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Graduate Student Assistantship (M. Sc)

Proline in Cabbage Tolerance to Temperature/Water Stress

Supervisor: Dr. Hong Li, Assistant Professor, Department of Plant and Animal Sciences

Location: Nova Scotia Agricultural College (NSAC), Truro, Nova Scotia

Project: A graduate research assistantship of studying proline accumulation in Chinese cabbage response to temperature and water stress is available through a 2-yr research project. Proline, a multifunctional amino acid, protects plants against the adverse effects of temperature extremes and high concentrations of inorganic ions. Proline accumulation is a metabolic response of plants to environmental water shortage and temperature stress. This study is to examine the proline accumulation and translocations within leaf tissues, shoot apical meristems, heads and roots of Chinese cabbage under the influence of seaweed extracts, high temperature and high soil water potential. This study will also quantify the correlations of cabbage yield and quality attributes (bolting, tipburn, N/proline ratios and P/proline ratios).

Qualifications: Applicants must possess a B.Sc. Honors degree or equivalent degree in plant science, soil science, environmental science, and have a minimum GPA of 3.0 in the last two years of undergraduate study. Knowledge of plant nutrition, biochemistry, soil physics and data statistics would be a strong asset.

Start Date: Summer (May) or Fall (September), 2010

Stipend: \$16,500 per year for two years

To Apply: Submit application forms to NSAC Graduate Study and Research Office. For additional information please contact Dr. Hong Li, Edible Horticulture Research Program, hli@nsac.ca, 902-897-9762 (fax).

Graduate Program Information: For additional information on NSAC's M.Sc. program contact Marie Law at mLaw@nsac.ca or visit nsac.ca/research/graduatestudies

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