

PINE NEEDLE SCALE—*Chionaspis pinifoliae*

HOSTS: Pine and spruce

IDENTIFICATION, LIFE CYCLE, AND DAMAGE: Mature scales are tiny insects that are covered by a white, oblong, waxy protective covering that is 2.5 to 3 mm in length.

Scales overwinter as eggs beneath female scales on the needles. In mid-May (eastern Nebraska) crawlers hatch and migrate to new needles on the tree. The crawlers then molt to an immobile nymph stage that feeds on the sap and secretes the scale covering. In the Central Great Plains (central Nebraska), scales mature in July and lay eggs for a second generation. In the Northern Great Plains, scales mature and lay eggs in the fall.

By August needles become spotted with white elongated scales. Damaged needles are discolored and may fall prematurely. Severely infested trees are less vigorous and occasionally may be killed.

CONTROL: Thoroughly spray foliage, branches, and trunk with a dormant oil in March or with malathion, diazinon, acephate, or chlorpyrifos in early June. Control is not effective after the insects have formed their protective waxy scales.



Pine needle scales