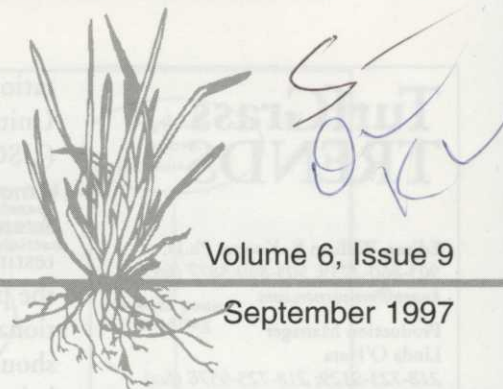


TurfGrass TRENDS



Volume 6, Issue 9

September 1997

Turfgrass Seedling Establishment

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Establishing turfgrass from seed as part of a new installation or renovation represents the most important stage in the life of the stand. Mistakes made during establishment evolve into chronic problems that often require additional inputs of water, fertilizer or pesticides to maintain an adequate stand. Many times, the mistakes made at establishment are a result of less than ideal conditions.

A clear understanding of the logistical considerations involved in establishing a healthy stand of turf is vital, such as; assessing site conditions, timing, soil preparation, selecting an adapted species or cultivar, seed rate, mulching, interval to traffic, etc. Optimizing each consideration to maximize establishment success, however, is often constrained as a result of construction, economic, scheduling issues, or environmental concerns associated with erodable soils. Each constraint then moves the manager further from the ideal. Without additional resources, will result in a less healthy stand more reliant on energy intensive inputs.

The establishment of a turfgrass stand from seed involves a myriad of decisions rooted in the basic principles of soil science, seed physiology, ecology, and pathology. Utilizing information based on these disciplines will lead to a healthier stand.

Soil Testing and Preparation

Improper soil preparation is a common reason for establishment failure. Soil preparation includes physical and chemical characteristics. Traditionally, soil nutrient testing has been recommended to ensure success, with particular emphasis on pH and phosphorus (P) levels. The soil reaction or pH is vital for determining nutrient availability and adequate P levels necessary for the energetic processes required during germination (see Hull, *Turfgrass Trends* Vol. 6 No. 5).

Recently, with the increasing use of modified rootzones, soil physical testing is becoming a standard practice. The increasing costs of modified root zones and the well publicized failures have lead to the establishment of an accredi-

IN THIS ISSUE

- **Turfgrass Seedling Establishment1**
 - Soil Testing and Preparation
 - Amending Problem Soils
 - Seed Germination
 - Seed Priming
 - Pregerminated Seed
 - Seed Rates and Carrying Capacity
 - Interspecific Competition

- **Turfgrass Seed Treatments For Control of Pythium Diseases And Better Establishment....8**
 - Seed and Seedling Pathogens
 - Conditions Favoring Pythium
 - Seedling Susceptibility
 - Seed Treatments
 - Biological Controls
 - Conclusions

- **New Tools for Overseeding Success14**