

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

For this period, 129 specimens were submitted to the Botany Section for identification, and 1,226 were received from other sections for identification/name verification (total 1,355). Also during this period 106 specimens were added to the herbarium. Some of the samples sent in for identification are discussed below.

Anacardium occidentale L. (A genus of 11 species in tropical America.) Anacardiaceae.

Cashew-nut, maranon, acajou. Native to northeastern Brazil, but widely cultivated and naturalized elsewhere, this species forms a wide-crowned tree to 15 m tall with spreading, often tortuous branches. Unlike many plants in its family, such as sumacs (*Rhus*) and Brazilian pepper (*Schinus*), *Anacardium* species have simple, rather than pinnately compound leaves. In *A. occidentale*, the leaves are glossy, thick and leathery, oblong to obovate, 10-20 cm. long and 5-10 cm. wide. Large terminal panicles bear small, pinkish, staminate, pistillate and perfect flowers intermingled. The odd kidney-shaped fruit consists of a thin, outer layer with a caustic resin enclosing the seed (the cashew-nut). As the fruit matures, the flower stalk beneath it develops into a large, red, pear-shaped, juicy 'pseudo-fruit' (the cashew-apple). This is truly a utilitarian plant. After being roasted to destroy the toxins, the nut becomes a familiar and popular snack. In many parts of the tropics, the juicy and delicious cashew-apple is commonly eaten out of hand and juiced to make a popular soft drink or wine. Resin from the seed covering has molluscicidal and antibiotic properties and is used to make brake fluid and plastics. Gum from the bark and branches is used in bookbinding and to make an indelible ink. Additional uses are too numerous to mention. In Florida, the tree can be grown only in the south, and it is not common there. (Broward County; B2004-294; Rita J. Carpenter, 19 May 2004) (Mabberley 1997; Morton 1987)

Curcuma alismatifolia Gagnep. (A genus of approximately 40 species distributed throughout tropical Asia.) Zingiberaceae. **Siam tulip.** This native of Thailand has recently become popular in many parts of the world, both as a pot plant and as a cut flower. Like most of its genus, the colorful inflorescence of this species is borne on a stalk separate from the leaves. The inflorescence, standing nearly 1 m tall, consists of two parts. The white flowers, with a showy purple lips and subtended by relatively inconspicuous green bracts, are borne on the lower portion; on the upper portion are 8-10 showy, erect, sterile bracts, rich pink in the most familiar forms, but varying to white and magenta. The effect is vaguely tulip-like. The attractive leaves are slightly grayish with a purple mid-vein. They have a broad blade reminiscent of a canna leaf, but with a long petiole. This is an excellent ornamental, whether grown in a container or in the garden. It is generally hardy as far north as the Gainesville area and should be planted in a spot sheltered from the afternoon sun. This plant is completely dormant in the winter, whether grown indoors or outdoors. If containerized, it should be kept only barely moist during dormancy. (Broward County; B2004-358; William A. Thiel, 17 June 2004) (Huxley 1992; Mabberley 1997)

Garcinia livingstonei (A genus of perhaps 200 species, native to the Old World tropics, especially in Asia and southern Africa.) Guttiferae (Clusiaceae). **Imbe, Livingstone's garcinia.** This native of southern and eastern Africa is very unusual among plants in the Guttiferae in that it has leaves in whorls of three (rather than two opposite leaves per node), and also in that its leaves have crenate (rather than entire) margins. In fact, these characters

led us to look at other families when originally trying to identify it; only the yellow sap oozing from the torn petioles kept us on the right track. In South Africa, it grows to be a tree 18 meters tall, with a narrowly pyramidal shape when young. Like its leaves, the twigs and branches are usually in whorls of three. The small, fragrant greenish flowers are borne in clusters, with staminate, pistillate and perfect ones on the same tree. They are followed by edible, pink to red, plum-like fruits, with a refreshing acid taste, but an unpleasant sticky, yellow juice. The fruits are enjoyed by both the local people and many types of animals in Africa, but the tree is seldom cultivated elsewhere. It is occasionally planted as an ornamental in South Florida, but can tolerate only a light frost. (Miami-Dade County; B2004-339; Misael E. Igarza, 4 June 2004) (Mabberley 1997; Palmer and Pitman 1972)

Habranthus robustus Herbert ex Sweet. (A genus of 10 species native from Texas to Argentina.)

Amaryllidaceae. **Argentine rain lily.** The rain lilies include the closely-related genera *Zephyranthes* and *Habranthus*, both sharing much the same geographic range, and both growing from a true bulb. Their common name refers to the lily-like appearance of the flowers (but with an inferior ovary), and the fact that they often bloom profusely after the rain that ends a dry period. Flowers of *Zephyranthes* face upward, are completely actinomorphic, and have stamens of two differing lengths; those of *Habranthus* face outward, are slightly zygomorphic, and have stamens of four differing lengths. The beautiful plant treated here is native to southern Brazil and Argentina and is naturalized in a few counties in Florida. It grows about 2 dm. tall, with grasslike, but somewhat fleshy, often glaucous leaves. The trumpet-shaped flowers are colored apple-blossom pink with a yellow throat and are 5-6 cm across. A cultivar, named 'Russell Manning,' has beautiful lavender-pink flowers with a more greenish throat. Both are easy and rewarding garden plants and grow best in full sun. (Miami-Dade County; B2004-259; Edward T. Putland, 3 May 2004) (Flagg *et al.* 2002)

Litchi chinensis Sonn. (A monotypic genus with a natural distribution encompassing southern China and western Malesia). Sapindaceae. **Litchi, lychee.** This is a dense, evergreen, round-topped tree potentially growing to 30 m tall, but usually considerably smaller; the alternate, pinnately compound leaves have 4-8 glossy, somewhat leathery leaflets, 5-7 cm long. Small, perfect, greenish flowers are borne in large terminal panicles to 70 cm. long. The distinctive, showy fruits grow to about 2.5 cm across, usually spherical or ellipsoid, with a leathery, warty, easily peeled strawberry-red skin. Filling much of the inside is a fleshy, translucent grayish aril that separates easily from the seed. The aril is the edible portion, and it is highly prized. At peak maturity, it is plump, sweet and juicy with a distinctive flavor, but overripe litchis become desiccated like raisins, and their flavor is muskier. They are eaten fresh, dried or canned. Many cultivars have been selected for characteristics such as large and flavorful fruits, increased fruit production and cold hardiness. The trees grow and bear best in areas with hot, wet summers and cool, dry winters. Most commercial production is in China and India, but sizeable acreage exists elsewhere in subtropical Asia, as well as in South Africa and Australia. It is a common dooryard tree in Hawaii, with some commercial production there as well. In Florida, it has been grown successfully, between cold snaps, as far north as Merritt Island. (Brevard County; B2004-327; Ali A. Darrat, 27 May 2004) (Morton 1987)

Melilotus alba Medikus (A genus of 20 species in Eurasia and North Africa). Leguminosae (Fabaceae)-Papilionoideae. **White sweetclover.** This familiar, weedy plant is native to

central Europe and southwestern Asia, but has become widely naturalized throughout Eurasia, North American and temperate South America. It is often considered a white-flowered form of the yellow sweetclover, *Melilotus officinalis* Lam., since they are essentially identical except for the color of the flowers. Although sometimes annual, these sweetclovers are usually biennials with a deep taproot and a loose rosette of decumbent stems the first year, and an erect, branched, 1-2 m tall flowering stem the second year. The leaves are trifoliolate, and the leaflets have finely serrate margins, an unusual feature among legumes. The foliage has a sweet, clean, hay-like smell, which becomes stronger when it is dried. The small, white pea-like flowers are borne in long, slender axillary spike-like racemes during late spring and summer. The flowers are fragrant and are very attractive to bees. Sweetclovers have long been planted as forage and green manure crops, and frequently escape to vacant lots, roadsides and other disturbed areas, but have not become serious pests. A caution to anyone who might want to feed sweetclover to their livestock: if hay made from these plants becomes moldy, it can be seriously poisonous. (Marion County; B2004-262; B.L. Newman, 28 April 2004). (Mabberley 1997; Muenscher 1955).

Nymphoides cristata (Roxb.) Kuntze (A genus of 20 species, worldwide in distribution).

Menyanthaceae. **Crested floatingheart, water snowflake.** All of the species of *Nymphoides* are aquatic plants generally rooted in the substrate, with heart-shaped, floating leaves. They often resemble a small waterlily (*Nymphaea*), hence the generic name meaning "resembling *Nymphaea*." Clusters of delicate, diaphanous flowers with five-lobed corollas are borne from the upper nodes of floating stems. The flowers stand above the surface of the water and are white or yellow, depending on the species. *Nymphoides aquatica* (Walt.) Kuntze and *N. cordata* (Ell.) Fern. are native to Florida, but several exotic species, commonly grown as aquarium or pond plants, have escaped from cultivation. The species treated here is one of these exotics, ranging in Asia from India to China. The corolla is white with an erect flap of tissue along the midrib of each lobe; this flap, or 'crest' is unique to *N. cristata*, but it is only obvious in fresh flowers. The first North American record for this species was from an artificial lake in Naples, Florida in 1996, but it has since spread to at least four other counties in south and central Florida. Where it occurs, it forms a dense mat of leaves, so it has the potential to become a harmful weed. (Collier County; B2004-291; Yvette Ogle, 20 May 2004). (Burks 2002).

Passiflora incarnata L. (A genus of 430 species distributed through the warmer parts of the Americas as well as in southern Asia and the Pacific islands.) Passifloraceae. **Maypops, purple passionflower.** Plants of the genus *Passiflora* are almost always vines climbing by means of tendrils, with distinctive, intricately constructed and often brightly colored flowers. The most familiar of these usually have five sepals and five petals of similar appearance, with their basal tissue comprising a floral tube or hypanthium. On this hypanthium, apparently above the petals, is a showy corona or "crown" made up of one to several series of slender, often fleshy appendages. The styles and filaments are united into a slender, cone-like structure, with the five anthers appearing below the three thickened and conspicuous stigmas. The plants are called "passionflowers" because when priests first saw them in the Sixteenth Century, they thought parts the plant, especially the flowers, recalled various aspects of the passion of Christ: the corona being the crown of thorns, the three stigmas the three nails, the ten petals and sepals the ten faithful disciples and so on. *Passiflora incarnata* is the most familiar species native to the United States, ranging from Virginia and

southwestern Pennsylvania to Florida and Texas. It is an herbaceous, perennial, rhizomatous vine with three-lobed leaves, favoring sunny, often disturbed sites where it can occasionally become invasive. The showy flowers are 6-8 cm across with white or purple-tinged perianth. The corona is as long as the perianth, and the segments are banded with purple and white. The fruit is ovoid to spheroid, about the size of a hen's egg, and is edible, but not luscious and juicy like the fruits of some tropical species. The origin of the common name "maypop" is a puzzle. Supposedly it was altered from "maycock," itself an alteration of a Powhatan Indian (Virginia) name, "mahcawq." Perhaps the name stuck because of the way the flower buds pop open almost explosively in May, or the way the fruits pop when one steps on them. (Hillsborough County; B2004-283; Karyn L. Pippenger, 13 May 2004.) (Cronquist 1981; Mabberley 1997).

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ENTOMOLOGY SECTION

Compiled by Susan E. Halbert, Ph.D.

For the month of May, there were 807 samples, consisting of 36,227+ specimens. In June, there were 769 samples, consisting of 25,541+ specimens. Some of the samples are listed below:

ORNAMENTALS, FOLIAGE PLANTS:

- Acalypha hispida* (chenille plant)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A slight infestation was found at the DPI office in Miami (Miami-Dade County; E2004-3772; Haydee L. Escobar; 18 May 2004). NEW DPI HOST RECORD.
- Acalypha ostryifolia* (pineland threeseed mercury)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A slight infestation was found on a plant at a nursery in Princeton (Miami-Dade County; E2004-4256; Mario Jose Hernandez and Edward T. Putland; 8 June 2004). NEW DPI HOST RECORD.
- Bambusa oldhamii* (Oldham bamboo)-- *Palmicultor lumpurensis* (Takahashi), a **bamboo mealybug**: An infestation was found at a residence in St. Augustine (St. John's County; E2004-4652; Richard Waldron, homeowner; 22 June 2004). NEW DPI COUNTY RECORD.
- Bambusa* sp. (a bamboo)-- *Palmicultor lumpurensis* (Takahashi), a **bamboo mealybug**: A moderate infestation was found on 20 of 100 plants at a nursery in New Smyrna (Volusia County; E2004-4450; Raymond C. Jarrett; 15 June 2004). NEW DPI COUNTY RECORD.
- Eugenia brasiliensis* (grumichama)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A moderate infestation was found at a residence in Miami (Miami-Dade County; E2004-3403; Haydee L. Escobar; 5 May 2004). NEW DPI HOST RECORD.
- Euonymus japonicus* (Japanese spindle-tree)-- *Ovachlamys fulgens* (Gude), a **snail**: A moderate infestation on all of 20 plants was intercepted in a shipment from California at a nursery in Live Oak (Suwannee County; E2004-3682; W. Wayne Bailey; 14 May 2004). NEW DPI COUNTY RECORD. The snail spread by the orchid industry into Costa Rica about 35 years ago from Japan. It is established in Dade and Broward Counties, but not in California and is a common interception from Costa Rica (Dr. David G. Robinson, USDA/APHIS/PPQ, Philadelphia and Dr. Lionel A. Stange).
- Gardenia thunbergia* (forest gardenia)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A severe infestation was found on two plants at a residence in Opa Locka (Miami-Dade County; E2004-3917; Olga Garcia; 20 May 2004). NEW DPI HOST RECORD.
- Pittosporum tobira* (pittosporum)-- *Mesodon* sp., a **snail**: Several specimens were intercepted in 15 of 469 plants imported from Georgia to Boynton Beach (Palm Beach County; E2003-4360; Ellen J. Tannehill; 15 September 2003). This species is not established in Florida (Dr. Lionel A. Stange).
- Polyscias* sp. (polyscias)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A slight infestation was found on two plants at a residence in Sunrise (Broward County; E2004-3884; Nury M. Marrone; 20 May 2004). NEW DPI HOST RECORD.
- Senna* sp. (senna)-- *Mitrapysylla albalineata* (Crawford), **senna psyllid**: A moderate infestation was found on one of four plants at a nursery in Naples (Collier County; E2004-4780; Scott D. Krueger; 28 June 2004). NEW DPI COUNTY RECORD.
- Senna surattensis* (glossy shower)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A severe infestation was found on 50 of ½ million plants at a nursery in Naples

(Collier County; E2004-4288; Matthew W. Brodie, David L. Renz, USDA/APHIS/PPQ, and Richard L. Blaney; 9 June 2004). NEW DPI HOST RECORD.

Trachelospermum jasminoides (Confederate jasmine)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A moderate infestation was found on ten of 50 plants at a nursery in Naples (Collier County; E2004-4308; Mathew W. Brodie, David L. Renz, USDA/APHIS/PPQ, and Richard L. Blaney; 9 June 2004). NEW DPI HOST RECORD.

ORNAMENTALS, FLOWERING PLANTS:

Cestrum sp. (a cestrum)-- *Ceroplastes sinensis* D. Guere, a **wax scale**: An infestation was found at a nursery in Estero (Lee County; E2004-3394; Walter W. Golden; 5 May 2004). NEW DPI COUNTY RECORD.

Euryops chrysanthemoides (bull's eye)-- *Toxoptera citricida* (Kirkaldy), **brown citrus aphid**: A moderate infestation was found at a residence in Ft. Myers (Lee County; E2004-3788; Reuben E. Sibert; 18 May 2004).

Hibiscus rosa-sinensis (hibiscus)-- *Acanalonia excavata* van Duzee, an **acanaloniid planthopper**: A specimen was found at a packing house in Florida City (Miami-Dade County; E2004-4347; Edward T. Putland; 9 June 2004). This is only the third specimen we have of this species, which was discovered in Miami-Dade County in 1997. We know nothing about its biology (Dr. Susan E. Halbert). *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A severe infestation was found on 50 of 1,000 plants at a nursery in Naples (Collier County; E2004-4251; Scott D. Krueger; 8 June 2004). NEW DPI COUNTY RECORD.

Petrea volubilis (queen's wreath)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A slight infestation was found at a residence in Miami (Miami-Dade County; E2004-3288; Haydee L. Escobar; 3 May 2004). NEW DPI HOST RECORD.

Rosa sp. (rose)-- *Wahlgreniella nervata* (Gillette), a **rose aphid**: A slight infestation was intercepted in Naples in a shipment of plants from California (Collier County; E2004-3474; Scott D. Krueger; 6 May 2004). This species is not established in Florida. It can be a pest on cultivated roses. Infestations of this species often develop in the flowers (Dr. Susan E. Halbert).

Tecoma stans (yellow elder, yellow bells)-- *Cecidophyes* sp., an **eriophyid mite**: An infestation was found at a botanical garden in Miami (Miami-Dade County; E2004-2819; Gwen H. Myres; 16 April 2004). NEW DPI HOST RECORD.

Tecomaria capensis (Cape honeysuckle)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A slight infestation was found at a residence in Miami (Miami-Dade County; E2004-3307; Olga Garcia; 3 May 2004). NEW DPI HOST RECORD.

Tillandsia sp. (a bromeliad)-- *Antonina* sp., a **mealybug**: An infestation was intercepted from Guatemala and Mexico on two of 200 plants at a nursery in St. Augustine (St. John's County; E2004-4591; Mark A. Wheldon; 18 June 2004).

FOREST AND SHADE TREES:

Ficus citrifolia (short-leaved fig)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A moderate infestation was found on a plant at a residence in Miami (Miami-Dade County; E2004-4624; Olga Garcia; 18 June 2004). NEW DPI HOST RECORD.

Filicium decipiens (ferntree, Japanese ferntree)-- *Paratachardina lobata* (Chamberlin), **lobate**

lac scale: A slight infestation was found at a residence in Miami (Miami-Dade County; E2004-3319; Misael E. Igarza; 29 April 2004). NEW DPI HOST RECORD.

Magnolia grandiflora 'Little Gem' (a cultivar of southern magnolia, a native)-- *Xylosandrus compactus* (Eichhoff), a **scolytid beetle:** A slight infestation on two of 25 plants was intercepted in a shipment from California at a nursery in Naples (Collier County; E2004-4065; Scott D. Krueger; 26 May 2004).

FOOD AND CROP PLANTS:

Annona muricata (soursop, guanabana)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug:** A severe infestation was found on a plant at a nursery in Homestead (Miami-Dade County; E2004-4448; Dr. Jorge E. Peña, University of Florida's Tropical Research and Extension Center, Homestead, and A. Palmateer, employee; 14 June 2004). NEW DPI HOST RECORD.

Cocos nucifera (coconut palm)-- *Aleurotrachelus atratus* Hempel, a **whitefly:** A slight infestation was found on 10% of five plants at a nursery in Fellsmere (Indian River County; E2004-4377; Christine J. Frere; 9 June 2004). NEW DPI HOST RECORD. This whitefly is established in Florida but has been more common in southern Florida. It is known only from hosts in the family Palmae (Dr. Greg S. Hodges).

CITRUS:

Citrus limon (lemon)-- *Diaphorina citri* Kuwayama, Asian citrus psyllid: A moderate infestation was found at a residence in Port Charlotte (Charlotte County; E2004-4137; Richard L. Blaney; 1 June 2004). NEW DPI COUNTY RECORD.

Citrus reticulata (tangerine, mandarin)-- *Scaphytopius* (Cloanthanus) *nigrinotus* Caldwell, a **leafhopper:** A specimen was found at a residence in St. Petersburg (Pinellas County; E2004-4677; Susan E. Halbert, Caleb D. Dalley, USDA/APHIS and Noah E. Ressa, USDA/APHIS; 23 June 2004). NEW DPI COUNTY RECORD. This species is relatively new to Florida. It was intercepted in citrus fruit from the Bahamas and was collected in a suction trap at LaBelle (Dr. Susan E. Halbert).

WEEDS AND GRASSES:

Abutilon sp. (abutilon)-- *Parasaissetia nigra* (Nietner), **nigra scale:** A moderate infestation was found on one of two plants at a nursery in Naples (Collier County; E2004-4779; Scott D. Krueger; 28 June 2004). NEW DPI HOST RECORD.

Acacia auriculiformis (earpod acacia, earleaf acacia)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale:** A slight infestation was found on one plant at a residence in Miami (Miami-Dade County; E2004-3298; Edward T. Putland; 1 May 2004). NEW DPI HOST RECORD.

Gramineae (a grass)-- *Duplacionaspis divergens* Green, an **armored scale:** A severe infestation was found at a residence in Hialeah (Miami-Dade County; E2002-2480; 17 June 2002). NEW DPI COUNTY RECORD.

Panicum repens (torpedo grass, quack grass, bullet grass)-- *Duplacionaspis divergens* Green, an **armored scale:** An infestation was found at an IFAS unit in Ft. Lauderdale (Broward County; E2004-4634; Bryan Steinberg, University of Florida, Ft. Lauderdale Research and Extension Center; 21 June 2004). NEW DPI HOST RECORD.

Parthenium hysterophorus (Santa Maria, white top, escoba amarga)-- *Maconellicoccus hirsutus*

(Green), **pink hibiscus mealybug**: A moderate infestation was found at a nursery in Princeton (Miami-Dade County; E2004-4343; Edward T. Putland; 9 June 2004). NEW DPI HOST RECORD.

Phyllanthus sp. (phyllanthus)-- *Asterolecanium pustulans* (Cockerell), **oleander pit scale**: A moderate infestation was found at the Monroe County Extension Office in Key West (Monroe County; E2004-4595; Lyle J. Buss, University of Florida, Entomology; 15 June 2004). NEW DPI HOST RECORD.

Solanum diphyllum (twoleaf nightshade)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A severe infestation on two plants was found at a residence in Miami (Miami-Dade County; E2004-3803; Olga Garcia; 18 May 2004). NEW DPI HOST RECORD.

NATIVE AND NATURALIZED PLANTS:

Bursera simaruba (gumbo-limbo)-- *Aleurothrixus floccosus* (Maskell), **woolly whitefly**: A slight infestation was found on a plant at a cemetery in Key West (Monroe County; E2004-4599; Lyle J. Buss, University of Florida, Entomology; 14 June 2004). NEW DPI HOST RECORD. *Dysmicoccus brevipes* (Cockerell), **pineapple mealybug**: A slight infestation was found on a plant at the Monroe County Extension Office in Key West (Monroe County; E2004-4594; Lyle J. Buss, University of Florida, Entomology; 15 June 2004). NEW DPI HOST RECORD.

Cordia globosa (Curaçao bush, bloodberry)-- *Diceratalebra sanguinolinea* (Baker), a **leafhopper**: A severe infestation was found on endangered plants near a tile warehouse in Miami (Miami-Dade County; E2004-3969; Eduardo M. Varona, USDA/APHIS/PPQ and Michael E. Meadows, CAPS; 25 April 2004). NEW USA CONTINENTAL RECORD. This new leafhopper is known from Nicaragua, Cuba, Puerto Rico, and St. Thomas. Nothing is known about its biology (Dr. Susan E. Halbert, Dr. Paul Freytag, University of Kentucky, and Dr. Stuart H. McKamey, USDA/ARS/SEL).

Eclipta prostrata (false daisy)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A slight infestation was found at a nursery in Princeton (Miami-Dade County; E2004-4254; Mario Jose Hernandez and Edward T. Putland; 8 June 2004). NEW DPI HOST RECORD.

Gossypium hirsutum (upland cotton, wild cotton)-- *Maconellicoccus hirsutus* (Green), **pink hibiscus mealybug**: A slight infestation was found at a residence in Miami (Miami-Dade County; E2004-4537; Olga Garcia; 16 June 2004). NEW DPI HOST RECORD on an endangered plant.

Ilex cassine (Dahoon holly)-- *Vinsonia stellifera* (Westwood), **stellate scale**: A moderate infestation was found on four plants at a residence in Miami (Miami-Dade County; E2003-4205; Edward T. Putland and Lynda F. Davis; 9 September 2003). NEW DPI HOST RECORD.

Matelea alabamensis (Alabama milkvine, Alabama spiny pod, Alabama anglepod)-- *Cecidophyes* sp., an **eriophyid mite**: An infestation was found at a public garden in Lake Wales (Polk County; E2002-3121; Susan E. Halbert and Terrence D. Williams; 12 July 2002). NEW DPI HOST RECORD on an endangered plant.

Sida acuta (common wireweed, common fanpetals, broomweed)-- *Phenacoccus solani* Ferris, **solanum mealybug**: A severe infestation was found at the DPI office in Miami (Miami-Dade County; E2004-4788; Edward T. Putland; 30 June 2004). NEW DPI HOST RECORD.

Sida rhombifolia (Cuban jute, Indian hemp)-- *Parasaissetia nigra* (Nietner), **nigra scale**: An

infestation was found at a tile store in Deerfield (Broward County; E2004-3285; Michael E. Meadows, CAPS and Joseph S. Beckwith, USDA/APHIS/PPQ; 27 April 2004). NEW DPI HOST RECORD.

Sideroxylon foetidissimum (false mastic)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A severe infestation was found at a park in Hollywood (Broward County; E2004-4611; Sallie H. Simmons; 18 June 2004). NEW DPI HOST RECORD.

Sideroxylon salicifolium (white bully, willow bastic)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A severe infestation was found at a nursery in Miami (Miami-Dade County; E2004-4446; Olga Garcia; 11 June 2004). NEW DPI HOST RECORD.

Stachytarpheta jamaicensis (blue porter weed, joe)-- *Phenacoccus parvus* Morrison, a **mealybug**: A severe infestation was found at a residence in Treasure Island (Pinellas County; E2004-3686; Gabriela M. Bernard; 13 May 2004). NEW DPI HOST RECORD.

Taxodium distichum (bald cypress)-- *Parthenolecanium fletcheri* (Cockerell), **Fletcher scale**: A moderate infestation on one plant was found at a residence in Largo (Pinellas County; E2004-3808; William J. Salway; 19 May 2004). NEW DPI COUNTY RECORD.

Verbesina virginica (white crownbeard)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A severe infestation was found on four plants at a nursery in Miami (Miami-Dade County; E2004-4438; Olga Garcia; 11 June 2004). NEW DPI HOST RECORD.

Vitis rotundifolia (muscadine)-- *Paratachardina lobata* (Chamberlin), **lobate lac scale**: A slight infestation on ten plants was found in a vacant lot in Miami (Miami-Dade County; E2004-3297; Edward T. Putland; 1 May 2004). NEW DPI HOST RECORD.

FEDERAL AND STATE PLANT PROTECTION AND QUARANTINE PROGRAMS:

Three live cerambycid beetle larvae were found in a "twig tower" manufactured in China and imported into Maitland (Orange County; E2004-4320; Susan E. Halbert, Phillip J. Russell, USDA/AHIS/PPQ and Brian D. Saunders, USDA/APHIS/PPQ; 9 June 2004). The USDA has issued a recall for the product (Dr. Michael C. Thomas).

ARTHROPODS OF MEDICAL AND VETERINARY IMPORTANCE:

Neoscona nautica (L. Koch), a **spider**: A severe infestation was found in a warehouse belonging to a cut flower dealer in Naples (Collier County; E2004-3875; Scott D. Krueger; 20 May 2004). These spiders often are found in large numbers in buildings. They have been implicated in previous cases of human bites (Dr. G.B. Edwards).

INSECT DETECTION:

Boreioglycaspis melaleucae Moore, **melaleuca psyllid**: Three specimens were collected in the suction trap at Winter Haven (Polk County; E2004-4544; Michael C. Kesinger, Citrus Budwood Registration Bureau; 10 June 2004). NEW DPI COUNTY RECORD. This species was released intentionally in Florida to control *Melaleuca quinquenervia* (Dr. Susan E. Halbert).

Cameraria gaultheriella (Walsingham), a **moth**: Specimens from Oregon were intercepted on cut greens in Jacksonville (Duval County; E2004-4007; Flewellyn W. Podris; 26 May 2004).

Cnemodus hirtipes Blatchley, a **seed bug**: A specimen was found under fallen *Sabal* sp. fronds in a vacant lot in Vero Beach (Indian River County; E2004-4605; Kenneth L. Hibbard; 17 June 2004). NEW DPI COUNTY RECORD.

Cyrtophora citricola (Forsk.) a **tentweb weaver**: A severe infestation was found at a nursery in Naples (Collier County; E2004-4396; Scott D. Krueger and Richard L. Blaney; 10 June 2004). An entire oak tree was covered with webs. NEW DPI COUNTY RECORD.

Dieuches armatipes Walker, **African peanut bug**: A specimen was collected in a suction trap in a citrus nursery in LaBelle (Hendry County; E2004-4314; Mark R. Terrell, Citrus Budwood Registration Bureau, Immokalee; 1 September 2000). NEW DPI COUNTY RECORD.

Euglossa sp., **orchid bee**: Two specimens were found in a Jackson trap in Pompano Beach (Broward County; E2003-4528; David T. Benner USDA/APHIS/PPQ; 17 September 2003). Another specimen was found in a Jackson trap in *Mangifera indica* (mango) in Miami (Miami-Dade County; E2004-4097; Javier C. del Hierro; 28 May 2004).

The Euglossini are the orchid bees of the American tropics, so called because the males are pollinators of orchids. They also are attracted to rotting logs and certain fungi. Artificially, the male bees can be attracted to various aromatic compounds (cineole, eugenol, eucalyptol, methyl salicylate, and skatol) that are similar to the natural aromatic compounds of orchids. These fragrances are picked up, along with salivary secretions, and are transferred to a hairy groove or slit on each tibia. Males of one species even collected DDT from buildings sprayed for malaria control, apparently with no ill effect. These fragrances may be precursors of sex pheromones although as collected they do not attract females.

Euglossa is a genus that consists of brilliantly metallic species, usually green but in some species blue, purple, coppery, or partly red. They occur from Paraguay north through the tropics to Mexico; also Jamaica. With 103 species, it is the largest genus of the tribe Euglossini. Nests of some species are constructed of resin and located on stems or twigs in the open. Other species construct cells, in small cavities in tree branches or trunks, earthen banks, or in buildings.

Ten male specimens of *Euglossa* sp. have been collected in Florida between June 2003 and June 2004 (Broward County, nine specimens; Dade County, one specimen) in baited fruit fly traps (multi-lure, methyl eugenol, and Jackson). These males apparently are attracted to the chemical components of these trap baits or lures. There is the possibility that the *Euglossa* sp. has become established in Broward and Dade Counties, due to the length of time, and distance between collections, although no females have been collected (James R. Wiley).

Geocoris uliginosus (Say), **bigeyed bug**: A specimen was found in undeveloped land in Tampa (Hillsborough County; E2004-4318; Amy R. Simington; 4 June 2004). NEW DPI COUNTY RECORD.

Glycaspis brimblecombei Moore, **red gum lerp psyllid**: A specimen was collected in a suction trap at Immokalee (Collier County; E2004-4416; Mark R. Terrell, Citrus Budwood Registration Bureau, Immokalee; 3 June 2004). NEW DPI COUNTY RECORD for a serious new pest of eucalyptus.

Hyadaphis coriandri (Das), **coriander aphid**: A specimen was collected in a suction trap in Kendall (Miami-Dade County; E2004-4754; Gwen H. Myres; 23 June 2004). NEW DPI COUNTY RECORD. This is the first record for the coriander aphid in South Florida. It is damaging to coriander, dill, fennel, and related plants (Dr. Susan E. Halbert).

Lygyrocoris litigiosus Stål, a seed bug: A specimen was found in a sweep sample along a roadside in Tampa (Hillsborough County; E2004-4727; James R. Martin and Amy R. Simington; 24 June 2004). NEW DPI COUNTY RECORD.

- Odinia conspiua* Sabrosky, a fly: A specimen was caught in a Jackson trap in Pinellas (Hillsborough County; E2003-5070; Ralph E. Muekeley; 30 September 2003). NEW DPI COUNTY RECORD. This fly is a parasite of tenebrionid beetle larvae (Dr. Gary J. Steck).
- Oligosita giraulti* Crawford, an egg parasite: Ten specimens were found in a black light trap in Gainesville (Alachua County; E2003-3579; J. Eric Cronin, FSCA Research Associate; 10 August 2003). NEW USA CONTINENTAL RECORD. This species was described from Trinidad and probably is an egg parasite of Cercopidae (Dr. Gregory A. Evans, USDA, Beltsville, MD).
- Orius tristicolor* (White), minute pirate bug: A specimen was intercepted in fruit of *Rubus* sp. from a supermarket in Apopka (Orange County; E2004-4494; Serena D. Stornaiuolo; 8 June 2004). This predaceous bug is a Western species (Dr. Susan E. Halbert).
- Sphiximorpha signifera* (Loew), a flower fly: A specimen was collected in a multi-lure trap in Dover (Hillsborough County; E2004-3373; Reuben S. Cliatt, USDA/APHIS/PPQ; 21 April 2004). NEW DPI COUNTY RECORD.
- Steatoda albomaculata* (DeGeer), a spider: Three specimens were found at a residence in Jacksonville (Duval County; E2004-4273; Linda Doss, homeowner; 7 June 2004). NEW DPI COUNTY RECORD. This is the second record for this introduced cosmopolitan species in Florida (Dr. G.B. Edwards).
- Trioza* sp. nr. *russellae* Tuthill, a Ficus psyllid: A specimen was collected in a suction trap at Winter Haven (Polk County; E2004-4114; Peggy J. Sieburth, Citrus Budwood Registration Bureau; 21 May 2004). NEW DPI COUNTY RECORD. This is an undescribed species from Central America. The only previously known host is *Ficus aurea*, the strangler fig. All other United States records have been in South Florida (Dr. Susan E. Halbert).

INSECT DETECTION: SURVEY OF IMPORTED TILE:

The following arthropods were intercepted during a survey of warehouses holding shipments of tiles from foreign sources. Most specimens were apparently dead at the time of collection. There were many other specimens collected that were clearly exotic, but we do not have species names for them yet. They will be reported in future issues when we receive final identifications from specialists.

- Mantis religiosa* Linnaeus, preying mantis: A specimen was found in a pallet of tile imported from Italy at a warehouse in Fort Walton Beach (Okaloosa County; E2004-3989; Joseph S. Beckwith, USDA/APHIS/PPQ; 26 May 2004). This is a European species (Dr. Michael C. Thomas).
- Megalonotus chiragrus* (Fabricius), a seed bug: A specimen was found in tile from Italy at a warehouse in Palm Springs (Palm Beach County; E2004-3414; Michael E. Meadows, CAPS, and Eduardo M. Varona and Joseph S. Beckwith, USDA/APHIS/PPQ; 28 April 2004). This is an exotic species from Europe, North Africa, and Asia Minor (Dr. Susan E. Halbert and Julieta Brambila).
- Metcalfa pruinosa* (Say), citrus flatid planthopper: A specimen was intercepted in tile from Italy at a warehouse in Palm Springs (Palm Beach County; E2004-3416; Michael E. Meadows, CAPS, and Eduardo M. Varona, and Joseph S. Beckwith, USDA/APHIS/PPQ; 28 April 2004). Another specimen was intercepted in tile from Italy at a warehouse in Dania (Broward County; E2004-3250; Brian D. Saunders and Michael Patterson, USDA/APHIS/PPQ; 28 April 2004). This is a Florida species that has become an exotic pest in Europe (Dr. Susan E.

Halbert).

Metopoplax ditomoides (Costa), a seed bug: Two specimens were found alive in tile from Italy at a warehouse in Pompano Beach (Broward County; E2004-3238; Joseph S. Beckwith, USDA/APHIS/PPQ and Michael E. Meadows, CAPS; 27 April 2004). This is a southern European species. It has become established in Oregon, where it is a pest of *Corylus* (Julieta Brambila).

Xylotrechus rusticus (Linnaeus), a cerambycid beetle: Two specimens, including one live one, were intercepted in tile from Italy at a warehouse in Ft. Lauderdale (Broward County; E2004-3259; Michael Patterson and Brian D. Saunders, USDA/APHIS/PPQ; 27 April 2004). This is a European species.

NEMATODOLOGY SECTION

Compiled by Janete A. Brito, Ph. D, Renato Inserra, Ph. D, and Jason D. Stanley

A total of 4,128 samples (3,051 for morphological and 1,077 for molecular identifications) were processed in May and June 2004. Details are shown below:

<p>Certification and Regulatory Samples:</p> <p>Multistate Certification for National and International Export1,890 California Certification.....790 Burrowing nematodes.....8 Pre movement (Citrus Nursery Certification).....32 Site or Pit Approval(Citrus Nursery and Other Certifications) 27</p>	<p>Other Samples:</p> <p>Identification (invertebrate)..... 1 Plant Problems..... 71 Intrastate Survey, Random 232</p> <p>Molecular Identifications*</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 May and June 2004:

Acorus gramineus (grassy-leaved sweet flag) - *Radopholus similis* (Cobb, 1893) Thorne, 1949, **the burrowing nematode**, was found infecting the roots of this indoor and outdoor ornamental (Hillsborough County, N04-00517, James L. Anderson, April 2, 2004). In the past, *Acorus* species were included in the family Araceae which contains many plant hosts to the burrowing nematode. Although this ornamental has been transferred to another family (Acoraceae), it, like the aroids, is a very good host of the burrowing nematode. This finding is a **NEW HOST RECORD**.

Poinsettia cyathophora (Mexican fire plant) — *Meloidogyne mayaguensis* Hammah & Hirschmann, 1988, **a root-knot nematode**, was found infecting the roots of this weed (Dade County, N04-00260, Ana L. Ochoa, February 19, 2004). The detection of *M. mayaguensis* on this weed confirms the wide host-range (including agricultural crops, ornamentals and weeds) of this root-knot nematode in Florida. This finding is a **NEW HOST RECORD**.

COLLECTORS SUBMITTING FIVE OR MORE SAMPLES THAT WERE PROCESSED FOR NEMATODOLOGICAL ANALYSIS DURING MAY AND JUNE 2004:

Anderson, James L61	Podris, Flewellyn W 11
Bailey, W. Wayne 19	Qiao, Ping109
Bloom, Richard T 6	Robinson, William L 179
Brodie, Matthew W 13	Salisbury, Thomas L321
LeBoutillier, Karen W275	Smith, Larry W 22
Lehman, Paul S..... 10	Stone, Carrie S......68
Looker, Sol F..... 11	Zamora, Christine A49
Ochoa, Ana L264	
Pate, Jo Ann.....59	

PLANT PATHOLOGY SECTION
Compiled by Robert M. Leahy

For this period, the Plant Pathology Section received and processed 3,182 specimens. These included 2,459 pathology, 46 miscellaneous and six soil samples. Full pathogenicity tests for citrus canker were performed on 646 samples from South East Florida, one from Central Gulf Coast Florida, 23 from South West Gulf Coast Florida, one from Central Florida, and none from North Florida.

ORNAMENTALS, WOODY PLANT AND PALMS:

Camellia sasanqua (*sasanqua*)-- *Phytophthora ramorum*, **leaf blight**: Collected at a nursery in Tallahassee, Leon County (12 May 2004, M. Jane Echols, Timothy S. Schubert, and Wayne N. Dixon, P2004-1894). NEW RECORD: HOST

Ficus sp. (a fig)-- *Nectriella pironii*, **stem gall**: Collected at a nursery in Zolfo Springs, Hardee County (28 June 2004, Richard T. Bloom, P2004-3401).

Ilex sp. (a holly)-- *Sphaeropsis tumefaciens*, **stem gall / witches broom**: Collected at a dooryard in Clearwater, Pinellas County (27 June 2004, Thomas S. Lastrapes, P2004-3403).

Rhaphiolepis sp. (Indian hawthorn)-- *Phytophthora* sp., **stem / leaf blight**: Collected at a nursery in Geneva, Seminole County (9 June 2004, Amanda D. Melco, P2004-2303).