

## BOTANY SECTION

Compiled by Richard E. Weaver, Jr., Ph.D. and Patti J. Anderson, Ph.D.

For this period, 120 specimens were submitted to the Botany Section for identification and 1721 were received from other sections for identification/name verification (total 1741). Also during this period, 32 specimens were added to the herbarium. Some of the samples sent in for identification are discussed below:

*Boerhavia diffusa* L. (A genus of about 50 species found worldwide in warm regions.)

Nyctaginaceae. Named for a Dutch naturalist (Hermann Boerhaave) and its open or wide-spreading habit (*diffusa*), common names include **red spiderling, tar vine, wine flower, and spreading hogweed**. Like its relatives, *Bougainvillea* and *Mirabilis* (four o'clocks), the red pigment of *Boerhavia* comes from betalains (think beets) rather than the anthocyanins common in other plant families. Although the plant has been used medicinally for a range of ailments, including as an antihelminthic, research reported by National Institutes of Health found no antibacterial or antifungal activity. The leaves, roots, and seeds of this species are used as food by humans. The herbaceous perennial has a woody taproot, and often dies back to the roots in winter. Its stems are branched profusely with few or no hairs. The leaves are opposite, with paired leaves of unequal size, 1-5 cm long and broadly lanceolate, ovate, or broadly ovate, with few hairs on the veins. The inflorescence is a terminal cyme with inconspicuous bracteoles. The flower is purplish red to reddish pink, with two or three stamens that are included or barely exerted. Fruits are 3-5 mm long, broadly conic at the apex, with five viscid glandular (sticky) ribs (see photo: <http://botany.cs.tamu.edu/FLORA/pic1/JRMBoer2.JPG>). Plants grow along roadsides, in waste places, disturbed sandy areas, and as a "weed" in lawns. (Lake County; B2006-310; Mary C. Sellers; 20 July 2006.) (Holm *et al.* 1997; Kunkel 1984; Murphy 1992; [www.efloras.org](http://www.efloras.org); [www.hear.org/gcw](http://www.hear.org/gcw); [www.nlm.nih.gov](http://www.nlm.nih.gov))

*Eragrostis elliottii* S. Watson. (A genus of perhaps 300 species distributed through the temperate and tropical zones of both hemispheres.) Gramineae/Poaceae. **Elliott's love grass, blue lovegrass**. This clump-forming, perennial grass is native in dry, open sites on the Coastal Plain from North Carolina to Texas, through Mexico to Central and South America and in the West Indies. In Florida, it is common and conspicuous in pine flatwoods and sandhills; in the West Indies, it often grows in areas with serpentine soils. The stems (culms) grow from 25 to 80 cm tall and stand erect; the narrow leaf blades are 6-30 cm long and 2-4.5 mm wide, drooping, and often a beautiful blue-green color. The spikelets are borne in diffuse and open panicles as much as 60 cm long and 45 cm wide; the spikelets themselves are linear-lanceolate, 4-18 mm long, with 9-30 florets, on long, filiform stalks. With its large airy panicles and blue-green foliage, this is a beautiful and graceful plant that has become a popular ornamental, used successfully in borders or as an accent. It is also excellent for naturalistic plantings and erosion control. (Miami-Dade County; B2006-347; Eduardo G. Camero; 3 August 2006.) (Mabberley 1997; Peterson 2003.)

*Ipomoea batatas* Lam. (A genus of ca. 500 tropical and warm temperate species.)

Convolvulaceae. **Sweet potato.** That this species and the following one, *I. violacea*, are in the same genus (or even the same family) is a botanical surprise for many people because sweet potato flowers are rarely seen in North America. Shared characteristics include their twining habit, contorted (twisted clockwise) buds, and funnellform corollas.



These fused corollas are marked with five lines at the center of each lobe to form a “star” pattern. A nectary disk surrounding the ovary provides a reward for pollinators. *Batatas*, from an Arawak name, were grown in Central and lowland South America, as well as in the West Indies, before Europeans arrived. Although the sweet potato is native to northwestern South America, it has long been a major crop in many Asian and South

Pacific countries. Two cultivated forms of sweet potato are familiar in the United States: the yellow sweet potato and the orange “yam,” (not *Dioscorea*, true yam, in a quite different plant family.) This tuberous-rooted vine has stems up to 4 m long, usually prostrate; leaves are ovate (entire or palmately lobed) or cordate, borne on long petioles and green or purple in color. The white or pale violet flowers, rare outside the tropics, are axillary, funnel-shaped and borne singly or in cymes; the fruit is a round capsule (also rarely seen.) Propagation is vegetative. *I. batatas* is cultivated mainly for the tuber, used as vegetable. Leafy tops are also eaten as a vegetable or used as forage. St. Johns County; B2006-319; Sol F. Looker; 20 July 2006.) (Van Wyk 2005; Zomlefer 1994; <http://www.hort.purdue.edu>; <http://www.botgard.ucla.edu>)

*Ipomoea violacea* L. (A genus of ca. 500 tropical and warm temperate species.) Convolvulaceae.

**Common morning-glory.** *I. violacea* is familiar to home gardeners through the “Heavenly Blue” cultivar. Stems grow to 5 m, leaf blades are cordate, 5-15 cm in length and width. Flowers (9-12 cm long) have fused white, blue, or lavender petals, with midpetaline bands. Stamens are included, with filaments inserted near base of corolla tube. The stigma is two-lobed. The angular black seeds of this plant contain ergoline alkaloids that have been used to induce religious and shamanic visions. (Lafayette County; B2006-339; Christopher Vann; 8 August 2006.) (Schultes and Hofmann 1992; Zomlefer 1994.)

*Melinis repens* (Willd.) Zizka. (A genus of 22 species native to tropical and southern Africa.)

Gramineae/Poaceae. **Rose Natalgrass.** Like another grass treated here (*Eragrostis elliottii*), this is a beautiful plant; like *Panicum repens* (see below), this is not a desirable plant. It is a weedy annual or short-lived perennial that is now widely distributed through the tropics and subtropics, but is thought to be native in southern Africa. Introduced to the United States as a forage grass, it has become naturalized throughout the southern states from North Carolina to California. At present, it is considered a serious problem only in Florida. The culms are 40-150 cm long, decumbent, and usually rooting at the lower nodes. The erect to spreading leaf blades are 4-27 cm long and 2-9 mm wide. Erect, airy panicles, 6-22 cm long and 3-12 cm wide, are borne in late summer or early fall, with distinctive spikelets about 4 mm long, their glumes densely covered in long and silky, pink or red hairs. A field full of rose Natalgrass is a beautiful sight, especially

when backlit by the setting sun. Unfortunately, its beauty belies its weedy tendencies, and it has spread to nearly every county in Florida. Because this grass is displacing native plants, it has been placed on the Florida Exotic Plant Pest Council's (EPPC) list of invasive species (Category I). (Hardee County; B2006-346; Susan C. Griego; 3 August 2006.) (Mabberley 1997; Wipff 2003.)

*Myrcianthes fragrans* (Sw.) McVaugh. ( A genus of about 50 species, mostly found in tropical South America and the West Indies, with only one Florida species.) Myrtaceae.



Photo P. Anderson

**Twinberry, Simpson's stopper, naked-wood, pale stopper.** Although native to coastal hammocks of Florida and the Caribbean, this threatened species is planted as an ornamental farther north. The small-statured evergreen tree or shrub, to 20 m, has pale reddish-brown, peeling bark and fragrant ethereal oils like many other members of this family (allspice, cloves and eucalyptus.) Leaves are opposite, ovate, about 1.5 cm long, with pellucid dots (crushed leaves have the aroma of nutmeg.)

The inflorescences (dichasia) are 2-4 cm long, with four-petaled white flowers, having numerous showy white stamens. Fruits are often paired (hence the name, twinberry), bright orange to red-orange when ripe, 1-3 cm wide by 2-4 cm long, and are edible raw for humans and wildlife. *Myrcianthes fragrans* thrives in a wide range of growing conditions, from shade to full sun, and is drought and salt tolerant. (Hillsborough County; B2006-308; Karyn L. Pippenger; 7 July 2006.) (Coile 2003; Couplan 1998; Osario 2001; Tomlinson 1986.)

*Noronhia emarginata* (Lam.) Poir. (A genus of 40 species native to Madagascar and the Comoro Islands.) Oleaceae. **Madagascar olive.** This is strictly a tropical plant. In the mainland United States, it succeeds only in the warmest parts of South Florida and coastal Southern California. A large shrub or small tree, with a dense oval or vase-shaped crown, this species grows to about 6 m tall with a more or less equal spread. The evergreen, leathery, opposite leaves are 5-10 cm long, elliptic to obovate, with a broadly and shallowly notched (emarginate) apex. The small, fragrant flowers, with a fleshy, pale yellow, four-lobed corolla, are borne in axillary panicles and are not conspicuous. The fruit is a drupe with a sweet, yellow edible flesh and a single large seed. This is an adaptable, drought-tolerant ornamental, growing well in a variety of soil types. It is an excellent tree for seaside planting because it is highly tolerant of wind and salt spray, and moderately tolerant of salty soils. Although it is offered by a number of nurseries in South Florida, it is not common in general cultivation (Miami-Dade County; B2006-345; J. Garcia-Lopez; 7 August 2006.) (Gilman and Watson 1994; Mabberley 1997.)

*Panicum repens* L. (A genus of ca. 470 species in tropical and warm temperate areas.) Gramineae/Poaceae. **Torpedo grass, panic grass, creeping panic** (don't panic, the name refers to the panicle inflorescence.) This genus includes millet (*P. miliaceum*) as well as

panic grasses. Florida Exotic Pest Plant Council has found that *P. repens* is a serious weed. It can displace native wetland vegetation by forming monocultures through rapid extension of its rhizomes. In Florida, this exotic invasive grows in wet places ranging from the shores of Lake Okeechobee to ditches and ponds on agricultural land as well as



in dry pastures and suburban lawns. The perennial gray-green grass (presumed to be native to Australia) can be confused with Florida native panic grasses, but its rhizomes with stiff, sharply pointed (torpedo like) tips are distinctive. Stems grow to 30-80 cm with distichous, linear leaves 5-25 cm long and 5-10 mm wide; the inflorescence is an open, branched panicle 3-10 cm long. Because this grass reproduces by rhizome extension and fragmentation, tilling might help its spread to

new areas. Repeated applications of herbicides have been somewhat useful for control. (Volusia County; B2006-329; Raymond C. Jarrett, Jr.; 28 July 2006.) (FLEPPC 2003; Murphy 1992; Tobe 1998; van Wyk 2005; [www.aquaplant.tamu.edu](http://www.aquaplant.tamu.edu))

*Syzygium cumini* (L.) Skeels. (A genus of nearly 1000 species distributed through the Old World tropics.) Myrtaceae. **Java plum, jambolan.** This tree is widely naturalized throughout the Old World tropics, but appears to be native to India, Myanmar, Sri Lanka, and the Andaman Islands. It is fast growing, reaching heights of 30 m in southern Asia, but in Florida, it seldom grows more than 15 m tall. The opposite, evergreen, glossy dark green leaves smell of turpentine when fresh; they are variable in shape, oblong to elliptic, either obtuse at the apex or abruptly tapering to an often twisted point. The fragrant flowers are borne in panicle-like clusters from the leaf axils. The white to pink petals are quickly deciduous, leaving only the numerous stamens as the conspicuous parts. Flowers are followed by round or oblong, 2-5 cm, fleshy, usually one-seeded fruits which become nearly black when mature. They are edible, although some are unpleasantly astringent, and are eaten fresh or made into sauces and jams; the juice is used fresh or made into wine. Most parts of the plant, from the bark to the seeds are important in folk medicine, the latter evidently being somewhat efficacious in the treatment of diabetes. Once widely planted for shade, ornament and fruit, the Java plum has lost favor because of its weedy tendencies. It is a pest in Hawaii and is included as a Category I Invasive on the Florida EPPC's list of invasive species. (Brevard County; B2006-289; Ali A. Darrat; 11 July 2006.) (Mabberley 1997; Morton 1987.)

*Tradescantia spathacea* Sw. (A genus 70 species native to temperate and tropical North and South America.) Commelinaceae. **Moses-in-the cradle, oyster plant, boatlily.** Formerly known as *Rhoeo discolor* (L'Hér.) Hance, this is a familiar ornamental, popular as a houseplant in the cooler parts of North America and Europe and as a garden plant in warmer areas around the world. Native to southern Mexico, Belize and northern Guatemala, it is common on the Maya ruins found throughout that region. The linear-lanceolate to oblong lanceolate, acuminate leaves are spirally arranged in a loose rosette atop a short stem; they are from 15-30 cm long and seldom more than 5 cm wide, dark

green above and vivid purple beneath. The leaves are also rather succulent, with a copious, caustic sap that can cause serious skin irritation or gastrointestinal problems if ingested. All of the common names are derived from the curious inflorescence. Many plants of the Commelinaceae have their inflorescences arising from a folded bract, or “spathe.” In this species, the spathes are boat-shaped (or oyster-shaped), borne on short stalks in the axils of the leaves. The flowers themselves are small, short-stalked, with three delicate, white petals and six stamens with hairy filaments. This is an adaptable plant, growing well in either sun or shade, and tolerant of drought and poor soils; in the wild, it often grows as a lithophyte. In warm climates, plants spread rapidly, forming a dense groundcover. It has become naturalized in five counties of South Florida and is a pest (especially in hardwood hammocks) included on the Florida EPPC’s list of invasive species (Category I). (Brevard County; B2006-289; Ali A. Darrat; 11 July 2006.) (Huxley 1992; Mabberley 1997.)

## REFERENCES

- Coile, N.C. (updated by M.A. Garland.) 2003. Notes on Florida’s Endangered and Threatened Plants 4th edition. Division of Plant Industry, FDACS, Gainesville, Florida. 120 p.
- Couplan, F. 1998. Encyclopedia of edible plants of North America. Keats Publishing. New Canaan, CT. 584 p.
- Gilman, E.F. and D.G. Watson. 1994. *Noronhia emarginata* – Madagascar olive. Fact Sheet- 419, Department of Environmental Horticulture, University of Florida, Gainesville, Florida. 3 p.
- Holm, L., J. Doll, E. Holm, J. V. Pancho, and J. P. Herberger. 1997. World weeds: natural histories and distribution. John Wiley and Sons, New York. 1129 p.
- Huxley, A.J. (ed.) 1992. New Royal Horticultural Society dictionary of gardening. Four volumes. Macmillan Press, London. 3240 p.
- Kunkel, G. 1984. Plants for human consumption. Koeltz Scientific Books, Koenigstein, Germany. 393 p.
- Mabberley, D.J. 1997. The plant book, 2nd edition. Cambridge University Press. 858 p.
- Morton, J.F. 1987. Fruits of warm climates. Julia F. Morton, Miami, FL. 505 p.
- Murphy, T.R. (ed.). 1992. Weeds of southern turfgrasses: golf courses, lawns, roadsides, recreational areas, commercial sod. Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, Florida. 208 p.
- Osario, R. 2001. Gardener’s guide to Florida’s native plants. University Press of Florida. Gainesville, Florida. 345 p.
- Peterson, Paul M. 2003. Eragrostis, in Flora of North America 25: 65-105.
- Schultes, R.E. and A. Hofmann. 1992. Plants of the gods. Healing Arts Press. Rochester, Vermont. 192 p.
- Tobe, J.D. (ed.). 1998. Florida wetland plants: an identification manual. Department of Environmental Protection. Tallahassee, Florida. 598 p.
- Tomlinson, P.B. 1986. Biology of trees native to tropical Florida. Harvard University Printing Office. Allston, MA. 480 p.
- Van Wyk, B. 2005. Food plants of the world: an illustrated guide. Timber Press. Portland, Oregon. 480 p.
- Wipff, J.K. 2003. Melinis, in Flora of North America 25: 490 – 492.
- Zomlefer, W. 1994. Flowering plant families. University of North Carolina Press. Chapel Hill, North Carolina. 430 p.

## ENTOMOLOGY SECTION Compiled by Susan E. Halbert, Ph.D.

For the month of July, there were 1,031 samples and 49,169+ specimens. In August, there were 836 samples and 42,655+ specimens. Some of the samples are listed below:

### ORNAMENTALS, WOODY PLANTS, AND PALMS:

*Chaenomeles* sp. (flowering quince)-- *Howardia biclavis* (Comstock), **mining scale**: A slight infestation was found on both of two plants at a nursery in Naples (Collier County; E2006-5308; Scott D. Kreuger; 9 August 2006.) NEW DPI HOST RECORD.

*Spiraea* sp. (spirea)-- *Howardia biclavis* (Comstock), **mining scale**: A slight infestation was found on five of eight plants at a nursery in Naples (Collier County; E2006-5306; Scott D. Krueger; 9 August 2006.) NEW DPI HOST RECORD. This scale has a wide host range and can be a pest (Dr. Greg S. Hodges).

### ORNAMENTALS, FOLIAGE PLANTS:

*Aloe* sp. (aloe)-- *Vryburgia amaryllidis* (Bouche), **lily bulb mealybug**: A slight infestation was found on house plants from California in Brandon (Hillsborough County; E2006-4277; Jason B. Sharp; 7 July 2006). This scale does not occur in Florida, but it has been reported from California. It can be a pest of plants in the Agavaceae, Amaryllidaceae, Cyperaceae, Gramineae, Iridaceae, and Liliaceae (Dr. Greg S. Hodges).

*Bambusa* sp. (bamboo)-- *Palmicultor lumpurensis* (Takahashi), **a bamboo mealybug**: An infestation was found at a residence in Pensacola (Escambia County; E2006-4559; Danny Doege, homeowner; 18 July 2006.) NEW DPI COUNTY RECORD.

*Mahonia bealei* (Beale's Oregon-grape)-- *Scirtothrips dorsalis* Hood, **chili thrips**: A slight infestation was found in a Windermere park (Orange County; E2006-5544; George A. Warden; 14 August 2006). NEW DPI HOST RECORD.

*Murraya paniculata* (orange-jasmine, orange-jessamine; chinese box)-- *Scirtothrips dorsalis* Hood, **chili thrips**: An infestation on more than 100 plants was found at a discount garden center in Port Charlotte (Charlotte County; E2006-5951; Lorrie R. Rigby; 29 August 2006). NEW DPI HOST RECORD.

*Opuntia* sp. (cactus)-- *Cactoblastis cactorum* (Berg), **cactus moth**: A moderate infestation was found on six plants at a residence in Wachula (Hardee County; E2006-5674; G. Prichard and Joann Curfman, homeowners; 17 August 2006). NEW DPI COUNTY RECORD.

*Strobilanthes dyerianus* (Persian shield)-- *Scirtothrips dorsalis* Hood, **chili thrips**: A slight infestation was found at an amusement park nursery in Orlando (Orange County; E2006-5609; George A. Warden; 16 August 2006). NEW DPI HOST RECORD.

### ORNAMENTALS, FLOWERING PLANTS:

*Cyclamen persicum* (cyclamen)-- *Aulacorthum solani* (Kaltenbach), **foxglove aphid**: A severe infestation was found at a grocery store in Naples (Collier County; E2006-4950; Scott D. Krueger; 26 July 2006). NEW DPI HOST RECORD.

*Hibiscus rosa-sinensis* (hibiscus)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A severe infestation was found on more than ten plants at a residence in Palm Coast (Flagler County; E2006-4725; Raymond C. Jarrett; 24 July 2006). NEW DPI COUNTY RECORD.

*Kalanchoe* sp. (kalanchoe)-- *Aulacorthum solani* (Kaltenbach), **foxglove aphid**: A severe infestation on all of five plants was found at a grocery store in Naples (Collier County; E2006-4951; Scott D. Krueger; 26 July 2006). NEW DPI HOST RECORD.

*Poinsettia pulcherrima* (poinsettia)-- *Scirtothrips dorsalis* Hood, **chili thrips**: An infestation was found at an IFAS unit in Apopka (Orange County; E2006-4607; Lance S. Osborne, University of Florida, IFAS, Apopka; 20 July 2006). NEW DPI HOST RECORD.

*Tecomaria capensis* (cape honeysuckle)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A moderate infestation on ten plants was found at a discount garden center in Englewood (Charlotte County; E2006-5956; Lorrie R. Rigby; 29 August 2006). NEW DPI HOST RECORD.

### FOREST AND SHADE TREES:

*Cercidiphyllum japonicum* (katsura tree)-- *Howardia biclavis* (Comstock), **mining scale**: A slight infestation was found on both of two plants at a nursery in Naples (Collier County; E2006-5310; Scott D. Krueger; 9 August 2006). NEW DPI HOST RECORD. This scale has a wide host range and can be a pest (Dr. Greg S. Hodges).

*Cordia sebestena* (Geiger tree)-- *Diceratalebra sanguinolinea* (Baker), **a leafhopper**: A slight infestation was found at an IFAS unit in Ft. Lauderdale (Broward County; E2006-5908; Bryan Steinberg, University of Florida, IFAS, Ft. Lauderdale; 21 May 2006). NEW DPI COUNTY RECORD. This is a relatively new pest of *Cordia* spp. (Dr. Susan E. Halbert).

*Gleditsia triacanthos* (honey locust)-- *Howardia biclavis* (Comstock), **mining scale**: A slight infestation was found on two of three plants at a nursery in Naples (Collier County; E2006-5307; Scott D. Krueger; 9 August 2006). NEW DPI HOST RECORD. This scale has a wide host range and can be a pest (Dr. Greg S. Hodges).

*Liquidambar styraciflua* (sweetgum)-- *Diaspidiotus liquidambaris* (Kotinsky), **sweet gum scale**: A moderate infestation on one of four plants was found at a nursery in Beverly Hills (Citrus County; E2006-4736; Corinne M. Hermle; 25 July 2006). NEW DPI COUNTY RECORD.

*Magnolia x soulangiana* (saucer magnolia, Japanese magnolia)-- *Aleurodicus dispersus* Russell, **spiraling or Keys whitefly**: A slight infestation was found on all of six plants at a nursery in Williston (Levy County; E2006-5549; W. Wayne Bailey; 17 August 2006). NEW DPI HOST RECORD.

### FOOD AND CROP PLANTS:

*Ficus carica* (common fig)-- *Zaprionus indianus* Gupta, **a fruit fly**: Hand-collected on foliage of *Ficus carica*. In Brazil, *Z. indianus* is a serious, primary pest of figs, as larvae can penetrate directly to the interior of the fruit through the ostiole. In other fruits, larvae are secondary feeders, as they can enter fruit only through necrotic tissue resulting from other insect attack or mechanical damage. Specimens were found in a nursery in Lithia (Hillsborough County; E2006-4257; Karyn L. Pippenger; 7 July 2006). NEW DPI COUNTY RECORD. See <http://www.doacs.state.fl.us/pi/enpp/ento/zaprionusindianus.html> (Dr. Gary J. Steck).

*Lycopersicon esculentum* (garden tomato, tomate, ajitomate)-- *Leptoglossus zonatus* (Dallas), **a leaffooted bug**: A specimen was found feeding on tomato fruit in Homosassa (Citrus County; E2006-4989; Roberta Newhall, homeowner; 20 July 2006). NEW DPI COUNTY RECORD.

*Mangifera indica* (mango)-- *Zaprionus indianus* Gupta, **a fruit fly**: Nearly 700 flies were reared from one ripe, damaged fruit collected of the ground in Vero Beach (Indian River County; E2006-5010, 5584; Kenneth L. Hibbard; 20 July 2006). NEW DPI HOST RECORD.

#### **WEEDS AND GRASSES:**

*Conyza canadensis* (Canadian horseweed)-- *Icerya rileyi* nr. Cockerell, **a margarodid scale**: A slight infestation was found at a residence in Weston (Broward County; E2006-4109; William A. Thiel and Nury M. Marrone; 29 June 2006). NEW DPI HOST RECORD.

*Desmodium incanum* (zarzabacoa comun, Spanish clover)-- *Icerya rileyi* nr. Cockerell, **a margarodid scale**: A moderate infestation was found on a plant at a residence in Miami (Miami-Dade County; E2006-5509; Olga Garcia; 15 August 2006). NEW DPI HOST RECORD.

*Schinus terebinthifolius* (Brazilian pepper tree, Florida holly, Christmas berry)-- *Diptacus* sp., **an eriophyid mite**: A moderate infestation was found at a residence in Miami (Miami-Dade County; E2006-5282; Olga Garcia; 8 August 2006). NEW DPI HOST RECORD for the genus. This may be a new species (Dr. Warren C. 'Cal' Welbourn).

*Solanum viarum* (tropical soda-apple, Sodom apple, apple-of-Sodom)-- *Manduca sexta* (Linnaeus), **Carolina sphinx, tobacco hornworm**: A moderate infestation was found on one of ten plants at a ranch in Ft. Drum (Okeechobee County; E2006-4293; Kenneth L. Hibbard and Michelle M. Amaral; 7 June 2006). NEW DPI HOST RECORD.

*Talipariti tiliaceum* (mahoe)-- *Pseudococcus jackbeardsleyi* Gimpel & Miller, **Jack Beardsley mealybug**: A slight infestation was found on a plant at a residence in Sanibel Island (Lee County; E2006-4604; Jim L. Jacobson, USDA/APHIS/PPQ; 20 July 2006). NEW DPI COUNTY RECORD.

#### **NATIVE AND NATURALIZED PLANTS:**

*Zanthoxylum clava-herculis* (Hercules' club, prickly ash, toothache tree)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A slight infestation was found on a plant at a residence in Orlando (Orange County; E2006-5075; Anthony Puppelo; 1 August 2006). NEW DPI HOST RECORD.

#### **FEDERAL AND STATE PLANT PROTECTION AND QUARANTINE PROGRAMS:**

*Lactuca sativa* (lettuce, Romaine lettuce, leaf lettuce)-- *Liriomyza langei* Frick, **California pea leafminer**: An infestation was intercepted in a shipment from California at a discount store distribution center in Arcadia (De Soto County; E2006-6053, 6054; Susan C. Griego; 31 August 2006). This species is a serious pest of numerous vegetable crops in California and does not occur in Florida (Dr. Gary J. Steck).

#### **INSECT DETECTION:**

*Hoplocheiloma fabricii* Steyskal, **a stilt-legged fly**: A specimen was found in a Jackson trap in *Murraya paniculata* (orange-jasmine, orange-jessamine, chinese box) at a residence in Weston (Broward County; E2006-4832; John Caruso, USDA/APHIS/PPQ; 25 July 2006). NEW DPI COUNTY RECORD.

*Leptoglossus fulvicornis* (Westwood), **a leaffooted bug**: A specimen was found at a residence in Panama City (Bay County; E2006-4972; Larry W. Smith; 28 July 2006). NEW DPI COUNTY RECORD.

*Sobarocephala flaviseta* (Johnson), **a clusiid fly**: A specimen was found in a multilure trap in a *Mangifera indica* (mango) tree in Wauchula (Hardee County; E2006-4712; Gary J. Moore, USDA/APHIS/PPQ; 12 July 2006). Another specimen was found in a multilure trap in *Citrus x paradisi* (grapefruit) at a residence in Kissimmee (Osceola County; E2006-5230; Larry Byrd, USDA/APHIS/PPQ; 25 July 2006). Another specimen was found in a multilure trap in citrus in Poinciana (Polk County; E2006-5546; Larry Byrd, USDA/APHIS/PPQ; 27 July 2006). All finds are NEW DPI COUNTY RECORDS.

*Toxotrypana curvicauda* Gerstaecker, **papaya fruit fly**: A specimen was found in a multilure trap in citrus in Zolfo Springs (Hardee County; E2006-5780; Cecilia Carrero, USDA/APHIS/PPQ; 23 August 2006). NEW DPI COUNTY RECORD.

*Xanthaciura insecta* Loew, **a fruit fly**: A specimen was found in a multilure trap in *Murraya paniculata* (orange-jasmine, orange-jessamine, chinese box) at a nursery in Port Charlotte (Charlotte County; E2006-5950; Lorrie R. Rigby; 29 August 2006). NEW DPI COUNTY RECORD. This species is widespread and common and is not a pest (Dr. Gary J. Steck).

*Zaprionus indianus* Gupta, **a fruit fly**: Specimens were found in a Jackson trap in *Citrus sinensis* (sweet orange, navel orange) at a residence in Wauchula (Hardee County; E2006-4517; Mona Lisa Payne, USDA/APHIS/PPQ; 12 July 2006). Specimens also were found in multilure traps Orange County (E2006-4571; Apopka Book #249006, collector not specified; 30 May 2006), in Manatee County (E2006-4572; no collector specified; 21 June 2006), and in Polk County (E2006-4584; Nick D. Szanyi, USDA/APHIS/PPQ; 30 May 2006). All finds are NEW DPI COUNTY RECORDS.

## NEMATODOLOGY SECTION

### Compiled by Janete A. Brito, Ph.D and Renato N. Inserra, Ph.D

A total of 3,150 samples (2,607 for morphological and 543 for molecular identifications) were processed in July and August, 2006. Details are shown below:

<p><b>Certification and Regulatory Samples:</b>                  Multistate Certification for National and International Export..... 1,873                  California Certification..... 454                  Burrowing nematode ..... 20                  Pre-movement (Citrus Nursery Certification) ..... 54                  ..... 54                  Site or Pit Approval (Citrus Nursery and Other Certifications)..... 69</p>	<p><b>Other Samples:</b>                  Identification (invertebrate)..... 2                  Plant Problems..... 52                  Intrastate Survey, Random ..... 83</p> <p><b>Molecular Identifications*</b> ..... 543</p> <p><small>*The majority of these analyses involved root-knot nematode species</small></p>
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### Nematodes of Special Interest

Nematodes of special interest detected and/or identified in July – August, 2006:

*Bacopa caroliniana* (water hyssop)-*Verutus volvingentis* Esser, 1981 was found infecting the roots of this aquatic plant (Broward County; N06-00786; Tom Salisbury; 31 May 2006). *Verutus volvingentis* is a species related to cyst-forming nematodes, but is of minor economic importance. It is indigenous to Florida. Water hyssop is a new host to this nematode. **NEW HOST RECORD.**

*Hygrophila difformis* (water wisteria)-*Hirschmanniella caudacrena* Sher, 1968 **a rice root nematode** was found infecting the roots of this aquatic herb (Broward County; N06-00785; Tom Salisbury; 31 May 2006). Rice and aquatic plants are the preferred hosts of this nematode.

#### COLLECTORS SUBMITTING FIVE OR MORE SAMPLES THAT WERE PROCESSED FOR NEMATODOLOGICAL ANALYSIS DURING JULY AND AUGUST 2006:

Anderson, James L.	71	Podris, Flewellyn W.	8
Bentley, Michael	6	Qiao, Ping	162
Harris, James K.	10	Salisbury, Thomas L.	142
LeBoutillier, Karen W.	190	Spriggs, Charles L.	331
Looker, Sol F.	6	Stone, Carrie S.	71
Ochoa, Ana L.	156	Toral, Angelina M.	55
Pate, JoAnn	58	Zamora, Christine A.	12

## PLANT PATHOLOGY Compiled by: Robert M. Leahy

For this period, the Plant Pathology Section received and processed 1,162 specimens. These included 389 pathology, 12 miscellaneous, 10 soil, 8 apiary, and 174 citrus greening samples. The section performed tests for citrus canker on 35 samples from Southeast Florida, 121 from Central Gulf Coast Florida, 163 from Southwest Gulf Coast Florida, 177 from Central Florida, and 58 from North Florida with full pathogenicity tests on 15 additional samples.

### ORNAMENTALS, WOODY PLANTS AND PALMS:

*Chamaerops humilis* (European fan palm) -- *Phytophthora palmivora*, **bud rot**:

Collected at a dooryard in Quincy (Gadsden County, P200602191; Sol F. Looker; 18 July 2006).

*Chionanthus virginicus* (fringe tree) -- *Fusicladium* sp., *Pseudocercospora* sp, **leaf spot**:

collected at a nursery in Gainesville (Alachua County; P200602362; Grandiflora Nursery; 10 August 2006). NEW RECORD: HOSTS

*Phoenix dactylifera* (date palm) -- *Ceratocystis radicicola*, **rhizosis**: Collected at a tree farm in Groveland (Lake County; P200602181; James R. Holm; 13 July 2006).

*Syagrus romanzoffiana* (queen palm) -- *Exserohilum longirostratum*, **leaf rot**: Collected at a nursery in Palm City (Martin County; P200602343; Schafefer, Pattison and Alleyne (07 August 2006).

*Trachycarpus fortunei* (windmill palm) -- *Phytophthora palmivora*, **bud rot**: Collected at a dooryard in Quincy (Gadsden County; P200602192; Sol F. Looker; 18 July 2006).

### ORNAMENTALS, FOLIAGE PLANTS:

*Aloe vera* (aloe) -- *Geotrichum candidum*, **leaf rot**: Collected at a nursery in Alva (Lee County; P200602413; Lori A. Richards; 17 August 2006).

*Liriope muscari* (lilyturf) -- *Phytophthora palmivora*, **crown/root rot**: Collected at a dooryard in Gainesville (Alachua County; G. Bonn; 24 July 2006; P200602231).

### WEED AND GRASSES:

*Baccharis halimifolia* (weed) -- *Dothidea puccinioides*, **black pustule**: Collected at a sod farm in Hastings (Putnum County, P200602208; Cheryl A. Jones and Mary J. Echols; 19 July 2006).

*Sporobolus indicus* (grass) -- *Physarum* sp., **slim mold**: Collected at a boat ramp in Bradenton. (Manatee County; P200602190; Mark L. Runnals; 13 July 2006).

### FOOD AND CROPS:

*Citrus limonia* (rangpur lime) -- *Candidatus Liberibacter asiaticus*, **citrus greening**: Collected at a dooryard (Miami-Dade County; P200611293; Olga Garcia and Edward Putland; 13 August 2006). NEW RECORD: HOST

*Vaccinium* sp. (blueberry) -- *Phytophthora cinnamomi*, **foot rot**: Collected at a nursery in Winter Haven. (Polk County, P200602176; Albert L. Wright; 12 July 2006).