

1989 - 1998



President 1989
D. E. Maathre

- 1989 The adoption of *Arabidopsis* for genetic studies stimulates the search for mutants with altered disease resistance, plant functional genomics, and the *Arabidopsis* genome sequencing project. This information will greatly affect disease control strategies in the twenty-first century.
- 1989 First Excellence in Teaching Award. Recognizes members for excellence in teaching plant pathology.
- 1989 First Excellence in Extension Award. Recognizes members that have made outstanding contributions by creating, developing, or implementing extension-related programs or materials or who have provided significant leadership in an area of extension plant pathology.
- 1989 First demonstration of oxidative burst in plant-bacterial interactions
- 1989 First use of the polymerase chain reaction (PCR) in plant pathology. Technique was used to amplify *Hop stunt viroid* cDNAs for sequence analysis.



- 1989 A 10,000 ft² addition is made to the APS/AACC facility in Eagan, MN. This addition was later named the Tarleton Wing.

- 1989 Demonstration that a cloned cutinase gene transforms a fungal wound pathogen into one capable of directly penetrating the host cuticle. The experiment strongly supports the role of cutinases in direct penetration by certain fungi.



President 1990
P. H. Williams

- 1990 First EPA-registered fungal biocontrol agent in the U.S. for plant disease control—*Trichoderma harzianum* T-22 (Root Shield, Bioworks, Geneva, NY). Used for control of soilborne pathogens.
- 1990 First identification and characterization of a bacterial elicitor. The *avrD* gene from *Pseudomonas syringae* pv. *tomato* produces an elicitor that produces a hypersensitive response on resistant soybeans.
- 1990 The *avrBs2* avirulence gene of *Xanthomonas campestris* is found to have an important virulence/fitness function. Similar findings follow showing that avirulence genes may in fact be effectors for pathogen virulence and fitness that have been co-opted by plant disease resistance genes.
- 1990 First phenylpyrrole fungicide is reported—fludioxonil. This pesticide was designed from the structure of the antibiotic pyrrolnitrin of *Pseudomonas fluorescens*.

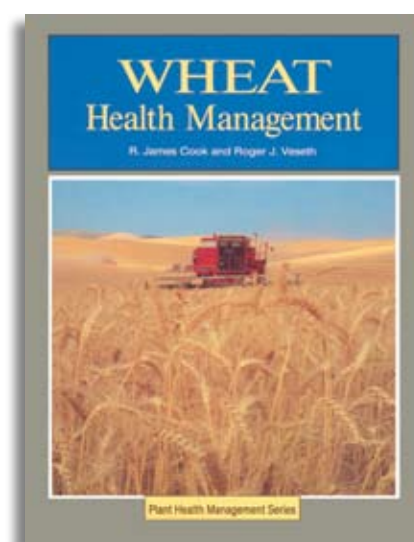


Citrus plant pathologists at the University of Florida, Citrus Research and Education Center, Lake Alfred, Florida. Top row (left to right): Jack Whiteside, Eldon Brown, L. W. "Pete" Timmer, and Ken Derrick. Bottom row (left to right): Ron Brlansky, Richard Lee and Jim Graham, 1989.

- 1990 Salicylic acid is shown to be associated with systemic acquired resistance; however, the identity of the initial systemic signal remains elusive
- 1990 John Niederhauser is awarded the World Food Prize for leading the worldwide expansion of potato production and productivity, and advancing disease resistance in potato
- 1991 The first fungal avirulence gene (*avr9*) is cloned from *Cladosporium fulvum*



President 1991
G. N. Agrios



- 1991 The first Plant Health Management Series is published by APS PRESS—*Wheat Health Management* by R. J. Cook and R. J. Veseth
- 1991 Fumonisin from *Fusarium moniliforme* described in U.S. crops. Shortly after, the production of fumonisins was demonstrated in a number of additional species of *Fusarium*. This was a new mycotoxin first described by South African researchers in 1988 and responsible for leukoencephalomalacia in horses.
- 1991 Importance of reactive oxygen species (radicals) in defense
- 1991 APS forms the National Plant Pathology Board to provide a presence and voice in Washington, DC. The mission of this board was to keep the members of APS informed of changes in regulations or legislation at the national level and when necessary to serve as a voice for the society. In 2000, this board is renamed the Public Policy Board and some of the responsibilities of this board in Washington, DC, were turned over to a private firm.



Poster presentations during the 87th APS Annual Meeting, Pittsburgh, Pennsylvania, 1995.