Extension Award

This award was established in 1988 by the APS Council in recognition of excellence in extension plant pathology. The award is presented to those involved in formal plant pathology extension with recognized superior contributions in developing and/or implementing leadership roles in local, regional, or national honor societies or professional organizations.

Walter R. Stevenson



Walter R. Stevenson, born in 1946, was raised in the Finger Lakes region of New York State. He received his B.S. degree in 1968 from Cornell University and his Ph.D. degree in 1972 in plant pathology from the University of Wisconsin-Madison under the direction of Dr. D. J. Hagedorn. After serving as assistant and associate professor of plant pathology at Purdue University from 1972 to 1979, he joined the Department of Plant Pathology at the University of Wisconsin-Madison as an associate professor and was promoted to professor in 1984.

Dr. Stevenson has developed an outstanding research program that focuses on the control of vegetable crop diseases. He has shown a unique ability to coordinate his research and extension activities so that they are fully complementary. His extensive research on the epidemiology of early blight of potato has focused on the effects of different fungicide application schedules and different cultivars on early blight disease development progress. In addition, analysis of disease progress in conjunction with research relating the stage of potato plant development and occurrence of airborne Alternaria solani inoculum to physiological time units (P-days) has significantly increased understanding of the epidemiology of potato early blight. These research results have been used to develop an effective forecasting system for early blight on potato. This forecasting program was combined with BLITECAST, the late blight forecasting program developed at the Pennsylvania State University, into a Potato Disease Management Program software package for microcomputers. In 1987 the use of this program saved over \$350,000 on 27,000 acres of potatoes in the Midwest, and its use continues to increase. This program was recently combined with modules, developed by colleagues at the University of Wisconsin, that integrate disease management with insect management, emergence prediction, and

irrigation scheduling into a potato crop management software package. His fungicide research program on potatoes led to national labels of fungicides for late blight control.

His efforts have also demonstrated the feasibility of controlling foliar diseases of potato by applying fungicides through centerpivot irrigation systems. Research on use of protectant fungicides on potato seed pieces led to the unexpected observation that thiabendazole applied to potato seed pieces of some cultivars caused reductions in stand establishment and yields. The effectiveness of his total program was recognized by the Indiana Vegetable Growers Association in 1980 and the Wisconsin Potato and Vegetable Growers Association in 1986 with awards of appreciation, and the Wisconsin Cooperative Extension Service in 1988 with an award for excellence.

Dr. Stevenson's extension and research activities also include development and testing of disease forecasting strategies for white mold of snap beans. Additionally, fungicide evaluations have provided the data necessary for the approval of fungicides for the control of Botrytis leaf blight of onion and bottom rot of lettuce.

His focus of research with mint growers has centered on the importance of growing pathogen-free rootstocks. He was instrumental in establishing a spearmint and peppermint nursery on one of the University of Wisconsin research stations to demonstrate the potential benefit of using pathogen-free propagation material.

Through his extension activities, he has been a leader in the application of computers to assist in the development of disease control recommendations and to provide access to current information. He has prepared over 140 Pest Profile modules that provide up-to-date information on diseases of 23 vegetable crops. These Pest Profiles can be accessed by county extension agents and growers through the University of Wisconsin-Extension computer system. He has served on numerous state, regional, and national committees concerned with computer applications in agriculture.