

GET TOUGH

on
Dollar Spot
Fusarium Patch
Leaf Spot
Brown Patch
Red Thread

*Approval Pending

PROBLEM SOLVER

By Balakrishna Rao, Ph.D. and Thomas P. Mog, Ph.D.

Q: Do you have any tips on getting ground covers established under tree canopies without massive hand weeding? (Ohio)

A: Establishing ground covers under tree canopies is not very difficult; however, to have a weed-free ground cover, beds require a little bit of effort. The following guidelines should help you establish ground cover under trees with a minimum of weed problems and possibility of hand weeding.

Prepare the soil in the planting area by removing the sod and tilling the soil to at least 6 inches deep. If the soil is clay, improve drainage and incorporate organic materials such as leaf mold, compost, rotted manure, peat moss or similar materials to improve the aeration, penetration and infiltration. Based on soil test results, adjust the pH (to 6-7) and fertility levels.

Although plants can be planted at anytime during the growing season, for best results plant them during early spring and early fall. Plants like English ivy, pachysandra or myrtles are usually planted on one-foot centers and cotoneaster, junipers and euonymus three feet apart. For quick fill-up, plant them closer.

Weed problems can be eliminated or minimized by uniformly spreading mulching materials like peat moss, sawdust, wood chips and pine bark. Mulching also can enhance establishment by maintaining uniform temperature and conservation of moisture. Wood chips and sawdust materials can require the addition of nitrogen to speed up the decomposition. Pre-emergent herbicides, such as DCPA (dacthal), diphenamid (Dymid, Enide), norea (Herban), and trifluralin (Treflan) are available as

alternative tools to control weed seeds as they germinate. The above materials give better control of annual grasses than broadleaf weeds. Usually herbicides should be applied yearly until the ground cover fills in properly. This will minimize the need for hand weeding.

Keep the area properly watered during establishment and during dry periods.

You could also consider producing ground cover in a sod-like manner. Reports from Ohio State University indicate that plants like euonymus, English ivy and pachysandra can be grown in a sod-like manner and can be rooted into the soil and established 6 months after transplanting into the field. With this method, you should have little need for hand weeding.

Q: Please give your recommendations for killing tall fescue which is growing up through junipers we have covering a hillside. We have several thousand shrubs, so you can see the magnitude of the problem. The fescue appears to be perennial. What do you recommend that can be applied as a spray directly to the plants without any damage to them? (New York)

A: Dichlobenil (Casoron) is labelled for the control of fescue in juniper. Casoron granules are easily applied with a hand-held cyclone spreader and penetrate through the foliage dropping to the ground. Casoron, as a wettable powder, may be sprayed over plants, but because of the density of juniper foliage, it is best to direct the spray to the area beneath and around the plants.

A recent report from Ohio State University indicates that dichlobenil, formerly marketed only as Casoron by

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spores are colorless, one-celled, long and narrow, and curved or hooked on one end. The presence of beta spores makes identification of *P. juniperovora* fairly easy.

Benomyl is federally registered for *Phomopsis* blight and prevents infection of the new foliage.

Poor drainage, shade and overhead sprinkling seems to encourage development of this disease. Situations which discourage infection are well-drained beds, sunlight and watering underneath the branches.



Balakrishna Rao is plant pathologist and Thomas Mog is pest management specialist for Davey Tree Expert Co., Kent OH.

Questions should be mailed to Problem Solver, Weeds Trees & Turf, 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Please allow 2-3 months for an answer to appear in the magazine.

the Thomson Hayward Company, is now available under the following trade names and forms:

Casoron - Uniroyal Agricultural Chemicals (for commercial use);

Dyclomec - Acme Agricultural Products (for home garden use - pbi/Gordon); and

Norosac - Gordon's Professional Products (for commercial use - pbi/Gordon).

Q: Is there a disease which causes browning and dieback of spreading junipers? It must be a disease because we haven't seen any insects or red spiders. (Pennsylvania)

A: Dieback is caused by many things and for an accurate diagnosis, the plants or some of the affected branches must be examined.

Cercospora sequoiae and *Phomopsis juniperovora* are two fungi which cause a blight disease of junipers. Winter injury or drought will also result in symptoms similar to those you described.

Cercospora starts on the oldest needles of the lower branches spreading upward and outward; whereas, *Phomopsis* infects the youngest needles first.

P. juniperovora is more common than *C. sequoiae* on ornamental junipers. The following information should be helpful in identifying *Phomopsis* blight. Symptoms start at the tips of branches. The green color of the foliage gets lighter, then red-brown, and eventually turns to an ashen grey. Stems about 3/8-inch in diameter or smaller may have cankers because the fungus grows through the needles and into the stem. These cankers eventually girdle smaller branches. Sometimes small, black fruiting bodies (pycnidia) can be found on dead and dying tissue, usually they appear in the advanced stages of infection.

Phomopsis is somewhat unusual in that it produces two kinds of spores called alpha and beta spores. The beta

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