AN INDEPENDENT NEWSLETTER FOR TURF MANAGERS

TurfGrass TRENDS

Volume 4, Issue 8

August 1995

IPM: What Does It Really Mean?

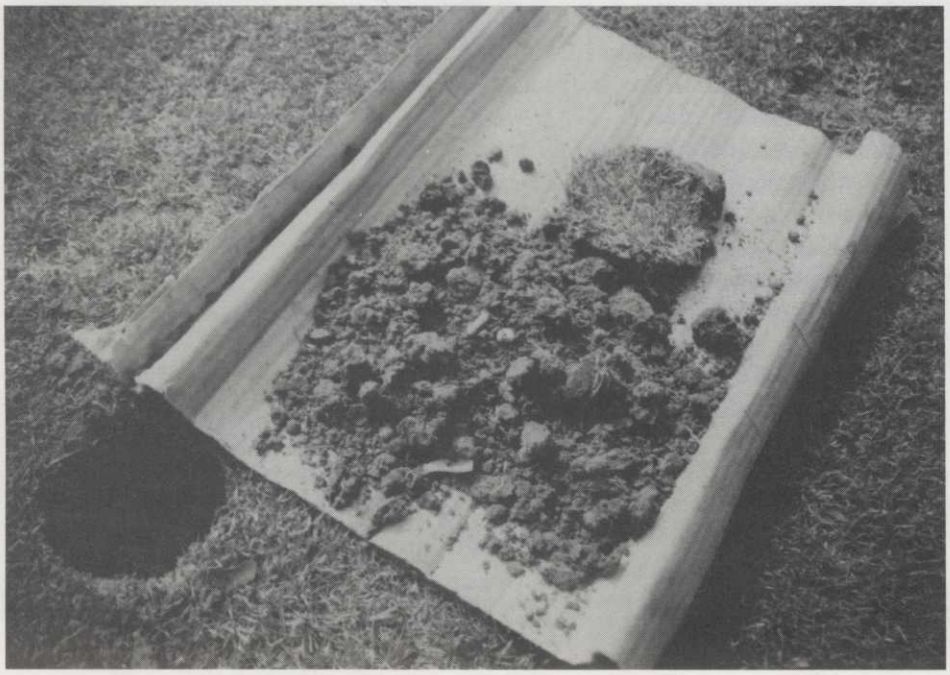
by Jennifer A. Grant

Integrated Pest Management (IPM) is a decision making process that strives to make the best use of all available management tools, including cultural, biological, mechanical, environmental, and chemical methods. IPM is also known as Integrated Turfgrass Management, Best Management Practices, or plain old common sense.

Precise definitions of IPM vary, but most agree on the following as its goals. On the one hand, they are to minimize losses to pests, costs, negative environmental effects, negative effects on human health and pesticide resistance potential. On the other hand, they are to maximize cultural, mechanical and biological pest controls, the effectiveness of chemical pesticides, turf quality and populations of beneficial organisms.

Any decisions based on these criteria involve compromise, and will depend on factors such as pest pressure, weather, quality demands, and intended use of the area. Turfgrass managers therefore select distinct IPM practices in various settings and circumstances. As practitioners you know that IPM is diverse and cannot be applied according to "cookbook" recipes. A weed problem in August will be handled differ-

Photography courtesy of Jennifer A. Grant



IPM involves careful examination of developments in the turf

IN THIS ISSUE

TurfGrass TRENDS

Maria L. Haber
Publisher
Robert G. Weinland
Editor
Christopher Sann
Field Editor
Dr. Richard J. Hull
Science Advisor
Joan Siregar
Circulation Manager
THE DEAN GROUP INC.
Layout & Production

TurfGrass Trends
1775 T Street NW
Washington, DC 20009-7124
Phone: 202-483-TURF
Fax: 202-483-5797
Internet: 76517.2451 @ CompuServe.com

TurfGrass Trends is published monthly. ISSN 1076-7207. The annual subscription price is $180.00.

ently by a golf course superintendent in Georgia, than by a lawn care professional in Colorado. In fact, neighboring lawns often have unique IPM programs.

Pest monitoring, or "scouting", is considered the backbone of any IPM program. This includes regular inspections of turfgrass health, pest presence and signs of pest damage. Short- and long-term strategies for pest management are based on the information collected. Decisions include the need for control measures, when to take action, and the optimal products and practices to use. Better timing and product selection can greatly improve the performance of pesticides, resulting in higher turfgrass quality. When considering biological control agents and other alternative management strategies, monitoring information is even more critical.

After monitoring and determining where action is needed, there are a variety of pest management methods to choose from. The "I" in IPM aims to create a truly INTEGRATED system by emphasizing cultural, biological, and mechanical pest control practices, and removing the focus from chemicals. Traditional pesticides are still an important IPM tool, but the need for them is reduced, sometimes eliminated, by better timing and diversification of pest control strategies.

IPM can be viewed in two phases. The first phase includes basic techniques such as monitoring, use of thresholds, and the optimal timing and selection of pesticides. This phase is sometimes referred to as "Integrated Pesticide Management." These methods are being implemented throughout the world, and have resulted in pesticide reductions up to 75% on turfgrass as well as many food and fiber crops.

In its second phase, IPM is taken a step further by substituting alternatives for chemical controls. Well-known basics are utilized, such as raising mowing heights, physical removal of weeds, and management of thatch and water to alleviate stress. Recently developed biological methods are also used. Products now or soon to be available for turfgrass insect control include parasitic nematodes and insect-attacking bacteria and fungi. Natural organic fertilizers, composts, and beneficial fungi are also on the market for disease prevention and suppression.

The techniques of the first phase of IPM are available to all turf managers. Many already follow these principles, while others could improve their pest management by monitoring more frequently and by using the information gathered as the basis for pest control decisions. In order to be successful with the alternative strategies of phase two, phase one of IPM must be a routine practice. Unfortunately, a full array of alternative solutions for turfgrass pest problems does not currently exist. Researchers and industry professionals are working to fill the gaps. Meanwhile, turfgrass managers must be content to perfect phase one of IPM, and use appropriate alternatives when available. Most IPM techniques are not new or high tech — just common sense principles being put to use.

Jennifer A. Grant, an Ornamentals IPM Specialist in the New York State IPM Program at Cornell University, has been working with the turfgrass industry for the last six years. Prior to joining Cornell, she was an Entomologist with the Entomological Research Laboratory of the University of Vermont. She has been active in agricultural research and education in Honduras and Indonesia. Ms. Grant has degrees in international agriculture and entomology from the University of Vermont. This is her first contribution to *TurfGrass TRENDS*.