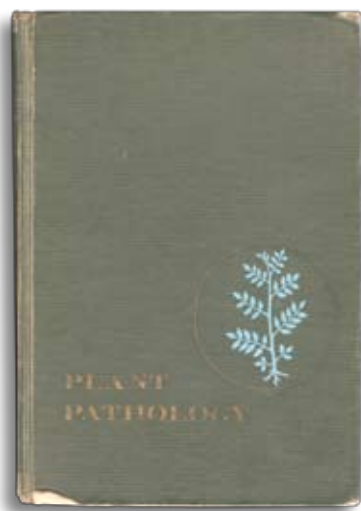


# 1969 - 1978



President 1969  
A. W. Dimock

- 1969 EPIDEM developed—first computer simulation for the development of a disease epidemic is created—early blight on tomato and potato
- 1969 *Journal of Nematology* is initiated in January. This is the first nematology journal published in the U.S.—S. D. Van Gundy was the first editor



- 1969 The first edition of *Plant Pathology* by G. N. Agrios (Academic Press, New York)



President 1970  
D. E. Ellis

- 1970 Norman Borlaug receives the Nobel Peace Prize for his lifelong work on semi-dwarf wheat which led to increased food supply, preventing hunger and famine. Borlaug improved semi-dwarf wheat varieties, but more importantly, was instrumental in introducing these varieties into India, Mexico, and Pakistan, igniting the “green revolution”.



- 1970 Southern corn leaf blight epidemic caused more than 1 billion dollars in loss to the corn industry. New race of *Cochliobolus heterostrophus* (*Helminthosporium maydis*) is highly virulent on corn with the Texas male sterile cytoplasm (race T).

- 1970 Discovery of major gene resistance in a wild forest pathosystem—sugar pine (*Pinus lambertiana*) resistant to white pine blister rust (*Cronartium ribicola*). In 2003, this was shown to be part of a gene-for-gene system with other white pines and rust biotypes.



President 1971  
T. Kommedahl

- 1971 Coconut lethal yellows arrives on the mainland of Florida, killing thousands of trees. This disease was originally discovered in the Florida keys in the 1950s but was restricted to Key West. This phytoplasma disease of coconut palms killed 15,000 trees by 1973, and by 1975, 75% of the coconut palm trees in Dade County were infected or dead.
- 1971 The viroid is discovered. A small, single-stranded, non-protein-coding RNA lacking a coat protein is demonstrated to be the causal agent of the potato spindle tuber disease. This is the first of more than a dozen crop and ornamental diseases now known to be viroid incited.
- 1971 Toxin from corn leaf blight pathogen (*Helminthosporium maydis* race T) acts on mitochondria of the corn plant
- 1972 Discovery of spiroplasma. A helical, motile, wall-less prokaryote. The term “spiroplasma” was coined and is eventually adopted as the formal genus name.



President 1972  
J. P. Fulton

- 1972 First commercial biological control. Nonpathogenic *Agrobacterium rhizogenes* (= *A. radiobacter* var. *radiobacter*) isolate K84 used to control pathogenic *Agrobacterium tumefaciens* (= *A. radiobacter* var. *tumefaciens*) on peach seedlings. When applied to stone fruit tree seedlings as a root dip, it protected them from infection by pathogenic strains of this same bacterium.

- 1972 APS operations move into new facility in Eagan, MN—APS and the American Association of Cereal Chemists purchase and share space in the 12,000-ft<sup>2</sup> facility.

- 1972 EPIMAY developed—first computer simulation of a plant disease epidemic using biological data. Developed for Southern corn leaf blight.



President 1973  
H. L. Barnett

- 1973 Causal agent of Pierce’s disease discovered. A rickettsia-like organism (*Xylella*) that is restricted to the xylem tissue.

- 1973 APS hosts the Second International Congress of Plant Pathology in Minneapolis, MN

- 1973 Discovery of *Bdellovibrio*—bacterial parasites of bacteria

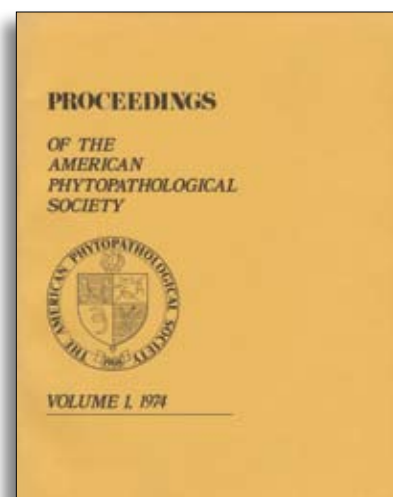
- 1973 Discovery of a coryneform bacterium as the probable causal agent of ratoon stunting disease of sugarcane

- 1974 *Caenorhabditis elegans* selected as a research model for biology—this paper documented the first extensive genetic studies with this organism following its selection in the 1960s



President 1974  
R. J. Green, Jr.

- 1974 APS published the first *The Annual Proceedings of The American Phytopathological Society*. The proceedings publication was discontinued with the 1977 issue.



- 1974 Discovery of Ti plasmid of *Agrobacterium tumefaciens* and its role in crown gall. Shortly after this discovery, it was determined that portions of these plasmids are incorporated into plant cells following infection. These finding lead to the establishment of genetic transformation systems for plants and stimulated interest in the molecular genetics of plant pathogens.

- 1974 *Pseudomonas syringae* strains found in decaying litter were discovered to be active ice nuclei, catalyzing the formation of ice in supercooled water.

- 1974 Turbulent gusts of wind are demonstrated to play a role in the removal of spores and their escape from a canopy.

- 1975 The International Meloidogyne Project (IMP) is initiated. This project, which operated from 1975 to 1991, involved more than 70 countries and greatly advanced nematology. This included documenting the worldwide genetic, physiological/biochemical, morphological, and pathogenic diversity of root-knot nematodes.

- 1975 APS Manual of Operations is approved. This manual provides the job descriptions for officers, councilors, directors, and committee chairs.



Ray Tarleton surveys the plans at the building site for the new AACC and APS/AACC headquarters, 1969.

AACC President Kenneth A. Gilles (left) and APS President Joseph P. Fulton (right) dedicate the headquarters building, 1972.