## TurfGrass TRENDS



Volume 5, Issue 4

April 1996

## Maximizing Disease Control with Fungicide Applications:

The Basics of Turfgrass Fungicides Part Three: Plant and Pathogen Factors Affecting Fungicide Efficacy

by Eric B. Nelson Cornell University

An important consideration when estimating the overall efficacy of fungicide applications is the growth of the turfgrass plants. Vigorously-growing plants not only have a greater natural defense mechanism to pathogen attack, but they also take up penetrant fungicides more readily. Both situations make disease control more effective at lower rates or with fewer applications.

Vigorously-growing turfgrass plants are not to be confused with excessive turfgrass growth. Vigorously-growing plants are those in a balanced state of growth where top growth is such that the root system can supply adequate levels of water and nutrients, maintaining the plant in a metabolic balance.



## IN THIS ISSUE

■ Maximizing Disease
Control with Fungicide
Applications: The Basics
of Turfgrass Fungicides
Part Three: Plant and
Pathogen Factors Affecting
Fungicide Efficacy
1

Effect of turfgrass vigor on fungicides efficacy

Pathogen life cycles and disease cycles in targeting fungicide applications

Development of fungicide resistance and its impact on fungicide efficacy

Management recommendations

■ Herbicide Effects on Bermudagrass

Potential adverse effects

Measurement of root injury

Injury to rhizomes

Ask the Expert

■ In Future Issues 16

13

Adapted with permission