

(revision date:4/30/2013)

Common Diseases: Pseudomonas bacterial canker

Use Integrated Pest Management (IPM) for successful plant problem management.

Biology

Pseudomonas bacteria remain alive in old cankers, in buds, and on plant surfaces of infected trees and on many kinds of plants, including weeds and grasses. Bacteria may be systemic within the tree. The bacteria can be spread by splashing, windblown rain, irrigation water, insects, and infected bud wood and nursery stock. Infections occur during wet periods, especially during cool, wet weather. The bacteria enter the plant through natural openings and wounds. The most apparent symptoms are branch or trunk cankers, gumming, and branch dieback. Numerous woody ornamentals and fruit producing plants are susceptible: Cherry, plum, Asian pear, peach, blueberry, raspberry, etc. Cankers may or may not appear sunken, but significant gumming is usually associated with canker margins on Prunus species. However, gumming is not specific to bacterial canker. Other factors, such as injury, improper growing conditions and other disease can cause gumming, too. Cankers develop in the winter and early spring. When tree growth begins in spring, the canker stops expanding and the wound begins to close. At times, however, the canker may have girdled the branch or trunk.

Management Options

Non-Chemical Management

- ~ Plant trees properly and in suitable locations. Protect from rain and frost, if feasible.
- ~ Give the plants appropriate care. This keeps trees vigorous and helps them to better resist disease.
- ~ Remove and destroy cankered branches when first noticed. Perform disease management pruning or surgery during dry weather, and especially before fall rains.
- ~ Burn or cauterize cankers using a hand held propane burner to kill bacteria and lessen disease spread.
- ~ Conduct normal dormant season pruning in January to February, during dry weather.
- ~ Plant resistant varieties where bacterial canker is a problem. The Japanese flowering cherry cultivar 'Kwanzan' is resistant when mature but not when young. Most maple species (except sugar maples) are susceptible.

Select non-chemical management options as your first choice!

Chemical Management

IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides

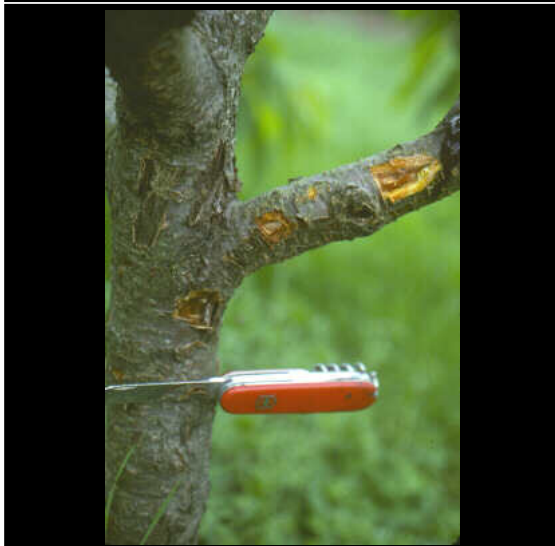
Refer to the specific host for registered pesticides effective in managing bacterial canker.

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Images



~ Caption: *Pseudomonas bacterial canker on cherry*
~ Photo by: R.S. Byther



~ Caption: *Incisions showing brown discoloration from bacterial canker*
~ Photo by: R.S. Byther



~ Caption: *Pseudomonas leaf spot*
~ Photo by: R.S. Byther



~ Caption: *Dead bud from Pseudomonas infection*
~ Photo by: R.S. Byther



~ Caption: *Pseudomonas bacterial canker*
~ Photo by: R.S. Byther