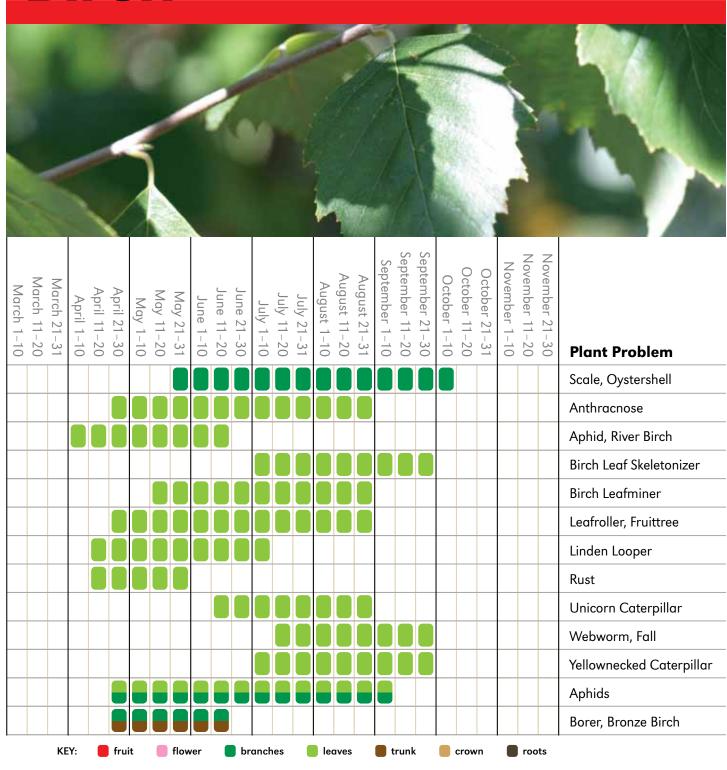
Birch



Plant Problem

Signs/Symptoms

Treatment

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.

Anthracnose



Small lesions without defined borders.

Sanitation. Improve air ciruclation and light penetration.

Aphid, River Birch



Leaves have deep, gall-like corregations. Small, grayish aphids are feeding within folds on undersides. Profuse honeydew is produced, and lady beetles are often present.

Not a harmful condition, although unsightly. Aphid populations decline by summer; there is no need thereafter to treat. Remove witch-hazel, the alternate host. Birches later put out a new flush of leaves. A systemic insecticide is a preventive option.

Birch Leaf Skeletonizer



Young larvae are leafminers. Older larvae feed externally on leaves, skeltonizing them and causing them to turn brown. Silken molting tents and pupal cases are evident on leaves. There are two generations. Control is not needed if defoliation is less than 40% in healthy hosts. Infestations can be severe in some years. A foliar systemic insecticide can be useful. Rake up and destroy fallen leaves, as pupal cocoons are often attached to them.

Birch Leafminer



There are two generations of this sawfly leafminer pest. As larvae feed, damage progresses from small yellow spots, to isolated brown blotches, then to fully brown leaves. Monitor early to detect the small yellow spots on leaves. If spots are numerous and suggest a serious outbreak, apply a foliar systemic insecticidal spray to kill young larvae within leaves. Or, treat the soil in autumn with a systemic insecticide.

Plant Problem

Signs/Symptoms

Treatment

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 product containing Bt or spinosad.

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.

Rust



Angular brown lesions with yellow borders on the upper surface of leaf; powdery, bright orange-yellow pustule on the lower leaf surface.

Foliar fungicide application during budbreak and leaf expansion.

Unicorn Caterpillar



Colorful caterpillars, not hairy, but with enlarged bumps on top of body behind a large head. Young caterpillars feed in groups. Leaves have ragged holes. Infestations often spotty and not harmful to overall tree health. Groups of young caterpillars are easily controlled with a microbial insecticide, a horticultural oil or an insecticidal soap. Do not treat when caterpillars are nearly mature, well over an inch long.

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.

Plant Problem

Signs/Symptoms

Treatment

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 aphid damage is evident; otherwise, allow natural enemies to work. Dislodge early colonies with a strong spray of mild, soapy water. Control with a spray oil, insecticidal soap or insecticide. Apply a systemic insecticide early to realize benefit.

Borer, Bronze Birch



Attacks trees that are stressed and appear unhealthy. Small D-shaped exit holes are evident on the bark. There are raised ridges or uneven bulges where larvae mine beneath bark.

Monitor for new adult exit holes in May. Thereafter, treat with an appropriate borer spray insecticide until July 1. Keep the affected tree healthy through regular watering and mulching around the base. Treat with a systemic insecticide applied as a soil drench.