

Ornamental Insects Sheet 1¹

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Spider mites. These are among the most common pests that attack ornamental plants in Florida. The two-spotted spider mite, *Tetranychus urticae*, is the most common (Plate 1). They are not insects but are more closely related to spiders and ticks. Adult spider mites, spiders and ticks have eight legs. Mature mites are usually less than 1/50" long and are generally found on the undersides of leaves. Mite infestations are often not detected until the plants exhibit damage (Plate 2).



Plate 1 .



Plate 2 .

Mites have needlelike, piercing mouthparts that puncture the leaf and suck the plant juices. Damage from light infestations appears as yellow or gray

stippled patterns on the leaves. The undersides of infested leaves usually have fine, silken webbing spun across them (Plate 3). Heavy infestations cause the leaves to turn yellow, gray or brownish and eventually drop off. Webbing may be spun over entire branches or, in the case of small plants, over the entire plant.



Plate 3 .

When the undersides of the leaves are examined closely with a 10 or 15 power magnifying glass, the small mites can be seen. They may be green, yellow, purple, black or virtually transparent. The body contents sometimes show through their transparent body walls, giving them a spotted appearance. Cast skins may also be seen among the live mites, imparting a grayish residue to the undersides of the leaves.

The adult female lays several hundred eggs during her life. The eggs hatch in about three days.

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Immature mites molt three times before reaching the adult stage. Under optimum conditions (80°F), mites complete their development from egg to adult in seven to 10 days. There are many overlapping generations per year.

Spider mites are frequently found on azalea, camellia, chrysanthemum, citrus, ligustrum, orchid, pyracantha, rose, viburnum and bedding plants. They are also a persistent pest of interior foliage plants. Mite damage is much more severe during dry weather.

Broad and cyclamen mites. These mites are translucent and very small, about 1/100" long. Their presence is usually first detected by the plant injury symptoms (Plate 4) rather than by visual observation. Symptoms of injury are new leaves that are curled or cupped and smaller than usual, or newly produced leaves that do not expand. Heavy infestations often kill the shoot apex.



Plate 4 .

Thrips (Plate 5). Thrips are very small, slender, yellow-brown or black insects 1/8" to 1/25" in length. Thrips have rasping-sucking mouthparts to withdraw plant juices. Their life cycle (egg to adult) takes two to four weeks, with three to five generations per year (Plate 6).



Plate 5 .



Plate 6 .

Thrips populations peak during the spring months, and they damage both foliage and flowers. The most important thrips species attacking flowers

and buds are the Florida flower thrips and gladiolus thrips. Redbanded thrips, Cuban laurel thrips and greenhouse thrips are the most common species on foliage.

Infested leaves have a stippled appearance, and small, brownish specks of excrement usually are visible on the undersides of the leaves. Infested flower buds fail to open or the flowers are deformed. Damaged flowers become streaked and discolored (Plate 7). Shake flowers or leaves suspected of being infested over a white sheet of paper to detect the insects.



Plate 7 .

Lacebugs (Plate 8). Lacebugs are small, broad, flat insects about 1/8" long. Their bodies are usually brown and wings are clear with a fine, lacy appearance. Immature lacebugs are wingless and covered with spines (Plate 9). Lacebugs have piercing-sucking mouthparts.



Plate 8 .



Plate 9 .

Damage appears on the top side of the leaf as a whitish speckling, which is caused by the insects feeding on the underside of the leaf (Plate 10). Shiny black spots of excrement on the undersides of leaves are a good indicator of lacebug infestation. The most prevalent lacebug species are the azalea, hawthorn, pyracantha and sycamore lacebugs, so named because they are most common to these plants.



Plate 10 .