

PLANT DISEASE CONTROL NOTES

EXTENSION DIVISION • VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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Lawn Diseases

Control Series 115

FUSARIUM PATCH (PINK SNOW MOLD)

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Fusarium patch is caused by the fungus *Fusarium nivale*. The disease occurs commonly on bentgrasses, Bermudagrass, bluegrasses, fescues, and ryegrasses.

SYMPTOMS.- Fusarium patch usually becomes apparent with the first spring thaw as areas of pale yellow grass, irregularly circular in outline and ranging from 2 inches to a foot or more in diameter. Under conditions favorable for disease development, numerous infection centers may join together producing large areas of dead turf (see photograph). As the disease progresses, the affected grass changes in color to a whitish gray, with the individual leaves having a bleached appearance and feeling slimy when wet.

Under a snow cover, or during prolonged, cool wet weather, the diseased patches may be covered with a mat of aerial fungus threads which is at first white and then turns to a faint pink color with exposure to light--hence, the name Pink Snow Mold. Usually, only leaves are attacked, but the pathogen may infect crowns, causing a rot that results in complete killing of the plants. (over)

DISEASE CYCLE.- Although Fusarium patch is generally a disease of late fall, winter and early spring, it may occur at any time of the year. Optimum conditions for infection and disease development are periods of high humidity and air temperatures from 36°F to 45°F. Disease development will occur, however, up to 65°F. The fungus becomes dormant at 70°F and above. Snow falling on unfrozen ground is most conducive to disease development.

Surviving adverse periods in the dormant state in infected grass plants or in debris of previously diseased leaves, the fungus produces numerous spores whenever temperature and moisture conditions are favorable. Spores are carried to the leaves by air currents, where infection occurs by penetration through leaf spores.

Lawn management practices favorable to disease development are: (a) late fall nitrogen applications promoting a flush of succulent growth just before winter; (b) the use of mulch to protect grass from winter injury; and (c) allowing a heavy thatch to develop, which in turn, produces natural "moist chambers" for fungus growth.

CONTROL.- Resistant Varieties - The Congressional and Penncross varieties of creeping bentgrass show a high degree of resistance to Fusarium patch, while Colonial and Highland bentgrasses are highly susceptible to the disease.

Cultural Practices - Practices that prevent heavy thatch accumulation will reduce severity of the disease. Where Fusarium patch recurs year after year, the construction of barriers or the planting of windbreaks in such a manner as to reduce snow accumulation will aid in disease reduction. In the spring, to speed recovery, the matted grass in the affected areas should be broken up by brushing or raking before applying fungicides.

Chemical Control - Fusarium patch may be controlled by fungicidal applications. For most effective control, spray 1,000 sq. ft. with 4 gal. of water containing 2 oz. (11 tablespoons) Tersan 1991 50% WP. The first fungicide application should be made just prior to the first snow cover or the beginning of cold, wet winter weather. In areas of repeated or severe disease development, make a second application during mid-winter thaws and a third application after the final spring thaw.

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KEYS TO PROPER USE OF PESTICIDES

1. Read the label on each pesticide container before each use. Follow instructions to the letter; heed all cautions and warnings, and note precautions about residues.
2. Keep pesticides in the containers in which you bought them. Put them where children or animals cannot get to them, preferably under lock and away from food, feed, seed, or other material that may become harmful if contaminated.
3. Dispose of empty containers in the manner specified on the label.

SEE YOUR DOCTOR IF SYMPTOMS OF ILLNESS OCCUR DURING OR AFTER USE OF PESTICIDES.

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