TURFGRASS TRENDS

Volume 7, Issue 10 • October 1998

TURFGRASS PATHOLOGY

Disease Resistance in Bentgrasses Cultivars

By Eric B. Nelson

Bentgrasses have been used for golf and other sports turf since the late 1890s. The first reported occurrence of diseases on bentgrasses was in the early 1900s. Since then, the management of an ever-growing number of fungal disease problems has continued to be one of the more difficult aspects of golf turf management. To this day, disease outbreaks are one of the major obstacles to the maintenance of a smooth and aesthetically pleasing playing surface.

Despite the overwhelming problems with disease management in golf turf, little effort has been devoted to the development of bentgrass varieties with high levels of disease resistance. Since the turn of the century, we have continued to maintain a growing and effective arsenal of fungicides that are easy to apply and broad-spectrum in their activity. As a result, breeding efforts have been focused primarily on improving playing qualities, asuming that disease control could be effectively achieved with routine, albeit frequent and sometimes excessive, fungicide applications.

Few breeding efforts have ever been closely linked to pathology programs. Nearly all have been centered in agronomy or plant breeding programs, with only occasional input from turfgrass pathologists. Consequently, criteria used for the selection of improved vari-

IN THIS ISSUE

Disease Resistance in Bentgrasses Cultivars

History of Development of Bentgrass Varieties

The Nature of Resistance

Why Do We Have So Much Disease On Highly Managed Bentgrasses?

Greater Disease Resistance

Resistance Among Bentgrass Cultivars to Damping-Off Disease

TABLE 2. CURRENTLY AVAILABLE BENTGRASS VARIETIES

Creeping Bentgrass (Agrostis stolonifera)

18th Green	Backspin	Carmen	Cato	Century
Cobra	Crenshaw	Emerald	Imperial	Loft's L-93
Lopez	Mariner	National	Penn A-1	Penn A-4
Penn G-2	Penn G-6	Penncross	Penneagle	Pennlinks
Pennway	Princeville	PRO/CUP	Providence	Putter
Regent	Seaside	Seaside II	Sefton	Southshore
SR 1020	SR 1119	Trueline	Trust	Viper
C-1				

Colonial Bentgrass (Agrostis tenuis)

Allure	Astoria	Bardot	Egmont	Exeter
Highland	SR 7100	Tendenz	Tracenta	

Velvet Bentgrass (Agrostis canina)

Kingston	SR 7200
VIIIIVIIII	36 //11