



**YELLOWHEADED SPRUCE SAWFLY**  
*Pikonema alaskensis*

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**Damage**

Although this is a native insect, the first serious outbreak of yellowheaded spruce sawfly reported from Maine occurred in stands of mature spruce along the coast south of Bath from 1947 through 1949 and required aerial spraying for control. Since that time most defoliation has been on ornamentals or young immature trees. At times this species can seriously defoliate young spruce in plantations and natural reproduction growing in open fields, or along edges of woods. Ornamental spruces are commonly infested.

**Hosts**

Its hosts are white, black, red, Colorado blue and Norway spruces.

**Life Cycle and Description**

The yellowheaded spruce sawfly larvae occur on spruce foliage from early June to late July and prefer to feed on new growth needles. The larvae have a reddish-yellow head and a dark yellowish-green body with gray-green longitudinal stripes and blend in well with the needles being fed upon. The colors darken as the larvae mature. When fully grown the larvae are about 3/4" long. Usually by late June or early July defoliation can be quite noticeable. Often the tips of many branches are stripped. Defoliation is especially noticeable in the upper portion of ornamental spruces. Older larvae will eat old needles when new foliage is lacking. The larvae become full grown in early to late July, drop to the ground, and spin tough brown cocoons in the duff in which they overwinter as prepupae. Pupation occurs in the spring.

The adults, which emerge in late May, are four-winged, fly-like insects with straw to reddish-yellow bodies and are about 3/8" long. The females lay pearly-white eggs in shallow slits at the base of current year needles. There is usually only one egg per needle. Eggs hatch in about a week.

**Control\***

Defoliation due to the yellowheaded spruce sawfly larvae becomes progressively greater as the larvae mature and may increase in intensity in any one area over a period of several years. Caught early enough the damage can usually be minimized or prevented. Infested trees can be sprayed in early June, soon after the larvae start actively feeding, with pesticides such as: acephate, carbaryl, or imidacloprid. Be sure to refer to the pesticide container label for specific use instructions.

**\*NOTE:** These recommendations are not a substitute for pesticide labeling. Read the label before applying any pesticide. Pesticide recommendations are contingent on continued EPA and Maine Board of Pesticide Control registration and are subject to change.

**Caution**

For your own protection and that of the environment, apply the pesticide only in strict accordance with label directions and precautions.