Control of Common Pests of Landscape Plants

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- Sucking Pests
- Chewing Pests
- ATTENTION! Pesticide Precautions

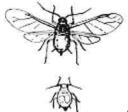
Many species of insects or mites attack Florida landscape plants. Homeowners have difficulty controlling these pests because they often are not aware of the problem until both the infestation and the damage are extensive, or they may apply insecticides improperly or at the wrong time.

An effective pest control program on landscape plants begins with proper plant selection. Select plants that are less prone to insect problems when designing, purchasing or replacing landscape plants. Secondly, on a weekly basis during the growing season, closely inspect landscape plants for developing pest populations. Remember that some insects and mites are minute in size and are frequently found on the undersides of leaves. A close and thorough inspection is necessary to detect these pests. Thirdly, if you find a developing pest population that you cannot identify, get some assistance with the identification from your local county extension office or a reliable nursery. You must know what pests you are trying to control.

Brief descriptions of major groups of pests (or the damage they cause) found on Georgia landscape plants are provided to assist with identification. Control strategies for these pests are presented in Table 1.

Sucking Pests

Sucking insect pests cause damage by removing sap from plant tissues. Symptoms of infestation include wilting of plant tissues, stunting, curling or distortion of new growth, chlorotic spots or stippling of leaf surface, or a sticky substance or black fungal growth on the upper leaf surface. Common insects and mites causing this type damage include aphids, scale insects, mealybugs, lace bugs, whiteflies, and spider mites.



Aphids

Aphids are small (about 1/4 inch in length), soft-bodied insects that vary in color from green to yellow to black. Some species are winged during certain times of the year. Generally, aphids can be recognized by their cornicles, a pair of tube-like structures projecting from the rear of their bodies. They are frequently found in large numbers clustered together on the backs of leaves or on the stems of new growth.

Aphids: adult winged female (top); adult wingless female (bottom)

Scale insects and mealybugs

Scale insects are very small, soft-bodied pests that secrete a protective covering over their bodies. These coverings vary in color from white to red to black. Some are flattened while others are more turtle-shaped. This covering protects the scale and makes control difficult. Scale insects are most easily controlled when insecticide applications are timed

for the first instars or "crawler" stage of the scale. Mealybugs are very similar to scale insects, however they secrete a white waxy material over their bodies.

Mealybugs also move about on the host plant to feed. Mealybugs are most susceptible to insecticide applications when they are young and have not formed a thick covering over their bodies.

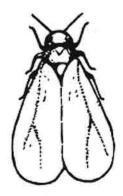
-R: Adult brown soft scale; scale "crawler" (top); mealybug (bottom)



Lace bugs

Lace bugs get their name from the appearance of the area behind their head and the wing covers. The area forms a lacelike covering over the body of the insect. They are 1/8 to 1/4 inch in length and are partially transparent. Lace bug damage appears on the upper leaf surface as white to yellow chlorotic spots. The lower leaf surfaces will be cluttered with black spots and the old cast skins of immature lace bugs.

Adult lace bug

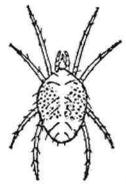




Whiteflies

Whitefly adults resemble small gnats. They range in size from 1/10 to 1/16th inch and have four broad, delicate, milk-white wings. The immature whiteflies are attached to the underside of leaves and resemble scale insects. They are oval, flattened and yellow to almost transparent. Whiteflies often occur in tremendous numbers and when a heavily infested plant is disturbed, the air is filled instantly with a white cloud of these insects.

Whitefly: adult (left); immature form (right)



Spider mites

Spider mites, often called "red spiders," are most often found on the backs of leaves. They are so small they can barely be seen with the unaided eye. The adults are oval-shaped and have eight legs and no antennae or wings.

Chewing Pests

Chewing insect pests cause damage by consuming plant parts such as leaves and stems or burrowing in plant tissues to cause damage to the host plant. Symptoms of chewing insect pests include holes in leaves, silvering of leaf tissue, complete removal of leaf tissues, burrowing in or around stems, branches or trunks of plants. Common insects causing this type damage include tent caterpillars, webworms, bagworms, shadetree borers, and other beetles.

Tent caterpillars

Tent caterpillars are attractively colored larvae that reach about 1 1/2 inches in length. They have a few long hairs on their bodies, mostly along the sides. They are commonly seen in the early spring closely associated with the webs or "tents" they construct in the crotch of small limbs on their host plant. This tent serves as a refuge for the larvae at night and during rainy weather. They have only one generation per year.

Tent caterpillar

Webworms

Webworm larvae are about 1 inch long when full grown and are pale yellow or green in color. There is a broad, dusky stripe running down the back, bordered on each side by a

yellow stripe They are covered with tufts of long whitish hairs. These larvae can be found inside unsightly webs at the terminal ends of branches on host plants. Georgia has three to four generations of webworms per year.



Bagworms

Bagworms construct and live inside a 1- to 2-inch tough, tear-shaped portable silken case. These bags are the most easily seen and identifiable feature of the insect. Outside, the silken texture of the bag is somewhat concealed with layers of leaf, twig and bark fragments. The bag has an opening at the larger end that allows the worm to partially crawl out to feed and make repairs to its bag.

Bagworm

Shadetree borers

Many insects boring or living in the wood of shade trees are

the larval or grub stage of beetles. Most of these pests attack trees or shrubs that are already weakened or injured by transplant shock, drought, flooding, soil fills, mechanical damage, or disease. These larvae or grubs are 1/4 to 2 inches in length, yellowish-white, legless and have either a fleshy, rounded head area or a large flattened area behind the head. They are found burrowing or tunneling under the bark of infested trees.

Shadetree borer

Beetles

Several beetles, such as the elm leaf beetle, imported willow leaf beetle, flea beetle, and Japanese beetle, attack trees and shrubs and cause feeding damage. Damage first appears when the green parts of leaves are removed with just the veins of the leaf tissue remaining. As damage accumulates, dry skeltonized leaves become obvious. Leaves take on a rusty, reddish-brown tint.

Japanese beetles: adult (left), white grub stage (right)

See Table 1: Control strategies for major pests of Florida landscape plants (35 KB PDF)

ATTENTION: Pesticide Precautions

- Observe all directions, restrictions and precautions on pesticide labels. It is dangerous, wasteful and illegal to do otherwise.
- Store all pesticides in original containers with labels intact and behind locked doors. "KEEP PESTICIDES OUT OF THE REACH OF CHILDREN."
- Use pesticides at correct label dosage and intervals to avoid illegal residues or injury to plants and animals.
- Apply pesticides carefully to avoid drift or contamination of non-target areas.
- Surplus pesticides and containers should be disposed of in accordance with label instructions so that contamination of water and other hazards will not result.
- Follow directions on the pesticide label regarding restrictions as required by State or Federal Laws and Regulations.