Fletcher scale

Parthenolecanium fletcheri
Order Hemiptera, Family Coccidae; soft scales
Native pest

Host plants: Yew is preferred, but arborvitae and juniper are also susceptible.

Description: Mature female scales are 4–5 mm long, round and brown. Immatures are smaller, flatter transparent yellow.

Life history: Immatures that overwintered grow quickly in spring. They mature on twigs into adults. Their eggs are deposited in May and hatch in mid to late June. Newly hatched crawlers settle on leaves where they remain for the winter. Males are unknown. There are two generations a year in most locations.

Overwintering: Immatures on leaves and shoot.

Damage symptoms: Copious amounts of honeydew result in noticeable black sooty mold growth. Heavy infestations can weaken plants, causing needle yellowing and premature needle drop. Small plants may even be killed.

Monitoring: Eggs hatch when Greenspire littleleaf linden and Northern catalpa bloom in mid to late June (Herms). Look for round, brown, adult females on twigs from April through June and look for their honeydew and sooty mold. Look for immatures in winter. After mid June, look for smaller, flatter crawlers on needles and twigs.

Chemical control: *General information.*

Conservation of beneficial insects: Use short duration, low residual insecticides, such as horticultural oil, insecticidal soap, and insect growth regulators (IGR).

Foliar applied broad spectrum insecticides, such as acephate, carbaryl, imidacloprid, and pyrethroids: Use only when scale populations are high to rescue trees; beneficial insects will be also killed.

Dormant season oil treatments: Use for soft scales that overwinter as immatures.

Summer oil treatments: Oil smothers exposed eggs, crawlers, and immature females.

Insect growth regulators (IGR), such as pyriproxifen: Use for crawlers as they disrupt molting.

Soil applied systemic insecticides or trunk injections, such as imidacloprid: Apply imidacloprid in fall for crawlers in spring. Less harmful to beneficial insects than foliar applied, broad spectrum insecticides.

Biological control: Common soft scale predators are minute pirate bugs, lacewings, lady beetles, and predaceous midges. Parasitoids are also important.

Fletcher scale nymphs, overwintering stage on shoots and leaves. (125) Photo: John Davidson

Fletcher scale adult female in spring. (122) Photo: John Davidson

Fletcher scale mature females with eggs (on left). (123) Photo: John Davidson

Plant mortality risk: Low, if regulated in nursery trade

Biorational pesticides: horticultural oil, insecticidal soap, pyriproxifen

Conventional pesticides: acephate, bifenthrin, carbaryl, chlorpyrifos (nursery only), deltamethrin, fluvalinate, imidacloprid, lambda-cyhalothrin, malathion, permethrin