

CHAPTER TWENTY-FIVE

Minor Insects

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Leafrollers

Lepidoptera: Tortricidae

Choristoneura rosaceana; *Archips argyrospilus*

Both species of leafroller are widely distributed throughout the United States. Larvae feed on a broad range of deciduous trees, perennial plants, and herbaceous weeds. In the Willamette Valley, leafroller larvae also feed on the new growth of Douglas-fir seedlings

Leafroller damage appears:

2+0

Late spring through summer



Figure 25-1. Leafroller larvae measure 7 to 19 mm (1/4 to 3/4 inch) in length.

between June and August. The most obvious symptoms are the presence of silk webbing and small, pale-green to olive-green larvae 6 to 20 mm long (1/4 to 3/4 inch) on new shoots (Figure 25-1). Insecticides such as diazinon and acephate are effective against leafrollers.

Seedcorn maggot

Diptera: Anthomyiidae

Hylema platura

The seedcorn maggot is an important pest of vegetable crops throughout the United States. Twice it has been reported to damage germinating Douglas-fir seeds in western Oregon and Washington. In most crops, damage is correlated with late sowing during cold, wet springs when germination and growth are

slowed. Symptoms of an infestation are dying germinants and the presence of a yellowish-white maggot 3 to 7 mm (1/8 to 1/4 inch) long (Figure 25-2). Infested beds can be treated with diazinon or chlorpyrifos. However, like any pesticide treatment of germinants, this should be undertaken carefully because of the high potential for phytotoxicity.

Seedcorn maggot damage

appears:

1+0

Late spring through

early summer

Lepidoptera:

Pyraustidae

Nomophila noctuella

(no common name)

This insect is found throughout the continental United States and is a general feeder on young, succulent plants. There is a single report of its having caused cutworm-like damage to Douglas-fir seedlings. Larvae 13 to 22 mm (1/2 to 7/8 inch) in length clip seedlings off above the ground and carry the severed tops into a tunnel in the soil. A unique damage symptom is a silk thread leading from the tunnel to the base of the clipped seedling. Insecticides effective against cutworms, such as diazinon, should also control this insect.

Cooley spruce gall adelgid

Homoptera: Adelgidae

Adelges cooleyi

The Cooley spruce gall adelgid is one of the most common insects found on Douglas-fir foliage in Oregon and Washington. The presence of the white, cottony tufts produced by the adult adelgid often causes alarm. However, most infestations do not significantly affect seedling vigor or survival. Damage appears as yellow spots on new foliage and distortion of elongating needles. Only the crawler stage of the insect is susceptible to control with insecticides. If control becomes necessary, carbaryl or endosulfan can be used against the crawlers as new growth flushes in the spring.

Cooley spruce gall adelgid
damage appears:
2+0
transplants
Spring through fall

Migratory grasshopper

Orthoptera: Acrididae

Melanoplus sanguinipes

The migratory grasshopper can be an occasional pest on pine nursery stock during the summer months in eastern Oregon. The risk of seedling damage is greatest dur-

Grasshopper damage appears
2+0
Summer

ing the years when a grasshopper outbreak occurs. Adult grasshoppers 25 to 38 mm (1 to 1-1/2 inches) long are easily observed feeding on both new and old needles (Figure 25-3). Multiple



Figure 25-2. Seedcorn maggots and damaged Douglas-fir seedling. Mature maggots are about 6 mm (1/4 inch) long. Weyerhaeuser Company photo.

applications of insecticides such as diazinon or carbaryl may be necessary to protect seedlings from this highly mobile pest.

Pine bark adelgid

Homoptera: Adelgidae

Pineus species

Bark adelgids can occur on pine seedlings grown in bareroot nurseries. These adelgids produce white, waxy secretions similar to those produced by Cooley spruce gall adelgid on Douglas-fir. Pine seedlings with heavily infested foliage or stems may become stunted and develop yellowish needles (Figure



Figure 25-3. Grasshopper feeding damage on ponderosa pine foliage in southern Oregon. Oregon Department of Forestry photo.



Figure 25-4. Pine bark adelgid secretions on lodgepole pine. Oregon Department of Forestry photo.

**Pine bark adelgid damage
appears:
2+0
Summer**

25-4). The insecticide endosulfan can be used to control bark adelgid infestations.

Selected references

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