



Texas Agricultural Extension Service

Texas Citrus Mealybug and Whiteflies

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Mealybug

Citrus Mealybug

Pseudococcidae: *Planococcus citri* (Risso)

The citrus mealybug has increased to damaging levels in some groves and these increases appear to be related to disruption of beneficials. Mealybugs are recognized by a distinctly segmented body that has lateral filaments covered with a white wax. They average 3 mm in length and tend to situate themselves on the bottom of fruit or on areas where adjacent fruit are in contact. Citrus mealybugs tend to prefer grapefruit over oranges. Large infestations cause fruit drop and reduced yields, but their greatest damage is caused by honeydew on fruit and leaves. Buildup of honeydew and associated sooty mold fungus leads to reduced fruit quality and lowered tree vitality.



Citrus Mealybug

Whiteflies

Whiteflies

Aleyrodidae

Whitefly adults are small insects averaging 1 to 3 mm in length with two pairs of mealy-white wings held in a roof-like position over the body. Whiteflies differ from scales in that both sexes are winged and motile as adults and they restrict their feeding to foliage. Population increases generally coincide with a new flush of foliage on trees. Whiteflies damage citrus by removing sap from leaves during feeding and by secreting large amounts of honeydew upon which black sooty mold grows. Photosynthesis can be substantially reduced in trees with extensive amounts of sooty mold. Several species of whiteflies occur in Texas citrus, including the citrus blackfly, the citrus whitefly, the woolly whitefly and the cloudy-winged whitefly.

Citrus Blackfly

Aleurocanthus woglumi (Ashby)

The citrus blackfly is a potentially serious citrus pest that has moved into the Rio Grande Valley from Mexico. The adults have slate-blue wings, red abdomens, reddish-brown eyes and average 1.3 to 1.6 mm in length. Females lay their eggs in a characteristic spiral pattern that provides an easy method of identifying this pest. Immature forms are dark black. The life cycle requires two to four months and the occurrence of various life stages usually overlaps considerably.

If not destroyed by unfavorable weather conditions or pesticides, parasites can effectively control the blackfly. A number of chemicals bring about control, but most are broad spectrum materials that must be used carefully to avoid upsets of other pests.

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Citrus Blackfly

Citrus Whitefly

Dialeurodes citri (Ashmead)

The citrus whitefly lays smooth, shiny pale-yellow eggs. Eggs usually hatch in one to three weeks and the crawlers move about for several hours before settling. The larvae are oval, thin and translucent, which makes them difficult to see on green leaves. The nymphs require three to four weeks before pupating and another two to four weeks before emerging as adults. Pupae are similar to nymphs but are thicker and have distinct eyespots.

Adults live an average of two weeks during which time the female lays an average of 150 eggs. Citrus whiteflies have been observed to develop high populations during growth flush periods, but generally occur in low numbers.

Woolly Whitefly

Aleurothrixus floccosus (Maskell)

Adults are yellowish-white and seldom fly. Woolly whitefly eggs are laid in a circle on the underside of mature leaves, with the female at rest in the center. The eggs are brown and sausage-shaped. The first instars are light green; subsequent instars are brown. Pupae are covered with waxy white filaments, giving a woolly appearance. Copious amounts of honeydew often are associated with colonies of this species.



Citrus Whitefly

Cloudy-winged Whitefly

Dialeurodes citrifolii (Morgan)

Adult cloudy-winged whiteflies differ from other whiteflies by the darkened area in the middle of each wing, which gives the wings a cloudy appearance, and by the fact that the wings are held in a flatter position than those of the citrus whitefly. Fresh-laid eggs of the cloudy-winged whitefly are yellow, but soon turn black and have a network of ridges. Eggs are commonly laid on young leaves. Nymphs and pupae are very similar to those of the citrus whitefly. Populations of this whitefly are often mixed with the citrus whitefly within an orchard.

References

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