

Elongate Hemlock Scale

TREE DOCTOR TIPS

Elongate Hemlock Scale

(*Fiorinia externa*)

DESCRIPTION:

Elongate hemlock scale is an armored scale pest with a hard, waxy coating. Small, oblong, flattened insects appear on lower needle surfaces.

HOSTS:

Elongate hemlock scale is a pest of various hemlock species, including our native eastern hemlocks and Carolina hemlock. This scale is occasionally also found on yew, spruce and fir, although damage is not usually severe.

BIOLOGY AND SYMPTOMS:

This scale damages hemlock needles by inserting needle-like mouth parts into leaf tissue and removing cell fluids. Yellow spots develop on the upper surface of hemlock needles. When infestations are severe, needles turn yellow and trees defoliate. Trees appear off-color and have a sparse canopy.

MANAGEMENT:

These armored-type scales are difficult to control. If untreated, branches and possibly the entire tree may eventually die.

Natural insect predators exist, but they cannot be relied upon solely for effective control on valuable ornamental hemlocks. An early spring oil treatment, plus one or two applications during the growing season, can provide effective control. A large population may take

a few seasons to adequately control. Soil applied, systemic insecticides are also available where spraying is not practical. Injecting a complete, slow-release fertilizer into the soil may increase tree tolerance to scale damage and also speed recovery from previous scale feeding damage. Fertilization should only proceed after the scale population is under control.



FIGURE A. ELONGATE HEMLOCK SCALE, EASTERN HEMLOCK

*The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute PHC Handbook*.*

