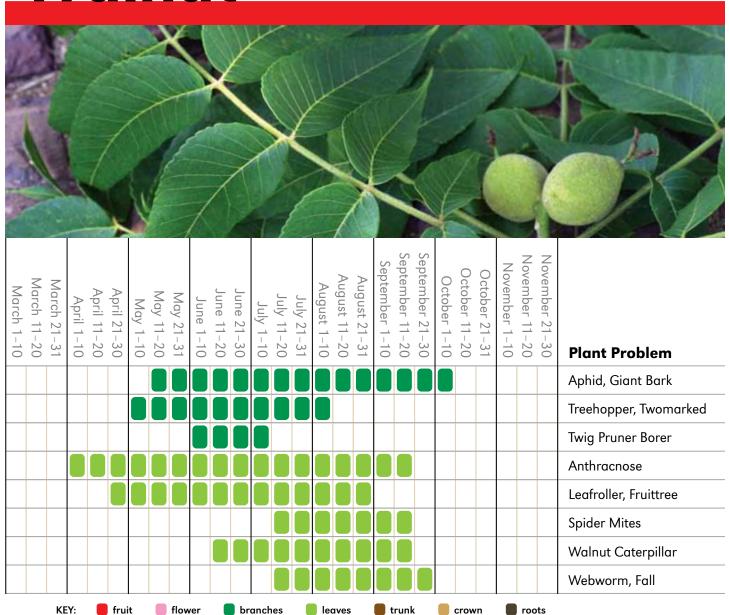
Walnut



Plant Problem

Signs/Symptoms

Treatment

Aphid, Giant Bark



Large, one-quarter inch long, gray-brown, spotted, long-legged aphids in dense colonies on new twigs; many winged. Heavily infested branches may be stressed or wilted.

These aphids have many hosts and are most evident in late summer. Older established trees tolerate them well, but monitor newly planted trees. For severe infestations, dislodge aphids with a strong spray of water, or treat with a contact insecticide.

Treehopper, Twomarked



The brown, one-quarter inch long adults have two yellow spots and a long projection on the top of the back. White masses cover eggs inserted into twigs, causing some leaf curl or stunting.

With high populations, female adults can damage twigs when they deposit eggs into small slits made by their ovipositors. Nymphs and adults feed on sap. Treat only if damage is apparent by spray applications of a contact insecticide. Wash nymphs off with a strong spray of water.

Twig Pruner Borer



Larger twigs break off and fall to the ground in late summer. Inspection shows the twig is cleanly cut from within by a mature larva. Bark remains on the cut when the twig breaks. Gather and destroy broken twigs, as they contain mature larvae. This species attacks only dead or severely weakened trees, so there is little justification for insecticidal control. A related species, the oak twig pruner, attacks healthy red oaks and should be monitored.

Anthracnose



Tiny dark-brown or black circular to irregularly circular lesions that may enlarge; yellowish to golden leaf tissue borders lesions. Premature defoliation. Fruit has sunken, dark lesions.

Sanitation.

Leafroller, Fruittree



Buds with holes, webbing and frass. Leaves rolled together with webbing and skeletonized or devoured. These green worms with shiny black heads wriggle violently when disturbed.

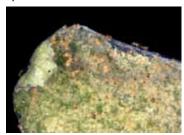
Rarely justifiable to control, as infestations tend to be spotty, and healthy trees tolerate even extensive defoliation. Should control be warranted, make several applications of a microbial insecticide, such as a product containing *Bacillus thuringiensis* or spinosad.

Plant Problem

Signs/Symptoms

Treatment

Spider Mites



Leaves stippled or yellow with fine webbing on undersides of leaves. Tiny greenish mites moving beneath webbing. When foliage turns brown, mites may mass together at tips of stems. Populations explode during prolonged hot, dry weather. Monitor in late July, checking undersides of leaves. Keep host plants well-watered. Dislodge colonies with a strong spray of water. Apply an insecticide/miticide if infestations become serious; repeat in 10 days.

Walnut Caterpillar



Caterpillars are brick red with several ivory stripes along the body. They feed and even pupate together in masses (shed skins in masses), and raise their heads and tails in unison when disturbed. There are two generations per season. Locate and remove white egg masses on leaves in mid-May and again in July. Apply successive sprays of a microbial insecticide to control young caterpillars. Treat caterpillars with an insecticide when they mass together on trunks to pupate.

Webworm, Fall



A nest of webbing covers several leaves initially, then later envelops entire branches as caterpillars grow. Fuzzy, yellowish or brown caterpillars feed on leaves inside webbing. Rake out nests, or dislodge with a powerful jet of soapy water from a power washer. Apply a microbial insecticide to control young caterpillars in small nests; larger nests are almost impenetrable with insecticidal sprays. Damage is more unsightly than serious.