

1919 - 1928



President 1919
C. L. Shear

1920 First textbook on bacterial plant pathogens—*An Introduction to Bacterial Diseases of Plants* by E. F. Smith (W. B. Saunders Company, Philadelphia)



President 1920
W. A. Orton

1921 First attempt to inoculate soils with antagonistic fungi to control damping-off. Using saprophytic organisms isolated from the soil, substantial suppression of *Pythium debaryanum* was observed.



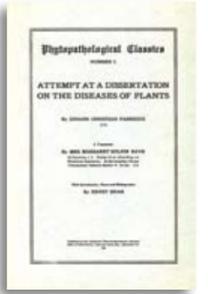
1921 Controlled environments are recognized as a critical component of plant disease research. Growth chambers were used to show how changes in temperature could influence disease. This leads to the development of sophisticated growth chambers.



President 1921
D. Reddick



1926 APS begins publishing *Phytopathological Classics*—the first was a translation of J. C. Fabricius (1774), *Attempt at a Dissertation on the Diseases of Plants*



1926 A growth regulator produced by "bakanae" fungus (*Gibberella fujikuroi*) is shown to cause excessive growth of rice seedlings. By 1938, this growth regulator was purified and named gibberellin.



President 1925
C. W. Edgeron

1926 Microbes producing "toxic substances" in the field may be responsible for the suppression of potato scab. This was the first evidence of antibiosis leading to disease suppression.



President 1926
I. E. Melhus

1927 Cypress canker (*Seiridium cardinale*) is reported in northern California. Greatest damage was to Monterey cypress, although the Italian cypress as well as other species of American and exotic Cupressaceae were also affected.

1927 Evidence of direct mechanical penetration of a fungus into host plants—*Botrytis* can directly penetrate thin gold foils. Others later showed that cutinases and/or pectic enzymes are required.



President 1927
M. F. Barris

1928 Dutch elm disease, caused by *Ophiostoma ulmi* (= *Ceratocystis ulmi*), introduced into the U.S.

1928 First antibiotic (penicillin) is discovered by Alexander Fleming. This discovery would pave the way for advances in the medical field as well as open the door to a new therapy for bacterial plant disease control.



President 1922
E. C. Staekman

1922 Discovery that a planthopper (*Peregrinus maidis*) could transmit a plant virus causing yellow stripes (*Maize mosaic virus*). Aphid transmission is described shortly thereafter, sparking a large increase in research on insect transmission.

1923 First edition of *Bergey's Manual of Determinative Bacteriology* published—the tribe Erwineae was established to contain all genera of plant-pathogenic bacteria, which were grouped into two genera (*Erwinia* and *Phytomonas*)



President 1923
G. R. Lyman

1925 The subtitle *An International Journal* is added by the *Phytopathology* journal. H. M. Quanjer of Wageningen, Holland, was the first editor for Europe, but the European editor position was discontinued in 1943.



President 1924
F. D. Fromme

1925 A detailed plant pathology laboratory manual, *Laboratory Outlines in Plant Pathology*, is written by H. H. Whetzel, L. R. Hesler, and C. T. Gregory. This model lab manual set the standard for plant pathology labs.



President 1928
H. P. Barris

1928 Plants infected with TMV are found to have a specific antigen to the virus—discovered using precipitin serological assays

1928 TMV-infected plants are shown to undergo a shock phase and a recovery phase. This phenomenon that was repeatedly described for other virus diseases and the recovery is eventually shown to be RNA gene silencing by the host.



Annual summer meeting in conjunction with conference of the cereal pathologists, July 1921.



University of Minnesota, Department of Plant Pathology, 1922.