# Plant Sciences

Purpose: To support teaching and research through the doctoral level in botany, crop sciences, plant pathology, horticultural sciences, environmental and natural resource sciences as related to the plant sciences and plant physiology; and the bachelor of science degree in Landscape Architecture. Additionally, to provide basic materials concerning certain practical aspects of these subjects for non-specialists. Major concern for these fields is centered in the following departments/programs: Biological Sciences, Crop and Soil Sciences, Horticulture and Landscape Architecture, Plant Pathology and Plant Physiology, Natural Resource Sciences, and Environmental Science and Regional Planning, but certain areas are also of great interest to personnel of other departments/programs such as Genetics & Cell Biology, Biochemistry and Biophysics, and the Institute of Biological Chemistry.

## General Collection Guidelines:

Languages: English is the primary language of collection, but appropriate materials in any language are selected.

Chronological Guidelines: Not applicable.

Geographical Guidelines: There is some emphasis on the Western hemisphere for taxonomic materials. Otherwise, geographical guidelines are not applicable

Treatment of the Subject: Upper division textbooks are purchased on a highly selective basis, lower division textbooks almost not at all. Most of the emphasis is on the collection of scholarly materials.

Types of Material: Material collected consists of serial and monographic publications. Included are scientific journals, publications of indexing and abstracting services, conference and symposia proceedings, encyclopedias, atlases, dictionaries, directories, handbooks, and government publications in any suitable format.

Date of Publication: Emphasis is on materials published within the last 10 years. With respect to retrospective materials, preference is seldom given to original printings over reprints and microforms.

Other General Considerations: Collection should represent the areas of animal, microorganism (microbe), and plant biochemistry and biophysics. Some special materials in plant pathology are part of Manuscripts, Archives, and Special Collections (MASC). Biotechnology, sustainable agriculture and integrated pest management cut across subjects listed below.

## Observations and Qualifications by Subject with Collection Level:

Plant pathology: C(1) / B

Economic effects, causes, nature, control, epidemiology. The Department of Plant Pathology supports both applied and basic research/teaching.

Host Plants: C(1) / B

Diseases of plants in general with emphasis on diseases of plants in Washington State; small grains (wheat, barley, etc.); large fruits (apples, peaches, etc.); small fruits (cherries, etc.); cane berries (blackberries, etc.); vegetables (potatoes, etc.); and forest trees.

Organismal Causes: C(1) / B

Organismal agencies that cause disease: fungi, plant residues, plant viruses, plant pathogenic bacteria and parasitic nematodes

Plant Physiology: C(1) / B

Cellular, subcellular and whole-plant physiology. Molecular biology and biochemistry of plant-related processes.

Fruit & vegetable plants: B

Plant growth and development. Production, handling, management and utilization. Postharvest technology. Viticulture. Medicinal plant cultivation.

Landscape planning & development: C(1) / B

Landscape architecture. Floriculture and nursery management. Ornamental horticulture. Environmental horticulture.

Botany: C(1) / B

Basic plant science. Structural botany. Systematics. Plant communities; ecology. Physiological ecology.

Crop plants and seed sciences: B

Crop physiology, breeding, metabolic and developmental processes. Production and management practices. Turf management. Cropping systems. Seed science.

Joel Cummings

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