**Pine thrips**
*Gnaphothrips* sp.
Order Thysanoptera, Family Phlaeothripidae; thrips
Native pest

**Host plants:** Scotch and Austrian pines

**Description:** Adults are minute, slender insects with narrow, fringed wings that are carried flat on their back. Thrips are 1–2 mm long and black in color. Immatures are orange-yellow.

**Life history:** Adult thrips usually appear in late April to early May, as buds are breaking, to deposit their eggs. Several subsequent generations produce thousands of insects that feed on trees throughout the summer. Hot, dry weather favors their buildup.

**Overwintering:** Prepupae in the soil.

**Damage symptoms:** Discolored, crooked or curled needles with brownish wounds are found on the needles. Severely injured trees lose their needles and die.

**Monitoring:** With a hand lens, look for orange-yellow or black insects on the buds on new needles from late April to October. Also look for discolored, wounded needles.

**Cultural control:** Keep trees watered and healthy during hot, dry weather.

**Chemical control:** Spray trees thoroughly with insecticide in late April or early May to control adults before they lay their eggs. Two or three applications are necessary after adults lay eggs.

**Biological control:** No reports of natural enemies

**Plant mortality risk:** Low

**Biorational pesticides:** abamectin, spinosad

**Conventional pesticides:** acephate, chlorpyrifos (nursery only), malathion, permethrin

Damage to pine needles caused by pine thrips. (200)
Photo: John Davidson

Pine thrips adult. (201)
Photo: John Davidson