pest Alert: Gladiolus rust(Uromyces transversalis) Arrives in the U.S.) (Manatee County; P2011-48475; Lane P. Southerland, Amber L. Roux and Doris Rogers; 16 May 2011.)

Sample Submissions		
	May/ June	Year to Date
Pathology	317	1,972
Bee	7	22
Soil	3	19
Citrus canker	417	1,059
Citrus greening	1,623	3,437
Sweet orange scab-like disease	5	202
Miscellaneous	6	44
Total Samples Submitted	2,378	6,755

Uromyces transversalis

Plant Pathology Sample Report

Following is a table 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. The table is organized alphabetically

Plant Species	Plant Common Name	Causal Agent	Disease Name	Location	County	Log #	Collector	Date	New Records
Capsicum sp.	pepper	Groundnut ringspot Tospovirus	Groundnut ringspot virus	Harris Moran Seed Company	Collier	48068	Scott D. Krueger	4/28/11	
Gladiolus x hortulanus	garden gladiolus - glad	Uromyces transversalis	gladiolus rust	Manatee Floral	Manatee	48475	Lane P. Southerland, Amber L. Roux, Doris Rogers	5/16/11	
Persea palustris	swamp bay	Raffaelea lauricola	Laurel wilt	John Chestnut Sr. State Park	Pinellas	48843	Richard A. White	5/24/11	County