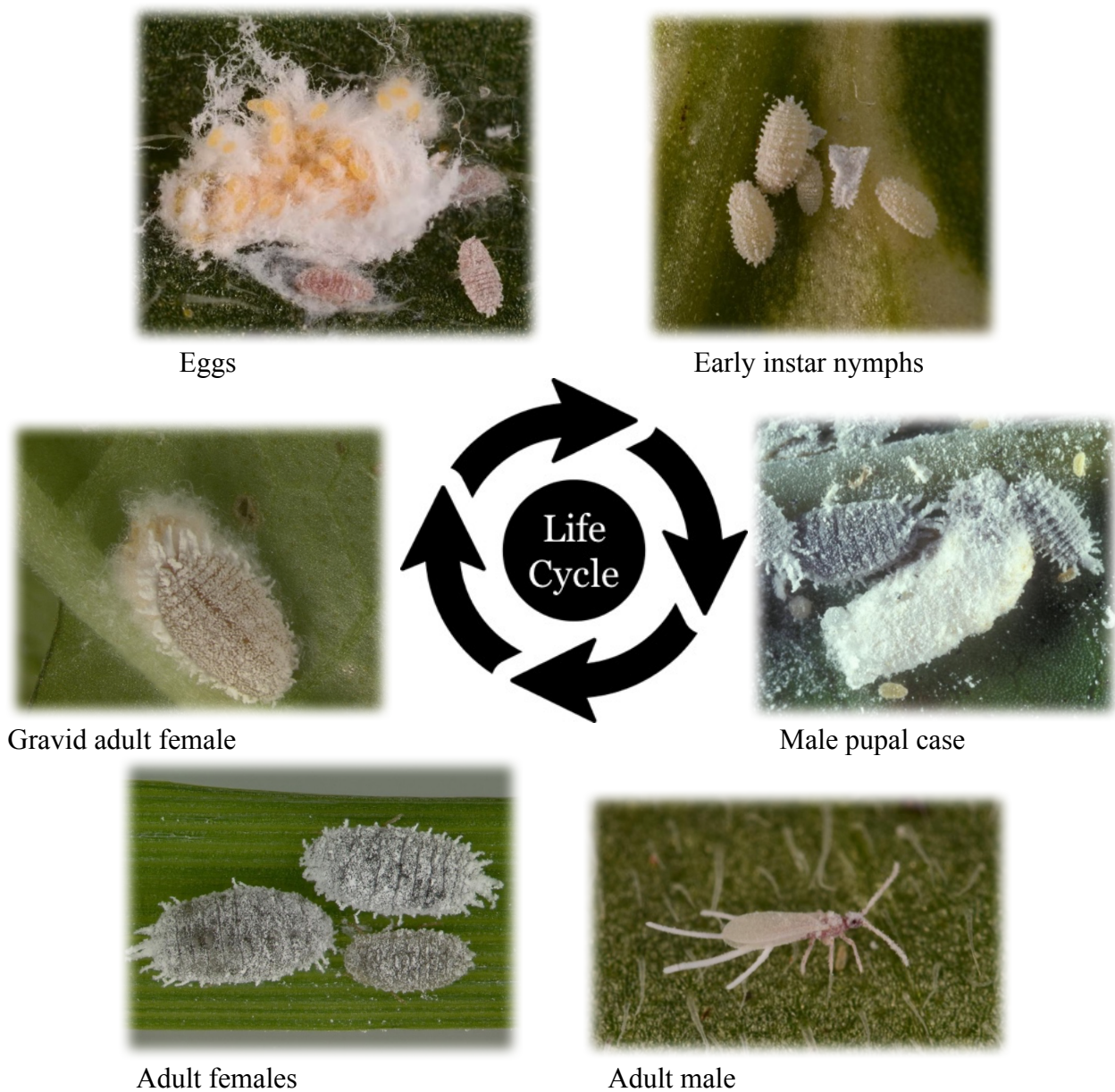


## Mealybugs (Hemiptera: Pseudococcidae)

Adam G. Dale, Turfgrass and Ornamental Entomologist



### Mealybug insects

Mealybugs are a diverse group of sap-feeding insect pests of ornamental plant in nurseries, greenhouses, and ornamental landscapes. These insects are similar to soft scale insects in their biology and management. Females are soft-bodied, oval-shaped insects that do not have wings, but are mobile during their entire life. Most mealybugs produce a fluffy white wax that covers their body or protrudes from their posterior like a tail. This waxy fluff is hydrophobic and protects them from many contact-toxic insecticides. As nymphs mature, they produce more wax and become more difficult to control. Adult male mealybugs look much different and have two wings and long tails of white wax.

## Biology

Mealybugs damage plants by inserting their hair-like mouthparts into plant tissue where they remove plant sap. During feeding, mealybugs excrete copious amounts of honeydew, which coats surfaces beneath the feeding site and facilitates sooty mold growth, turning plants black. Some mealybugs, like the citrus mealybug, secrete a toxin during feeding, which causes the host plant to drop its leaves and buds. Although relatively immobile, mealybugs can easily disperse through wind. Individual adult females can produce several hundreds of offspring during their lifetime.

## Signs & symptoms of a mealybug infestation

1. Leaf chlorosis
2. Sticky, honeydew-covered surfaces
3. Black sooty mold
4. Branch dieback
5. Premature leaf drop
6. Plant death

## Host plants

Most mealybugs are polyphagous and instead of specializing on a single host plant, although some are named after their primary host. Mealybugs are more commonly found on herbaceous plants and plant parts than woody plant parts.

### Common mealybug – host plant associations in Florida

- Striped mealybug (*Ferrisia virgata*) – Croton, hibiscus, seagrape
- Pink hibiscus mealybug (*Maconellicoccus hirsutus*) – Hibiscus
- Papaya mealybug (*Paracoccus marginatus*) – Papaya, citrus, hibiscus
- Longtailed mealybug (*Pseudococcus longispinus*) – Cycads, orchids, citrus
- Citrus mealybug (*Planococcus citri*) – Citrus, canna lily, coleus, banana

## Natural enemies

Many predators and parasitoids attack mealybugs in the landscape and keep them below damaging levels. Natural enemies like lacewing larvae, lady beetles, and predatory flies are commonly found in association with mealybug infestations. Insect-parasitic fungi and bacteria also commonly attack mealybugs and reduce populations. However, under the right conditions or following certain environmental disturbances, mealybugs may outbreak.

Visit the UF/IFAS EDIS website (<http://edis.ifas.ufl.edu>) and search “mealybugs”, for more information on the biology and management of specific mealybug species in Florida.

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\*All photos were taken by Lyle Buss, UF/IFAS Entomology and Nematology Department

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