



Arborvitae leafminer

Argyresthia thuiella

Order Lepidoptera, Family Argyresthiidae; ermine moths
Native pest

Host plants: Arborvitae, junipers.

Description: Adult leafminers are silvery gray moths, approximately 8 mm in length. Mature larvae are green with a reddish tinge, black head, and about 6 mm long.

Life history: Adults emerge in June and July, leaving holes in tips of arborvitae or juniper foliage. Larvae remain in tips most of the year. Heavy feeding occurs in fall and early spring.

Overwintering: Larvae in terminals of foliage.

Damage symptoms: Infested foliage tips turn from green to yellow and then to brown, with damage symptoms visible in late summer and progressing through the following spring. Most severe damage is usually found on the south side of plants.

Monitoring: Shake foliage in June and July to determine the presence of adult moths. Larvae are present from late summer to the following spring. Look for brown tips in spring and fall. Break them open and look for larvae or their tunnels and frass.

Physical control: Remove infested tips for light infestations.

Chemical control: For heavy infestations, spray with a systemic insecticide in fall or early spring. Spray for adults with a residual insecticide in June and July if they are present in large numbers.

Biological control: At least 26 species of parasitoids have been reported in the United States and Canada, including *Pentacnemus bucculatricis* and *Apanteles bedelliae* (Britton and Zappe 1922; Juillet 1972).

Plant mortality risk: Low

Biorational pesticides: abamectin, spinosad

Conventional pesticides: acephate, carbaryl, chlorpyrifos (nursery only), fenoxycarb, imidacoprid, malathion, permethrin



Discolored foliage caused by arborvitae leafminer. (3)
Photo: Ted Bissell