Plant Agriculture: MSc, PhD

Plants provide food, raw materials, and a healthy environment, and are the cornerstone for life on earth. Plant Science is key to understanding and enhancing plant life. Research in the Department of Plant Agriculture is divided into four areas: Plant Biochemistry and Physiology, Plant Breeding and Genetics, Crop Production Systems, and Bioproducts.

http://www.plant.uoguelph.ca/contact/

Program

Plant Agriculture is strongly rooted in crop science and horticultural science but we now encompass applied bioinformatics; molecular genetics; genomics; field, horticultural and greenhouse crops; plant breeding; turf and grassland studies; environmental sustainability; weed science/ecology; and the use of plant materials for health, fibres and industrial products. Furthermore, we recognize that society’s expectations of agriculture are changing to include a wide range of health and environmental services such as producing food with nutraceuticals, protecting biodiversity, mitigating climate change and providing alternative energy sources.

Admission Requirements

The MSc requires a Baccalaureate degree in an honours plant science/biology program, or equivalent, from a recognized university or college with at least a B average over the last two years of full-time study (or equivalent).

The PhD requires a MSc degree by thesis in a field appropriate to the proposed area of specialization with a minimum B average.

Application Deadline:
Ongoing

Entry: Fall, Winter, Spring

Research Fields

- Plant Biochemistry & Physiology
- Plant Breeding & Genetics
- Crop Production Systems
- Bioproducts

Our Faculty

Faculty have modern labs with state-of-the-art equipment and access to controlled environment growth facilities and numerous field sites distributed over Ontario. Faculty are located on four campuses affording a variety of opportunities and experiences for our students. Our Faculty are internationally recognized as leaders in their scholarly activities. Support for research is obtained from a variety of sources including federal, provincial, international, industrial and grower sponsors.

ARE YOU INTERESTED IN:

- Increasing plant production efficiency?
- Developing new varieties?
- Understanding plant growth and development?
- Weed control?
- Plant-environment interactions?
- Discovering new environmentally friendly industrial materials?

CAREER OPPORTUNITIES:

- Agricultural Consultant
- Breeder/Geneticist
- Plant Physiologist
- R&D Bio-Based Plastics

CONTACT INFORMATION

Graduate Coordinator, MSc & PhD:
Dr. J. Alan Sullivan
519-824-4120 ext 52792
asulliva@uoguelph.ca

Graduate Program Assistant:
Tara Israel
519-824-4120 ext 56077
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Departmental Graduate Faculty with Research Areas

Stephen R. Bowley  
Crop Science Building  
sbowley@uoguelph.ca  
Perennial forage breeding & genetics, transgenic plants; stress tolerance

A. Max P. Jones  
E.C. Bovey Building  
amjones@uoguelph.ca  
Plant propagation and in vitro conservation

Amar Mohanty  
Crop Science Building  
mohanaty@uoguelph.ca  
Bioeconomy related to biobased materials, biofuels & biorefinery

Art W. Schaafsma 
Ridgetown Campus  
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Entomology/pathology field crops

Gale G. Bozzo  
E.C. Bovey Building  
gbozzo@uoguelph.ca  
Postharvest physiology & secondary metabolism

Katerina S. Jordan  
E.C. Bovey Building  
kJordan@uoguelph.ca  
Turfgrass science; nematology

Alienze Navabi  
Crop Science Building  
anavabi@uoguelph.ca  
Wheat breeding

Peter H. Sikkema  
Ridgetown Campus  
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Weed management, field crops

John A. Cline  
Simcoe and Vineland Campus  
jcline@uoguelph.ca  
Fruit tree physiology & management

Elizabeth A. Lee  
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lizlee@uoguelph.ca  
Corn breeding & genetics

Gopinadhan Paliyath  
E.C. Bovey Building  
gpaliyat@uoguelph.ca  
Postharvest biology; functional foods & nutraceuticals

J. Alan Sullivan  
E.C. Bovey Building  
asulliva@uoguelph.ca  
Breeding, genetics & physiology of ornamental and berry crop species

Bill Deen  
Crop Science Building  
bdeen@uoguelph.ca  
Cropping systems; agronomy; nitrogen use efficiency

Lewis N. Lukens  
Crop Science Building  
l lukens@uoguelph.ca  
Bioinformatics, genetics of stress tolerance

K. Peter Pauls  
Crop Science Building  
pauls@uoguelph.ca  
Tissue culture; molecular biology techniques to crop improvement

Manjusri Misra  
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Bio-based new materials & green nanotechnology

Praveen K. Saxena  
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Plant morphogenesis; conservation; medicinal plant biology

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