

# PINE SPITTLEBUG Aphrophora parallela (Say)

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# **Symptoms and Damage**

The presence of spittle masses on twigs of pine in May and June is indicative of the pine spittlebug. The immature stage or nymphs of this pest are black and yellow and conceal themselves within frothy masses of "spittle" composed of eliminated plant juices for protection from desiccation and natural enemies. The adults, which occur in July and August, do not cover themselves with spittle, are 3/8 inches long, brown and wedge-shaped with their wings folded roof-like over the body. Both nymphs and adults feed on plant juices. Their sap withdrawal and feeding punctures along twigs and branches can produce needle browning at branch tips (flagging), and in severe infestations, limb and tree mortality.

Pine spittlebug damage is a serious problem especially in Scotch (Scots) pine Christmas tree plantations where aesthetic value is reduced by needle discoloration and twig and limb mortality. Two or three years of very heavy infestation can result in tree mortality.

#### Hosts

White and Scotch pine seem to be preferred but jack and pitch pines as well as Norway, white and red spruces may also occasionally be attacked.

# Life Cycle

The overwintering eggs are usually deposited in dead branch wood or just under the bark of twigs and hatch in May. The young black and yellow nymphs move towards the tips of twigs where they soon start feeding and cover themselves with spittle. The nymphs tend to move to new locations towards the base of branches and the trunk as they develop, each time covering themselves with new spittle. The full grown nymphs range in color from light to dark brown and migrate to the needles and fascicles where they transform into winged adults. Adults mate and lay eggs throughout July and August.

### Control

**Non-chemical**: Damage and infestations may be reduced by silvicultural tree practices that maintain tree vigor, such as properly timed thinning; and reduction of egg laying sites such as removal of dead or dying branches and trees. **Chemical\***: Ornamental or plantation trees may be protected by spraying both the nymphs and adults with carbaryl, chlorpyrifos, or pyrethrin in early July when 95% of the spittle masses are empty.

\*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 Pesticides 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.