

Dr. Deborah R. Fravel

Deborah R. Fravel earned a B.A. degree in Botany from Duke University in 1972 and M.S. and Ph.D. degrees in Plant Pathology from North Carolina State University in 1976 and 1981, respectively. In 1982, she joined the United States Department of Agriculture (USDA), Agricultural Research Service (ARS), Soilborne Diseases Laboratory in Beltsville, MD as a Postdoctoral Research Associate, becoming a Research Plant Pathologist in 1984.

Since 2004, she has been the Research Leader for the Vegetable Laboratory, USDA, ARS, in Beltsville. Dr. Fravel is recognized as a leader in the field of biological control, particularly the ecology and mechanisms of biocontrol fungi, integration of biocontrol and fumigation, and formulation of biocontrol agents. Her early work identified a novel mechanism of biocontrol, the indirect production of hydrogen peroxide by the biocontrol agent *Talaromyces flavus*. The application of biological control to agricultural production systems is a recurring theme in Dr. Fravel's research.

She holds two patents for development of an alginate-based formulation that is used commercially. While employing diverse approaches to study the biological control of different diseases, Dr. Fravel has identified specific components of each production system that could be manipulated to enhance the success of biological control. In March 2010, Dr. Fravel joined the USDA, ARS, Office of National Programs as the National Program Leader for Plant Health where she is co-leader of the ARS National Research Program for Plant Diseases