

Iowa State University Library
Collection Development Policy Statement
PLANT PATHOLOGY

I. General Purpose

The Plant Pathology library collection provides information access and material support for the discipline of plant pathology. This includes ongoing research, teaching, and extension efforts of the faculty, staff, and students in the department. Departmental research, teaching, and extension programs focus on the biology and management of plant pathogenic microorganisms and the interactions of pathogens with their host plants. The department participates in several centers of the Plant Sciences Institute and in several interdepartmental graduate programs (see Section III).

II. History

Plant Pathology was under the umbrella of Botany at Iowa State from 1870–1979. Faculty member Charles E. Bessey taught the first laboratory course in plant pathology, and the first forest pathology course in the United States. J.C. Arthur, who later became an authority on rust fungi, received the first graduate degree in plant pathology at Iowa State University. Irving E. Melhus, who later became the department chair of Botany (1929–946), was the first plant pathologist hired by Iowa State.

With the addition of an undergraduate curriculum in plant pathology in 1957, the name of the department changed to Botany and Plant Pathology. In 1979, the department split, with the plant pathology component joining the new Department of Plant Pathology, Seed, and Weed Sciences. In 1987, the Department of Plant Pathology completed its emergence as an independent department.

III. Iowa State University Program

The Department of Plant Pathology is the sole unit in the state of Iowa providing education, research, and extension services in plant pathology. The department has sole responsibility for research on plant pathology issues relevant to Iowa agriculture. “Research scopes range from very applied problems to mission-oriented very basic programs, and research subjects span the wide range of bacteria, viruses, fungi, nematodes, and their plant hosts. Our extension services meet the needs of diverse groups from Amish farmers to horticultural endeavors and new developments like viticulture to the most modern farming operations in the world.”¹

The Department of Plant Pathology offers the M.S. and Ph.D. degrees. The department

¹ Plant Pathology Department Homepage – Welcome
http://www.plantpath.iastate.edu/welcome/welcome_contd

participates in several interdepartmental graduate programs including Bioinformatics and Computational Biology; Ecology and Evolutionary Biology; Genetics; Molecular, Cellular and Developmental Biology (MCDB); Plant Physiology; Microbiology; Sustainable Agriculture; and Toxicology.

The Department of Plant Pathology, in collaboration with the Department of Animal Science, offers the undergraduate major in Microbiology. Plant Pathology is the administrative home for this program, and many courses in this major are taught by Plant Pathology faculty.

The department also supports several teaching and research facilities, such as the Bessey Hall greenhouses, the Seed Science Center, the Plant Sciences Institute, several common-use facilities for cell tissue culture, molecular biology, and electron microscopy, and a university-wide nucleic acid instrument center. The department also houses a center for cell sorting, image analysis, hybridoma preparation, and protein analysis. The university has farms throughout the state available for field research.

IV. Subject Boundaries

Because of Iowa State's land-grant mission and ranking as a major research university, the stature of its agricultural science programs, and the strength of its department of plant pathology, collection support is comprehensive. Areas of research in the department include many sub-disciplines within plant pathology, including mycology, bacteriology, virology, nematology, pathogen ecology, epidemiology, seed pathology, forest pathology, and genetics and molecular biology of host-pathogen interaction.

V. General Collection Guidelines

A. Linguistic: Most of the material selected is in English; however, selections from other languages are not excluded. Worldwide gifts and exchanges are received, supporting the program, visiting scholars, and our international students.

B. Geographical Areas: Iowa and the United States are the natural scope of coverage; however, Iowa State University's land-grant mission and ranking extends its International Agriculture programs worldwide.

C. Types of Materials Collected: Materials selected include serials (including full-text e-journals), monographs, conference proceedings, government publications in all forms (including technical reports, CDs, etc.), traditional reference sources (e.g., handbooks, encyclopedias, and indexes), electronic databases, and Web resources significant to the program. Some textbooks are procured selectively.

D. Formats of Materials Collected: The library generally selects materials supportive of the program in all the traditional forms. As mentioned above, more emphasis is now placed upon electronically networked resources (see Section V.C).

VI. Specific Collection Guidelines

The LC subject classification areas QH, QK, S, SB, and SD support Plant Pathology, as do other areas where plant science information is found.

VII. Other Resources Available

The ISU College of Agriculture and Life Sciences, with its excellent network, has access to worldwide literature and collections through the following groups: the land-grant universities in the Midwest and throughout the nation; the National Agricultural Library, Washington DC; the Linda Hall Library on the campus of the University of Missouri–Kansas City; and agriculture-based university libraries around the world, including information available via OCLC’s WorldCat.

VIII. Cross-Reference to Collection Policies

Primary overlapping subject areas include Agronomy, Botany, Entomology, Forestry, Horticulture and Microbiology. Secondary areas of subject overlap include Environment, Genetics, Molecular/Cellular & Developmental Biology, and Toxicology.

IX. LC Class(es)

Primary: QH, QK, S, SB & SD

Secondary: Other areas of pertinent plant sciences information.

X. Subject Specialist’s Name

Pali U. Kuruppu

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