



Pear Thrips

Donald C. Booth, Ph. D., Entomologist

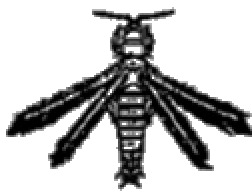
The pear thrips, Taeniothrips inconsequens (Uzel) is a tiny insect in the order Thysanoptera. There are over 600 species of thrips in North America, but only a few are serious pests. Most thrips feed on plants, attacking flowers, leaves, buds and fruits. Some thrips are particularly abundant in the flower heads of daises and dandelions. Several species of thrips feed on fungus spores, and a few are beneficial predators on mites. The pear thrips is an imported species that was first found in California in 1904.



Adult pear thrip

DESCRIPTION

The pear thrips adult is dark brown and only about 1/20 of an inch in length. Adult thrips are slender-bodied with four narrow, feather-like wings. The adult female has a sharp ovipositor used to insert eggs into plant tissue. The young thrips are white or yellow and lack wings.



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PLANTS ATTACKED AND RANGE

The pear thrips has been considered primarily a threat to fruit growers, but has recently begun to damage sugar maple, red maple, and beech. Other recorded hosts include pear, apple, apricot, cherry, grape, peach, plum, prune, poplar, shadberry, willow and currant. Although the pear thrips occurs along the Pacific Coast, in recent years it has been reported as a pest in Pennsylvania, New York, and New England.

DAMAGE AND LIFE CYCLE

The pear thrips has a single generation per year and overwinters in the soil. The adult thrips emerge from the soil in early spring and begin feeding just as the buds begin to expand. They have sharp, sucking mouthparts, which destroy plant cells. The females soon begin laying eggs in the petioles of leaves and fruit and the midribs of leaves. The young nymphs begin hatching in two weeks and feed in large numbers within the opening buds.

Development is completed in about four weeks, and the nymphs drop to the ground. The feeding and egg laying of the pear thrips prevents normal leaf formation by trees. Leaves appear mottled yellow to green-brown, dwarfed and cupped with brown



Damaged leaves

margins. This effect often resembles late frost damage. Severely attacked trees will drop all their leaves followed by refoliation in several weeks.

MANAGEMENT

Research on the impact and control of pear thrips in shade trees has only just begun. Much of what is known is based on the experiences of fruit producers. Preliminary recommendations for management of pear thrips include the following:

1. *Maintain Tree Vigor* - Trees attacked by pear thrips should be fertilized to promote the production of new foliage. These trees should also be watered deeply once a week during dry weather. Avoid other stresses such as aphids, leaf-feeding caterpillars, and deicing salt.
2. *Horticultural Spray Oil* - Early spring applications of spray ("dormant") oil, as the buds begin to open, has long been a recommended control for the pear thrips. Oil sprays will reduce populations of the emerging adults and lower the number of eggs laid. Note: Oil should be applied to maples only on days with good drying conditions - avoid warm, humid days or freezing nights.
3. *Systemic Sprays* - Applications of systemic insecticide, timed for shortly after bud-break, may reduce populations of hatching nymphs. Note: Systemic

treatments should not be applied to trees for food purposes (such as syrup production).