Pitch Canker of Pine

(Fusarium circinatum)

DESCRIPTION:
Pitch canker of pine is a severe fungal disease that creates numerous problems for pine trees, including yellowing and browning needles, branch death and formation of cankers.

HOSTS:
Monterey pines (often found in California) are extremely susceptible to pitch canker of pine. However, this disease impacts other species as well such as Shortleaf Virginia and slash pine. While loblolly and eastern white pine can be affected, they tend to be more resistant. All host trees are most susceptible when they suffer from wounds, drought stress or over-fertilization.

BIOLOGY AND SYMPTOMS:
Infections typically start in late summer or fall, but can occur any time of year. Insects like weevils and bark beetles transmit the pitch canker fungus. A signature symptom is brown cankers on trees that leak thick white fluid called resin. By early spring, the disease devastates trees, killing twigs or whole branches and turning needles yellow and brown. In some cases, the tree’s leading branch will turn black and curl.

MANAGEMENT:
The best treatment for pitch canker of pine is prevention. Because pine pitch canker can attack healthy trees as well as stressed trees, proper fertilization, watering, mulching and pruning that help maintain vigor and improve the tree’s defense against disease and insect activity in general, cannot be relied upon to reduce this disease. Fungicide treatments may not be reliable either. Talk to a professional arborist about a management plan that will meet your needs.

FIGURE A. FLAGGING OF TERMINAL SHOOT
(Photocredit: Edward L. Barnard, Florida Department of Agriculture and Consumer Services, Bugwood.org)

FIGURE B. CANKER LEAKING WHITE RESIN ON TRUNK
(Photocredit: David J. Moorhead, University of Georgia, Bugwood.org)

FIGURE C. PINE TRUNK WITH RESIN FROM EARLY STAGE CANKERS
(Photocredit: Elizabeth Benton, University of Georgia, Bugwood.org)