

# NEWSLETTER

## CANADIAN SOCIETY for HORTICULTURAL SCIENCE SOCIÉTÉ CANADIENNE DE SCIENCE HORTICOLE

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# September 2007 Volume 2 No. 3 Septembre 2007

| In this issue   | Page |
|---|------|
| President's Corner  | 2    |
| Message from the Secretary-Treasurer  Edmonton to host international partners meeting | 3    |
|   |      |
| Annual business meeting of the Canadian Society for Horticultural Science             | 9    |
| Plants and Soils: Montreal '08  | 14   |
| Graduate student assistantship  | 15   |
| Graduate student assistantship  | 16   |

#### PRESIDENT'S CORNER



Dear colleagues:

Greetings from your Executive Committee. We hope that everyone had a productive and enjoyable summer.

CSHS had a successful Plant Canada 2007 meeting. I would like to thank the CSHS members serving on these for yest amount of time required to creating and

the organizing committees for vast amount of time required to organize and hold these meetings, and especially Karen Tanino and Bob Bors for their efforts with the CSHS supper and field tours. This has set a good foundation for future meetings with the upcoming Montreal 2008 (joint meeting of the Canadian Societies of Agronomy, Horticultural Science, and Soil Science, and the Northeast Branches of the American Society of Agronomy, Crop Science Society of America and Soil Science Society of America) and also the next Plant Canada meeting which has been tentatively scheduled for July 2011 in Halifax.





Past CSHS Executive members should also be congratulated and thanked for keeping the momentum going forward with CSHS. With increased emphasis on increasing membership, maintaining a solid fiscal footing, increasing graduate student involvement through travel and oral/poster contribution awards, and continually improving CSHS's web site, there is no doubt that CSHS is providing value to its membership. CSHS's involvement in Plant Canada has been recently further strengthened with Shahrokh Khanizadeh accepting the role of President of Plant Canada.

In addition to CSHS's involvement in conferences including Plant Canada and Halifax 2006, Blanche Dansereau (CSHS's representative to ASHS) is working with ASHS on initiatives including joint meetings and CSHS sponsored symposia. Details of these joint initiatives will hopefully materialize over the next couple of months.

As we go forward with CSHS activities in the year upcoming year, I would like to encourage our membership and new potential members to become engaged in CSHS activities. We have an exciting year ahead, feel free to contribute, and if you have any questions or concerns, please feel free to contact me.

Best regards,

David Percival, Ph.D.

President of CSHS

dpercival@nsac.ca

Telephone: (902) 893-7852

#### MESSAGE FROM THE SECRETARY-TREASURER



Dear colleagues:

The 2007 Annual Business Meeting of the Canadian Society for Horticultural Science (CSHS) was held on June 13, 2007 at Saskatoon. CSHS membership has increased over the past two years and we have now more over120 members. Some of the achievements that have been obtained include the addition of new corporate regular, retired and student members. With respect to endowments, the Macoun-Hill fund was revitalized through the efforts of D.

Charlebois with the Hill family. There has also been new income from advertisements on the CSHS web site and revenues associated with annual meetings (Plant Canada 2005, 2006 Halifax meeting). Elections for an incoming CSHS executive were held and the officers for 2007 - 2009 are as follows:

**President:** David Percival, NS Agr. College, Truro, NS

Vice President: Denis Charlebois, AAFC, Saint-Jean-sur-Richelieu, QC

**Secretary-Treasurer:** Samir Debnath, AAFC, St. John's, NL

**Prairie representative:** Bob Bors, U. SK, SK

**Central representative:** Laura L. Van Eerd, U. Guelph, ON

**Eastern representative:** Martine Dorais, St-Jean-sur-Richelieu, QC

**Eastern representative:** Vasantha Rupasinghe, NS Agr. College, Truro, NS

Past President: Shahrokh Khanizadeh, AAFC, St-Jean-sur-Richelieu, QC



NSAC graduate student received the award for best graduate student oral presentation (under CSHS) as well as a travel award from Dr. S. Khanizadeh, the president of CSHS, at the Plant Canada 2007 in Saskatoon.

NSAC Participated in Plant Canada 2007 - Congratulation to Ajit P. K. Joshi, an NSAC graduate student, who won the 1st prize for her oral presentation on "Enzymatic browning in selected apple genotypes" at the graduate student presentation competition of the annual conference of the CSHS of Plant Canada 2007 in Saskatoon. Ajit was also selected to receive 2007 Macoun-Hill graduate student travel award. She was presented a certificate along with a cheque of \$400 during the meeting in Saskatoon. Ajit's co-supervisors are Dr. Vasantha Rupasinghe and Dr. Nancy Pitts of the Department of Environmental Sciences. This year, six societies have held their annual meetings jointly during June 11-14<sup>th</sup> under Plant Canada, which is the federation of Canadian Plant Science societies.

#### **Best 2007 CSHS Paper Awards**

1. Elisabeth J. Botha, Bernie J. Zebarth, and Brigitte Leblon for their paper "Non-destructive estimation of potato leaf chlorophyll and protein contents from hyperspectral measurements using the PROSPECT radiative transfer model." Published in Published in Can J. Plant Sci. 86: 279-291.



2. Sean, M. Westerveld, Alan W. McKeown, and Mary Ruth McDonald for their paper "Distribution of nitrogen uptake, fibrous roots and nitrogen in the soil profile for fresh-market and processing carrot cultivars." Published in Can J. Plant Sci. 86: 1227-1237.

Mary Ruth McDonald and Sean M. Westerveld received the award for best paper award (under CSHS) from Dr. S. Khanizadeh, the president of CSHS, at the Plant Canada 2007 in Saskatoon.

#### The 2007 CSHS Graduate Student Poster Award:

Title: Essential Oils as Sprout Inhibitors and Their Effects on Potato Seed Tuber Performance. Authors: Xin Zong (winner and first Author), K. Tanino (second author and advisor) and C. Nesser and M. Bondara (other authors).

Congratulations to the Xin and co-authors.

We encourage all active members to do their best recruiting new members. Please send us your: job offers, published papers, posters, presentations, questions, suggestions, nominations and any other relevant information that could be of interest to our members. The CSHS web site and Newsletter are there for you.

Thank you.

Samir Debnath, Ph.D. Secretary-Treasurer of CSHS debnaths@agr.gc.ca

# EDMONTON TO HOST INTERNATIONAL PARTNERS MEETING - CSHS MEMBERS INVITED TO MEET OUR GHANA PARTNERS

AIC will be holding the ITPP (International Twinning Partnership Program) International Partners Meeting (IPM) in Edmonton November 1-3, 2007. It will proceed the AIC Annual Conference to be held November 5 and 6 at the Crowne Plaza- Chateau Lacombe. This group meets every two years and last met in 2005 in Tanzania. The purpose of the IPM meeting is to bring together project management teams from the Canadian partner organizations and their partner organizations from various countries. This year partner organizations from the following countries will be in attendance: Ghana, Tanzania, Ethiopia, Sri Lanka, and Vietnam.

CSHS has been partnered with the Ghana Institute of Horticulturists since 2001 on a project on dry season vegetable production in Ghana. The current CSHS management team consists of Dinah Ceplis (Assiniboine Community College, Brandon, MB), Mary Ruth McDonald (University of Guelph), Josee Owen (AAFC Bouctouche, NB), and Merv Pritchard (University of Manitoba). Two of our partners from Ghana will be attending this meeting: Patrick Kumah and Gustav Mahunu.

On Thursday, November 1, an evening get-together (possibly dinner) will be held and CSHS members not part of the management team are welcome to meet with our Ghana partners. You need only cover the cost of your meal. If there are CSHS members who are planning to attend the AIC Annual Conference following the IPM meeting or who are in the Edmonton area who would like to join us for the evening, please contact Merv Pritchard at: merv pritchard@umanitoba.ca

This will be a great opportunity for those CSHS members not working on the project to find out more about the project, to meet our Ghana partners, and to learn more about AIC's ITPP program.

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Dr. Merv Pritchard Associate Dean, Academic Room 248 Agriculture Building University of Manitoba Winnipeg, Manitoba, Canada R3T 2N2 Phone: 204-474-9395 FAX: 204-474-7525

merv\_pritchard@umanitoba.ca

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### PLANT CANADA 2007 - SASKATOON

Plant Canada 2007, organized under the direction of Plant Canada, a federation of Canadian plant science societies, was a joint meeting of the following six scientific societies:

- CPS (Canadian Phytopathological Society) http://cps-scp.ca/
- CBA (Canadian Botanical Association) http://www.cba-abc.ca/
- CSA (Canadian Society of Agronomy) http://agronomycanada.com/
- CSHS (Canadian Society for Horticultural Science) http://www.cshs.ca/
- CSPP (Canadian Society of Plant Physiologists) http://cspp-scpv.ca/
- CWSS (Canadian Weed Science Society) http://cwss-scm.ca/

Plant Canada 2007 was held at TCU Place - Saskatoon's Arts and Convention Centre from June 11 – 15, 2007 in Saskatoon, SK. TCU Place belongs to the city of Saskatoon and has been a valuable contribution to local arts and entertainment as well as a gathering place welcoming people from all over the world.

#### **CSHS Keynote Speakers**

**Session: Natural Products from Horticultural Crops** 

Moderator: Shahrokh Khanizadeh



Title: Distribution and antioxidant properties of apple flavonols.

Author: H. P. V. Rupasinghe, Department of Environmental Sciences, Nova Scotia Agricultural College, Truro, NS, Canada.



Title: Novel techniques to improve functionality of horticultural foods and food ingredients.

Author: H. Ramaswamy, Department of Food Science, McGill University, Ste-Anne-de-Bellevue, QC,

Canada.



Title: Foods with added physiological function: facts and fallacies.

Author: P.J. Jones, Director, Richardson Centre for Functional Foods and Nutraceuticals, and Professor, Departments of Food Science and Human Nutritional Sciences, University of Manitoba, Winnipeg, MB, Canada.

#### **CSHS Natural Products Special Seminar**

Moderator: Shahrokh Khanizadeh



Title: Exploring native Canadian plants for human health.

Author: R. Cao. Agriculture and Agri-Food Canada, Food Research Program, Guelph, ON, Canada.

#### **Organic Horticulture Forum**

Moderator: David Ehret





**Panel discussion:** B. Frick, T. Forge, M. Dorais, G.H. Neilsen, and R.K. Prange. Organic Agriculture Centre of Canada, Truro, NS, Canada; (T. F.) Agriculture and Agri-Food Canada, Pacific Agri-Food Research Centre, Agassiz, BC, Canada; (M. D.) Agriculture and Agri-Food Canada, Horticultural Research Centre, Université Laval, Sainte-Foy, QC, Canada; (G. H. N.) Agriculture and Agri-Food

Canada, Pacific Agri-Food Research Centre, Summerland, BC, Canada; and (R. K. P.) Agriculture and Agri-Food Canada, Atlantic Food and Horticulture Research Centre, Kentville, NS, Canada.

#### **Organic Horticulture: Separating Fact from Fantasy**

Moderator: David Ehret

**Title:** Organic production of vegetables: State of the art and challenges.

Author: M. Dorais, Agriculture and Agri-Food Canada, Horticultural Research Centre, Université

Laval, Sainte-Foy, QC, Canada.

**Title:** Organic fruit production: Managing reality and perception.

**Authors:** G. H. Neilsen, D. T. Lowery, T. Forge, D. Neilsen, and D. Ehret. Agriculture and Agri-Food Canada, Pacific Agri-Food Research Centre, Summerland, BC, Canada; and (T. F. and D. E.) Agriculture and Agri-Food Canada, Pacific Agri-Food Research Centre, Agassiz, BC, Canada.

**Title:** Are organically-produced fruits and vegetables safer and more nutritious than conventionally-produced fruits and vegetables: A review of the literature.

**Author:** R. K. Prange. Agriculture and Agri-Food Canada, Atlantic Food and Horticulture Research Centre, Kentville, NS, Canada.

**2007 CSHS Awards** (please see in pages 3 and 4)

# ANNUAL BUSINESS MEETING OF THE CANADIAN SOCIETY FOR HORTICULTURAL SCIENCE

The 2007 CSHS Annual Business Meeting was held on June 13, 2007 from 12:00 to 15:00 hrs. at the Plant Canada 2007 Conference Centre in Saskatoon, SK and was mediated by Past President Dr. Alan Sullivan.

#### **Executive Committee**

The 2005 – 2007 Executive of CSHS consisted of the following: President - Shahrokh Khanizadeh, AAFC, QC Vice-President - David Percival, NS Agr. College, NS Secretary-treasurer - Denis Charlebois, AAFC, QC Western Representative - David L. Ehret, AAFC, BC Eastern Representative - Sylvie Jenni, AAFC, QC Central Representative - C. Richer, AAFC, QC Prairie Representative - Bob Bors, U. Sk, SK Past President - Yves Desjardins, U. Laval, QC

#### **Executive Activities**

- (i) Membership. CSHS membership has increased over the past two years to a point where there are once more over120 members. Of particular interest has been the increase in both regular and student memberships. Upon examining the distribution of the membership, Ontario, Nova Scotia and Quebec continue to provide the majority of CSHS's membership.
- (ii) Awards. The Past President submits his choices to the Executive of CSHS, and these publications underline excellence in publication. The financial contributions to the Plant Product, Ontario Fruit and Vegetable Growers' Association and the Bishop awards discontinued. In their place, 2 generic awards for the two best papers published in CJPS were established with no financial value.

Graduate Student Awards. Efforts have been made to facilitate graduate student involvement in the field of horticulture by establishing travel awards and also awards for best oral and poster contributions at CSHS meetings. To receive a student travel award (four, \$400 awards were allocated in 2007), the student must be a CSHS member. Submission can be done on CSHS's web site. For 2007, these travel awards consisted of the Macoun-Hill, and the Western Canadian Society for Horticulture (WCSH: note this was not awarded in 2007). Money available from WCHS was attained as a result of the transfer of remaining funds (approximately \$10,000) to a CSHS account. The remaining WCSH members decided at the Plant Canada 2005 meeting in Edmonton to transfer these funds to CSHS on condition that the interest from these funds be used to fund graduate student travel award(s). Governance of this account will be overseen by a CSHS representative in the former confines of the WCSH, and for 2007 to 2009 will be conducted by Bob Bors (University of Saskatchewan). For upcoming meetings selection of WCSH funded travel award(s) will be completed by Bob Bors and a CSHS committee using online submissions.

**CSHS** Merit Award. This award is based life long achievement in horticulture and contribution to CSHS. No award was given in 2007, and efforts will be made to seek nominations in 2008.

(iii) Budget Orientation. Efforts have been made over the past two years to keep CSHS on a solid fiscal footing by increasing revenues and decreasing expenses. To achieve this emphasis has been placed on attracting and retaining more regular and corporate members, and attracting more student members. To facilitate the recruiting of new members, separate English and French CSHS application forms were made to make more efficient use of space and add additional relevant information. These application forms are posted on CSHS's web site and are available in both PDF and Word formats. Attracting more student members was attained by targeting schools, establishing a database and then sending out flyers to potential members.

From an expenditures perspective, CSHS decided to no longer pay ISHS County Membership dues. Although a difficult decision, it did save approximately \$2,400 over the past fiscal year.

One item that continues to remain is the AIC dues. CSHS presently pays a \$1,000 membership fee and an additional \$1,500 to \$2,000 for various services. For the upcoming year, these fees will be reviewed to see if they can be reduced.

(iv) CSHS Web Site Development. The CSHS web site is critical for the visibility of the society. Maintenance of the web site has been undertaken by Shahrokh Khanizadeh since 2001. For visitors to the CSHS web site, information is available about the Society, access to membership application form, link to corporate members' web page, and information about the CSHS statute, CJPS, awards (including an online submission form), scientific and business meetings, CSHS's executive, job offers, contact information, logos and posters and most recently CSHS history.

To CSHS members, the web site provides a member section that can be accessed with a user name and password (provided with membership subscription). Members can post news and awards, have access to electronic format of CSHS newsletters, access archived information (i.e., view member lists, newsletters, etc.), have online access to membership directory, access to AIC news and also have access to the CSHS logo. Please remember that the web site continues to evolve, be a work in progress and is ultimately be a reflection of CSHS. Therefore, CSHS members are reminded that the membership has a collective role in maintaining the web site, and are encouraged to provide the web master with assistance in reporting mistakes, omissions and errors. As previously mentioned, CSHS members are encouraged to send material to be posted on the web site.

(v) Acheivements Since June 2005. Some of the achievements that have been obtained over the past 2 years have included the addition of new corporate regular, retired and student members. With respect to endowments, the Macoun-Hill fund was revitalized through the efforts of D. Charlebois with the Hill family. There has also been new income from advertisements on the CSHS web site and revenues associated with annual meetings (Plant Canada 2005, 2006 Halifax meeting).

Changes to the CSHS membership application forms were made to have these available in both English and French and also in MSWord and PDF formats and avoid the cluttered appearance of a single application form. With CSHS being on a more solid financial basis, there has also more newsletters

prepared and circulated to the membership, and continued development of the CSHS web site (as previously mentioned).

#### **CSHS Affiliations**

As mentioned is CSHS's statutes, "The Society shall be an Associate Member of the Agricultural Institute of Canada as described in the By-Laws of the Agricultural Institute of Canada, hereinafter referred to as the AIC." In addition reference is also made to "The Society accounts are held at and managed by AIC staff under the direction of the Secretary Treasurer, reporting to the Board of Directors."

In addition to CSHS's affiliation with AIC as an associate member, CSHS also has an association with the American Society of Horticultural Science with Blanche Dansereau being the CSHS rep to ASHS. Blanche has held this responsibility for over 4 years, has done an excellent job conveying CSHS's interests to ASHS, and it is hoped that Blanche will be willing to continue serving in this role. Subsequent discussions were held with Blanche Dansereau and David Percival on this matter and Blanche agreed to continue servings as CSHS's rep to ASHS. In addition, Blanche was given the task of seeing what initiatives ASHS might be interested in partnering with CSHS in the upcoming 4 year period (Annual Meeting, colloquia, publications, etc.). Blanche will be bringing this to the ASHS Board, and will be reporting back to CSHS after ASHS's Annual meeting in July.

Starting at the Plant Canada meeting in 2005 CSHS became one of the six professional societies (Canadian Societies of Agronomy, Botany, Plant Physiology, Phytopathology, Weed Science and Horticultural Science) involved in Plant Canada. Each contributing society has two members serving on the Plant Canada's Board, and consists of the following:

Plant Canada Chair: Shahrokh Khanizadeh (2007 to 2011)

CSHS representatives: David Pervial (2007 to 2011)

Shahrokh Khanizadeh (2007 to 2011)

Shahrokh Khanizadeh (2005 to 2007)

David Pervial (2005 to 2007)

Yves Desjardins (2003 to 2005)

#### **Upcoming CSHS Activity Highlights**

(i) 2008 CSHS Annual Meeting. An opportunity exists for CSHS to partner with the Canadian Societies of Agronomy and Soil Science for an annual meeting that is tentatively scheduled to be held at the campus of McGill University (i.e., downtown Montreal) in 2008. Although an understanding exists that CSHS would partner with ASHS in years when the Plant Canada conference is not present, it was felt that the recent trend of ASHS having their annual meetings in southern locations with high associated airfares was not conducive for significant CSHS involvement. Subsequently, the ability of CSHS to partner with CSA and CSSS on a 2008 meeting appeared to be a better option.

(ii) Next Plant Canada Meeting. At the Plant Canada Board meeting before the onset of the Saskatoon Plant Canada meeting, it was observed that there appeared to be an increasing reluctance for the various societies to hold to a 2 year cycle for scheduled meetings. Combined with the Canadian Society of Phytopathology opting out of the 2009 Plant Canada meeting (resulting in a very significant reduction in registrants) which was to be co-sponsored by CSA and CSHS, it was proposed that CSHS endorse a move for Plant Canada meetings to change to a 4 year cycle starting with the CSA/CSHS sponsored meeting in Halifax in 2011. This motion was subsequently approved.

#### **Budget**

A budget consisting of assets and expenditures was presented by D. Percival on behalf of D. Charlebois.

Total Assets: \$37,729

Total Pre-paid Expenses: \$1,802

Total Revenues: \$7237

Total Expenses \$11,230

As far as revenue contributions for the 2007 fiscal year are concerned, Mr. Hill made a \$2,000 contribution to the Macoun Hill Award for 2007. There are outstanding revenues for the 2007 fiscal year, consisting of the 2005 Plant Canada Meeting (\$1,500) and the 2006 Halifax Meeting (approximately \$4,000 to \$5,000: the claims to the funding agencies involved in this conference are just about complete and the resulting revenue will then be dispersed to the various professional societies).

CSHS expenses were reduced in 2007 by having no financial award for best paper, and CSHS opting out of paying for ISHS Country Membership dues.

#### **Future Plans and Objectives**

It is envisioned that CSHS will continue building a strong society with regularly scheduled (i.e., every 1 or 2 years) national meetings and a continuing emphasis on increased membership (including corporate members). CSHS is also aware of cost sensitivities, so it is hoping to maintain actual fees while trying to provide more services to members. In addition, CSHS also wishes to continue working with other societies including ASHS, Plant Canada and ISHS.

Realizing that resources to operate CSHS are finite and done on a voluntary basis, it is envisioned that to continue gaining momentum, new subcommittees should be created to assist with regular events. These may include (i) Awards Committee, (ii) Membership Committee, (iii) CSHS Annual Conference Committee, and (iv) CSHS Web Site Committee.

#### **Elections**

Elections for an incoming CSHS executive were held and the officers for 2007 - 2009 were selected (page 3).

#### **CSHS** and Ghanaian Institute of Horticulturalists (GhIH)

An update was provided on the AIC led CIDA project involving CSHS and GhIH. CSHS members involved in this project include Dinah Ceplis, Merv Pritchard, Josee Owen, and Mary Ruth McDonald, and GhIH involvement has included Patrick Kumah, Gustav Mahunu, Abdul-Halim Abubakari, Gladys Timpo and Irene Irdun. The objectives of this initiative have been to improve irrigated vegetable production in the upper west region of Ghana, and support GhIH: through membership, publication of the journal and vibrant student association. Outcomes of the project have included i ncreased amount and types of vegetables, improved nutrition and health , increased family income, more employment reduces migration, which reduces AIDS and Guinea worm infection and greater gender equity. Additional information on the project can be found at the CSHS web site.

#### Adjournment

The Annual Meeting was adjourned at 2:50 p.m. Motion to adjourn was made by Allan Sullivan, was seconded by Shahrokh Khanizadeh, and was approved. The next Annual Business Meeting of CSHS is tentatively scheduled to occur in July 2008 at the Plants and Soils Conference being held in downtown Montreal.

### PLANTS & SOILS: MONTREAL '08

#### Mark your calendars!

A joint conference between the Northeast Branch of the American Society of Agronomy Crop Science Society of America Soil Science Society of America

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the Canadian Society of Agronomy

&

the Canadian Society of Horticultural Science is planned for

13-16 July 2008 in Montreal hosted by McGill University at the downtown campus.

Members of the joint steering committee are:

Donald Smith, Philippe Seguin, JoAnn Whalen, Magali Merckx – McGill University Dick Weismiller (U MD), Sid Bosworth (U VT), Dave Hansen (U DE) – Northeast Branch Shahrokh Khanizadeh, David Percival, Denis Charlebois – Canadian Society of Horticultural Science Tom Bruulsema – Canadian Society of Agronomy
Input & Volunteers welcome!

#### Please contact:

Tom Bruulsema, President, Canadian Society of Agronomy International Plant Nutrition Institute 18
Maplewood Drive, Guelph, Ontario, Canada N1G 1L8 519-821-5519
Tom.Bruulsema@ipni.net

#### GRADUATE STUDENT ASSISTANTSHIP

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

#### **Natural Product Chemistry**

Supervisor: Dr. Vasantha Rupasinghe, Assistant Professor, Department of Environmental

Sciences

Location: Nova Scotia Agricultural College, Truro, Nova Scotia

**Project:** A graduate research assistantship in natural product chemistry is available through a project funded by the Natural Sciences and Engineering Research Council of Canada (NSERC). The area of research includes isolation and identification of natural compounds from selected fruits and characterization of their specific antioxidant properties. Research activities mainly include but are not limited to the isolation of selected polyphenolics using various chromatographic partitioning techniques, identification of compounds using liquid chromatography mass spectrometry, and characterization of their antioxidant properties using selected *in vitro*, food, and biological model systems.

**Qualifications:** Applicants must possess a B.Sc. honours degree in chemistry, biochemistry, or equivalent, and have a minimum first class GPA (80%, A- or 3.7) average in each of the last two years of undergraduate study. Interest in and knowledge about food and analytical chemistry or fruit biochemistry would be a strong asset. Strong written and oral communication skills are important. **Dates:** Summer (May) or Fall (September), 2007

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

(The successful candidate will be encouraged to apply for an NSERC-Industrial Postgraduate Scholarship (IPS) valued at \$21,000 per year for two years. While only Canadian citizens and permanent residents are eligible to apply to NSERC scholarship programs, applications for this position will be accepted from all those who have the appropriate qualifications.)

**To Apply:** For additional information on the research project and to submit the application, please contact: Dr. Vasantha Rupasinghe, Tree Fruit Bio-product Research Program, Department of Environmental Sciences, Nova Scotia Agricultural College, Box 550, Truro, NS B2N 5E3, Canada; e-mail: vrupasinghe@nsac.ca; Phone: +1 902 893 6623

#### **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

#### GRADUATE STUDENT ASSISTANTSHIP

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

#### **Graduate Student Assistantship**

#### **Process Biochemistry**

Supervisor: Dr. Vasantha Rupasinghe, Assistant Professor, Department of Environmental Sciences

Location: Nova Scotia Agricultural College, Truro, Nova Scotia

**Project:** This project attempts to use fruit biochemistry and nano-filtration membrane technologies as a part of an integrated and interdisciplinary research project to improve the quality of selected fruit juices. The successful graduate student will characterize the biochemical constituents of new fruit genotypes, study the application of nano-filtration membrane technologies for modulation of selected chemical properties of fruit juice, and investigate biochemical factors leading to the targeted quality attributes. This research initiative is a collaborative effort of the Nova Scotia Agricultural College, the Horticulture Development Center-AAFC (St- Jean-sur-Richelieu, Quebec), the Atlantic Food and Horticulture Research Center, AAFC, (Kentville, Nova Scotia) and the Food Technology Centre (Charlottetown, Prince Edward Island).

Qualifications: Applicants must possess a B.Sc. honours degree in food science, plant biochemistry, agriculture or equivalent, and have a minimum GPA of 3.0 in the last two years of study. Preference will be given to candidates who are eligible to apply to the NSERC Industrial Postgraduate Scholarship (IPS) program; candidates who have an 'A' (3.7, 80% or first class) average in each of the last two years and who are Canadian citizens or permanent residents of Canada. Interest in and knowledge about food science and technology, value-added food processing, fruit biochemistry and/or food analysis would be a strong asset. Strong written and oral communication skills are important.

Dates: Fall (September), 2007

**Stipend:** \$15,000 per year for two years

(The successful candidate may also apply for an NSERC-Industrial Postgraduate Scholarship (IPS) valued at \$21,000 per year for two years. While only Canadian citizens and permanent residents are eligible to apply to NSERC scholarship programs, applications for this position will be accepted from all those who have the appropriate qualifications.).

**To Apply:** For additional information on the research project and to submit the application, please contact: Dr. Vasantha Rupasinghe, Tree Fruit Bio-product Research Program, Department of Environmental Sciences, Nova

Scotia Agricultural College, Box 550, Truro, NS B2N 5E3, Canada; e-mail: vrupasinghe@nsac.ca; Phone: +1 902893 6623

#### **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