

The History of Phytopathology: Current Needs and Future Directions

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Plant diseases are part of humanity's earliest written records. Rusts and mildews have plagued us since before the beginning of agriculture, and blights and rots have caused many early families and tribes to know the pain of hunger. In more recent times, plant diseases have forced changes in human history, often through suffering and societal upheaval. Who is not familiar with the social and economic consequences of potato late blight? Who has not heard of English teatime instead of English coffeetime? Who

has not wondered at the power of a tiny ergot sclerotium? And who has not mourned the demise of the American chestnut?

But what of the study of the history of phytopathology—what is its future? And what are we doing to preserve the personal as well as the factual aspects of the continuing development of our science? At one time, nearly every academic department of plant pathology in the United States offered a formal course or seminar series on this topic. Few such courses remain, and the seminars have all but disappeared. The result is that the history of our science is most often presented as a portion of an introductory lecture in an undergraduate or graduate course on plant pathology. Thus, to the future leaders of our profession, much of our history remains unnoticed, if not unknown.

If we are to understand the relevance of current—and future—accomplishments in plant pathology, we must have a perspective on which to base our judgments. A knowledge of the people and events that shaped our science allows us to place current accomplishments in perspective and helps us to appreciate the great strides made by our scientific forefathers. This same knowledge allows us to recognize our predecessors' errors in judgment so that we can avoid repeating the steps that led to those errors.

The communications revolution permits us to remain cognizant of the current events in our chosen subdiscipline of phytopathology. In fact, we are inundated with an increasing number of papers in an increasing number of journals. Computer storage capabilities and the collecting and cataloging of most currently published materials by our libraries virtually assure the survival of our written research, teaching, and extension communications for use by future generations of scientists. The personal character and biographical information of the scientists who perform and publish this research,

however, may not be so easily preserved. The obituaries published in *Phytopathology* and the highly commendable "Pioneer Leader in Plant Pathology" chapters in the *Annual Review of Phytopathology* are significant steps toward the preservation of this personal history. But even these items are insufficient for the task at hand.

We are quickly approaching the time when few of the first-generation scientific descendants of the fathers of our science will remain. Even as we approach the 1990s, some of the scientific grandchildren of such scientists as L. R. Jones and H. H. Whetzel are reaching retirement age. And many of the scientists who have shaped our science during the 20th century have already retired. Yet, neither a history of The American Phytopathological Society nor a comprehensive history of plant pathology in the United States has been attempted. If such histories are not written soon, we will lose the invaluable perspective of those who shaped our recent history.

What is needed is a renewed interest in the orderly preservation of the history of phytopathology as a whole and as a collection of subdisciplines. We must preserve an accurate record not only of the accomplishments in our science and Society but also of the scientists responsible for those accomplishments. We must know what was done, what was the impetus for the accomplishments, and who were responsible for the benchmarks of phytopathology.

In order to preserve our history, to stimulate interest in our science, and to provide an invaluable resource for future plant pathologists, the history of phytopathology in the United States should be carefully researched, analyzed, recorded, and published. The events that have shaped our science should be placed in perspective with insight into the social and scientific environment of the time. To be truly meaningful, this history should be assembled with the cooperation and assistance of our emeritus scientists who have participated in much of our recent history. The final product should be published by APS Press and could have the title *Phytopathology in the United States: 1790–1990*, with the subtitle *Two Centuries of Progress*. Supplements could follow at regular intervals to continue the preservation of our history. Although such a work would probably not be a "best-seller," it would be one of the most useful and most significant publications of our time in phytopathology. Such a work would provide many hours of reading pleasure for those interested in the history of plant pathology and would be a valuable resource for those with less interest in that aspect of our science.

The era of the history of plant pathology courses and seminars is fading and may soon be at an end. As our history continues to develop, plant pathologists must and will continue to be scientists first. Perhaps, however, the progress of our science would not be slowed if we turned to look back from time to time to see where we have been. Such backward glances may, indeed, give us a clearer vision of our future.