

Centennial Feature

Plant Pathology in 1908/2008

Plant pathology has come a long way in the century since APS was founded. Can you imagine what it might have been like sitting in the audience at the first APS annual meeting? Now is your opportunity to take a few moments and step back in time during this special Centennial Session being held on Monday, July 28. The session format will not only examine the state of the discipline of plant pathology in 1908 via historical presentations on phyto bacteriology and chestnut blight, it will also take a unique look forward to illustrate the progress of our science in the last 100 years.



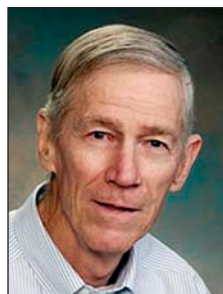
Erik L. Stromberg

Erik L. Stromberg, professor and extension plant pathologist, Department of Plant Pathology, Physiology and Weed Science, Virginia Polytechnic Institute and State University, will moderate the session.

Sandra Anagnostakis, Department of Plant Pathology and Ecology, The Connecticut Agricultural Experiment Station, will be **Flora W. Patterson** during the first 1908 presentation. She will be dressed in period clothing and have some of the lantern slides from the original presentation based on the paper “The chestnut bark disease” of **H. Metcalf** and **J. F. Collins**, Bureau of Plant Industry, USDA, which was presented at the first APS meeting held in Boston in 1909 and the abstract published in *Science* in 1910. The chestnut bark disease was first identified in 1904 when samples

were sent to the Bureau of Plant Industry from the New York Zoological Park. In contrast, **Gary Griffin**, professor emeritus, Department of Plant Pathology, Physiology, and Weed Science, Virginia Polytechnic Institute and State University, will provide the contemporary presentation, “Recent advances in chestnut blight research and management of chestnut blight on American chestnut.” During and following the killing of about 3.5 bil-

lion canopy American chestnut trees in eastern forests by chestnut blight in the first part of the twentieth century, research was initiated by state and federal agencies to restore the American chestnut to these forests. At this time, several approaches are showing promise for American chestnut restoration. These include breeding for blight resistance by backcrossing American chestnut–Chinese or Japanese chestnut hybrids to American chestnut for several generations; intercrossing large, surviving American chestnuts with low levels of blight resistance through several generations; inoculating blight-susceptible saplings and large, surviving American chestnut grafts or seedlings with hypovirulent strains of the chestnut blight fungus; producing transgenic American chestnuts; and using integrated



Gary Griffin

approaches that include the above and forest management practices, such as site selection and management of forest competition. The present status of research and potential of each of these approaches will be discussed.



Sandra Anagnostakis

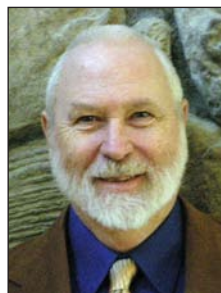


Jeffrey B. Jones

For the presentations on phyto bacteriology, **George H. Lacy**, professor emeritus, Department of Plant Pathology, Physiology and Weed Science, Virginia Polytechnic Institute and State University, will be dressed in period clothing and will portray **Erwin Smith**, USDA. The presentation will use illustrations from Smith’s original

treatise on “Bacteria in relation to plant diseases” published in 1905 and 1911. This was the “Golden Age” of phyto bacteriology. Following Fischer-Smith debates as to whether bacteria caused plant diseases, American plant pathologists began describing the bacterial causal agents of diseases. At the inaugural meeting of The American Phytopathological Society held in Boston, Smith presented descriptions of three bacterial agents of disease.

Descriptions of these bacteria from this APS meeting and his treatise, “Bacteria in relation to plant diseases,” vol. 1, 1905, and vol. 2, 1911, will be compared with *Bacillus phytophthorus*. Providing the contemporary perspective, **Jeffrey B. Jones**, professor, Department of Plant Pathology, University of Florida, Gainesville, will present, “Contemporary description of phytopathogenic bacteria: How they are described and how they should be described.” Biochemical, morphological, immunological, and molecular methods for bacterial description and phylogenetic analyses will be discussed.



George H. Lacy

Make sure to mark this unique session on your meeting agenda for the APS Centennial Meeting. ■