

## ARBORVITAE (CEDAR) LEAFMINERS

*Argyresthia thuiella and other species*



A cedar or arborvitae leafminer larva tunnels inside the foliage and can cause severe browning and canopy thinning. (photo by M. Kennedy)



A cedar "hedge" defoliated by leafminer outbreak loses the desired function of a screen.

**SYMPTOMS:** Larvae of several moth species tunnel inside the leaf tissue of cedars or arborvitae shrubs. This causes plants to turn brown and defoliate prematurely. In June, this damage can be distinguished from winter browning or desiccation by the distinct yellow to brown discoloration pattern of the prior year's foliage; the new growth is green. Leafminer damage is generally more severe on the lower  $\frac{3}{4}$  and interior portions of the canopy. Tear open the brown foliage to confirm leafminer activity by the blackish frass or larvae in the hollowed out leaves. Larger trees and hedges lose their effectiveness as a screen and become unsightly. Infested cedars become more susceptible to spider mites and gradually decline if treatments are not applied.

**CAUSE:** Cedar leafminers are the larvae or caterpillars of small,  $\frac{3}{8}$ -inch long, silver and tan moths that resemble miniature sod webworm moths in that they hold their wings close to their abdomens and not fanned out. In Canada, the moths emerge from the leaves in mid-June through mid-July and deposit eggs on the leaves. The larvae soon hatch and start mining the leaves the rest of the season and during the winter. Feeding continues into the early spring.

**SOLUTIONS:** Damage by these larvae can be minimized by two applications, one in early May and the other in late August. Cedars benefit from mulching and watering during dry periods. Keep cedars vigorous with patented, slow-release, Davey Arbor Green® fertilizer applications.