**Scurfy scale and Elm scurfy scale**

*Chionaspis furfura* and *Chionaspis americana*

Order Hemiptera, Family Diaspididae; armored scales

Native pests

**Host plants:** Aspen, crabapple, apple, mountainash, willow, dogwood, hawthorn, and elm (only for elm scurfy scale)

**Description:** Adult female covers are flat, pear-shaped, dirty whitish to gray and approximately 3 mm long. Male covers are narrower and smaller.

**Life history:** Life histories for these two species are similar. Crawlers hatch in June and begin feeding on leaves, branches and trunks. They mature in August, mate and deposit eggs. One or two generations a year.

**Overwintering:** Eggs beneath the female cover.

**Damage symptoms:** Twig and branch dieback and weakened plants.

**Monitoring:** Look for scale covers year round. Look for crawlers in June.

**Cultural control:** Conserving the numerous natural enemies by avoiding conventional insecticides.

**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, and pyrethroids:* Use only when scale populations are high to rescue trees; beneficial insects will also be killed.

*Dormant season oil treatments:* Use for armored scales that overwinter as eggs under female covers (delayed dormant).

*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:* Not effective against armored scales, which feed at different sites than soft scales.

**Biological control:** Parasitic wasps are important.

**Mortality risk:** Low

**Biorational pesticides:** horticultural oil, insecticidal soap, pyriproxifen

**Conventional pesticides:** acephate, bifenthrin, carbaryl, chlorpyrifos (nursery only), deltamethrin, fluvialinate, lambda-cyhalothrin, malathion, permethrin
Scurfy scale and Elm scurfy scale (continued)

Scurfy scale with recently settled crawlers. (W66)
Photo: Whitney Cranshaw