

Fungal Leaf Spot on Trees

TREE DOCTOR TIPS

Fungal Leaf Spot on Trees (*Phomopsis* spp. and *Septoria* spp.)

DESCRIPTION:

Fungal leaf spot on trees is caused by various species of *Phomopsis*, *Septoria* and other fungal pathogens. Infections may cause partial or even complete defoliation.

HOSTS:

Septoria leaf spot can affect cottonwoods, aspens and balsam poplars. Other hosts include some fruit trees, crops, ornamentals, magnolias, willows, birches, cherry laurels, dogwoods and oaks. *Phomopsis* leaf spot may infect Eastern red cedar and creeping, Rocky Mountain and savin junipers, as well as dogwood, cherry, spruce, hemlock and other conifers and hardwoods.

BIOLOGY AND SYMPTOMS:

Septoria leaf spot is caused by *Septoria* fungi. Spots can be different sizes, colors and shapes. Trees lose some or all of their leaves and may weaken. Spores overwinter in infected plant debris, germinate in spring and are spread by rain or wind.

Young leaves (scales) are most susceptible to *Phomopsis juniperovora*, a fungus that discolors and kills twig and branch tips. Cankers may develop. The fungus can overwinter in infected plant tissue. Infections usually occur in cool, wet conditions.

MANAGEMENT:

While established trees may tolerate some foliage loss, young or small trees can be damaged or weakened greatly by fungal leaf spot. Rarely, established trees may die if defoliation occurs over consecutive years. Immature foliage is susceptible to leaf spot caused by *Phomopsis juniperovora*, but becomes resistant once it matures.

To help prevent fungal leaf spot, keep foliage dry by using soaker hoses or watering early in the day. Prune for good air circulation. Use good cultural practices so your trees stay

healthy enough to grow new leaves. Test your soil before fertilizing.

Fungal sprays won't cure infected foliage, but may help prevent new infections if they are used at the right time and as directed. An arborist can identify the pathogen attacking your tree and recommend a course of action.



A



B

FIGURE A. *SEPTORIA* LEAF SPOT ON PEAR

FIGURE B. CLOSE-UP, *PHOMOPSIS* DISCOLORATION ON JUNIPER
(photo credit: Bruce Watt, University of Maine, Bugwood.org)

The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute's Plant Health Care Book*.

