Low Sunlight on Closely Mowed Putting Greens

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Reports of distinctly slowed leaf growth and even thinning of closely mowed putting greens are occurring more frequently. This is associated with the shift to the very close mowing heights of 3.2 to 2.5 mm (1/8–1/10 inch) that are being practiced to meet the demands for more speed on putting greens. The problem may be associated with tree shade that extends onto a portion of the putting green, or in some cases it is associated with a two-to-four-week period of extended cloudy weather, especially during the autumn period.

The shade stress problem has been observed on both creeping bentgrass (Agrostis stolonifera) and (Cynodon dactylon x C. transvaalensis) cultivars, with somewhat greater thinning of the turf with the hybrid bermudagrasses. The cause is attributed to the very close mowing, because the problem was not previously noticed on Tifdwarf hybrid bermudagrass. However, the change to more close-mowing heights resulted in the shade stress being observed, including cultivars such as Tifdwarf, Champion, MS Supreme, and TifEagle. Controlled low sunlight studies have revealed Champion to be slightly better adapted to low sunlight conditions than Tifdwarf.

One approach to correcting this problem is by raising the cutting height in the affected area. This will allow increased leaf area for the capture of sunlight to be used in photosynthesis to produce more carbohydrates for shoot and leaf growth. If the problem is caused by tree shade, it frequently occurs on the perimeter area of the putting greens where a double trim mowing is practiced. Lifting the mower every other mowing or every two out of three mowings while passing over the shaded area is very beneficial. In the case of an extended cloud cover for two to four weeks, the practice of elevating the cutting height for the entire putting green surface is advisable. Subsequently, when more normal sunlight levels return, the cutting height should be returned to its normal lower level.

Fungicide Application

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Table 1. Common chemical name, trade names, and chemical class or properties of turfgrass fungicides.

Common Name	Some Trade Name(s)	Class/Type	Contact/ Penetrant ^c
Azoxystrobin	Heritage	Strobilurin	Р
Benomyl ^a	Benlate	Benzimidazole	Р
Chloroneb	Terramec SP, Terraneb SP	Substituted aromatic hydrocarbon	Р
Chlorothalonil	Daconil Ultrex, Concorde, others	Substituted aromatic hydrocarbon	С
Ethazol/Etridiazol	Koban, Terrazole	Substituted aromatic hydrocarbon	С
Fenarimol	Rubigan	Pyrimidine	Р
Fosetyl-aluminum	Aliette Signature	Ethyl phosphonate	Р
Flutolanil	ProStar	Benzamide	Р
Iprodione	Chipco 26 GT, Rovral	Dicarboximide	Р
Maneb	Pentathalon	Ethylenebis-dithiocarbamate	С
Mancozeb	Dithane M-45, Fore Rainshield	Ethylenebis-dithiocarbamate	С
Mefenoxam	Subdue MAXX	Acylalanine	Р
Myclobutanil	Eagle	Triazole	Р
Propamocarb	Banol	Carbamate	Р
Propiconazole	Banner MAXX	Triazole	Р
Quintozene	PCNB, PenStar, Revere, Terraclor	Substituted aromatic hydrocarbon	С
Terbuconazole ^b	Lynx	Triazole	Р
Thiophanate-ethyl	Cleary's 3336	Benzimidazole	Р
Thiophanate-methyl	Fungo 50	Benzimidazole	Р
Thiram	Spotrete, Thiramad	Dialkl dithiocarbamate	С
Triadimefon	Bayleton	Triazole	Р
Triticonazole	Triton	Triazole	Р
Trifloxystrobin	Compass	Strobilurin	Р
Vinclozolin	Curalan, Touche, Vorlan	Dicarboximide	Р

^a Voluntarily withdrawn from the turfgrass market, future status unknown.

^b Names proposed or pending U.S. EPA registration.

^c Contact = Fungicide is only active on leaf and sheath surfaces. Penetrant = Fungicide is absorbed and can provide activity both on the outside and inside of plant tissues.