EPA recently approved registration of: Apron 25WP (metalaxyl), Ciba-Geigy, seed treatment for control of Pythium damping-off on several crops; Bayleton 50WP (triadimefon), Mobay Chemical, foliar spray for control of powdery mildew and other diseases on apples, grapes, pears, wheat, barley, and pineapples; Bravo 500 (cholorothalonil), Diamond Shamrock, foliar spray for control of brown rot and other diseases of stone fruit and of leaf spot on dry beans and cowpeas; Ridomil 2E (metalaxyl), Ciba-Geigy, soil application for control of Phytophthora root rot of avocado and Pythium damping-off of cotton and tomatoes; Ridomil MZ 58WP (metalaxyl plus mancozeb), Ciba-Geigy, foliar spray for control of downy mildew on vegetables; Rovral 50WP (iprodione), Rhone-Poulenc, foliar spray for brown rot and blossom blight on stone fruits.

The registration of Ridomil MZ, a mixture of the systemic fungicide metalaxyl and the protectant fungicide mancozeb, is the first from EPA addressing the problems of fungicides vulnerable to potential resistance.

Management in industry continually asks for estimates of crop losses caused by plant pathogens. Plant diseases cause significant production losses annually, but few reliable loss estimates are available. Exceptions include the Cotton Council's loss estimates, published annually since 1952. The USDA published the last all-encompassing estimates in 1965—which points up the need for up-to-date crop loss estimates.

Industry is often asked to develop a bactericide, and the question that comes to mind is, which bacterial pathogen is of greatest economic importance in the United States? Erwinia amylovora? E. carotovora? Xanthomonas campestris? Pseudomonas syringae? P. solanacearum? Agrobacterium tumefaciens? Or some other pathogen? While the discussion continues among plant pathologists, industry must justify maintaining a bactericide screen for product development, even though bringing such a product to market costs $15 million. This is one reason for industry's increasing interest in natural products.

Allan J. Tomlinson was named chairman, president, and chief executive officer of the recently announced Diamond Shamrock-Showa Denko international biotechnology joint venture, with world headquarters in Painesville, OH. Tomlinson was previously president and chief executive officer of Diamond Shamrock Corporation. Other officers of the new venture are: W. Dale Wegrich, senior vice-president for finance and administration and interim director of research; Ronald L. December, vice-president for agricultural chemicals business; and John C. Dannemiller, vice-president for animal health business.

This new column prepared by the members of the APS Industry Committee broadens the scope of PLANT DISEASE by presenting news on developments, trends, and needs in industry. Items of interest may be sent to: H. V. Morton, Ciba-Geigy Corporation, P.O. Box 18300, Greensboro, NC 27419.
### Plants and Their Role in Pest Control

Richard C. Staples and Gary H. Toenniejs

This text presents the most current information on new methods for control of plant diseases. It is written by an international group of scientists on basic mechanisms and effects of various aspects of the plant pathogen relationship. Information is divided into three parts including compatible host-pathogen interactions, host-parasite incompatibility, and new directions in development of plants resistant to disease. 312 pp. 1981.

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