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GRADUATE STUDENT ASSISTANTSHIP (M.Sc.)

Insect Chemical Ecology

Supervision: Dr. Chris Cutler, Department of Environmental Sciences

Location: Nova Scotia Agricultural College, Truro, NS

Project: Behavioral manipulation through use of “info-chemicals” for monitoring and mass trapping has proved highly successful in the management of numerous agricultural and forest insect pests. Blueberry spanworm, *Itame argillacearia*, is one of the most important defoliators of lowbush blueberry in Eastern Canada but producers remain heavily reliant on chemical pesticides to suppress infestations. This project will attempt to identify and isolate sex pheromones that govern *I. argillacearia* behavior, utilizing techniques in GC-MS, electrophysiology and behavioral ecology. It is anticipated this work will lead to the development of monitoring tools to increase predictability of outbreaks, track populations, and ultimately reduce pesticide inputs.

Qualifications: Applicants must hold a B.Sc. Hon. Degree (or equivalent) in biology, ecology or another relevant discipline, and have a first class GPA (80%, A-) in the last two years of undergraduate study. Experience and knowledge of neurophysiology and insect ecology would be valuable assets. Strong written and oral communication skills are required.

Stipend: Minimum of \$16,500 per year for two years. Canadian citizens and permanent residents will be encouraged to apply for a NSERC PGS scholarship valued at \$17,300.

Start Date: May or September 2010

For additional information on the research project: please contact: Dr. Chris Cutler, Department of Environmental Sciences, Nova Scotia Agricultural College, Box 550, Truro, NS B2N 5E3, Canada; e-mail: ccutler@nsac.ca; Phone: 902-896-2471

For Graduate Program Information or to apply: contact Marie Law at mlaw@nsac.ca or visit the NSAC web site at <http://nsac.ca/research/graduatestudies/>.

The Master of Science program with a specialization in agriculture is offered by the NSAC in conjunction with Dalhousie University.