

Turfgrass (continued from page 1)

blight during the warm weather of summer are most active when the weather conditions are 68° night temperature, 85-95° day temperature, and 98% relative humidity. During the cool weather of spring and fall, other *Pythium* species cause disease problems when the night temperature is about 50°, day temperature is about 65°, and relative humidity is 98%. Seedling diseases caused by a variety of species of *Pythium* are a problem in the South where overseeding is common when converting from warm-season to cool-season grasses to maintain playing conditions for the winter months.

Sclerotinia dollarspot. The following points were made: 1) the taxonomic situation of *Sclerotinia* is confused; 2) wide temperature ranges occur among different strains of the pathogen; 3) environmental factors, such as drought, nitrogen level, and mowing height, can lead to stresses which affect disease development; and 4) because *Sclerotinia* can develop tolerance to fungicides, it is best not to use just one chemical continuously in controlling dollarspot.

Helminthosporium diseases. More than one species of *Helminthosporium* can cause disease in turfgrass. While it is not generally difficult to isolate these organisms from diseased tissue, there is a continuing controversy over the taxonomic position of these fungi. The genus name *Drechslera* has been proposed to replace the genus name *Helminthosporium*. The subject of another talk in this session was the relationship of cycles of wetting and drying leaf surfaces to the subsequent production of reproductive structures by *Helminthosporium*. Cultural practices associated with turfgrass maintenance may affect the numbers of reproductive structures produced. In a third presentation, results were given of laboratory research concerning the effect of post-emergent herbicides on *Helminthosporium* leaf spot. While it is too early to relate this work to actual field practices, it appears that compounds which alter senescence also affect development of leaf spot.

Fusarium blight. The situation in regard to the cause of *Fusarium* blight remains unresolved and controversial. While one participant emphasized that this disease is caused by species of the fungus *Fusarium*, another speaker suggested that certain environmental and/or cultural stresses, such as temperature extremes, water stresses, thatch conditions, phytotoxins, fertilizer concentrations, mowing heights, soil structure, and pesticides, may lead to production of symptoms similar to those attributed to *Fusarium*. Problems have also arisen from the finding that *Fusarium* species which cause disease under greenhouse conditions often do not cause disease under field conditions.

Other disease problems. The major point about nematodes parasitizing turfgrasses was that while this problem is well known in the South, there is far less documentation of nematode diseases in turfgrasses in the North. The cause of spring deadspot of Bermuda grass still has not been determined despite intensive research efforts. An interesting correlation was reported: that the zone of incidence of spring dead spot appears to coincide with the zone in which 45°

temperatures occur in November. Whether there is any cause and effect relationship between disease development and late-fall temperature is not know. *Sclerophthora macrospora* has recently been shown to be the cause of yellow tuft disease of turfgrass. This disease, which could be of concern to sod producers, is primarily a problem under cool, moist conditions and is characterized by yellowing foliage in tufts with poor root development. The diseased tufts can be pulled from the soil easily. The fungus has an apparently wide host range among the grasses.

Golf Course Statistics Greg Bayor

Below are some interesting "stats" from the National Golf Foundation for the year 1978:

Number of golf courses in the United States:

Regulation	10,974
Executive	692
Par-3	1,018
Total Courses: 12,684	

Statistics below cover period from Jan. 1, 1978 to Dec. 31, 1978

Number of new courses reported open for play:

Regulation	58
Executive	15
Par-3	4
Total New Courses: 77	

Number of additions to already existing golf courses reported open:

Regulation	56
Executive	10
Par-3	0
Total Additions: 66	
Total new courses and additions opened for play 143	

Number of new courses and additions currently under construction:

Regulation	294
Executive	13
Par-3	10
Total under construction 317	

- Now that you've read these numbers, consider this:
- a. How many "Assistant Supers" are looking for their own course?
 - plus
 - b. How many Turf School graduates are seeking employment?
 - minus
 - c. How many "Supers" retire each year.

Now TOTAL this imaginary number to the above number of new courses and you can reach your own uncomfortable conclusion!