

NEWS



New York State Agricultural Experiment Station
Cornell University, Geneva, NY 14456-0462

FOR IMMEDIATE RELEASE: August 2, 1993

THREE SCIENTISTS AT GENEVA PROMOTED

Geneva, NY—Three scientists at Cornell University's New York State Agricultural Experiment Station, Geneva, recently received promotions. They are: Dr. Thomas Henick-Kling, department of food science and technology, and Dr. Roxanne M. Broadway, department of entomology to associate professor with tenure; and Dr. Anthony M. Shelton, department of entomology, to full professor.

Dr. Henick-Kling joined the faculty of the Geneva Station in 1987 as an assistant professor of enology. His appointment is 60 per cent extension and 40 per cent research. He is a native of Germany and came to Cornell after studying wine microbiology in Oregon and in Australia. Through his research publications and extension work he has established himself as an internationally recognized expert on wine fermentation.

Dr. Henick-Kling is responsible for research and extension in enology (study of wines). His research centers on the physiology of lactic acid bacteria of wine and the development of starter cultures. He has conducted fundamental research on learning how lactic acid bacteria are able to grow under the high acid conditions which are typical for wine. In collaboration with other scientists in the department of food science and technology Dr. Henick-Kling is studying the contribution of bacteria and yeast cultures to wine aroma. Winemaking trials are carried out to study the effects of viticultural practices and variations of vinification techniques on wine quality. Working with scientists in the department of horticultural sciences, Dr. Henick-Kling evaluates new grape varieties and newly selected clones of established varieties for their winemaking potential for New York. The extension service Dr. Henick-Kling provides includes technical information and assistance to the New York wine industry through the Wine Analysis Laboratory, industry workshops, special seminars, visits to individual wineries, and through technical and lay publications. With his broad experience in wine evaluation he serves as a judge in regional and national wine competitions.

Dr. Broadway joined the department of entomology in 1987. She was charged with developing a program on biochemical mechanisms by which horticultural crop plants resist colonization or damage by pest insects. She has established herself as a recognized expert in this area of insect/plant interactions.

She has developed an expanding program on the purification, characterization, regulation, and mode of action of proteinaceous natural products from plants, fungi, and bacteria. These products have the potential to control the growth and development of insect pests. In her search for new biologically active natural products, Dr. Broadway has become involved in a cooperative project to evaluate microbial metabolites from aging

composts for their ability to control the growth of soil insect pests and for their effectiveness in controlling plant pathogenic fungi. She has become one of the leading authorities on the impact of plant proteins on insect digestive physiology. She has received competitive federal funding for this work and has served as a panel member for the U. S. Department of Agriculture's competitive grants program. Dr. Broadway has also been invited to speak at numerous national meetings, to review manuscripts for prominent journals, has published in pre-eminent journals in her field, and has written a review article for the *Annual Review of Entomology*.

Dr. Shelton received his BA in classics and philosophy at St. Mary's College of California and his Ph.D. in entomology in 1979 from the University of California at Riverside. He came to Geneva as an assistant professor of entomology in 1979 and was promoted to associate professor with tenure in 1985. In 1986 he received a fellowship from the Dutch government and spent six months in Holland. He has established a reputation as one of the leading scientists in the world in the development of improved integrated pest management (IPM) strategies for vegetable insect pests. Dr. Shelton has worked effectively in diverse areas, including developing improved sampling techniques and action thresholds, biological control, use of biorational pesticides, and plant resistance. He has become a respected expert on the use of microbial control agents in the field.

Dr. Shelton is active in international research and has cooperative projects in Asia, Africa, Central America and Europe. The main focus of his present research is control of diamondback moth, a pest of cabbages and related crops in New York and throughout the world. Much of his present work involves studying insecticide resistance of this pest and developing alternative strategies such as biological control and host plant resistance. Results of this research will have a substantial impact on the management of this pest in the Northeast United States and in other parts of the world.

Dr. Shelton is a prolific writer of scholarly papers that appear in scientific journals, and he has participated in numerous symposia, national and international meetings, invited lectures, and many industry/grower conferences. He also teaches in Ithaca and has advised graduate students who have gone on to become productive entomologists at other universities. Dr. Shelton has been active in community affairs by coaching Little League and serving on the Board of Education and the Board of Geneva Concerts, Inc.

##rek##