



## **Master of Science (Biology) position – Université Laval**

### **Tri-trophic effects of supplemental LED lighting in greenhouse vegetables**

We are seeking an MSc student to study the effects of supplemental LED lighting on plants, insect pests, and commercial biological control agents (insect parasitoids wasps), and how these effects propagate through simplified tri-trophic ecosystems in greenhouse vegetable production. The candidate may also choose to investigate the role of genetic variation in structuring parasitoid wasp circadian rhythms, and their modification by LED light-extended photoperiods. The successful candidate will carry out basic and applied research on insect behaviour, plant-pest interactions, and pest-natural enemy interactions in laboratory and greenhouse settings.

**Starting Date:** January 1, 2020. Applications will be accepted until a suitable candidate is found, but those received before July 1, 2019 will be given priority.

**Locations:** The student will be enrolled at Laval University (Québec City, QC) under the primary academic supervision of Dr. Martine Dorais. Experimental work will be carried out under the supervision of Dr. Paul Abram at the Agassiz Research and Development Centre, Agriculture and Agri-Food Canada (Agassiz, BC).

**Qualifications:** Candidates should have a BSc in biology, entomology, plant science, ecology, or a related discipline. We are particularly seeking someone with enthusiasm for integrating a variety of experimental approaches to understand the effects of supplemental LED lighting in cropping systems. Depending on the candidate's preferences and selected coursework, they may need to re-locate between Québec City, QC and Agassiz, BC during the course of the project. Applicants must meet the admission requirements of Laval University

(<https://www.ulaval.ca/en/admissions/admission-requirements.html>)

**Stipend:** Approximately \$21,000 per year for 2 years. Applicants are encouraged to apply for other scholarships (e.g., NSERC postgraduate scholarships).

**To apply:** Interested applicants should send a cover letter outlining their research interests, a current CV, unofficial transcripts, and contact information for two academic references to Dr. Martine Dorais, [Martine.Dorais@fsaa.ulaval.ca](mailto:Martine.Dorais@fsaa.ulaval.ca), cc. Dr. Paul Abram ([paul.abram@canada.ca](mailto:paul.abram@canada.ca)). Application materials can be sent in English or in French.