

Home Grounds Fact Sheet



Juniper Twig Blight

Juniper twig blight, a progressive dying back of twigs and branches, is caused by the fungus *Phomopsis juniperovora*. The disease causes devastation to young trees and hedges; trees more than 5 years old are less seriously damaged. Many species of juniper, arborvitae, white cedar, cypress and false-cypress are susceptible.

Symptoms

Blight symptoms first show up on recent growth of the lower branches. Beginning with the shoot tips, they die back toward the main stem. Eventually, death of the shrub may result. Drought, winter kill, male dog injury and transplant shock can cause similar die-back symptoms. However, the small black fruiting bodies of this fungus (up to 0.5 mm in diameter) present on recently killed leaves and stems are diagnostic for juniper twig blight.

Life cycle of causal agent

Phomopsis juniperovora overwinters in killed twigs and bark on the tree or the ground. Fruiting bodies of the fungus develop in the spring and, during wet weather, release many microscopic spores capable of causing new infections. The fungus attacks young, succulent shoot tips and may also enter the plant through wounds. If wet seasons prevail, it will spread throughout the shrub in a

few years or less.

Integrated Pest Management (IPM) Considerations

IPM is a common sense approach to pest control and plant care. It employs a number of measures to prevent, control or reduce plant problems. These include using resistant plant varieties, proper plant selection and placement, good aftercare and biological and/or mechanical controls. As a last resort, after all other remedies have been explored, a pesticide* that is least toxic to people and natural predators, can be considered. Prior to using any pesticides, plants should always be monitored for the degree of infestation and a sensible control measure considered.

* A pesticide is a substance that kills, or attempts to kill, a particular pest, e.g. insecticide, fungicide, herbicide, etc.

Control

Infected twigs and branches should be pruned about 2" below infected area into live wood and destroyed. Prune only when the plants are dry. Sterilize shears between each cut with rubbing alcohol or a chlorine bleach and water solution (1 part bleach to 10 parts water) to prevent spread of the disease. Severely infected plants should be destroyed.

Plants should be spaced to provide good ventilation; this will reduce high moisture conditions that favor this disease. Overhead irriga-

tion should be avoided. Wounding during transplanting and cultivation should be avoided for similar reasons.

Chemical pesticides may be available. If you choose to use a chemical pesticide, contact your local Cooperative Extension office for specific recommendations.

Spray at two-week intervals throughout the growing season. The effectiveness of fungicides has been good in some tests and poor in others. No fungicides have shown complete control of juniper blight.

DISEASE-RESISTANT JUNIPERS

All types in the following list have been reported resistant to blight under field conditions. They have also been reported resistant to cedar apple rust and cedar hawthorn rust.

Juniperus chinensis

Femina
Iowa
Keteleeri
Pfitzeriana
var. *sargentii*
sargentii Glauca

J. communis

Depressa
Saxatalis

J. sabina

Broadmoor
Knap Hill
Skandia

J. virginiana

Tripartita

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"This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are still possible. Some materials mentioned may no longer be available, and some uses may no longer be legal. All pesticides distributed, sold or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension specialist or your regional DEC office (631) 444-0341. Read the label before applying any pesticide. Cornell Cooperative Extension and its employees assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsement of products is made or implied."

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