

Cankers

Atropellis Canker

Atropellis piniphila (Weir) Lohman and Cash

Hosts: Southwestern white pine, limber pine and ponderosa pine

Symptoms/signs: Cankers appear as elongated depressions covered with bark. *Atropellis* species produce two kinds of fruit bodies, one flask-shaped and one cup-shaped, on killed bark. The flask-shaped structure develops first. These are black, about 1 mm across, and contain multiple chambers where spores form. The cup-shaped structures are black with a brown interior, measuring 2-4 mm across when moist. They form on cankers 2 or more years old and are present year round. Dark brown mycelium permeates the bark and wood, creating a zone of bluish black stain that in cross-section is initially wedge shaped, pointing toward the center of the stem,



Figure 218. Fruiting structures on *atropellis* canker.

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becoming irregular with age. Species are separated based on spore morphology.

Biology: Infection begins in a branch axil on stems 5-30 years old and so there is typically a branch stub in the center of the canker. Some cankers start on internodes, reflecting the ability of the fungus to infect wounds or bruised bark as well as apparently undamaged bark of young stems.

Effects: Atropellis canker can be found throughout the region but its occurrence is infrequent in natural forest settings. Although Atropellis rarely kills trees, there are areas where outbreak levels are reached and mortality occurs in young trees. It can be damaging in Christmas tree plantations where it causes trunk deformities and economic loss.

Similar Insects and Diseases: Atropellis canker may be confused with other canker-causing fungi; however, atropellis is the only one that stains the wood.

Reference: 100