1-1-1976

Juniper Twig Blight

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Juniper twig blight is widely distributed in landscape plantings throughout Indiana. It is a fungus disease which renders the foliage of junipers unsightly and may eventually kill the entire plant. Although juniper twig blight is most severe on junipers, especially eastern red-cedar (Juniperus virginiana), it has also been found on various species of arbor-vitae, cypress, false cypress, fir, larch, white-cedar, and hemlock.

Symptoms

Diagnostic symptoms of twig blight are a browning of the tips of affected twigs and the appearance of ashen-gray cankers at the junction of healthy and diseased tissue. In advanced stages of infection, small, black fruiting bodies of the fungus can be found in the cankered areas. NOTE: Similar symptoms may result from winter injury, frost

Figure 1. Black fungus fruiting bodies on blighted twig.
damage or drought; however, injury due to such causes does not show the characteristic cankers or fungal fruiting bodies as described above.

New growth is most susceptible and most severely damaged by Juniper twig blight. Small diameter stems of new growth (foliage) are frequently girdled; stems over one-third of an inch in diameter are usually not girdled. Thus, well-established juniper plantings are not likely to show severe injury since the major branches are rarely affected.

Cause

Twig blight is caused by a fungus with the scientific name Phomopsis juniperovora. During prolonged wet, warm periods, as occur in the spring and fall, spores of the fungus are spread by rain to adjacent healthy twigs and/or plants, where new infections occur. Therefore, most infections occur in April, May, early June, late August and September; very few occur during dry summer periods.

Control

1. Cultural Control: a) During DRY weather, prune out infected branches; however, make as few cuts as possible since pruning forces development of juvenile tissue which is highly susceptible to the fungus. b) Space new plantings to allow for good air circulation. c) Avoid wounding while transplanting or cultivating.

2. Chemical Control: Unfortunately, no economical chemical control is available at present. The fungicide benomyl (Benlate 50 W.P.) has shown some promise of giving effective control; however, further study is required before a positive recommendation can be made.

3. Resistant Cultivars: At present, the selection of blight resistant species, varieties, and cultivars is the most practical approach to juniper blight control. Those juniper cultivars that have a history of repeated blight damage should be replaced whenever possible with a culturally similar but more resistant cultivar. In a 3-year study by Dr. Donald F. Schoeneweiss, Illinois Natural History Survey, 146 species and cultivars of junipers were examined. Those listed below were reported as resistant to Phomopsis twig blight.

**Juniperus chinensis** --
- cv. Femina
  - Iowa
  - Keteleeri
  - Pfitzeriana Aurea
  - Robusta
- var. sargentii
  - sargentii, cv. Glauc
- cv. Shoosmith

**Juniperus communis** --
- cv. Ashfordii
  - Aureo-spica
- var. depressa
  - cv. Hulkjaehrs
  - Prostrata Aurea
  - Repanda
- var. saxatilis
  - cv. Suecica

**Juniper horizontalis** --
- cv. Depressa
- cv. Depressa Aurea
  - Procumbens

**Juniper sabina** --
- cv. Broadmoor
  - Knap Hill
  - Skandia

**Juniper scopulorum**
- cv. Silver King

**Juniper squamata** --
- cv. Campbellii
- var. fargesii
- cv. Prostrata
  - Pumila

**Juniper virginiana** --
- cv. Tripartita

* Also reported resistant to cedar-apple rust and cedar-hawthorn rust.