

Mealybugs & Mealybug Look-Alikes of the Southeastern United States





Publication Information

- This publication was produced and distributed by USDA-CSREES Integrated Pest Management Centers in cooperation with the National Plant Diagnostic Network, APHIS, the National Plant Board, and the Land Grant Universities. USDA-CSREES Critical Needs grant 2005-1763-02 'Early Detection and Rapid Response System for the Pink Hibiscus Mealybug through Education, Training, and Implementation of Integrated Pest Management', by J. VanKirk, G. Wisler, R. Hammerschmidt, and S. Ratcliffe, funded graphic design and printing for this publication. Content development was funded through the USDA-CSREES Southern Plant Diagnostic Network, the University of Florida, Institute of Food & Agricultural Sciences, and the Florida Department of Agriculture & Consumer Services, Division of Plant Industry.
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Mealybugs & Mealybug Look-Alikes of the Southeastern United States

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Mealybugs of the Southeastern United States

What are mealybugs?

- Mealybugs are plant pests that feed by piercing-sucking mouthparts. They are classified in the family Pseudococcidae. Mealybugs, along with soft scales (Coccidae) and armored scales (Diaspididae), are the most common families of scale insects (Hemiptera: Coccoidea).

Why are mealybugs important?

- Approximately 11 of the 21 species of exotic scales and mealybugs that have established in the United States during the past 20 years are currently considered problematic pests. Four of these species are mealybugs: pink hibiscus mealybug, miscanthus mealybug, papaya mealybug, and vine mealybug.
- Most exotic scales and mealybugs of concern feed on a wide range of plants species, and they are capable of rapid population explosions.
- Awareness of common field characteristics promotes early detection for pests of concern.

How do you identify mealybugs?

- The common name “mealybug” is derived from the fine powdery to “mealy” wax that covers the body. Adult female mealybugs are wingless and the best life stage for identification. Adult male mealybugs are winged, but they are rarely seen except with specific chemical-based trapping systems. Most adult female mealybugs are small (a few millimeters to typically less than 1/2 inch), and a hand lens is useful for scouting. The immature or active “crawler” stage of mealybugs is typically less than half a millimeter and may be readily dispersed to new plants via wind currents.

The following characteristics are useful for field identification:

- Body shape, size, and color.
- The number of wax filaments protruding from the side of the body.
- Presence and length of wax filaments at the end of the body (i.e., terminal wax filaments).
- Color of eggs (if present).
- Presence of an ovisac (a waxy mass covering the eggs).
- Stripes on the body.
- Color of fluids when crushed.

Plant damage

- Because mealybugs feed on plant juices they produce honeydew. Honeydew (a sugary, sticky substance) promotes the growth of black sooty mold. Sooty mold may inhibit plant photosynthesis. Other signs of plant damage may include stunted plant growth, wilting, and crinkled leaves. Mealybugs commonly feed on new plant growth. The pink hibiscus mealybug also injects a toxic saliva while feeding, and a characteristic known as “bunchy top” is often seen on its preferred host plant, hibiscus.

General mealybug integrated pest management

- Chemical and biological control options may be available for some mealybug and scale insect species. A general website focusing on mealybugs is available at <http://mrec.ifas.ufl.edu/LSO/Mealybug.htm>. Biological control options often include species-specific parasitoids, and chemical recommendations may vary depending on pest species or local recommendations. Your local county extension service is the best source for information regarding chemical controls in your area.

General mealybug integrated pest management

- Both biological and chemical control options are available for pink hibiscus mealybug. Once this pest has established in the landscape, biological control options are most often recommended. The most common natural enemies of pink hibiscus mealybug include the mealybug destroyer, *Cryptolaemus montrouzieeri*, and the parasitic wasps, *Anagyrus kamali* and *Gyranusoidea indica*. In contrast, chemical options may be the only choice in a commercial/nursery setting.
- Pink hibiscus mealybug is considered a regulatory pest of concern; subsequently, there is a zero tolerance for shipment of infested plant material. Please refer to the Pink Hibiscus Mealybug website <http://mrec.ifas.ufl.edu/Iso/pinkmealybug.htm> for the latest up-to-date information on pink hibiscus mealybug management.
- Mealybugs in this deck have been classified as the following:
 1. Exotic: Not native to the United States, but has invaded.
 2. Native: Native to the United States, or due to its widespread distribution and long-term establishment in the United States, its origin is uncertain.

Warning

- **Warning! This deck is not a comprehensive listing of all mealybugs. Although useful as a field screening tool, field identification is not definitive for new county, host, state, or confidential records. Slide mounting of specimens and identification by a specialist is necessary for species-level confirmation.**

001

E X O T I C

Maconellicoccus hirsutus

Pink Hibiscus Mealybug

Field Recognition

Body color pink, about 3 mm long, no to few lateral (side) wax filaments, body fluid red to pink in color. Ovisacs are present covering pink to orange eggs. Feeding from pink hibiscus mealybug can cause twisted or distorted foliage. High populations may result in leaf drop.

Known Southeastern Distribution

Established in Florida (2002) and limited populations detected in Louisiana (2006) and Texas (2007).

Common Hosts

Over 200 known hosts occur, but the most common host detected to-date is Hibiscus. Pink hibiscus mealybug could be a problematic pest for some of major agronomic crops in the southeastern U.S. if established populations are nearby. Cotton, a close relative of hibiscus, is of particular concern.

Pink Hibiscus Mealybug
Maconellicoccus hirsutus

Bunchy Top



Pink Hibiscus Mealybug

Field Recognition

Body pink, about 3 mm long, no to few lateral (side) wax filaments, body fluid red to pink. Ovisacs are present covering pink to orange eggs. Feeding from pink hibiscus mealybug can cause twisted or distorted foliage. High populations may result in leaf drop.

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More than 200 known hosts occur, but the most common host detected to date is hibiscus. Pink hibiscus mealybug could be a problematic pest for some of major agronomic crops in the southeastern United States if established populations are nearby. Cotton, a close relative of hibiscus, is of particular concern.

Pink Hibiscus Mealybug
Maconellicoccus hirsutus

Droplet of Red Body Fluid



Pink Hibiscus Mealybug

Field Recognition

Body pink, about 3 mm long, no to few lateral (side) wax filaments, body fluid red to pink. Ovisacs are present covering pink to orange eggs. Feeding from pink hibiscus mealybug can cause twisted or distorted foliage. High populations may result in leaf drop.

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Pink Hibiscus Mealybug
Maconellicoccus hirsutus



White Wax on Abdomen

Pink Hibiscus Mealybug

Field Recognition

Body pink, about 3 mm long, no to few lateral (side) wax filaments, body fluid red to pink. Ovisacs are present covering pink to orange eggs. Feeding from pink hibiscus mealybug can cause twisted or distorted foliage. High populations may result in leaf drop.

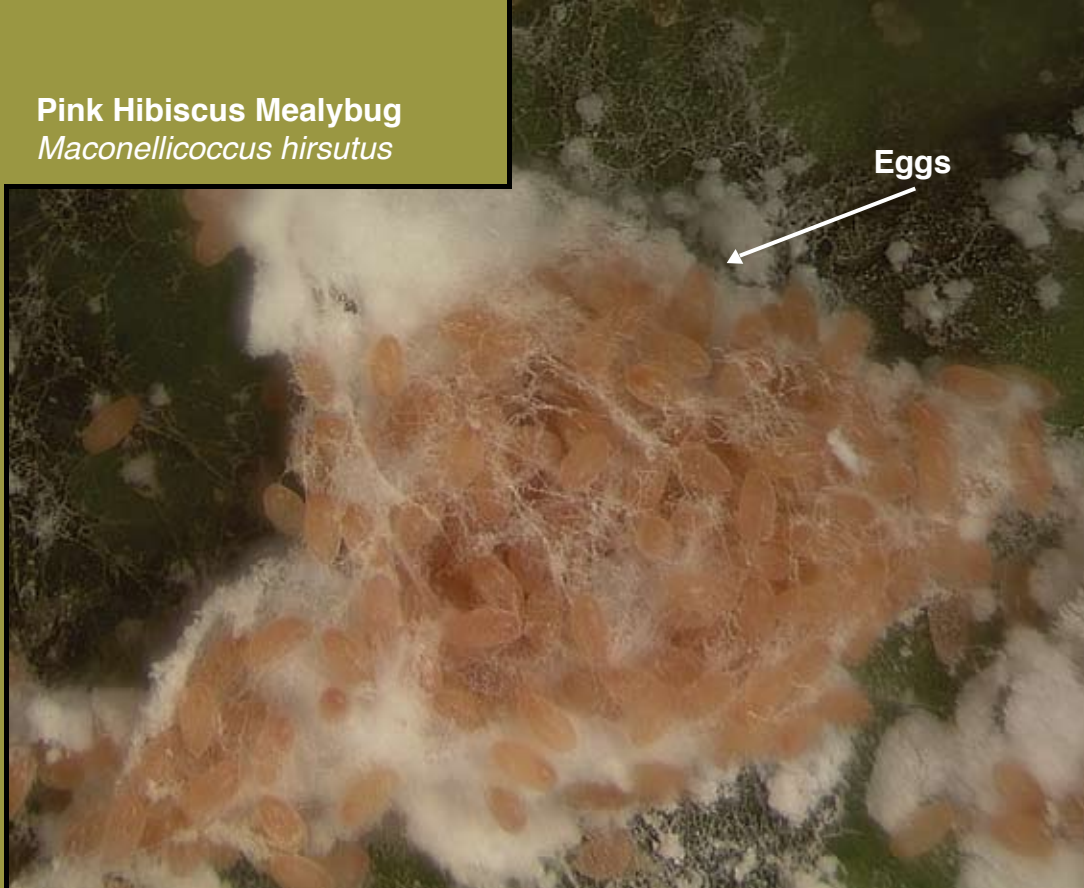
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Pink Hibiscus Mealybug
Maconellicoccus hirsutus



002

E X O T I C

Paracoccus marginatus

Papaya Mealybug

Field Recognition

Body yellow, 2-3 mm long, with many lateral (side) wax filaments. Ovisacs present with yellow to greenish yellow eggs. Wax pattern on body lacking any stripes on its upper surface (i.e., dorsum).

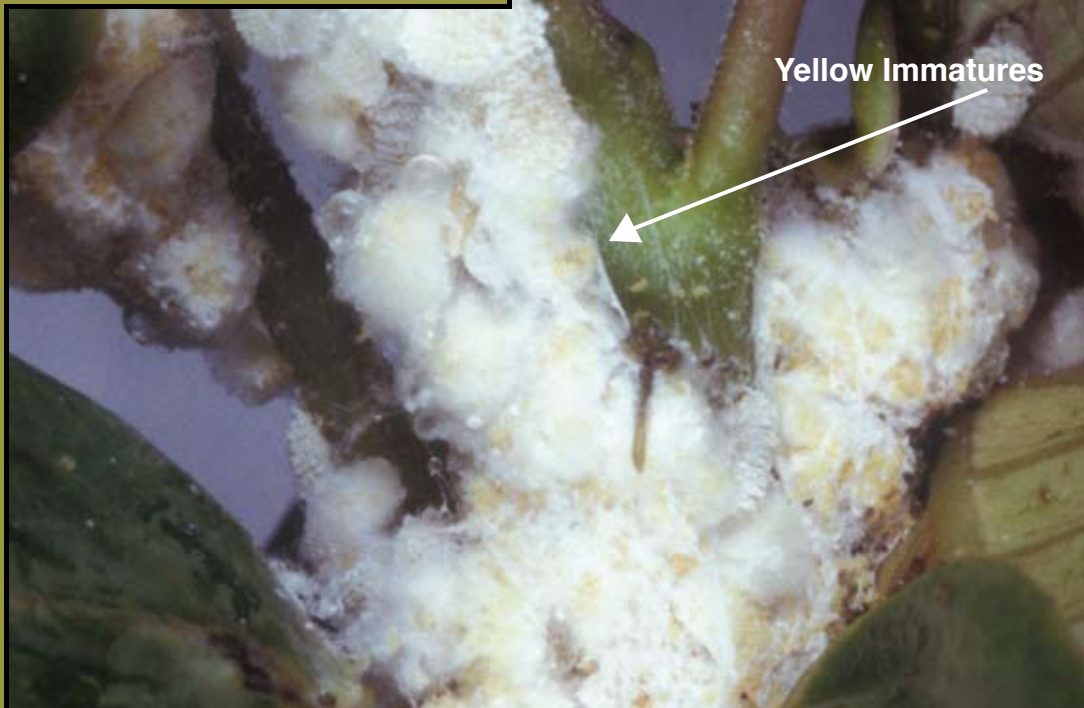
Known Southeastern Distribution

Established in Florida.

Common Hosts

Jatropha, *Hibiscus*, and *Plumeria*.

Papaya Mealybug
Paracoccus marginatus



Yellow Immatures

002

E X O T I C

Paracoccus marginatus

Papaya Mealybug

Field Recognition

Body yellow, 2-3 mm long, with many lateral (side) wax filaments. Ovisacs present with yellow to greenish yellow eggs. Wax pattern on body lacking any stripes on its upper surface (i.e., dorsum).

Known Southeastern Distribution

Established in Florida.

Common Hosts

Jatropha, *Hibiscus*, and *Plumeria*.

Papaya Mealybug
Paracoccus marginatus



003

NATIVE

Phenacoccus madeirensis

Madeira Mealybug

Field Recognition

Body gray underneath the waxy surface and with many lateral wax filaments. Body has two darker lengthwise strips on the body surface and size is about 3 mm long. Ovisacs present with yellow eggs.

Known Southeastern Distribution

Considered cosmopolitan in greenhouses and interior landscapes throughout the southeastern United States. Outdoor populations established in Florida.

Common Hosts

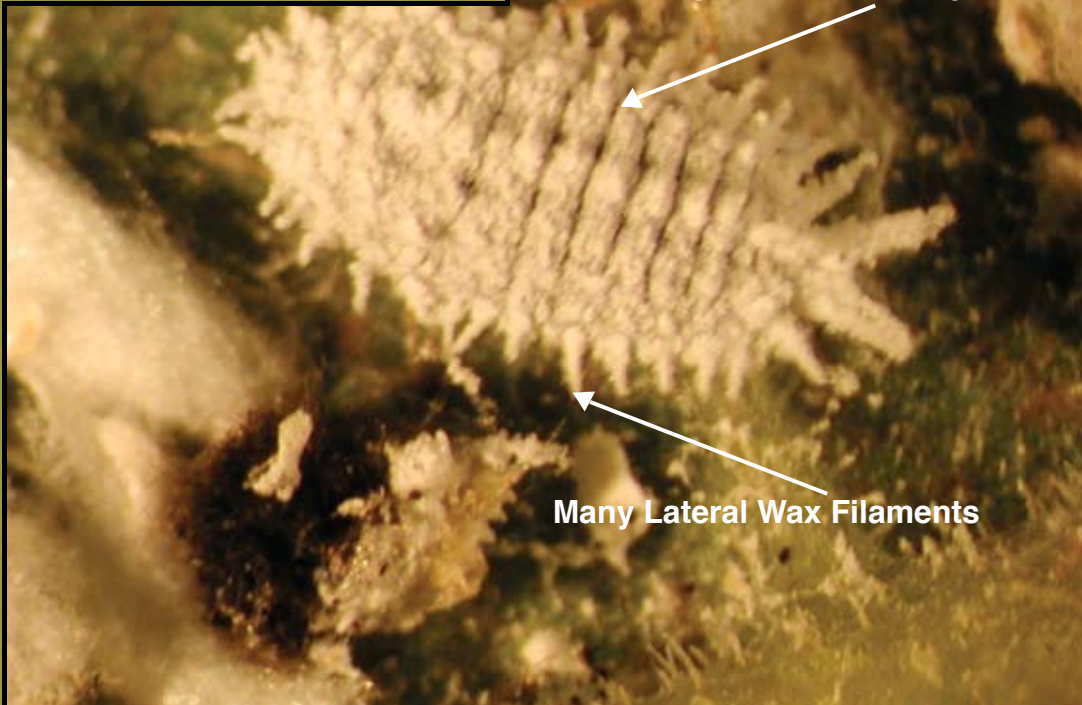
Wide host range, may vary in local areas but common on *Croton*, *Coleus*, and *Hibiscus*.

Madeira Mealybug

Phenacoccus madeirensis

Lengthwise Dark Stripes

Many Lateral Wax Filaments



004

N A T I V E

Phenacoccus solenopsis

Solenopsis Mealybug

Field Recognition

Body gray, about 4 mm long, with many lateral wax filaments. Ovisacs not present. Wax on top of body surface appears as a cottony mass, horizontal dark stripes at the tip of the end of the body (i.e., the abdomen opposite of the feeding mouthparts).

Known Southeastern Distribution

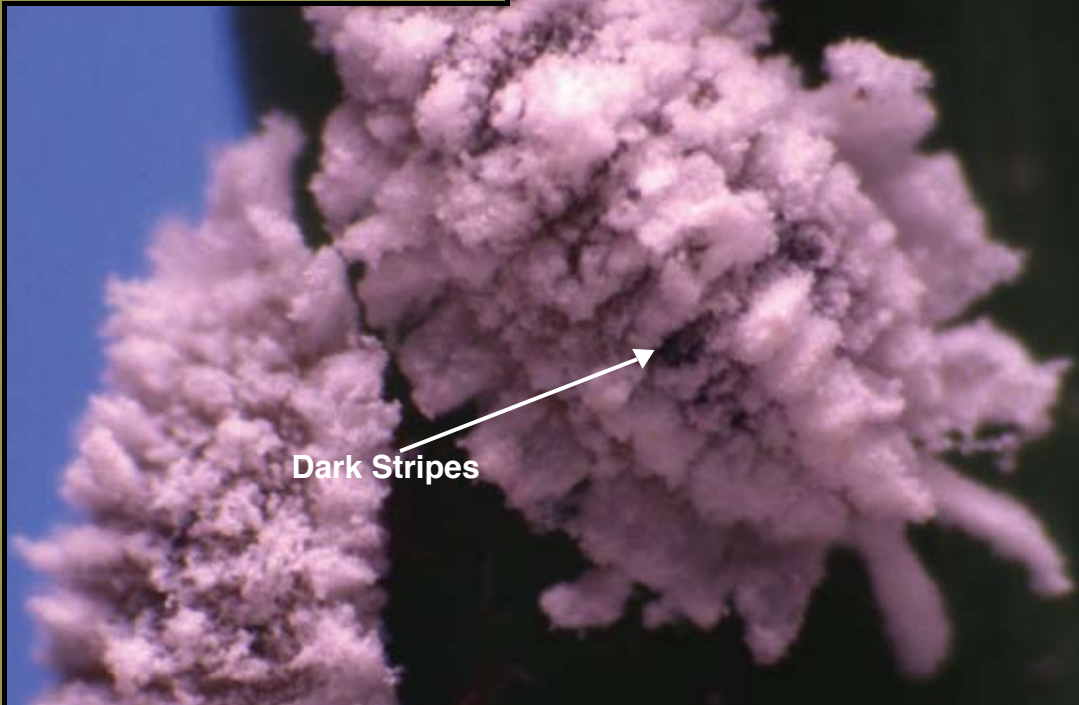
Florida and Mississippi.

Common Hosts

Most common on *Hibiscus* and other malvaceous hosts.

Solenopsis Mealybug

Phenacoccus solenopsis



005

E X O T I C

Ferrisia virgata

Striped Mealybug

Field Recognition

Body gray, about 4-5 mm long, without side (lateral) wax filaments. Two “thick” wax filaments arising from tip of abdomen. Ovisacs not present. Two dark lengthwise stripes on top surface of body. Thin crystal-like filaments protruding from sides and top of body.

Known Southeastern Distribution

Alabama, Florida, Georgia, Louisiana, Mississippi.

Common Hosts

Wide host range, common on copper leaf (*Acalypha*), *Alternanthera*, silver buttonwood (*Conocarpus*), and *Hibiscus*.

Striped Mealybug
Ferrisia virgata

Crystal-Like Filaments



Two Filaments Protruding from Abdomen

006

E X O T I C

Planococcus citri

Citrus Mealybug

Field Recognition

Body color light yellow to grayish yellow, about 3 mm long, with many side (lateral) filaments. Ovisacs present, eggs yellow. One centralized dark stripe on dorsum (top surface of body).

Known Southeastern Distribution

Common on ornamental plants in interior landscapes and greenhouses. Does occur outdoors in Florida.

Common Hosts

Wide host range, common on Citrus. SPECIAL NOTE: The Pacific mealybug (*Planococcus minor*) cannot be separated in field from citrus mealybug. There are no known populations of Pacific mealybug occurring in the United States. The Pacific mealybug is also known as the passionvine mealybug.

Citrus Mealybug
Planococcus citri



007

E X O T I C

Pseudococcus longispinus

Longtailed Mealybug

Field Recognition

Body gray in adults, about 3 mm long, yellowish in immature stages, with many lateral wax filaments. Four long filaments arising from tip of abdomen, middle pair being very long. One centralized dark stripe located in center of abdomen. No ovisac.

Known Southeastern Distribution

Common species found in interiorscapes and greenhouses. Does occur outdoors in Florida.

Common Hosts

Wide host range, common on Sago palms in Florida.

Longtailed Mealybug

Pseudococcus longispinus



Lengthwise Dark Stripes

Four Anal Wax Filaments

008

E X O T I C

Pseudococcus jackbeardsleyi

Jack Beardsley Mealybug

Field Recognition

Body light orange to pink, about 3 mm long, with many lateral filaments. Two long filaments arising from tip of abdomen. Body fluids brownish. Ovisac present, but not entirely covering body.

Known Southeastern Distribution

Not common, does occur outdoors in Florida.

Common Hosts

Polyphagous species, most common in Florida on tropical fruit.

Jack Beardsley Mealybug
Pseudococcus jackbeardsleyi



009

N A T I V E

Pseudococcus viburni

Obscure Mealybug

Field Recognition

Body pink to light purple, about 3 mm long, with many side (lateral) filaments. Very similar in appearance to Jack Beardsley mealybug, but body tends to be more pinkish. Body is oval. Two long anal filaments arising from the abdomen. No stripe on top surface of body. Eggs light colored, gray to yellow. Ovisac present, but not entirely covering body.

Known Southeastern Distribution

Not common, occurs in Florida.

Common Hosts

Polyphagous species, common on cacti.

Obscure Mealybug
Pseudococcus viburni



010

E X O T I C

Hypogeococcus pungens

Field Recognition

Body red to pink, about 3 mm long, without lateral filaments. Body fluids reddish. Oval to round-shaped body. No ovisac, but produces large amounts of wax. Feeding tends to cluster at nodal regions of plants.

Known Southeastern Distribution

Established in Florida.

Common Hosts

Literature reports that this mealybug can occur in cacti. However, in Florida the most common hosts are *Portulaca* and *Alternanthera* species.

Hypogeococcus pungens

Adult Female



011

E X O T I C

Dysmicoccus brevipes

Pineapple Mealybug

Field Recognition

Body gray, about 2-3 mm long, with many lateral wax filaments. No stripes on body. Occurs both above and below ground.

Known Southeastern Distribution

Florida and Louisiana.

Common Hosts

Polyphagous species, common in Florida on roots of many of the palms.

Pineapple Mealybug
Dysmicoccus brevipes



012

N A T I V E

Oracella acuta

Acute Mealybug

Field Recognition

Body red to pink, about 3 mm long, without side (lateral) wax filaments. Generally found both underneath bark and on needles of hosts.

Known Southeastern Distribution

Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia.

Common Hosts

Restricted to the following pines: loblolly, longleaf, shortleaf, and Virginia pines.

Acute Mealybug
Oracella acuta



013

E X O T I C

Antonina pretiosa

Noxious Bamboo Mealybug

Field Recognition

Adult body brown, about 2-3 mm long; immature stages (i.e., crawlers) yellow. Generally found at the nodal regions of various bamboos. Sooty mold occurring at the nodal regions and long wax filaments arising from nodal areas is a common symptom.

Known Southeastern Distribution

Common species, occurring throughout Southeastern region where bamboo is grown.

Common Hosts

Restricted to bamboos.

Noxious Bamboo Mealybug
Antonina pretiosa



Long Wax Filaments



014

E X O T I C

Nipaecoccus nipae

Coconut Mealybug

Field Recognition

Body maroon to red, about 3 mm long, with few side (lateral) wax filaments. Dorsal wax filaments occurring. Body round to oval. No ovisac produced, males common.

Known Southeastern Distribution

Florida and Louisiana.

Common Hosts

Polyphagous species, most common on palms.

Coconut Mealybug
Nipaecoccus nipae



014

E X O T I C

Nipaecoccus nipae

Coconut Mealybug

Field Recognition

Body maroon to red, about 3 mm long, with few side (lateral) wax filaments. Dorsal wax filaments occurring. Body round to oval. No ovisac produced, males common.

Known Southeastern Distribution

Florida and Louisiana.

Common Hosts

Polyphagous species, most common on palms.

Coconut Mealybug
Nipaecoccus nipae

Male Puparia



014

E X O T I C

Nipaecoccus nipae

Coconut Mealybug

Field Recognition

Body maroon to red, about 3 mm long, with few side (lateral) wax filaments. Dorsal wax filaments occurring. Body round to oval. No ovisac produced, males common.

Known Southeastern Distribution

Florida and Louisiana.

Common Hosts

Polyphagous species, most common on palms.

Coconut Mealybug
Nipaecoccus nipae



015

E X O T I C

Saccharicoccus sacchari

Pink Sugarcane Mealybug

Field Recognition

Body pink to red, about 4 mm long, body elongated and lacking lateral wax filaments. Usually found on stalks or beneath sheaths on blades of host plants.

Known Southeastern Distribution

Established in Florida.

Common Hosts

Most commonly encountered on sugarcane but *Andropogon* and *Miscanthus* grasses also may be hosts.

Pink Sugarcane Mealybug
Saccharicoccus sacchari



016

E X O T I C

&

N A T I V E

Rhizoecus & Rippersiella

Ground Mealybugs

Field Recognition

Very small mealybugs (1 to 2 mm in length), body white to yellowish white, lacking side (lateral) wax filaments. Roots with infestations of ground mealybugs generally have areas of white wax present and mealybugs may be visible with use of a hand lens.

Known Southeastern Distribution

Varies depending on species but many are common throughout the Southeastern region.

Common Hosts

Varies, but generally polyphagous. SPECIAL NOTE: There are many species within both *Rhizoecus* and *Rippersiella*. All may be considered pests and some may require quarantine actions. Expert identification is required.

Ground Mealybugs
Rhizoecus & *Ripersiella*



017

E X O T I C

Vryburgia amaryllidis

Lily Bulb Mealybug

Field Recognition

Small mealybugs (2-3 mm long), red to purple. Lacking side (lateral) wax filaments. Two thick wax filaments arising from tip of abdomen.

Known Southeastern Distribution

Not established in Southeastern region, but established in California.

Common Hosts

Commonly intercepted on bulb plants (lily bulb mealybug) and jade plants (short-legged mealybug).

Lily Bulb Mealybug
Vryburgia amaryllidis



018

E X O T I C

Vryburgia brevicruris

Short-Legged Mealybug

Field Recognition

Small mealybugs (2-3 mm long), red to purple. Lacking side (lateral) wax filaments. Two thick wax filaments arising from tip of abdomen.

Known Southeastern Distribution

Not established in Southeastern region, but established in Arizona and California.

Common Hosts

Commonly intercepted on bulb plants (lily bulb mealybug) and jade plants (short-legged mealybug).

Short-Legged Mealybug
Vryburgia brevicruris



019

N A T I V E

Stemmatomerinx acircula

Field Recognition

Body gray with white wax, about 2-3 mm long, some wax seems to be filamentous. No lateral wax filaments produced.

Known Southeastern Distribution

Established in Florida.

Common Hosts

Most common host is fakahatchee and muhlygrass.

Stemmatomerinx acircula



019

N A T I V E

Stemmatomerinx acircula

Field Recognition

Body gray with white wax, about 2-3 mm long, some wax seems to be filamentous. No lateral wax filaments produced.

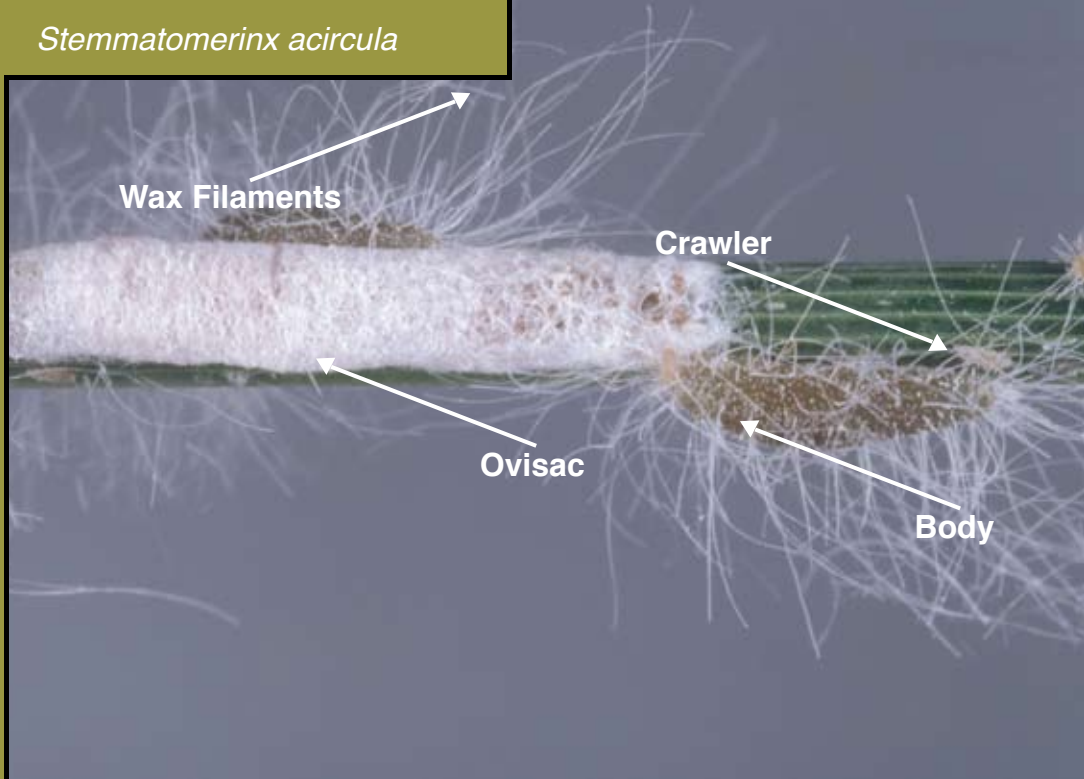
Known Southeastern Distribution

Established in Florida.

Common Hosts

Most common host is fakahatchee and muhlygrass.

Stemmatomerinx acircula



020

E X O T I C

Palmicultor lumpurensis

Field Recognition

Body grayish pink, about 3 mm long, with large amounts of white wax visible on host plant. Body with few side (lateral) wax filaments. No ovisac produced. SPECIAL NOTE: This species is found underneath sheaths of bamboo. It can be a severe pest.

Known Southeastern Distribution

Established in Florida.

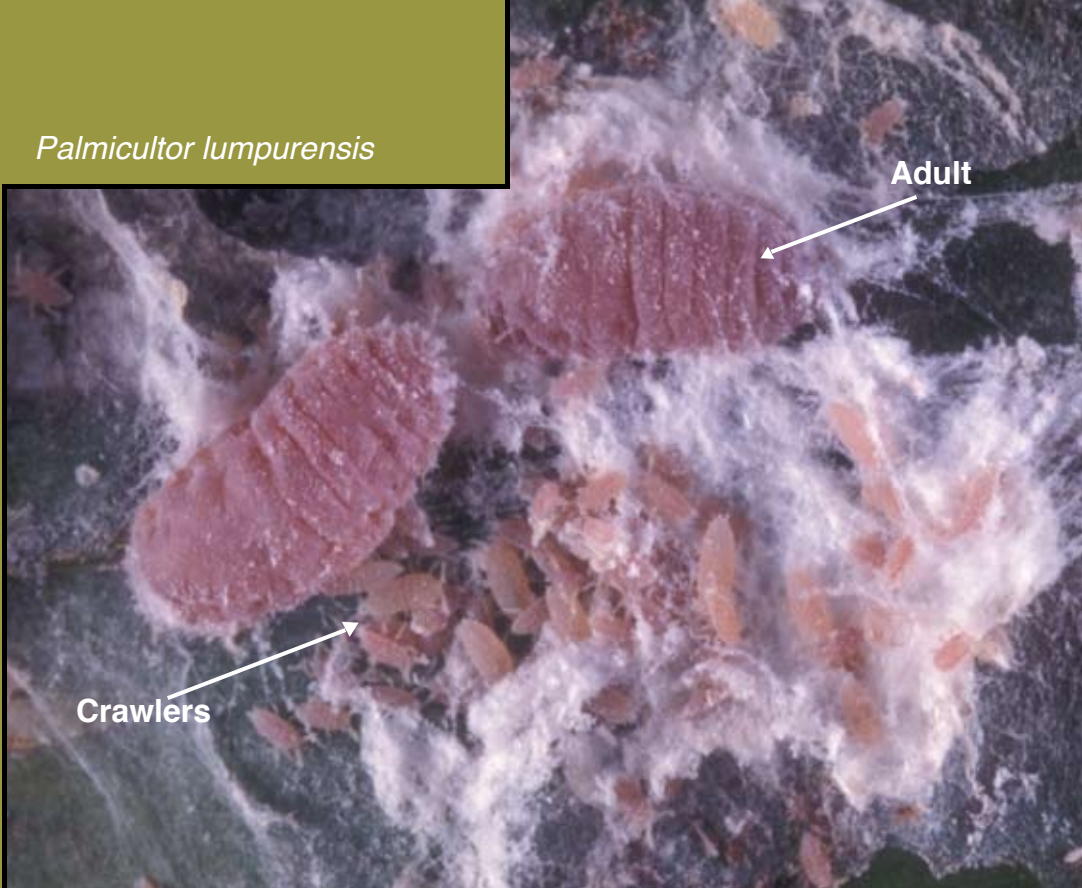
Common Hosts

Bamboo.

Palmicultor lumpurensis

Adult

Crawlers



020

E X O T I C

Palmicultor lumpurensis

Field Recognition

Body grayish pink, about 3 mm long, with large amounts of white wax visible on host plant. Body with few side (lateral) wax filaments. No ovisac produced. SPECIAL NOTE: This species is found underneath sheaths of bamboo. It can be a severe pest.

Known Southeastern Distribution

Established in Florida.

Common Hosts

Bamboo.

Palmicultor lumpurensis

Infested Bamboo



021

E X O T I C

Palmicultor browni

Field Recognition

Body reddish brown to pink, about 3 mm long, with side (lateral) wax filaments. No ovisac produced.

Known Southeastern Distribution

Established in Florida.

Common Hosts

Various palms.

Palmicultor browni



021

E X O T I C

Palmicultor browni

Field Recognition

Body reddish brown to pink, about 3 mm long, with side (lateral) wax filaments. No ovisac produced.

Known Southeastern Distribution

Established in Florida.

Common Hosts

Various palms.

Palmicultor browni



022

E X O T I C

Icerya genistae

Field Recognition

Superficially resembles the cottony cushion scale. Body light orange to pink, legs black. Body may be covered with a white wax. Long ovisac produced (3-5x body length) and held erect to horizontal from body.

Known Southeastern Distribution

Established in Florida.

Common Hosts

Wide host range, commonly collected on legumes.

Icerya genistae



022

E X O T I C

Icerya genistae

Field Recognition

Superficially resembles the cottony cushion scale. Body light orange to pink, legs black. Body may be covered with a white wax. Long ovisac produced (3-5x body length) and held erect to horizontal from body.

Known Southeastern Distribution

Established in Florida.

Common Hosts

Wide host range, commonly collected on legumes.

Icerya genistae



Immatures

023

E X O T I C

Icerya purchasi

Cottony Cushion Scale

Field Recognition

Body is orange with some white wax present on top side of body. Legs are black. Produces a grooved ovisac that is about the same size (or 2x) as the body and generally tapers down toward the host substrate.

Known Southeastern Distribution

A common species. Distribution scattered throughout the Southeastern region at different periods.

Common Hosts

Polyphagous species, common on *Citrus* and *Pittosporum*.

Cottony Cushion Scale
Icerya purchasi



**Ladybugs Feeding on Cottony
Cushion Scale**

023

E X O T I C

Icerya purchasi

Cottony Cushion Scale

Field Recognition

Body is orange with some white wax present on top side of body. Legs are black. Produces a grooved ovisac that is about the same size (or 2x) as the body and generally tapers down toward the host substrate.

Known Southeastern Distribution

A common species. Distribution scattered throughout the Southeastern region at different periods.

Common Hosts

Polyphagous species, common on *Citrus* and *Pittosporum*.

Cottony Cushion Scale

Icerya purchasi



Immatures

024

N A T I V E

Pulvinaria acericola

Cottony Maple Leaf Scale

Field Recognition

Body light brown to yellowish brown with young adults, dark brown on older females. Body 2.5 - 4.5 mm long. Ovisac produced and generally found on underside of leaves.

Known Southeastern Distribution

Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

Common Hosts

Maples, hollies, and dogwoods.

Cottony Maple Leaf Scale
Pulvinaria acericola



025

N A T I V E

Pulvinaria ericicola

Cottony Azalea Scale

Field Recognition

Body red to yellow and covered in glassy wax. Body 1.5 - 3.5 mm long. Ovisac produced and 2-4x as long as body.

Known Southeastern Distribution

Alabama, Florida, and Virginia.

Common Hosts

Azalea, lowbush blueberry and rusty lyonia.

Cottony Azalea Scale
Pulvinaria ericicola



026

E X O T I C

Pulvinaria psidii

Green Shield Scale

Field Recognition

Adult female light green, body 2.0 - 4.5 mm long, ovisac produced and without noticeable grooves, approximately 3x length of body. Body color is usually green but may seem somewhat brown depending on the host plant.

Known Southeastern Distribution

Alabama, Florida, Georgia, and Mississippi.

Common Hosts

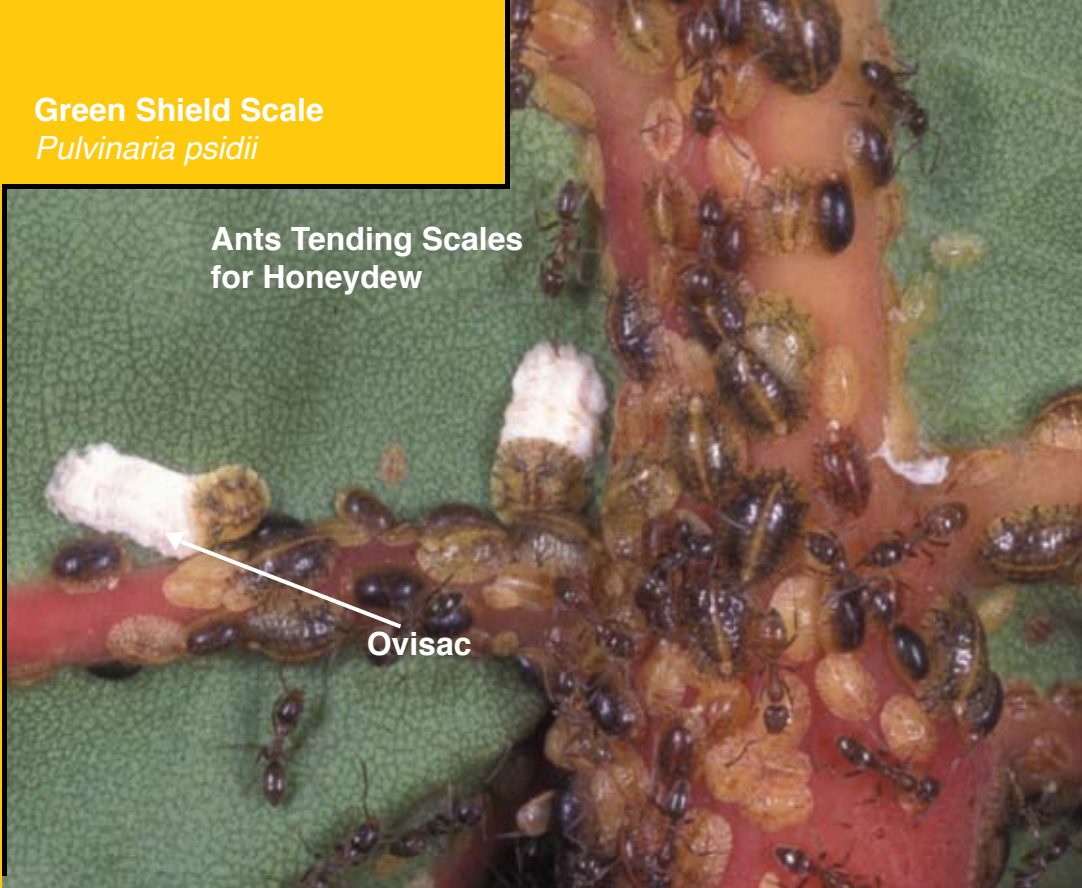
Wide host range, common on *Pittosporum*, *Citrus*, *Ficus* species, and mango.

Green Shield Scale

Pulvinaria psidii

Ants Tending Scales for Honeydew

Ovisac



027

E X O T I C

Pulvinaria urbicola

Urbicola Soft Scale

Field Recognition

Body of adult female brown to green, body 1.5 - 3.0 mm long, ovisac produced and without noticeable grooves, approximately 1.5 - 3x body length. Occurs on foliage but also near root line.

Known Southeastern Distribution

Alabama, Florida, Louisiana, and Texas.

Common Hosts

Common on seagrape, guava, and *Alternanthera* species.

Urbicola Soft Scale
Pulvinaria urbicola

Grooved Ovisac

Brown Body



028

N A T I V E

Neopulvinaria innumerabilis

Cottony Maple Scale

Field Recognition

Large scale (3-6 mm long) with color pattern differing depending on host, often blending in with host bark. Ovisac produced, but grooves are usually not clearly visible. Ovisac 2x body length. Generally found on woody portions of host plant material.

Known Southeastern Distribution

Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Tennessee, and Virginia.

Common Hosts

Polyphagous, common on dogwoods, maples and pecans.

Cottony Maple Scale
Neopulvinaria innumerabilis



Ovisac

Female Body

029

E X O T I C

Philephedra tuberculosa

Philephedra Scale

Field Recognition

Large scale (3-6 mm long). Young females are green similar to green shield scale. Ovisacs are long (3-5x body length) and usually have a "wet" appearance.

Known Southeastern Distribution

Florida and Texas.

Common Hosts

Wide host range but common on *Acalypha*, *Codiaeum*, and *Conocarpus* species.

Philephedra Scale

Philephedra tuberculosa



029

E X O T I C

Philephedra tuberculosa

Philephedra Scale

Field Recognition

Large scale (3-6 mm long). Young females are green similar to green shield scale. Ovisacs are long (3-5x body length) and usually have a "wet" appearance.

Known Southeastern Distribution

Florida and Texas.

Common Hosts

Wide host range but common on *Acalypha*, *Codiaeum*, and *Conocarpus* species.

Philephedra Scale
Philephedra tuberculosa



Pyriform Scale

Field Recognition

Body varies from tan to green to brown. Body about 2.5 mm long, pyriform. Ovisac produced, small and located beneath the scale insect. Long triangular anal plates visible in middle of top surface of body. Found on foliage of hosts.

Known Southeastern Distribution

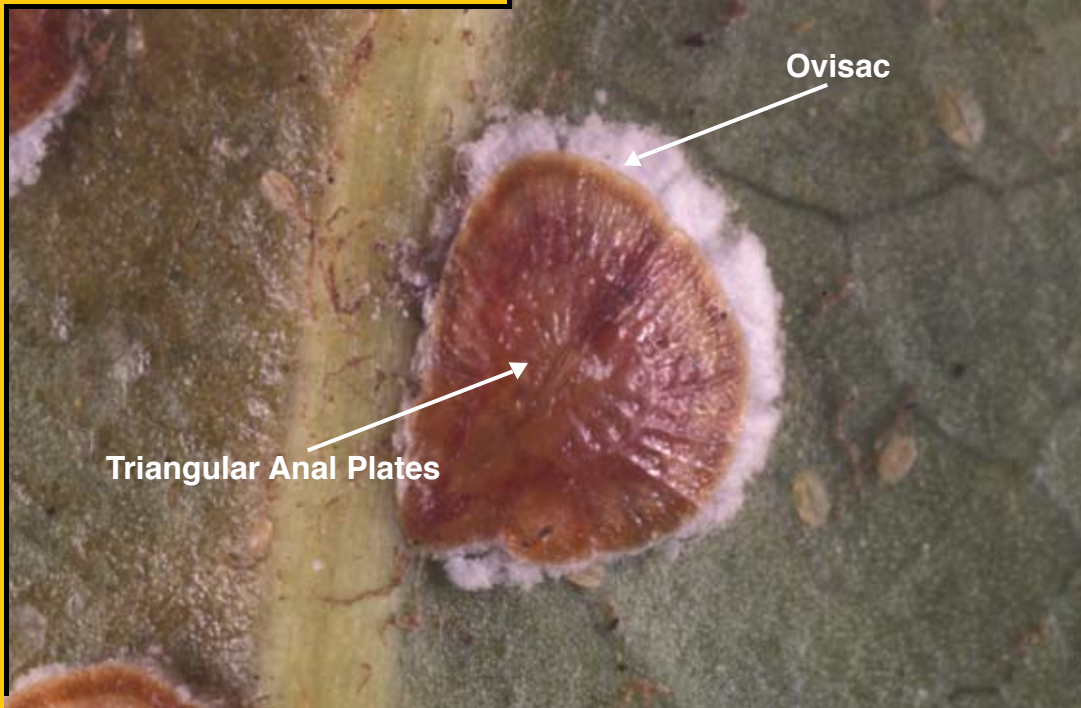
Alabama, Florida, Georgia, Louisiana, North Carolina, South Carolina, Texas, and Virginia.

Common Hosts

Wide host range, commonly found on *Pittosporum*, *Ficus* species, *Schefflera*, and tropical fruit.

Pyriform Scale

Protopulvinaria pyrifomis



Mango Shield Scale

Field Recognition

Very similar to that of pyriform scale, body yellowish green, body size 2 - 3.5 mm long, pyriform. Ovisac produced and located beneath adult female. Found on foliage of hosts.

Known Southeastern Distribution

Florida and Texas.

Common Hosts

Polyphagous species, commonly found on *Citrus*, *Ficus*, *Gardenia*, jasmine and tropical fruit.

Mango Shield Scale
Milviscutulus mangiferae



032

E X O T I C

Ceroplastes ceriferus

Indian Wax Scale

Field Recognition

Body red, covered in a thick white wet wax, normally with an anterior projecting "horn." Body size 3-12 mm long. Found on woody portions of host plants.

Known Southeastern Distribution

Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

Common Hosts

Wide host range, common on hollies, camellias, and magnolias.

Indian Wax Scale
Ceroplastes ceriferus



033

E X O T I C

Ceroplastes rusci

Fig Wax Scale

Field Recognition

Similar in appearance to barnacle scale. Body red, covered in a thick pinkish white wax. Wax covering seems plated from lateral view. Body 2-3 mm long. Occurring on foliage and woody portions of host plant material.

Known Southeastern Distribution

Florida.

Common Hosts

Wide host range, most commonly collected on *Ficus* species.

Fig Wax Scale
Ceroplastes rusci



Plated Wax Cover

034

E X O T I C

Ceroplastes cirripediformis

Barnacle Scale

Field Recognition

Body maroon to red, covered in a thick buff-colored wax. Without an anterior projecting horn. Appearing “plated” from lateral view. Body 1-6 mm long. Immatures maroon. Found on woody portions of host.

Known Southeastern Distribution

Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Texas.

Common Hosts

Wide host range, common on *Ficus* species, *Pittosporum*, hollies and *Citrus*.

Barnacle Scale

Ceroplastes cirripediformis



Maroon Immature Stages

035

E X O T I C

Ceroplastes dugesii

Duges Wax Scale

Field Recognition

Body red, covered in thick grayish white to buff colored wax cover. Body 3-8 mm long. Found on woody portions of host plants.

Known Southeastern Distribution

Florida.

Common Hosts

Wide host range, common on *Bursera* and *Piper* species.

Duges Wax Scale
Ceroplastes dugesii



036

E X O T I C

Ceroplastes floridensis

Florida Wax Scale

Field Recognition

Body red, covered in a thick grayish to pinkish white wax. Generally flat. Body 2-4 mm long. Immatures often resemble small white stars. Found on twigs and foliage of hosts.

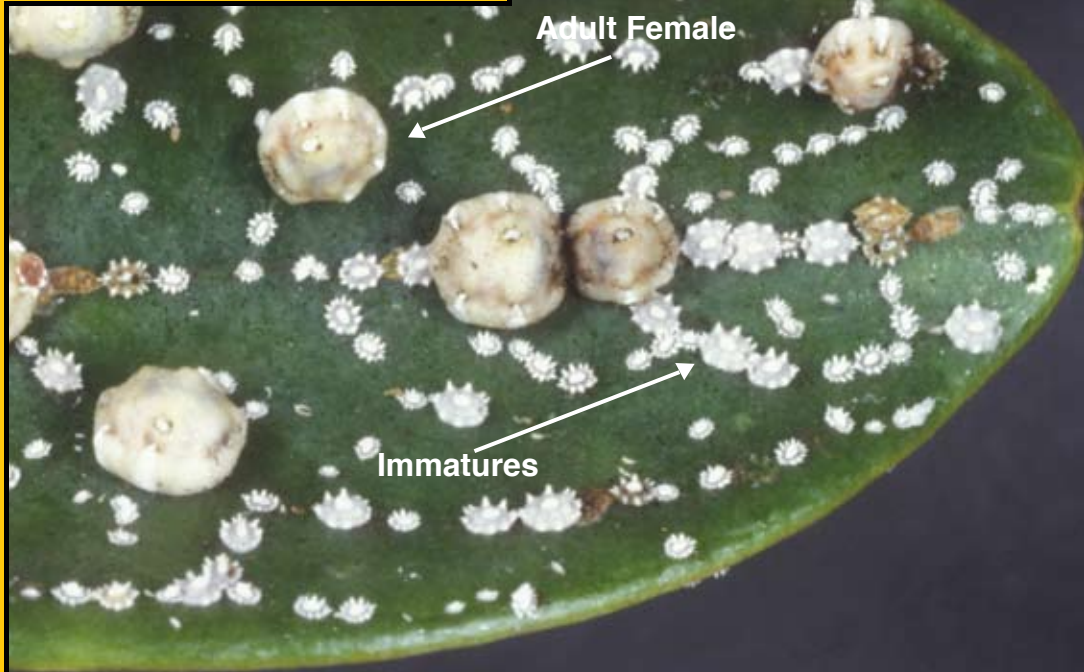
Known Southeastern Distribution

Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia.

Common Hosts

Wide host range, common on hollies, *Schefflera*, *Pittosporum*, cycads, *Citrus*, and tropical fruit.

Florida Wax Scale
Ceroplastes floridensis



037

E X O T I C

Ceroplastes rubens

Red Wax Scale

Field Recognition

Body red, covered in a thick red to pink wax. Body 2 mm long. Wax pentagonal in dorsal view. Occurring on foliage of host plants.

Known Southeastern Distribution

Florida.

Common Hosts

Wide host range, common on *Citrus* and other tropical fruit.

Red Wax Scale

Ceroplastes rubens



038

N A T I V E

Eriococcus azaleae

Azalea Bark Scale

Field Recognition

Body dark red to purple. Eggs and immature crawler stages pink. Body approximately 3-4 mm long, ovisac produced and is a shiny white (almost silvery). Generally found in nodal areas or “forks” of twigs and branches.

Known Southeastern Distribution

Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

Common Hosts

Wide host range but most commonly collected on *Azalea*.

Azalea Bark Scale
Eriococcus azaleae



038

N A T I V E

Eriococcus azaleae

Azalea Bark Scale

Field Recognition

Body dark red to purple in color. Eggs and immature crawler stages pink. Body approximately 3-4 mm long, ovisac produced and is a shiny white (almost silvery). Generally found in nodal areas or “forks” of twigs and branches.

Known Southeastern Distribution

Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

Common Hosts

Wide host range but most commonly collected on *Azalea*.

Azalea Bark Scale
Eriococcus azaleae



Adult Female

Pink Immatures

Adult Female

039

N A T I V E

Eriococcus quercus

Oak Eriococcin

Field Recognition

Body is dark red to purple. Body approximately 3-4 mm long, ovisac produced and is a shiny white (almost silvery).

Known Southeastern Distribution

Alabama, Florida, Georgia, Louisiana, Mississippi, Texas, and Virginia.

Common Hosts

Oaks.

Oak Eriococcin
Eriococcus quercus



040

N A T I V E

Dactylopius confusus

California Cochineal Scale

Field Recognition

Body maroon to purple, covered with sticky-stringy wax. Body fluids red. Found on pads of cacti.

Known Southeastern Distribution

Florida, Georgia, and Texas.

Common Hosts

Opuntia cacti.

California Cochineal Scale
Dactylopius confusus

