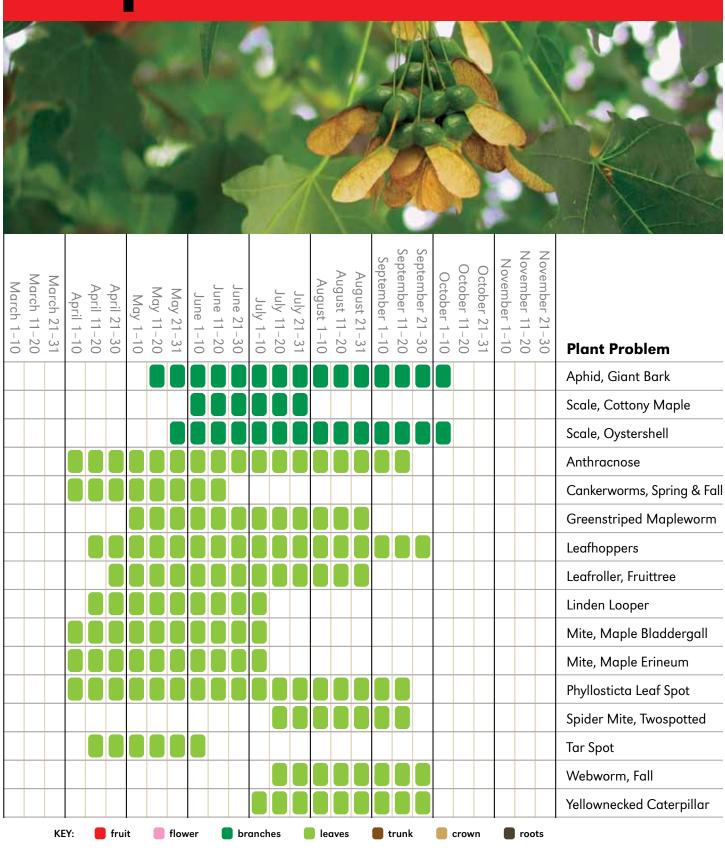
Maple



Maple September 21-30 September 11-20 November 21-30 November 11-20 September 1-10 November 1-10 October 11-20 October 21-3 August 11-20 October 1-10 March 11-20 March 21-3 August 1-10 March 1-10 June 21-30 June 11-20 May 11-20 June 1-10 July 21-31 **Plant Problem Aphids** Verticillium Wilt Borers, Beetle/Clearwing Moth Borer, Flatheaded Appletree Cankers KEY: fruit flower branches leaves trunk crown roots

Plant Problem

Signs/Symptoms

Treatment

Aphid, Giant Bark



Large, one-quarter inch long, gray-brown, spotted, longlegged 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.

Scale, Cottony Maple



Brown, adult hemispherical scales are attached often in clusters to twigs, and each have a large, bulging, cottony ovisac containing eggs.

Nymphs are attached to leaves in the summer.

Nymphs ("crawlers") hatch from ovisacs in late June-early July and crawl to foliage, where they feed on leaf undersides through the summer. In cases where infestations threaten tree health, apply a horticultural oil, insecticidal soap or contact insecticide to kill nymphs.

Scale, Oystershell



Small, brownish, oystershell shaped scales are crowded on branches and may cover the bark completely. Infested branches suffering dieback. Newly hatched nymphs are white.

Prune out heavily infested branches, as appropriate. Dormant oils are not effective, as scales are in the egg stage beneath female shells. Monitor in June to detect newly hatched nymphs and apply oil spray, insecticidal soap or insecticide.

Signs/Symptoms

Treatment

Anthracnose



Light brown, purple or black lesions on leaf surface. Large, irregular, dead areas on leaf. Leaf scorch. Leaves curl and turn black. Premature defoliation.

Sanitation. Improve air circulation. Apply foliar fungicide at bud break and repeat according to label instructions.

Cankerworms, Spring & Fall



Ragged holes in leaves; only veins may remain. These "inchworms" are greenish, brown or black and move in a looping fashion. Some may hang from silken threads when disturbed.

Healthy trees tolerate considerable defoliation; treat only if severe and when cankerworms are abundant and small. Microbial insecticides are effective and safe alternatives to chemical insecticides, especially in situations where drift is a concern.

Greenstriped Mapleworm



Yellow-green caterpillars with seven dark green stripes along the length of the body. Two dark horns protrude upward from behind the red head. The caterpillars cause a ragged defoliation. In some years, outbreaks are serious. Two generations enable rapid population increase. Look for white egg masses on undersides of leaves in May and late July. Treat masses of young caterpillars with a microbial insecticide, and older ones with a chemical insecticide.

Leafhoppers



Leaves develop pale flecks, which in time spread densely over leaf surfaces. Leaves may turn yellow. Wedge shaped adults, nymphs and fecal spots are present on leaf undersides. Nymphs cannot fly and are more easily controlled. A strong stream of slightly soapy water from a hose-end sprayer will dislodge and kill many. Other options include a horticultural spray oil, insecticidal soap, conventional insecticide, or systemic insecticide.

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 *Bt* or spinosad.

Signs/Symptoms

Treatment

Linden Looper



Ragged holes in leaves; only veins may remain. These "inchworms" are yellow with 10 dark wavy lines along the top half of the body. They move in a looping fashion.

Healthy trees tolerate considerable defoliation; treat only if severe and when loopers are abundant and small. Microbial insecticides are effective when applied with thorough coverage and repeated; otherwise, apply a chemical insecticide according to label directions.

Mite, Maple Erineum



By mid spring bright red, glossy, granular patches form on upper surfaces of leaves; they later turn brown by summer. A microscope reveals tiny, worm-like, white mites on the patches.

Infestations vary in intensity from year to year. They are not harmful to tree hosts, but may raise a mistaken suspicion of some disease. Mite populations collapse by mid summer. No control is needed. Dormant oil sprays just before bud-break help with control.

Mite, Maple Bladdergall



Red and green, smooth pouchlike galls are crowded in patches on the upper surfaces of leaves. The undersides show openings into the galls; tiny worm-like mites feed within. Infestations are not harmful to tree hosts, although some leaves can be completely covered with galls and twisted or stunted in growth. Mite populations collapse by mid summer. Control is actually not needed, but dormant oil sprays just before budbreak help with reduction.

Phyllosticta Leaf Spot



Tan to brown circular to irregular lesions; purple-brown margins. Small, black fruiting bodies may be visible on upper surface of lesion.

Sanitation. Avoid overhead irrigation.

Spider Mite, Twospotted



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.

Signs/Symptoms

Treatment

Tar Spot



Initially, small, pale yellow lesions. Lesions enlarge and yellow color intensifies. A black lesion develops in each yellow lesion. Black lesion grows in diameter and thickness.

Sanitation.

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.

Yellownecked Caterpillar



Caterpillars have narrow, black and white stripes along the body and an orange-yellow "neck" behind the head. They feed in groups and raise their bodies up when disturbed. Infestations are seldom serious, however, small trees and entire branches can be defoliated. Young caterpillars can be controlled with a microbial insecticide, a horticultural oil or an insecticidal soap. Do not treat mature caterpillars, as they soon cease feeding.

Aphids



Leaves are yellow or become wilted; new growth is stunted. Abundant, sticky and glossy honeydew is secreted by aphids. Lady beetles and other natural enemies may be present.

Treat if aphids populations are spotty, allow natural enemies to work. Dislodge early colonies with a strong spray of water. Spray foliage with an insecticide, or apply a systemic insecticide early. Some maples are sensitive to spray oils and insecticidal soaps.

Verticillium Wilt



Leaves turn yellow at the margins; margins eventually turn brown and dry. Sudden wilting of leaves. Typically only one side of the tree wilts. The wood is chocolate-brown in bands, streaks or flecks. Tree death.

Sanitation. Avoid root injury. Avoid water stress. Replace with non-suscpetible host.

Signs/Symptoms

Treatment

Borers, Beetle & Clearwing Moth



Branches show dieback. Exit holes may be evident, as well as sawdust-like frass on the ground. Bark may be cracked or loose, or swollen cankers and scarring may show.

Monitor for exit holes in May–June. Thereafter, treat with an appropriate borer spray insecticide until August 1. Keep the plant host healthy by regular watering and mulching. For flatheaded borers, an option is to apply a systemic insecticide as a soil drench.

Borer, Flatheaded Appletree



Loose bark with shallow, serpentine tunnels beneath, packed tightly with fine sawdust. Oval exit holes evident on trunk and branches. Tree is stressed or with dead branches. Monitor trees for exit holes beginning in May and through the summer. Keep especially younger trees healthy, with regular watering, if needed. Treat the trunk and major branches of infested trees with an insecticide, and treat regularly thereafter as per label directions.

Cankers



Brown, circular or irregular sunken cankers on branches. Cankers enlarge and girdle branch. Black fruiting bodies may be present on infected bark.

Prune out affected area.