

TURFGRASS TRENDS

Volume 7, Issue 12 • December 1998

TURFGRASS PATHOLOGY

Anthracnose: A Problem in Tall and Short Cut Turf

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Anthrachnose damage in turf, caused by the pathogen *Colletotrichum graminicola*, is a recognized major disease of closely mown, highly managed golf course and sports turf, but it is also an increasing problem with taller-cut, well maintained home lawns and commercial sites. A recognized problem on bentgrass and annual bluegrass stands for golf and sports turf managers, anthracnose often goes undiagnosed and unrecognized on many well managed fine fescue, bluegrass, ryegrass and tall fescue ornamental turfgrass sites.

As home lawn and commercial site turf managers become more sophisticated in their overall management practices and as the turf stands that they manage increase in leaf density, the microclimate turf canopy diseases like anthracnose, brown patch, and *Bipolaris* leaf spot are doing more damage. Unfortunately, because these diseases have not historically been well known in the ornamental turf industry, the negative impact that they have is rising. With that increase in damage has come an increased level of frustration by managers and the clients or bosses that they serve.

The frustration for any turfgrass manager of not knowing what is causing damage on a managed site is only surpassed by the embarrassment of admitting to the boss or client that you don't understand what has happened and you don't have a plan to stop it from happening in the future.

As with the concept in physics that "for every action there is an equal and opposite reaction," turfgrass managers need to understand that increasing the quality of the turf by increasing management inputs is not accomplished in a biological vacuum. As the leaf and plant density increases, the microclimate of the turf canopy changes. It becomes cooler and the humidity level rises. This, in turn, changes the types and populations of pathogens. A low- or moderate-maintenance site that has only supported low populations of the previously mentioned foliar diseases, can often sustain much higher pathogen populations that begin to produce damage symptoms — particularly when the host plants are stressed by low soil moisture, compaction, traffic or any condition or pest that adversely affects the efficiency or mass of the root system.

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