



Shelterbelt Centre Pest Leaflets

YELLOW-HEADED SPRUCE SAWFLY

Hosts: Colorado and white spruce

Appearance and Life History: Adult yellow-headed spruce sawflies emerge in the spring just as the buds on spruce trees are beginning to swell. Females deposit eggs singly into the base of new needles. Larvae emerge within two weeks and begin feeding on the succulent needles. By early to mid-July the larvae are full grown and are about 20 mm in length. Full grown larvae have brownish-orange heads and green bodies marked with six greyish-green stripes. Fully developed larvae drop to the ground and overwinter in cocoons in the soil. The sawfly completes one generation per year.

Damage: Larvae of the yellow-headed spruce sawfly initially feed on the new needles, leaving only short brown stubs. Once the new growth is devoured, the larvae move back on the branch and feed on the older needles. By July, infested trees appear ragged and yellowish-brown especially near the tops. Heavily-infested trees may be completely stripped of foliage. Three to four consecutive years of moderate to heavy attacks can kill the tree. The yellow-headed spruce sawfly prefers young, open grown trees, resulting in

extensive damage to spruce used in plantations and shelterbelts on the Prairies.

Control: Infestations on a few small trees can be controlled by picking off and destroying the larvae when they are first noticed. For shelterbelts or large trees, chemical control can be achieved with one of the following insecticides: acephate, carbaryl, diazinon, dimethoate, malathion or permethrin. Insecticide application should be made when damage is first noted.



For further information please contact:

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