



Commercializing of biologically-based technology for the control of plant pests

CL Wilson and MA Jackson

Appalachian Fruit Research Center, ARS/USDA, 45 Wiltshire Road, Kearneysville, WV 25430, USA

The withdrawal or restricted use of a number of key synthetic pesticides for the control of plant pests has created a critical need for safe alternatives. Recognizing this need, pesticide regulators have been instructed to put the development of biologically-based technologies for the control of plant pests on the 'fast track' for registration. Researchers have responded to the need for biologically-based alternatives to synthetic pesticides through accelerated research in this area. At the 1996 Society of Industrial Microbiology Meeting at Research Triangle Park, North Carolina, 4–8 August, two symposia were held on the formulation and commercialization of biologically-based products for the control of plant pests.

One symposium was titled, 'Biologically-based technology for the control of plant diseases—from the cradle to the marketplace'. Speakers presented fundamental studies designed to lead to new technology for control of plant diseases that occur on the aerial and subterranean parts of

plants, as well as postharvest diseases of fruits and vegetables. Industry representatives presented information on the development and marketing of new biologically-based products for the control of diseases such as fireblight, root rots, and postharvest decay of fruits and vegetables.

The second symposium was titled 'Strategies for selecting and developing microbial biopesticides'. Speakers addressed technological constraints which are shared by all living microbial biocontrol agents and which have hindered their commercial use for the control of insects, weeds, and plant pathogens. Constraints to commercialization include the lack of availability of low-cost production methods, the need for development of stable microbial formulations with reasonable shelf-lives, and consistent pest control under field conditions. Strategies for selecting potential biocontrol agents and for designing experimental approaches to overcome these constraints were the focus of this symposium.

What follows are papers presented at these two symposia.