

PROPER TRANSITIONAL MANAGEMENT HALTS DISEASES, ENSURES EARLY GREEN-UP

by AGRICULTURAL OPERATIONS OF THE
UPJOHN COMPANY

After battling tough, summer turf diseases on your course, autumn's cooler weather may seem a welcome respite.

But don't let your disease control defenses down! Fall's cooler, cloudier and shorter days mean leaf spot, dollarspot and snow molds are just waiting to attack your turf during the transitional period from early September to freeze-up.

"Traditionally, leaf spot (Helminthosporium) has been considered a spring and summer disease," states Dr. Clinton Hodges, professor of horticulture and plant pathology, Iowa State University. "However, our research indicates that most leaf spot activity may occur in the fall. That's why it's important that your fungicide control program be extended until freeze-up to control leaf spot activity and other common fall diseases."

According to Hodges, leaf spot may be potentially more devastating in the fall for the following reasons: 1) cooler temperatures and cloudy, wet weather, 2) shorter day length and 3) application of auxin-type preemergent herbicides.

"Cooler temperatures and cloudy, wet weather provide ideal conditions for the development of leaf spot. And as the day length becomes shorter, the aging process of leaves is accelerated. This can increase disease incidence and severity on older leaves," explains Hodges.

In late spring and summer, leaf spot causes small lesions or spots while in the fall, extensive yellowing of leaves can occur. One infection point may cause an entire leaf to yellow, notes Hodges.

A third factor, which Hodges believes may contribute to the severity of leaf spot, is the common, cultural practice of applying auxin-type pre-emergent herbicides for broadleaf weed control in the fall.

"Although we don't know how frequently this occurs, our studies show that the level of disease development from a single infection will be greater on the plant that has been exposed to auxin-type materials than on a plant that has not been exposed," states Hodges.

He concedes that although the use of these herbicides is part of a superintendent's normal cultural practices, he may counteract some of the possible negative side-effects by extending his fall fungicide control program.

"Disease-causing fungi such as Helminthosporium are present year round in the soil and thatch", states Joseph Niedbalski, TUCO plant health specialist, product/field development. "Because numerous disease organisms are very active in the fall, they directly affect the condition of grass as it enters dormancy."

For this reason, Niedbalski recommends using an effective fungicide, such as Acti-dione--the first in late October and the second in early November. However, if disease pressure is severe, earlier and more frequent applications may be necessary.

According to Hodges, the fall leaf spot symptoms are less severe in the Midwest than in Eastern states where the transitional period from fall to winter is longer and freeze-up occurs later. "Undercover leaves will show a distinct, severe yellowing in the fall and some mistakenly believe it's senescence. Actually, it's disease," he states.

In addition to an effective fungicide disease control program, superintendents must follow the proper cultural management practices during the transitional period to: maintain good surfaces for fall play, prepare turf for winter and ensure healthy turf for spring.

Niedbalski recommends using a balanced fertilizer to maintain adequate but not excessive grass growth for a good playing surface. Also, encourage root development by maintaining a proper watering program.

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Don't let your turf enter the transitional management period unprotected. "By extending your preventative fungicide control program, you can control leaf spot and other fall diseases and protect your turf from the ravages of the winter season," emphasizes Niedblaski. "A fungicide control program is more economical than turf renovation, and ensures early green-up of healthier turf for early play."

FOUR TRAITS OF A SUPER SUPERVISOR

Technical expertise alone does not make a good supervisor. According to effectiveness expert Robert Patchin, supervisors must have four personal traits in order to get the most from their workers:

1) **CANDOR** - If people don't view the boss as trustworthy, they will clam up and become uncooperative. A supervisor who is perceived as less than honest might seem to be working in his own interests rather than the company's.

2) **CONSISTENCY** - Any sign of favoritism quickly destroys the boss' credibility and influence. Particularly where discipline is concerned, fairness is all important.

3) **ACCESSIBILITY** - "It is comforting to know that your boss is available if you have a question or get into trouble," Patchin advises. But an open-door policy is not enough, nor is mere physical presence. Bosses who are always around may still have a problem with what Patchin calls "mental inaccessibility"...they are unsympathetic or only pretend to listen. Workers who receive a curt or uninterested response tend to stop coming back.

4) **PERSONAL COMPETENCE** - Although today's boss would be hard put to learn all the subordinates' jobs, he must know enough about their work to recognize good performance when he see it. He should also be able to provide information, choose materials and secure additional help for special problems. "Today," argues Patchin, "it's more productive to see yourself as the expeditor, not as the boss."

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