LODGEPOLE PINE TERMINAL WEEVIL

Pissodes terminalis (Hopping)

DISTRIBUTION

Throughout the range of lodgepole pine, mainly south of 56° latitude.

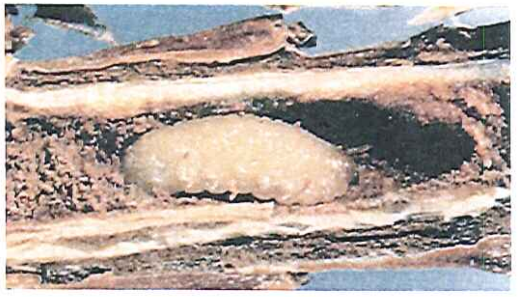

Figure 114. Yellowish-white larva mining leader of lodgepole pine.

TREE SPECIES ATTACKED:

Immature lodgepole pine, usually from 1 to 10 m in height.

INSECT DESCRIPTION & DAMAGE SYMPTOMS:

Larvae are stout, curved, legless grubs. The body is yellowish-white and the heads are brown. The length may reach 1.2 cm in the final instar. Adults are mottled, reddish-brown weevils with a long, curved snout. Their length varies from about 0.4 to 1.0 cm.

Pupae develop in the pith of the terminal shoot. They are white, about the same size and form as the adults, with the long curved snout visible.

Figure 115. Pupa within mined terminal.

The first sign of attack appears in late spring to early summer when small feeding punctures by adults appear at the base of the current year's leader, where the female adult lays her eggs. Resin droplets are associated with these wounds. The larvae then feed on the inner bark, girdling the shoot before migrating into the pith. By mid-summer, the current year's leader is chlorotic. The colour gradually changes from yellow to red to brown. In late summer to fall, large holes made by emerging adults may be seen midway down the current year's dead leader. Signs of attack from previous years include deformed

or multiple leaders and dead stubs along main stems. Dead stubs are very crisp, break easily, and are filled with coarse wood particles interspersed with pupal chambers.

DAMAGE:

This weevil prefers the most vigorous, open-grown trees, and causes terminal dieback of the current year's growth. In addition to growth loss, attacks reduce timber quality by inducing forked and crooked stems. The best time to evaluate damage is August to September, when attacked terminals are primarily red. Repeated attacks occurring over several years can result in deformed, multi-leadered trees.

SIMILAR DAMAGE:

Other terminal feeders, frost, and canker diseases can cause terminal death as well. Look for the larvae or pupae in the growing months, and the pupal chambers and adult emergence holes in older attacked stubs.

Figure 116. Killed and discoloured lodgepole pine leader due to attack. Only current year's growth is destroyed.

Figure 117. Fork defect caused by attack. Note the dead stub at the base of the fork.