

The History of Plant Pathology at Cornell



The history of plant pathology at Cornell began when the university opened its doors in 1868. A. N. Prentiss, a mycologist who held the titles of Professor of Botany, Superintendent of Grounds, and Director of Manual Labor, offered a course titled “Parasitic Fungi” that first year. Some variation of the course has been offered ever since.

In 1886, the first doctorate from Cornell in “the Sciences” was granted to J. C. Arthur. His research was on fire blight of apples, but he would become better known later for his expertise in rust fungi. Arthur did his research at the New York State Agricultural Experiment Station in Geneva—an institution that would become a formal part of Cornell with its own plant pathology department 37 years later.

When H. H. Whetzel arrived in 1906, he was quick to note that the study of plant diseases was the most productive research activity undertaken by the botany faculty, inasmuch as more than a third of the bulletins issued by the College of Agriculture since

1888 dealt wholly or in part with plant diseases. His

arguments won him a new department name and a new title of Professor and Department Head.

With college support, Whetzel forged on, recruiting faculty to meet academic obligations and enlisting farmers to aid in field research.

When Whetzel was ordered to limit efforts only to investigations so important to growers that they would fund them, the Niagara Sprayer

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Company met the challenge with its first Industrial Fellowship. That began a relationship between agribusiness and Cornell plant pathologists that persists today.

In 1922, L. M. Massey became head of a department that had grown to eight faculty members, who, collectively, had attained a worldwide reputation for research on fungi and plant diseases and for training students. That reputation continued to grow with the department's high standards for academic excellence, and by the mid-1950s, demands on the faculty had grown such that there were 22 professors focusing on individual or related crops or pathogen types. One of many distinguished faculty in the mid-1900s was A. W. Dimock. Dimock had an interest in engineering to complement his training in plant pathology, and the combination led to design and construction of first-generation walk-in growth chambers with sophisticated (at the time) apparatus for regulating growing conditions. The chambers are still in use.

G. C. Kent became chair in 1950. Among many significant events in Kent's term was the recruitment of D. F. Bateman (1970), the first person hired to study the fundamental nature of pathogenesis rather than to work on a specific crop or group of pathogens. The trend toward research on mechanisms of host-pathogen interactions continued such that today, half of the 20 faculty are working to answer questions rooted in basic biology.

The department in Ithaca joins with that in Geneva to administer the graduate field of plant pathology with numerous noteworthy alumni, including private practitioners Cynthia Westcott and P. P. Pirone; science policy advocate and scholar J. G. Horsfall; World Food Prize winner John Niederhauser; eminent mycologist R. P. Korf; and W. F. Mai, world-renowned nematologist.

Prepared by George Hudler