

Key to the Families of Scale Insects in Florida (adult females)

**Gregory S. Hodges and Gregory A. Evans
Florida State Collection of Arthropods**

1. Associated with palms; adults reddish brown, globular in appearance, and sessile.
.....Phoenicococcidae (palm scales)



- 1b. Not associated with palms, or if associated with palms, then not as above.....2

- 2(1b) Found on twigs of oak; body nearly spherical, mottled light and dark brown.
.....Kermesidae (oak gall scales)



- 2b. Not found on twigs of oak, or if on oak, then not as above.....3

- 3(2b) Body covered by thick resin, irregularly shaped and generally maroon to black in color;
found on stems of host.....Kerriidae (lac scales)

- i. Body in shape of bow-tie (3-5 mm in width), wide host range
.....*Paratachardina lobata* (lobate lac scale)



- ii. Body irregularly shaped but appears rounded; 5-10 mm in width, occurring only on *Acacia*.....*Tachardiella mexicana*



- 3b. Body not covered by thick resin, usually symmetrical, color and position variable.....4
- 4(3b) Legs present and mobile (legs absent in a few Pseudococcidae), adult female usually more than 2.5 mm in length and covered with whitish waxy plates or strands.....5
- 4b. Legs present or absent but adult female usually not mobile, usually less than 2.5 mm in length and not covered with whitish waxy plates or strands.....9
- 5(4) Body covered by bleach white wax, with grooved waxy ovisacs carried by female; legs exceptionally large and strong.....6
- 5b. Body covered by fine-mealy wax; ovisacs not grooved and not carried by female.....7
- 6(5) Body color orange; ovisac much shorter than body.....Margarodidae (*Icerya purchasi*, cottony cushion scale)



- 6b. Body color white; ovisac extending about length of body or more...Ortheziidae (ensign scales)



- 7(5b) Body usually tapered posteriorly; adults completely covered in snow white ovisac; anal lobes greatly protruding; usually found on grasses and oakEriococcidae (felt scales)



- 7b. Body usually round or elliptical and not tapered posteriorly; ovisac not carried by adults; anal lobes not greatly protruding.....8

- 8(7b) Associated with Cactaceae and with profuse amounts of wax; body fluid dark and ink-like when specimen is squished.....Dactylopiidae (Cochineal insects)



8b. Associated with a wide variety of hosts including Cactaceae and usually with less wax; body fluid lighter when specimen is squished.....Pseudococcidae (mealybugs)



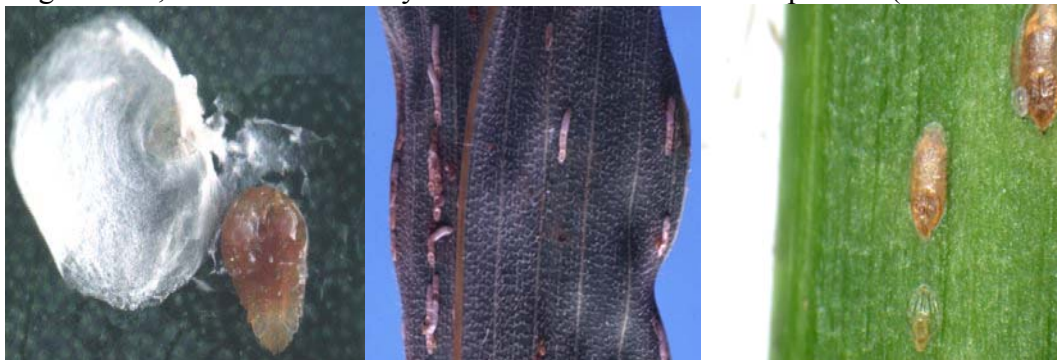
9(4b) Scale cover can be “flipped” off exposing a protoplasmic blob-like insect underneath.....10

9b. Scale cover not present, or if covered then can not be flipped off as above.....11

10(9) Legs present; scale cover resembles small white wax cap...(False Armored scales) Conchaspidae



10b. Legs absent; scale cover usually not as above.....Diaspididae (armored scales)



- 11(9b) Body shape and sculpture similar to a “hand-grenade”, generally light brown to tan in color found on twigs of various ornamentals, especially *Hibiscus*.....Cerococcidae (ornate scales, *Cerococcus deklei*)



- 11b. Body shape and sculpture not as above.....12

- 12(11b) Usually found in nodes of grasses; body shape generally elongate and flattened and reddish brown.....Aclerdidae (flat grass scales)



- 12b. Rarely found in the nodes of grasses; body shape usually round to elliptical and variable in color.....13

- 13(12b) Body with posterior apex not incised medially, generally upraised and surrounded by a thin, glassy wax; occurring on stems or twigs often causing pits or distortions in twigs under their body.....Asterolecaniidae (pit scales)



13b Body with posterior apex deeply incised medially, upraised or not, and generally not surrounded by glassy wax margin; found on leaves, stems or twigs but not causing pits.
.....Coccidae (soft scales)

