

PLANT PATHOLOGY

Graduate Program Head	Carolee Bull
Program Code	PPATH
Campus(es)	University Park (Ph.D., M.S.)
Degrees Conferred	Doctor of Philosophy (Ph.D.) Master of Science (M.S.) Dual-title Ph.D. in Plant Pathology and Biogeochemistry Dual-title Ph.D. and M.S. in Plant Pathology and International Agriculture and Development
The Graduate Faculty	View (https:// secure.gradsch.psu.edu/gpms/? searchType=fac&prog=PPATH)

Plant pathology is the study of disease in plants and concerns the dynamic interaction between the plant, the causal agent (bacteria, fungi, viruses, nematodes, etc.), and their environments. A student prepares for a professional career in research, teaching, extension, or industry through advanced studies of the principles of plant infection, the physiology of disease in plants, the ecology of root diseases, the nature and inheritance of disease resistance in plants, epidemiology, microbial ecology, phytobiomes, translational taxonomy, ecology and physiology of air pollution injury to plants, or plant disease management by biological or chemical means. A student may specialize in the etiology and integrated management of diseases of forest trees, agronomic or horticultural crops. Advanced studies in molecular systematics of fungi and applied mycology, related to the production of the commercial mushroom, are also available. Modern, well-equipped laboratories, controlled environment facilities and greenhouses, and well-developed field research areas are available for graduate study.