

**BOTANY SECTION**  
**Compiled by Richard E. Weaver, Jr., Ph.D.**

For this period, 146 specimens were submitted to the Botany Section for identification, and 878 were received from other Sections for identification and/or name verification (total 1,024). Some of the samples not previously discussed in *Tri-Ology*:

***Achillea millefolium*** L. (A mostly Eurasian genus of about 115 species.) Compositae/Asteraceae.

**Yarrow.** A common and familiar rhizomatous perennial throughout most of temperate North America, but rare in Florida where it reaches its southern limit in Volusia County. The flat-topped inflorescences, which are produced through much of the summer, are made up of numerous small heads, each with 5 white ray flowers and a few grayish white disk flowers. The alternate leaves are bipinnately divided into fine segments and the foliage is thus delicately fernlike and very decorative. All parts of the plant are strongly aromatic, and the plant has been used to treat an incredible variety of ailments, from personality disorders to hypertension. The genus is named for the mythical Achilles, who used this plant to stop the flow of blood from wounds suffered during the Trojan War. Yarrow is quite weedy and usually grows in disturbed habitats. If mown regularly, it makes a fragrant, fine-textured and durable turf. It is also attractive and easy to grow, and is a popular garden plant; various selections and hybrids have pink, red or yellow ray flowers. *Achillea millefolium* is also widespread in Europe, and there has been considerable debate as to whether it is native in North America or whether it was introduced in colonial times. However, the European plants are hexaploids and most of the American ones are tetraploids, suggesting that the two groups have been isolated for a long period, and that the American populations are native. (Volusia County; B2003-307; Raymond C. Jarrett, Jr.; 1 May 2003). (Muenscher 1980; Sumner 2000; Tyril 1975).

***Asclepias humistrata*** Walter. (A genus of about 100 species native to North and Central America., with a majority of the species occurring in the United States). Asclepiadaceae. **Pinewoods milkweed.** A distinctive herbaceous perennial native to scrub and sandhill habitats on the Coastal Plain from Mississippi to North Carolina; it is found through most of Florida north of Lake Okeechobee. This is a distinctive species, with its decumbent or ascending stems and bold, ovate, clasping leaves, all ashy-gray variously suffused with purple. The intricately constructed flowers, borne in umbels as in all milkweeds, are mostly pale pink; the blooming season starts in late March in northern Florida. Although this species has apparently not been investigated, the milky sap of most milkweeds causes skin and eye irritation in humans, and poisoning of varying degrees of severity may occur if any part of the plant is eaten. Yet milkweeds are the sole food source for caterpillars of Queen and Monarch butterflies; upon ingestion the larvae, and in turn the adults, become poisonous to birds and mammals. Milkweeds are also favored nectar sources for various butterflies; this species has been recorded as a host for various hairstreaks, Monarch, Queen, Ruddy Daggerwing, Silvery Checkerspot, and others. Even though it attracts butterflies and is an attractive plant, the sandhills milkweed is seldom cultivated. It would need full sun and very

well-drained soil, without much supplemental irrigation, to succeed in the garden. (Lake County; B2003-361; Harry L. Morrison, 22 May 2003).

(Bell and Taylor 1982; <http://www.nsis.org/garden/family/milkweed.html>; <http://www.plantatlas.usf.edu>).

**Blighia sapida** K. Koenig. (A genus of 4 species native to tropical Africa). Sapindaceae. **Akee.** An evergreen tree with a dense, shapely crown, growing to 12 m tall, this tree was brought to Jamaica from its native West Africa by the British Captain William Bligh in 1793, reportedly to serve as food for the slaves there. It is presently very commonly planted in Jamaica, but only occasionally in the remainder of the Caribbean Basin. The species thrives in South Florida and established individuals bear fruit heavily, although young plants may be damaged or killed by frost. Leaves are alternate and pinnately compound with 3-5 pairs of rather large, glossy, untoothed leaflets; the fragrant flowers are whitish and are borne in slender racemes. Generally, the tree is rather undistinguished, except for the showy fruits, which when mature are 8-10 cm long, bright red, leathery and distinctively 3-lobed. They split open from the tip revealing (usually) 3 large, hard, round, shiny black seeds, each with a larger, cream-colored, firm-textured aril. All parts of the fruit and seed are seriously poisonous. However, as the fruit matures and opens, light destroys most of the poisonous substances in the aril. Salt cod sautéed with the aril, along with diced pork, tomatoes and onions, is the national dish of Jamaica. In addition, the aril, parboiled and then sautéed in butter, substitutes for scrambled eggs at breakfast. However, “vomiting sickness,” occasionally fatal and caused by improperly prepared akee, is unfortunately not rare in Jamaica. (Miami-Dade County; B2003-407; Richard L. Blaney; 11 June 2003). (Kingsbury 1964; Morton 1987).

**Chapmannia floridana** Torrey & Gray. [A genus of 1 (-7?) species, native to Florida (and Mexico, Guatemala, Venezuela and the Horn of Africa?)] Leguminosae/Fabaceae. **Florida alicia.** A perennial herb restricted to sandhill and scrub habitats on the ridges of central peninsular Florida. Since it was described in 1838, it was thought that *Chapmannia* was monotypic and endemic to Florida. Recently, at least one taxonomist has proposed merging *Arthrocarpum* Balfour f. (with one species native to Somalia and four others to the nearby island of Socotra) and *Pachecoa* Standl. & Steyermark (with one neotropical species) into *Chapmannia*, creating a uniquely distributed genus. The name of the genus commemorates Florida’s preeminent botanist of the nineteenth century, Dr. Alvan Wentworth Chapman, who published three editions of the “Flora of the Southern United States” from 1860 to 1897. The plant itself is rather wispy in appearance. It produces 1-20 unbranched stems to 1 m tall, with small odd-pinnate leaves mostly restricted to the lower half of the stem. The 2-3 cm long flowers have bright golden yellow petals, and unlike most papilionaceous flowers, the wing petals are spreading rather than held close to the keel. The flowers are borne in sparse panicles atop mostly leafless stems and appear to float like butterflies; each one lasts for only a few hours. The larvae of at least one butterfly, the Ceraunus Blue, use the Florida alicia as a food plant. The plant is very rare in cultivation, probably because it is not particularly showy, and additionally is probably difficult to maintain. (B2003-296; James E. Bennett; 29 April 2003). (Gunn, Norman, and Lassetter 1980; Thulin 1999).

**Firmiana simplex** (L.) W. Wight. (A genus of 12 species native to tropical and warm-temperate regions of the Old World). Sterculiaceae. **Chinese parasol tree.** A tree 10-12 m tall, native to China, but sparingly naturalized in the southeastern United States. In Florida, adventive individuals have been found in a few counties of the Panhandle, mostly in disturbed upland woods. The large leaves are one of the conspicuous features of this rather unusual tree. Ranging to 30 cm long and broad, they are alternate on the thick, green branches, palmately veined and usually 3-5-lobed. They usually turn bright yellow in the fall. The slightly fragrant flowers appear in late spring or early summer, in large panicles clustered at the tips of last year's branches. They lack petals, but the sepals are colored yellow and white and the flowers are quite showy, mostly because they are borne in profusion. More showy are the fruits. Each fertilized ovary develops into five separate follicles: these grow rapidly and split open long before maturity into flat, eventually tan-colored, spoon-shaped structures bearing a few seeds along their margins. Despite these ornamental features, and its rapid growth while young, *Firmiana simplex* has never become a popular ornamental in this country. It is rather coarse and messy, and is very susceptible to wind damage. It is a popular street tree in Japan, but here it is mostly grown as a curiosity. (St. Lucie County; B2003-428; Dale Armstrong; 18 June 2003). (Gilman and Watson 1993; Godfrey 1988).

**Illicium parviflorum** Michx. ex Vent. (A genus of 42 species native to tropical and subtropical areas of Asia and Malesia, with a concentration in China; a few in the southern U.S., Mexico and the West Indies). Illiciaceae. **Yellow anise.** The Illiciaceae and three other small families make up one of the most ancient lineages in the angiosperms. This species is a shrub of suckering habit growing to 3 m tall, and restricted in the wild to hammocks along spring runs and in bayheads in six counties of Central Florida (Lake, Marion, Orange, Polk, Seminole and Volusia); it is on Florida's endangered plant list. The thick, blunt-tipped evergreen leaves are yellow- or olive-green and give off a strong, but pleasant, scent of anise when bruised. The yellowish-green flowers are small and inconspicuous. A related species, *Illicium floridanum* Ellis, is found in the Panhandle of Florida and west along the Gulf Coast to Louisiana. This species has dark green, pointed leaves and much larger and showier flowers with numerous dark red petals. Both are cultivated as ornamentals, but *I. parviflorum* is by far the more popular since it is more adaptable, thriving in sun or shade and in moist to moderately dry soils. Because of its rapid growth rate and suckering habit it is widely used as a formal or informal hedge. It was once sold as the Asian *I. anisatum* L.: see Botany Circular 19 at <http://www.doacs.state.fl.us/pi/enpp/botany/botcirc/NemBotcir19.htm> (Lake County; B2003-367; Harry L. Morrison; 27 May 2003). (Dirr 1990; Godfrey 1988; Judd *et al.* 2002).

**Spiranthes praecox** (Walt.) S. Wats. (A genus of 45 species in both hemispheres; a majority of the species occur in North America). Orchidaceae. **Greenvein ladies'-tresses.** A terrestrial orchid growing to 75 cm tall, native to open, often disturbed, wet or dry sites primarily on the Coastal Plain from Delaware to Texas; it is found throughout Florida except for the southern tip. The 4 - 7 often grasslike leaves are restricted to the base of the plant. The flowers are about 1 cm long, white with the veins of the lip usually outlined in green. They are arranged in long slender spikes that appear to be twisted into a spiral. This type of inflorescence is common in plants of the genus *Spiranthes*; in many species it resembles a braid of hair, giving rise to the common name "ladies'-tresses". The specific name

*praecox*, “precocious” or “developing early” in Latin, refers to the early blooming of this species. Unlike its many summer- and fall-blooming relatives, the flowers appear as early as February in Florida. *Spiranthes* species are among the most common and familiar orchids of the eastern United States. A few are commercially available as nursery propagated plants, and they are not difficult to cultivate. (Alachua County; B2003-297; David Serrano; 1 May 2003). (Sheviak and Brown 2002).

**Spondias mombin** L. (A genus of 10 species native to the Asian and American tropics). Anacardiaceae. **Yellow mombin, hog plum.** A tree to 25 m tall, native to lowland forests from southern Mexico to Peru and Brazil, and in the West Indies. In addition, it is cultivated in the Old World tropics and has naturalized widely in Africa. In the United States, it is hardy only in South Florida, and it is sparingly cultivated there. The deciduous, alternate, pinnately compound leaves grow to 45 cm long, with 9 - 19 subopposite leaflets. The small, white, fragrant flowers in large panicles appear with the new leaves in the spring in Florida, followed in the late summer and fall by the golden yellow, oblong drupe-like fruits. Although the flesh is juicy and tart, it forms a relatively thin layer over the hard stone, and the fruits are not widely eaten fresh. However, they are pressed to make juice and are preserved. An important additional use is as feed for livestock, perhaps giving rise to one of the plant’s common names, “hog plum.” (Miami-Dade County; B2003-429; Eugenia Orji; 10 June 2003). (Morton 1987).

## REFERENCES

- Bell, C.R. and B.J. Taylor. 1982.** Florida wild flowers. Laurel Hill Press, Chapel Hill, NC. 308 p.
- Dirr, M.A. 1990.** Manual of woody landscape plants, 4<sup>th</sup> edition Stipes Publishing Co., Champaign, IL. 1007 p.
- Gilman, E.F. and D.G. Watson. 1993.** *Firmiana simplex*, Chinese parasol tree. Fact Sheet ST-259, Dept. of Environmental Horticulture, Florida Cooperative Extension Service, IFAS, University of Florida, Gainesville.
- Godfrey, R.K. 1988.** Trees, shrubs and woody vines of northern Florida and adjacent Georgia and Alabama. University of Georgia Press, Athens. 734 p.
- Gunn, C.R., E.M. Norman and J.S. Lassetter. 1980.** *Chapmannia floridana* Torrey & Gray (Fabaceae). Brittonia 32: 178-185.
- Judd, W.S., et al. 2002.** Plant systematics, a phylogenetic approach, 2<sup>nd</sup> edition Sinauer Associates, Inc., Sunderland, MA. 576 p.
- Morton, J.F. 1987.** Fruits of warm climates. Julia F. Morton, Miami, Florida. 505 p.
- Muenschner, W.C. 1955.** Weeds, 2<sup>nd</sup> edition The Macmillan Co.; reissued by Cornell University Press, 1980. 586 p.
- Sheviak, C.J. and P.M. Brown. 2002.** *Spiranthes* Richard, in Flora of North America Editorial Committee, ed. Flora of North America 26: 530-545.
- Sumner, J. 2000.** The natural history of medicinal plants. Timber Press, Inc., Portland, OR. 235 p.
- Thulin, M. 1999.** *Chapmannia* (Leguminosae-Stylosanthinae) extended. Nordic Journal of Botany 19: 597-607.
- Tyrl, R. 1975.** Origin and distribution of polyploid *Achillea* (Compositae) in western North America. Brittonia 27: 187-196.

## ENTOMOLOGY SECTION

### Compiled by Susan Halbert, Ph.D.

For the month of May, there were 521 samples consisting of 24,771+ specimens. In June, there were 576 samples consisting of 21,841+ specimens. Some of the samples are listed below:

#### ORNAMENTALS--WOODY PLANTS AND PALMS:

*Acacia* sp. (acacia)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A severe infestation on ten plants was found at an apartment complex in Miami (Miami-Dade County; E2003-2799; Haydee L. Escobar; 26 June 2003). NEW DPI HOST RECORD.

*Callistemon* sp. (callistemon)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A moderate infestation was found on five plants at an apartment complex in Miami (Miami-Dade County; E2003-2800; Haydee L. Escobar; 26 June 2003).

*Cedrela odorata* (Spanish cedar)-- *Mastigimas ernstii* (Schwartz), **a psyllid**: A severe infestation was found on 14 plants at a nursery in Miami (Miami-Dade County; E2003-2480, 2516; Duraid I. Hanna; 6, 11 June 2003). NEW USA RECORD. This species is specific to *Cedrela* spp. It is known from Venezuela, Mexico, Cuba, and Guatemala (Dr. Susan E. Halbert).

*Lysiloma sabicu* (sabicu)-- *Tetraleurodes acaciae* (Quaintance), **acacia whitefly**: An infestation was found at a residence in Key Largo (Monroe County; E2003-2735; Julieta Brambila; 19 June 2003). NEW DPI HOST RECORD.

*Phoenix roebelenii* (pigmy date palm)-- *Phyllophaga hondura* Saylor, **a scarab beetle**: A moderate infestation was found on roots of 20 plants at a nursery in Homestead (Miami-Dade County; E2003-1774; Holly B. Glenn and Dr. Catherine M. Mannion, University of Florida, Tropical Research and Extension Center, Homestead; 30 April 2003). NEW USA RECORD. This is listed in the literature as an economically important species in Central America (Dr. Michael C. Thomas).

*Schinus molle* (Peruvian peppertree, pirul, pirul tree)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A moderate infestation was found at Chapman Field in Miami (Miami-Dade County; E2003-2094; Dr. Greg S. Hodges; 20 May 2003). NEW DPI HOST RECORD.

*Senna pendula* (Christmas cassia, velamuerto)-- *Mitrapsylla albalineata* Crawford, **senna psyllid**: A moderate to severe infestation was found at the Fruit and Spice Park in Homestead (Miami-Dade County; E2003-2160; Dr. Susan E. Halbert and Julieta Brambila; 21 May 2003). This collection represents a second location for this new pest (Dr. Susan E. Halbert).

*Syzygium cumini* (jambolan plum, Java plum, black plum, jamun duhat)-- *Eucalymnatus tessellatus* (Signoret), **tessellated scale**: A moderate infestation was found on a plant at a residence in Cape Coral (Lee County; E2003-2454; Leonora J. Coleman and Richard L. Blaney; 6 June 2003). NEW DPI HOST RECORD.

*Syzygium paniculatum* (Australian brush-cherry)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A moderate infestation was found at a residence in Hialeah (Miami-Dade County; E2003-2384; Lynda F. Davis; 3 June 2003). NEW DPI HOST RECORD.

*Tabebuia* sp. (tabebuia)-- *Holopothrips* cf. *inquilinus* (Bournier), **tabebuia thrips**: A severe infestation was found on two of eight plants at a nursery in Naples (Collier County; E2003-1489; Scott D. Krueger; 17 April 2003). NEW DPI COUNTY RECORD.

*Wodyetia bifurcata* (foxtail palm)-- *Palmicultor browni* Williams, **a mealybug**: A moderate infestation was found on 50 of 100 plants at a nursery in Goulds (Miami-Dade County; E2003-2517; Melba A. Otero; 6 June 2003). NEW DPI HOST RECORD.

#### ORNAMENTALS--FOLIAGE PLANTS:

*Bambusa* sp. (bamboo)-- *Odonaspis greeni* (Cockerell), **an armored scale**: A moderate infestation was found at a nursery in Ft. Lauderdale (Broward County; E2003-1765; William A. Thiel; 28 April 2003). NEW DPI COUNTY RECORD.

*Ixora* sp. (ixora)-- *Aleuroclava jasmini* (Takahashi), **a whitefly**: A slight infestation was found on 5% of 10 plants at a city dock in Ft. Myers (Lee County; E2003-2069; Matthew W. Brodie; 20 May 2003). NEW DPI COUNTY RECORD.

*Murraya paniculata* (orange-jessamine, orange-jasmine, Chinese box)-- *Pseudococcus maritimus* (Ehrhorn), **grape mealybug**: A slight infestation was found at a discount store in Gainesville (Alachua County; E2003-2494; Christine A. Zamora; 10 June 2003). NEW DPI HOST RECORD.

*Operculicarya decaryi* (operculicarya)-- *Coccus longulus* (Douglas), **long brown scale**: A moderate infestation was found on five of ten plants at a nursery in Sarasota (Sarasota County; E2003-2730; Mark L. Runnals; 23 June 2003). NEW DPI HOST RECORD.

*Plectranthus* sp. (plectranthus)-- *Parasaissetia nigra* (Nietner), **nigra scale**: A severe infestation was found on all ten plants at a garden center in Ormond Beach (Volusia County; E2003-2330; Raymond C. Jarrett; 30 May 2003). NEW DPI HOST RECORD.

*Pyracantha* sp. (pyracantha)-- *Saissetia neglecta* De Lotto, **Caribbean black scale**, and *Cerococcus deklei* Kosztarab & Vest, **a cerococcid**: Severe infestations were found on all of 100 plants at a bonsai dealership in Miami (Miami-Dade County; E2003-2825; Melba A. Otero; 20 May 2003). Both records are NEW DPI HOST RECORDS.

#### ORNAMENTALS--FLOWERING PLANTS:

*Dendrobium* sp. (orchid)-- *Saissetia coffeae* (Walker), **hemispherical scale**: A slight infestation was found on 20 of 8000 plants at a nursery in Naples (Collier County; E2003-2436; Scott D. Krueger; 5 June 2003). NEW DPI HOST RECORD.

*Hibiscus rosa-sinensis* (hibiscus)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A slight infestation was found on one of 194 plants at a nursery in Palm Bay (Brevard County; E2003-1798; Christine J. Frere; 5 May 2003). NEW DPI COUNTY RECORD.

*Myllocerus undatus* Marshall, **a weevil**: A slight infestation was found at a nursery in Apopka (Orange County; E2003-1322; Kathy A. Gonzalez; 7 April 2003). NEW DPI COUNTY RECORD.

*Justicia spicigera* (mohintli)-- *Hypogeococcus pungens* Granara de Willink, **a mealybug**: A moderate infestation was found on a plant at a residence in Safety Harbor (Pinellas County; E2003-2055; Thomas W. Turner; 19 May 2003). NEW DPI HOST RECORD.

*Myrtus communis* (myrtle)-- *Greenidea formosana* (Maki), **an Asian aphid**: A moderate infestation was intercepted in a box of cut flowers from California at a wholesale florist in Orlando (Orange County; E2003-1674; Terrence D. Williams; 28 April 2003). This Asian species became established in California in 1998. This is the first interception in Florida. Reported hosts are *Ficus* spp. and various Myrtaceae (Dr. Susan E. Halbert).

*Plumbago auriculata* (plumbago, cape leadwort)-- *Mylocerus undatus* Marshall, **a weevil**: An infestation was found at a residence in North Palm Beach (Palm Beach County; E2003-2076; Peter Girr, USDA/APHIS/PPQ; 14 May 2003). NEW DPI HOST RECORD.

*Plumeria obtusa* (white frangipani, Singapore frangipani)-- *Nipaecoccus floridana* Beardsley, **coconut mealybug**: A moderate infestation was found at Fairchild Tropical Garden in Miami (Miami-Dade County; E2003-2089; Gwen H. Myres; 20 May 2003). NEW DPI HOST RECORD.

#### FOREST AND SHADE TREES:

*Araucaria heterophylla* (Norfolk Island pine)-- *Eriococcus araucariae* (Maskell), **Norfolk Island pine eriococcin**: A moderate infestation was found on a plant at a residence in Naples (Collier County; E2003-1734; Scott D. Krueger; 1 May 2003). NEW DPI COUNTY RECORD.

*Crescentia cujete* (calabash tree, guira)-- *Holopothrips cf. inquilinus* (Bournier), **tabebuia thrips**: A severe infestation was found at a residence in Key Biscayne (Miami-Dade County; E2003-2268; Karolynne M. Griffiths, USDA/APHIS/PPQ; 28 May 2003). NEW DPI HOST RECORD.

*Eucalyptus robusta* (swamp mahogany)-- *Cyrtophora citricola* (Forsk.) **a tentweb weaver**: This spider was found on a tree at the Fruit and Spice Park in Homestead (Miami-Dade County; E2003-2787; Julieta Brambila and Jon-Mario Bautista, park employee; 22 June 2003). NEW DPI HOST RECORD.

*Eucalyptus* sp. (eucalyptus)-- *Glycaspis brimblecombei* Moore, **red gum lerp psyllid** and *Blastopsylla occidentalis* Taylor, **a eucalyptus psyllid**: A moderate infestation was found along a highway in Sarasota (Sarasota County; E2003-2302; Bertila Gomez, FSCA research associate, and Julieta Brambila; 1 June 2003). Both finds are NEW DPI COUNTY RECORDS.

*Ficus aurea* (Florida strangler fig)-- *Cligenes distinctus* Distant, **a seed bug**: A specimen was found under a tree in Sarasota (Sarasota County; E2003-2309; Julieta Brambila and Bertila Gomez, FSCA research associate; 1 June 2003). This is the northernmost record on Florida's west coast (Julieta Brambila).

*Greenidea ficicola* Takahashi, **an Asian ficus aphid**: A slight infestation was found at Fairchild Botanical Gardens in Miami (Miami-Dade County; E2003-2148; Dr. Susan E. Halbert, Dr. Greg S. Hodges, Gwen H. Myres, Julieta Brambila, and Mark A. Garland; 20 May 2003). This is the second location for this introduced Asian pest. It apparently is well established in Miami (Dr. Susan E. Halbert).

*Trioza russellae* Tuthill group, **a psyllid**: Specimens were found at Fairchild Tropical Gardens in Miami (Miami-Dade County; E2003-2148; Dr. Susan E. Halbert, Dr. Greg S. Hodges, Gwen H. Myres, Julieta Brambila, and Mark A. Garland; 20 May 2003). This is the second location for this introduced South American pest. It apparently also is well established in Miami. This is an undescribed species similar to *Trioza russellae* and closely matches material from Colombia (Dr. Daniel H. Burckhardt, Naturhistorische Museum, Switzerland, and Dr. Susan E. Halbert).

*Magnolia grandiflora* (southern magnolia)-- *Neolecanium cornuparvum* Thro, **magnolia scale**: A severe infestation was found on a plant at a nursery in Navarre (Santa Rosa County; E2003-2715; Laura L. Ooms; 17 June 2001). NEW DPI COUNTY RECORD. This is only the second record for this scale in Florida. The previous record was in Jefferson County (Dr. Greg S. Hodges).

*Persea palustris* (swamp bay)-- *Protopulvinaria pyriformis* (Cockerell), **pyriform scale**: A slight infestation was found at a residence in Tequesta (Martin County; E2003-2790; Yvette Ogle, DPI/CAPS; 20 June 2003). NEW DPI HOST RECORD.

*Pinus elliottii* (slash pine)-- *Pseudophilippia quaintancii* Cockerell, **woolly pine scale**: A slight infestation was found at a residence in Ft. Lauderdale (Broward County; E2003-2729; Sallie H. Simmons; 20 June 2003). NEW DPI COUNTY RECORD.

*Quercus geminata* (sand live oak)-- *Eriococcus quercus* (Comstock), **oak eriococcin**: A severe infestation was found on 16 of 7000 plants at a nursery in Live Oak (Suwannee County; E2003-1839; W. Wayne Bailey; 8 May 2003). NEW DPI COUNTY RECORD.

*Quercus laurifolia* (laurel oak)-- *Eriococcus quercus* (Comstock), **oak eriococcin**: A slight infestation was found at a residence in Gainesville (Alachua County; E2003-2481; Dr. Lyle Buss, University of Florida, Gainesville, 8 June 2003). NEW DPI COUNTY RECORD.

#### **FOOD AND CROP PLANTS:**

*Lavandula dentata* (French lavender)-- *Eriococcus* sp., **an eriococcid**: A moderate infestation on two of 100 plants was found at a nursery in Naples (Collier County; E2003-2528; Matthew W. Brodie and D. Steven Flesher; 10 June 2003). NEW DPI HOST RECORD.

*Litchi chinensis* (litchi, leechee)-- *Saissetia neglecta* De Lotto, **Caribbean black scale**: A slight infestation was found in a box of fruit for sale at a roadside vendor in Miami (Miami-Dade County; E2003-2300; Lynda F. Davis; 30 May 2003). NEW DPI HOST RECORD.

*Phoenix dactylifera* (date palm)-- *Phoenicococcus marlatti* (Cockerell), **red date scale**: A moderate infestation was found on a plant at a nursery in Crescent City (Putnam County; E2003-2746; Sol F. Looker; 24 June 2003). This is a quarantine pest that was previously eradicated from Putnam County (Dr. Greg S. Hodges).

*Pyrus* sp. (pear)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A moderate infestation was found on a plant at a residence in Opa-Locka (Miami-Dade County; E2003-2014; Lynda F. Davis; 14 May 2003). NEW DPI HOST RECORD.

*Rosmarinus officinalis* (rosemary)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A slight infestation was found on a plant at a grammar school in Miami (Miami-Dade County; E2003-2364; Haydee L. Escobar; 2 June 2003). NEW DPI HOST RECORD.

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

*Crotalaria pallida* (smooth rattlebox)-- *Aphis craccivora* Koch, **cowpea aphid**: An infestation was found on plants at Jonathan Dickinson State Park in Hobe Sound (Martin County; E2003-2150; Julieta Brambila; 14 May 2003). NEW DPI HOST RECORD.

*Dalbergia sissoo* (Indian rosewood, sissoo tree)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A slight infestation was found on a plant at a residence in Miami (Miami-Dade County; E2003-2361; Haydee L. Escobar; 2 June 2003). NEW DPI HOST RECORD.

*Eragrostis* sp. (lovegrass)-- *Ochrimnus mimulus* (Stål), **a seed bug** and *Blissus minutus* (Blatchley), **a chinch bug**: Specimens were found on a roadside near Deer Park (Osceola County; E2003-2333; Dr. Susan E. Halbert and Julieta Brambila; 13 May 2003). Both finds are NEW DPI COUNTY RECORDS.

*Hibiscus tiliaceus* (mahoe, seaside hibiscus)-- *Phenacoccus madeirensis* Green, **Madeira mealybug**: A slight infestation was found on a plant at a discount store in Naples (Collier County; E2003-2527; D. Steven Flesher and Matthew W. Brodie; 10 June 2003). NEW DPI HOST RECORD.

*Lamium maculatum* (spotted henbit)-- *Phenacoccus* nr. *artemisiae* King, **a mealybug**: A slight infestation was found on five of ten plants at a nursery in Archer (Alachua County; E2003-2593; Christine A. Zamora; 17 June 2003). NEW DPI COUNTY RECORD, NEW DPI HOST RECORD.

*Melaleuca quinquenervia* (melaleuca, cajeput, punktree, paperbark, white bottlebrush tree)-- *Coccus hesperidum* (Linnaeus), **brown soft scale**: A moderate infestation was found along a highway in Miami (Miami-Dade County; E2003-1781; Haydee L. Escobar; 2 May 2003). NEW DPI HOST RECORD.

*Boreioglycaspis melaleucae* Moore, **melaleuca psyllid**: A severe infestation was found on all of ten plants at a residence in Ft. Myers (Lee County; E2003-2208; Walter W. Golden; 27 May 2003). Another severe infestation was found at a residence in Sunrise (Broward County; E2003-2262, 2263; Brian Cairns, USDA; 28 May 2003). This species is the newly released biological control agent for melaleuca. It appears to be thriving (Dr. Susan E. Halbert).

*Oryza rufipogon* (wild red rice, brownbeard rice)-- *Oedancala cladiumicola* Baranowski & Slater, **a seed bug**: A slight infestation on one of 1000 plants was found at an IFAS unit in Ft. Lauderdale (Broward County; E2003-2484; D. Steven Flesher and Matthew W. Brodie; 3 June 2003). NEW DPI COUNTY RECORD.

*Spartina alterniflora* (saltmarsh cordgrass, smooth cordgrass)-- *Ischnodemus conicus* Van Duzee, **a seed bug**: Several specimens were found at Daytona Beach Ball Park in Daytona Beach (Volusia County; E2003-2334; Dr. Susan E. Halbert and Julieta Brambila; 16 May 2003). NEW DPI COUNTY RECORD.

*Syzygium cumini* (jambolan plum, Java plum, black plum, jamun, duhat)-- *Vinsonia stellifera* (Westwood), **stellate scale**: A moderate infestation was found in a parking lot in Miami (Miami-Dade County; E2003-2814; Lynda F. Davis and Rafael A. Llorente; 27 June 2003). NEW DPI HOST RECORD.

*Eucalymnatus tessellatus* (Signoret), **tessellated scale**: A moderate infestation was found at a residence in Cape Coral (Lee County; E2003-2454; Leonora J. Coleman and Richard L. Blaney; 6 June 2003). NEW DPI HOST RECORD.

#### NATIVE AND NATURALIZED PLANTS:

- Callicarpa americana* (American beauty berry, French mulberry)-- *Coccus hesperidum* (Linnaeus), **brown soft scale**: A slight infestation was found at a residence in Miami (Miami-Dade County; E2003-2127; Edward T. Putland; 22 May 2003). NEW DPI HOST RECORD.
- Calypttranthes pallens* (pale lidflower, spicewood)-- *Katacephala?* n. sp., **a psyllid**: An infestation was found in a research plot in Ft. Lauderdale (Broward County; E2003-2021; Kirk Tonkel, AmeriCorps Volunteer; 25 March 2003). Several rare and endangered species of native Myrtaceae were being monitored for feeding by melaleuca psyllid, *Boreioglycaspis melaleucae*, a newly introduced biological control agent for melaleuca. The presence of psyllids on *Calypttranthes* attracted the attention of the researchers. The psyllid on *Calypttranthes* is not melaleuca psyllid, but it is a NEW USA RECORD. It is an undescribed species that matches material from Belize. It probably belongs to the genus *Katacephala*, but more investigation is needed to be sure (Dr. Daniel H. Burckhardt, Naturhistorische Museum, Switzerland, and Dr. Susan E. Halbert).
- Paratachardina lobata* (Chamberlin), **lobate lac scale**: A slight infestation was found at a residence in Miami (Miami-Dade County; E2003-2366; Haydee L. Escobar; 2 June 2003). NEW DPI HOST RECORD.
- Chrysophyllum oliviforme* (satin leaf)-- *Saissetia oleae* (Olivier), **black scale**: A slight infestation was found on a plant at a grammar school in Miami (Miami-Dade County; E2003-2365; Haydee L. Escobar; 2 June 2003). NEW DPI HOST RECORD.
- Dodonaea viscosa* (varnish leaf, hopseed bush)-- *Coccus viridis* (Green), **green scale**: A moderate infestation was found on a plant at a residence in New Smyrna Beach (Volusia County; E2003-2328; Raymond C. Jarrett; 30 May 2003). NEW DPI HOST RECORD.
- Erythrina* sp. (erythrina)-- *Myllocerus undatus* Marshall, **a weevil**: An infestation was found at a residence in Miami Lakes (Miami-Dade County; E2003-1792; Lynda F. Davis; 1 May 2003). NEW DPI HOST RECORD.
- Ilex coriacea* (large gallberry, large sweet gallberry)-- *Saissetia neglecta* De Lotto, **Caribbean black scale** and *Eucalymnatus tessellatus* (Signoret), **tessellated scale**: A slight infestation was found in a natural area near Tequesta (Martin County; E2003-2804; Yvette Ogle, DPI/CAPS; 20 June 2003). Both finds are NEW DPI HOST RECORDS.
- Myrica cerifera* (wax myrtle, southern bayberry)-- *Ferrisia terani* Williams & Granara de Willink, **a mealybug**: A slight infestation was found on 10% of 25 plants at an IFAS unit in Homestead (Miami-Dade County; E2003-1782; Holly B. Glenn; 1 May 2003). NEW DPI COUNTY RECORD, NEW DPI HOST RECORD.
- Passiflora suberosa* (corksystem passionflower)-- *Dysmicoccus brevipes* (Cockerell), **pineapple mealybug**: A slight infestation was found at John D. McArthur Beach State Recreation Area (Palm Beach County; E2003-2183; Dr. Greg S. Hodges and Julieta Brambila; 21 May 2003). NEW DPI HOST RECORD.
- Psychotria sulzneri* (shortleaf wild coffee)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A severe infestation was found at a residence in South Miami (Miami-Dade County; E2003-2776; James Adt, homeowner; 24 June 2003). NEW DPI HOST RECORD.

*Trema micranthum* (Florida trema, nettletree)-- *Pulvinaria psidii* Maskell, **green shield scale**: A moderate infestation was found in a natural area near Florida City (Miami-Dade County; E2003-2717; Julieta Brambila; 19 June 2003). NEW DPI HOST RECORD.

#### **BENEFICIAL INSECTS:**

*Maconellicoccus hirsutus* (pink hibiscus mealybug)-- *Anagyrus kamali* Moursi, **a parasitic wasp**: Parasites were present and in good numbers in an infestation found at a discount store in Pompano Beach (Broward County; E2003-2168; Mark C. Williams; 23 May 2003). These parasites have been released to control pink hibiscus mealybug (Dr. Greg S. Hodges and Dr. Gregory A. Evans).

*Phoenicoccus marlatii* (a scale insect): *Saniosulus* sp., **a predaceous mite**: Several specimens were found associated with a severe infestation of scales at a residence in Ft. Lauderdale (Broward County; E2003-1570; Karolynne M. Griffiths, USDA/ APHIS/PPQ; 20 April 2003). This mite is new to science (Dr. W.C. 'Cal' Welbourn).

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

*Capsicum pubescens* (rocoto pepper)-- *Anastrepha ludens* (Loew), **Mexican fruit fly**: Four larvae were found in peppers for sale at a grocery store in Clearwater (Pinellas County; E2003-1836; Alan R. Haynes and David M. Mooney; 8 May 2003). Another specimen was found in peppers for sale at a grocery store in Pinellas Park (Pinellas County; E2003-1837; Alan R. Haynes and David M. Mooney; 8 May 2003). Identification was confirmed from reared adults. Mexican fruit fly previously had been recorded as infesting other hot peppers (*Capsicum annuum*) in laboratory tests, but none had been reported doing so in nature.

*Anastrepha ludens* (Loew), **Mexican fruit fly**: An adult was collected in a trap in Orlando (Orange County; E2003-2351; Jesse Saggus, USDA/APHIS/PPQ; 16 May 2003). Intensified trapping will be conducted over an 81-square-mile area surrounding the detection site for an estimated three life cycles to determine whether a colonization event has taken place. No additional flies had been detected by the end of the first estimated life cycle (June 19).

*Platyerus biguttatus* (Linnaeus), *Platyerus rhadamanthus* Gerst. **assassin bugs**, and an undetermined exotic **water scorpion** (Nepidae): Specimens were confiscated from a pet store in Deerfield Beach (Broward County; E2003-1984, 1985, 1986; J. Keith Harris; 14 May 2003). The two assassin bugs are African species with very painful bites. The water scorpion was advertised as a "Malaysian water scorpion," but it seems to match an unidentified specimen from Africa in the FSCA. None of these insects can be sold legally in Florida (Dr. Susan E. Halbert).

#### **INSECT AND OTHER INVERTEBRATE DETECTION:**

*Catorhintha guttula* (Fabricius), **a coreid bug**: A specimen was found in a wooded grass area near Gordonville (Polk County; E2003-2011; Martha A. 'Ginger' Simpson; 15 May 2003). NEW DPI COUNTY RECORD.

- Cotalpa lanigera lanigera* (Linnaeus), **a scarab beetle**: A specimen was found in a parking lot in St. Augustine (St. Johns County; E2003-1383; William Sweeters, customer; 8 April 2003). NEW DPI COUNTY RECORD. This is a very rare beetle in Florida (Dr. Michael C. Thomas).
- Dictyna dauna* Chamberlin & Gertsch, **a spider**: A specimen was found in a natural area near Ft. Pierce (St. Lucie County; E2003-2034; Kenneth L. Hibbard; 16 May 2003). NEW DPI COUNTY RECORD.
- Dieuches armatipes* Walker, **an African seed bug**: A specimen was found in a vacant lot in Ft. Pierce (St. Lucie County; E2003-2291; Kenneth L. Hibbard; 30 May 2003). NEW DPI COUNTY RECORD.
- Falconina gracilis* (Keyserling), **a spider**: A specimen was found in Naples (Collier County; E2003-2740; homeowner; 22 May 2003). NEW DPI COUNTY RECORD.
- Osmopleura chamaeropsis* (Horn), **a cerambycid beetle**: A specimen was found at a residence in Ormond Beach (Volusia County; E2003-2350; Raymond C. Jarrett; 30 May 2003). This is a very rare cerambycid. It develops in the base of last year's fronds on cabbage palms. It is not a pest (Dr. Michael C. Thomas).
- Pomacea caniculata* (Lamarck), **channeled apple snail**: Hundreds of specimens were found in a trailer park in Zephyrhills (Pasco County; E2003-2783; Diana E. Bozeman; 24 June 2003). NEW DPI COUNTY RECORD. This is a plant-feeding aquatic snail that lays eggs above water. Control is very difficult, because the majority of the population is in the water (Dr. Lionel A. Stange).
- Spilococcus* sp. nr. *pressus* Ferris, **a mealybug**: A slight infestation was found on five of 25 plants in a nursery in Delray Beach (Palm Beach County; E2003-2554; Ellen J. Tannehill; 11 June 2003). NEW DPI COUNTY RECORD.
- Strongylium aulicum* Maklin **a tenebrionid beetle**: A specimen was collected on a sticky board trap in Bartow (Polk County; E2003-2396; Martha A. 'Ginger' Simpson; 2 June 2003). NEW DPI COUNTY RECORD.

**NEMATODOLOGY SECTION**

**Compiled by Renato N. Inerra, Ph.D. and Janete A. Brito, Ph.D.**

A total of 3,517 samples (2,846 for morphological and 671 for molecular identifications) was processed in May and June 2003. Details are shown below:

<p><b>Certification and Regulatory Samples:</b></p> <p>Multistate Certification for National and International Export . . . . . 1,753                  California Certification . . . . . 691                  Burrowing Nematode (Detection) . . . . . 92                  Pre movement (Citrus Nursery Certification) . . . . . 48                  Site or Pit Approval (Citrus Nursery and Other Certifications) . . . . . 25</p>	<p><b>Other Samples:</b></p> <p>Plant Problems . . . . . 53                  Intrastate Survey, Random . . . . . 182                  Out of State Survey, Via Florida Interception. . . . . 2</p> <p><b>Molecular Identifications*</b> . . . . . 671</p> <p><small>*The majority of these analyses involved root-knot nematode species.</small></p>
---	--

**NEMATODES OF SPECIAL INTEREST:**

*Alternanthera ficoidea* (Joseph’s coat) - *Radopholus similis* (Cobb, 1893) Siddiqi, Thorne 1949, **the burrowing nematode**, was found infecting roots of this herb (Broward County; N03-00780; Thomas L. Salisbury; 14 May 2003). All nematode life stages were collected from the root system of this plant. **NEW HOST RECORD.**

*Cryptocoryne* sp. (water-trumpet) - *Hirschmanniella oryzae* (van Breda de Haan, 1902) Luc and Goodey in Sher, 1963, **the rice root nematode**, was found infecting the roots of this aquatic herb (Broward County; N03-00780; Thomas L. Salisbury; 14 May 2003). Roots were necrotic as a consequence of the nematode infection.

*Nymphaea* sp. (water lily) - *Hirschmanniella gracilis* (de Man, 1880) Luc and Goodey, 1964, was found infecting the roots of this aquatic herb (Broward County; N03-00872; Thomas L. Salisbury; 5 June 2003). All nematode life stages were collected from the root system of this plant.

**COLLECTORS SUBMITTING FIVE OR MORE SAMPLES THAT WERE PROCESSED FOR NEMATOLOGICAL ANALYSIS DURING MAY AND JUNE 2003:**

Bailey, Wayne W. . . . . 7	Pate, JoAnn . . . . . 81
Bennett, Jim E. . . . . 6	Podris, Flewellyn W . . . . . 29
Crooks, Ketturah L . . . . . 28	Qiao, Ping . . . . . 150
Debenport, Mary E. . . . . 22	Robinson, William L . . . . . 106
Fuller, Samuel A . . . . . 45	Salisbury, Thomas L. . . . . 229
Harris, Jessie . . . . . 40	Simington, Amy R. . . . . 5
LeBoutillier, Karen W. . . . . 260	Simmons, Stacy S . . . . . 8
Ochoa, Ana L. . . . . 307	Smith, Lane M. . . . . 14
Ooms, Laura L. . . . . 17	Stone, Carrie S. . . . . 22

## PLANT PATHOLOGY SECTION Compiled by Robert M. Leahy

For this period the Plant Pathology section received and processed 2,243 specimens. These included 1,683 pathology, 12 miscellaneous, and 21 soil samples. 527 citrus canker diagnoses were performed, including full pathogenicity tests on 39 samples from South East Florida, 1 from Central Gulf Coast Florida, 0 from South West Gulf Coast Florida, 194 from Central Florida, and 0 from North Florida.

### ORNAMENTALS, WOODY PLANTS AND PALMS:

*Coccoloba uvifera* (sea grape)-- *Uredo coccolobae* Henn., **leaf rust**: Collected at dooryard in Ft. Myers (Lee County; P2003-2334; Walter Golden; 27 May 2003).

*Leucothoe axillaris* (dog hobble)-- *Pseudocercospora leucothoes* (B.H. Davis) Deighton, **leaf spot**: Collected at a nursery in Hawthorne (Alachua County; P2003-2136; Christine Zamora; 8 May 2003).

*Wodyetia bifurcata* (foxtail palm)-- *Cercospora* sp., **leaf spot**: Collected at a nursery in Loxahatchee (Palm Beach County; P2003-2135; John DeFonseca; 7 May 2003). NEW HOST RECORD.

### ORNAMENTALS, FOLIAGE PLANTS:

*Alpinia zerumbet* (alpinia)-- *Acidovorax avenae* (Willems et al.), **bacterium**: Collected at a nursery in Gainesville (Alachua County; P2003-2478; Robert M. Leahy and Jodi Hansen; 11 June 2003). NEW HOST RECORD.

*Hoya cumingiana* (hoya)-- *Puccinia obliqua* Berk. & M.A. Curtis, **rust**: Collected at a nursery in Delray Beach (Palm Beach County; P2003-2647; Williams; 26 June 2003). NEW HOST RECORD

### ORNAMENTALS, FLOWERING PLANTS:

*Osteospermum* sp. (osteospermum)-- *Plasmopara halstedii* (Farl.) Berl. & de Toni, **downy mildew**: Collected at a dooryard in Gainesville (Alachua County; P2003-1050; Rick Schoellhorn; 5 May 2003). NEW HOST RECORD.

### FOOD OR CROP PLANTS:

*Citrus aurantium* (sour orange)-- *Xanthomonas axonopodis* pv. *citri* (Hasse) Vauterin et al., **Wellington citrus canker**: Collected at a dooryard in Lake Worth (Palm Beach County; X2003-01012; Gordon Bonn; 3 April 2003). Sour orange root stock foliage was infected by heavily infected key lime scion. NEW HOST RECORD.

### WEEDS AND GRASSES:

*Eclipta alba* (eclipta)-- *Bidens Mottle Potyvirus*, **virus**: Collected at Kanapaha Park in Gainesville (Alachua County; P2003-2247; Dr. Carlye Baker; 18 May 2003). NEW HOST RECORD.

*Mikania cordifolia* (Florida Keys hempvine)-- *Bidens Mottle Potyvirus*, **virus**: Collected on the roadside in New Smyrna Beach (Volusia County; P2003-2221; Dr. Susan E. Halbert and Julieta Brambila; 12 May 2003). NEW HOST RECORD.

*Rhynchospora inundata* (beakrush)-- *Cintractia leucoderma* (Berk.) Henn., **leaf smut**: Collected at a dooryard in Osceola (Osceola County; P2003-2214; Yvette Ogle; 13 May 2003).

**OTHER DETECTIONS OF SPECIAL INTEREST:**

*Amborella trichopoda* (amborella)-- *Thielaviopsis basicola* (Berk. & Broome), **wilt**: Collected at the University of Florida in Gainesville (Alachua County; P2003-2278; J. Richard Abbott; 22 May 2003). NEW HOST RECORD.

DACS-P-00124