

Plant Disease Technician

Undergraduate Summer Research Student Position Announcement Applied Soil Ecology Laboratory of the Department of Soil Science, University of Manitoba, Canada

Project title: Nematode and Fungal Pests of Crops in Manitoba

Project description: We are currently looking for highly motivated hands-on students who enjoy working in the laboratory and occasionally outdoors and a part of a team. The student will work on several projects examining limiting yield losses from the disease, Potato Early Dying and damage caused by plant parasitic nematodes. Soil and plant sampling will be conducted at field trial sites and farm surveys for the fungal wilt pathogen, *Verticillium dahliae*. Studies will also involve determination of host and environmental preferences, yield damage, and control strategies of plant-parasitic nematodes in the Canadian Prairie Provinces. The nematodes to be examined include members of the genus *Ditylenchus* and *Pratylenchus*. Crops examined include major field, pulse and horticultural crops grown on the Canadian Prairies. The research projects involve microscopic and molecular identification of pathogens and nematodes.

Qualifications: Enrolled in Agroecology, Agronomy, Biology, Engineering, Environment, Physical Geography, or Soil Science. Preference given to those in senior years with excellent academic achievement. Ability to follow detailed instructions and attention to detail an asset.

Duties and responsibilities: The student will be responsible for assisting graduate students and Senior Technicians in laboratory and field studies for plant and soil sampling and analyses. Laboratory duties include extraction of pathogens and nematodes, microscopic and molecular (conventional and real-time PCR) identification, preparation reagents and media, pure culture isolation and maintenance. Field duties include soil and plant sampling, and visual plant disease ratings.

Skills and benefits to be gained from this position: Microscopic and molecular pathogen and pest evaluation, extraction and isolation methods, conventional and real-time PCR, culturing, disease rating, field sampling

Supervisor: Professor Mario Tenuta, Applied Soil Ecology Lab, Department of Soil Science, Faculty of Agricultural and Food Sciences

Job Terms

Number of Jobs: 3

Job dates: April 29 to August 30, 2019

Hours/week: 35

Salary: Faculty pay scale dependent on program year

Location: Occasional travel to field sites outside of Winnipeg

Other info: Transportation vehicle provided

How to Apply

Deadline: March 8, 2019

University Level: Undergraduate

Application method: E-mail

Required application materials: Resume, cover letter, transcript, and a statement indicating the school, program, and year that you are currently enrolled in

References: list of three (3) references agreed to be contacted

Notification process: email application materials to Dr. Mario Tenuta, Professor, Applied Soil Ecology Lab at Mario.Tenuta@umanitoba.ca

Decision expected by March 20, 2019