CORNELL UNIVERSITY TURFGRASS TIMES Winter 2003 • Volume 13 • Number 4

Modern Turfgrass Development

ny effort to improve resource efficiency begins with the selection of a properly adapted turfgrass. Adaptation is the precursor to determining competitiveness. Simply if a turfgrass is well adapted to an environment (soils, management and traffic) it will be competitive with pests, especially invading species such as annual bluegrass. Increased competitiveness will allow for more efficient use of resources.

An important tenet of integrated pest management (IPM) is utilizing all available resources to maintain pests below a population that would cause unacceptable injury or reduction in visual quality. Too often any discussion of IPM moves past turfgrass selection and immediately to altering the growing environment or using pesticides. For example, several years ago a new bentgrass variety was released with known susceptibility to dollar spot. Several industry leaders argued that this was an "easy disease to control" and the grass should be used because of other technical benefits.

Most turfgrass managers are unwilling to broach the subject of using new cultivars because of the disruption associated with the process. Research has shown that to successfully incorporate new cultivars, competition from the existing turf must be eliminated. Elimination can involve drastic vegetation management with herbicides or soil fumigants. Attention will be paid to the process by the athletes and the risks can be great.

In this day of "fast" greens and perfect lawns, using a grass with high shoot density seems prudent. Yet, few turfgrass stands over the age of 30 are renovated to utilize new cultivars. Is it because of the inconvenience of resurfacing? Are the new cultivars better in a way that matters, i.e., pest resistance, competitive with annual bluegrass or stress tolerant? Did the breeders miss the mark with new grasses or do we just not know enough yet?

The Process

Doug Brede, Research Director of Jacklin Golf, says "turfgrass managers need to hear about grasses from friends, touch them and continued on page 4

This Times

- 1. Modern Turfgrass Development
- 2. Short Cutts
 - Emmons honored
 - CU grad Watson Fellow
 - NYSTA keeps you informed
- 3. Scanning the Journals
 - Exploring salt tolerance
 - Reducing phosphorus
- 6. Horticulture Analytical Laboratory
- 7. Better Sprayer Design
- 8. Reduced & Nonchemical Turf Management
- 23. Turf/Landscape Field Day
- 24. Biological Control of Turfgrass Diseases

CUTT, "CORNELL UNIVERSITY TURFGRASS TIMES" is published four times per year by the Turfgrass Science Program at Cornell University, Ithaca, New York 14853. Address correspondence to: Cornell University Turfgrass Times, 20 Plant Science Building, Cornell University, Ithaca, NY 14853; phone: (607) 255-1629; email: fsr3@cornell.edu.

Editor: Frank S. Rossi, Ph.D.

 $\begin{array}{c} \textbf{Design \& Production: Ghostwriters, inc.,} \\ \textbf{Ithaca, NY} \end{array}$

Cornell University is an equal opportunity, affirmative action educator and employer.

CUTT is copyright © 2003 by Cornell University. All rights reserved. Permission to reproduce any material contained herein must be obtained in writing.

The use of product names or trademarks in this newsletter or by Cornell University does not imply any endorsement of such products.