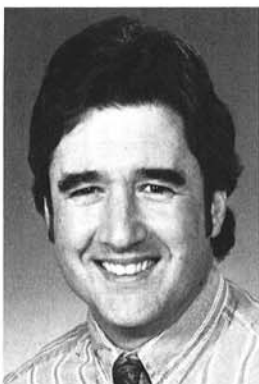


Ciba-Geigy Award

Sponsored by the Ciba-Geigy Corporation, this award is given to individual plant pathologists who have made significant contributions to the advancement of knowledge of plant diseases or their control. The award consists of a trophy and an expense-paid trip to Basel, Switzerland.

Wayne F. Wilcox



Wayne F. Wilcox is recognized for contributions to applied research and extension activities on fruit crop diseases.

Dr. Wilcox received a Ph.D. degree in plant pathology from the University of California, Davis, in 1982. He was assistant extension professor at the University of Kentucky from 1982 to 1984. He then moved to New York and is currently associate professor of plant pathology at Cornell University in Geneva, where his responsibilities are 70% extension and 30% research on biology and control of diseases of deciduous tree and small fruit crops.

Dr. Wilcox has made significant contributions to the identification of *Phytophthora* species that are associated with a serious decline of red raspberries. This decline was previously attributed to winter kill in many parts of the world. Dr. Wilcox isolated seven *Phytophthora* spp. that caused a root rot of raspberry, six of which had not been previously reported on the crop in North America. A species that is associated with the most serious decline of raspberry is morphologically similar to *P. fragariae*, although it has been previously identified as *P. erythroseptica* and *P. megasperma*. In cooperation with colleagues in Oregon and the United Kingdom, Dr. Wilcox showed that isolates from North America, the United Kingdom, and continental Europe, which were previously identified as *P. erythroseptica*, *P. fragariae*, and a unique variant of *P. megasperma*, are conspecific. They are very similar to, but distinguishable from, strawberry isolates of *P. fragariae*. The results of taxonomic studies have led him to propose that they be identified as a new variety within *P. fragariae*.

Dr. Wilcox has continued to study the biology and control of *Phytophthora* diseases of other fruit crops through cooperation with researchers in Ohio, Michigan, Wisconsin, and Massachusetts. *P. cinnamomi* was shown to be the cause of a common dieback of cranberries, and three *Phytophthora* spp. were shown to cause decline and death of peach trees in the Great Lakes region. Dr. Wilcox has also cooperated on research that identified isolates of *Trichoderma* and *Gliocladium* spp. for biological control of *Phytophthora* crown rot of apple trees. He is frequently called on by colleagues in research and extension to investigate diseases of fruit crops that may be caused by *Phytophthora* spp.

Dr. Wilcox's research has also significantly increased our understanding of the biology of *Monilinia fructicola* of stone fruits. He determined the effects of temperature and blossom

wetness on brown rot blossom disease development and showed that they are strongly affected by inoculum density of the pathogen. He showed that contrary to previous beliefs, overwintering cherry mummies in trees were more significant as a source of inoculum for fruit infection than for blossom infection. Dr. Wilcox showed that dicarboximide and certain sterol demethylation inhibiting fungicides have significant eradicator and antispore activities with respect to brown rot blossom blight infections. Cooperating with horticulturists at Geneva, the relative susceptibility of 54 sweet and sour cherry genotypes to fruit infection by *M. fructicola* was determined. The interactions between cherry species, fruit phenology, and inoculum concentration were also demonstrated in this study.

Dr. Wilcox has contributed to many APS functions. He was editor of *Biological and Cultural Tests for Control of Plant Diseases* and is an associate editor of *Plant Disease*. He has served as president of the Deciduous Tree Fruit Disease Workers and is a former member of the APS Extension Committee.

As an extension plant pathologist, Dr. Wilcox has earned the respect of other university colleagues, fruit growers, and the agricultural chemical industry. He publishes frequently in state, national, and international fruit publications. He was co-founder of the Cornell Small Fruit Newsletter, which is circulated in 38 states and in Canada. He has been a contributing author in three APS compendia. His applied and demonstrated research has contributed to IPM programs and our understanding of several important diseases of fruit crops. One project that involves the use of a minimal spray program for control of apple scab has been particularly successful and has generated much interest among growers and IPM specialists. This program saves eastern apple growers two or more applications of fungicide per year yet is highly effective for scab control even during years of heavy disease pressure. The program is based on the use of sterol biosynthesis inhibiting fungicides at four phenological stages of apple tree development and is integrated with critical periods for scab susceptibility and timings for insecticide applications.

Dr. Wilcox's ability to communicate with the agricultural industry is exemplified by his many invitations to speak at state-wide grower meetings in several fruit production states. He is recognized for clear and comprehensive oral and written presentations covering several diseases of fruits. He expresses a clear understanding and sincere appreciation for problems that the agricultural industry faces. He also has demonstrated an ability to work with all sectors of the industry in solving these problems. In the relatively short period of his career, Dr. Wilcox has become a very productive and successful practitioner of plant pathology and is commended for his efforts both nationally and internationally.