

# Industry News

One result of the introduction of the new site-specific systemic fungicides is the need for improved pathogen monitoring in order to:

1) Optimize resistance management, especially for the site-specific fungicides that are most prone to resistance. Phytopathologists need to develop methods for defining biochemical markers and monitoring resistance and strategies for handling resistant populations, possibly including resistance thresholds. Also, findings need to be effectively related to regulatory agencies.

2) Devise a method for sampling soil and quantifying fungal populations and action thresholds similar to the nematode assaying programs. University and industry research scientists should continue to address population dynamics and economic thresholds for soilborne pathogens and provide information on whether a grower's fields need treatment.

Despite crop rotation, resistant varieties, seed dressings, and cultural practices, soilborne diseases still account for a significant proportion of crop losses attributed to disease. In estimating disease losses, "disease workers" in the respective crops rank soilborne diseases as follows:

<u>Crop</u>	<u>Disease</u>	<u>Rank</u>
Cotton	Seedling diseases	1
	Verticillium wilt	3
Peanuts	Nematodes	2
	Southern blight	3
Soybeans	Root and lower stem rots	1
	Nematodes	2

There is a great need in the United States for industry to offer better means of controlling soilborne pathogens. Frequently, several toxophores are available for controlling foliar pathogens, but with the exception of the fumigants, agents against soilborne pathogens are limited or absent. University personnel can help tremendously by improving screening techniques for candidate compounds. What does the future hold? Perhaps an integral approach of both chemicals and biologicals. Soil microbiologists must elucidate the needs and assist the grower in making decisions.

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Pesticide Regulation Handbook is a new comprehensive and practical guide published by Executive Enterprises Publications Co., Inc., in cooperation with the law firm McKenna, Connert & Cuneo and several industry experts in pesticide regulation. The 474-page handbook is available for \$125 (additional copies \$87.50 each) from Executive Enterprises Publications Co., Inc., 33 West 60th Street, New York, NY 10023.

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Ciba-Geigy Corporation has announced the building of a biotechnology center at the Research Triangle Park in North Carolina. Advanced research in plant molecular biology aimed at developing new products for Ciba-Geigy's Agricultural Division will be conducted at the center, with Mary-Dell Chilton as director.

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Items for this column may be sent to H. V. Morton, Ciba-Geigy Corporation, P.O. Box 18300, Greensboro, NC 27419.

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