

Ornamental Insects Sheet 2 ¹

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Mealybugs (Plate 1 and Plate 2). These are soft-bodied insects covered with white, powdery or cottony, waxlike material. Short wax projections extend from the margin of the body and some species have long filaments projecting from the rear of the body. They vary from 1/8" to 1/5" in length when mature. Mealybugs have piercing-sucking mouthparts and damage appears as chlorotic spots on the leaves (Plate 3). They tend to congregate together, looking like fluffs of cotton on the foliage. The life cycle takes about 30 days at 80°F.



Plate 1 .



Plate 2 .

Some common host plants are azalea, coleus, croton, cactus, rose, bedding plants and many foliage



Plate 3 .

plants. Mealybugs are one of the major problems affecting plants in greenhouses and interiorscapes.

Aphids (Plate 4 and Plate 5). Aphids, or "plant lice," may infest almost any plant. They are most common on camellia, crepe myrtle, gardenia, hibiscus, ixora, oleander, palm and rose as well as nearly all bedding and foliage plants. Aphids have piercing-sucking mouthparts and cause damage by sucking plant juices. However, their ability to transmit plant viral diseases may be more harmful than any direct feeding damage.



Plate 4 .

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**Plate 5 .**

Aphids are soft-bodied, pear-shaped insects. They are generally less than 1/8" long and are usually green, but many aphids are black, brown, pink, yellow or blue. Aphids are commonly found on young, developing leaves and stems in clusters or colonies of individuals. Their feeding distorts a plant's new growth, and the leaves curl (Plate 6). Most aphids are wingless, but when colonies become overcrowded, winged forms are produced. The most distinguishing feature when identifying aphids are the two short tubes, or cornicles, that extend from the rear of the body.

**Plate 6 .**

Aphids are unlike most insects. Almost all aphids are female, reproduce without mating, and seldom lay eggs, instead giving birth to live young. Aphids can reproduce rapidly and produce many generations in a year. Each female aphid produces 50 to 100 daughters during her life, and each daughter begins reproducing in six to eight days.

Whiteflies (Plate 7). Whiteflies are common pests on many ornamentals. Plants most frequently attacked include allamanda, citrus, crepe myrtle, ferns, gardenia, hibiscus, ligustrum, viburnum and many bedding and foliage plants.

**Plate 7 .**

Adult whiteflies resemble tiny white moths. However, they are not closely related to moths but are more closely related to scale insects. Whiteflies are only 1/16" long and have four wings. The wings and body are covered with a fine, white powder of wax.

The immature stages (nymphs) live on the undersides of leaves (Plate 8). They are flat, round, slightly smaller than a pinhead, light-green, and somewhat transparent.

**Plate 8 .**

Whiteflies have piercing-sucking mouthparts that puncture the leaf and suck the plant juices. Top sides of leaves on infested plants become pale or spotted from the insects feeding on the undersides (Plate 9).

**Plate 9 .**

The eggs are deposited on the undersides of the leaves. In four to 12 days the eggs hatch into active six-legged nymphs, or crawlers. The crawlers insert their mouthparts into the leaves and remain stationary for the remainder of their immature stages. After molting three times, they pupate. The life cycle from egg to adult takes about 30 days at 80°F.

During recent years the sweetpotato whitefly has become the major species attacking ornamental plants, especially in central and south Florida. This whitefly is not yet parasitized to any extent and has the genetic ability to become rapidly resistant to chemical pesticides.

Sooty mold (Plate 10). Sooty mold is a black fungus that grows on the excretion (honeydew) of aphids, mealybugs, soft scales and particularly that of immature whiteflies. This fungus detracts from the beauty of ornamental plants and reduces their photosynthetic activity. Sooty mold can be washed off the leaves with soapy water.



Plate 10 .