



Canadian Society of Agronomy

La Société Canadienne d'Agronomie

CSA Newsletter

March 2022

PRESIDENT'S MESSAGE

Fellow CSA members,

In 2021, we had a very successful Tri-Society virtual conference, jointly organized with the Canadian Phytopathological Society, Canadian Society of Agronomy and Canadian Society of Horticultural Science. I am very pleased to inform you that Canadian Society of Agronomy (CSA) and Canadian Weed Science Society (CWSS) are working jointly to hold an in person 2022 conference. This CSA-CWSS conference will be held Nov. 13-19, 2022 in Halifax, NS. BioFuelNet's BioMass Canada (BMC) AgriScience Cluster, in collaboration with the Canadian Society of Agronomy, is hosting a joint Biomass Symposium, Developing Sustainable Biomass Management in Canada: Climate Change Resilience and Advancing the Bioeconomy, to be held Nov. 14, 2022 as part of the joint CWSS/CSA Annual Meeting and Conference.

Please mark your calendar to participate and present your research and meet your colleagues and scientists across the globe.

CSA is dedicated to promote and facilitate research collaborations in developing new techniques and beneficial management practices to enhance crop production to improve food security amidst climate change. Additionally, CSA provides a platform to the researchers to publish their research articles in "Canadian Journal of Plant Science". To further enhance the dissemination of knowledge on recent issues, CSA has decided to publish a CJPS special issue on "Cropping system adaptation for enhanced resilience to climate change in cold climate regions". This special issue will consider publishing original research and review articles on wide range of research areas/disciplines associated with this topic. CSA is thankful to Dr. Joann Whalen (Lead Guest Editor), and Dr. Helen Booker, Dr. Douglas Cattani, and Dr. Cameron Wagg (Guest Associate Editors) to work on this special issue.

I am very glad to inform our CSA members that CSA Green Baggers and CSA Brown Baggers series has shown a great success in the last two years. This initiative was created by Sheri Strydorst, Amy Mangin, and Laurel Thompson to increase our graduate student engagement. In each session a short research presentation is given by a CSA graduate student member. All CSA graduate student members are eligible and encouraged to present and attend sessions. All CSA members and interested non-members are welcome to attend and ask questions.

The CSA 2022 annual award nominations are now open. Please consider nominating a deserving colleague for these professional awards by April 15, 2022. Also remind your students to apply for "2022 Graduate Students Awards". The deadline for nominations is April 15, 2022.

As every year, there will be nominations for 2022-2023 CSA Executive. Please consider seeking nomination or nominating one of your enthusiastic colleagues by April 15, 2022. We have a lot of work to get done for our society!



President's Message (Con't.)

The CSA executive is working hard to extend more benefits for the members. Please have your say by providing the CSA executive with your ideas to make CSA more prominent in the changing agricultural landscape. Let us work together and promote our mission through recruiting and retention of membership which is the key of our success! I encourage you to maintain your membership and motivate others to become members as well. Best wishes for Spring season filled with health, happiness and prosperity!

I look forward to seeing all of you at the 2022 CSA-CWSS conference in Halifax, NS. Enjoy the rest of your winter.

Sincerely,

Mumtaz Cheema
Memorial University of Newfoundland
President, Canadian Society of Agronomy

Save the Date!

Upcoming Canadian Society of Agronomy Annual General Meetings and Conferences:

- The 2022 CSA Annual Meeting and Conference will be held in conjunction with the Canadian Weed Science Society on November 13-19, 2022 in Halifax.
- The 2022 CSA Annual Business Meeting will be held on November 16, 2022 from 16:30 - 18:30 in Halifax.
- BioFuelNet's BioMass Canada (BMC) AgriScience Cluster in collaboration with the Canadian Society of Agronomy is hosting a joint Biomass Symposium, Developing Sustainable Biomass Management in Canada: Climate Change Resilience and Advancing the Bioeconomy, to held Nov. 14, 2022 as part of the joint CWSS/CSA Annual Meeting and Conference.

Nominations for 2022-2023 CSA Executive

The Canadian Society of Agronomy is now accepting nominations for the 2022-2023 CSA Executive. The deadline for nominations is April 15, 2022.

The open positions are below:

1. President-Elect
2. Western Director
3. Student Representative
4. Industry Member

Nominations for the CSA Executive can be made by any active member of CSA. Please email your nominations to nzubriski@gmail.com by April 15, 2022.

Calling all Graduate Students.....

Do you want to share your work with other Canadian scientists and agronomists?

The Canadian Society of Agronomy (CSA) is looking to print short (250 word) summaries of graduate student research projects in the CSA newsletter. This will highlight up and coming graduate students and their work, and bring their energy and enthusiasm to the CSA!

We encourage all graduate students who presented at a CSA Green Bagger session to submit a written summary of their presentation. We also welcome research summaries from students who have not presented at a CSA Green Bagger event.

CSA newsletters are circulated 2 to 4 times per year. One month before the newsletter is circulated, a notice will be sent to the CSA membership requesting submissions of graduate student articles. Articles must be submitted at least 1 week prior to newsletter circulation. Graduate students should have their supervisor and fellow graduate student review their article and make editorial suggestions prior to submission. Articles will be printed as submitted. We also encourage graduate students to submit a photo with their article to be printed in the newsletter.

Please submit graduate student research summaries to Nancy Zubriski at nzubriski@gmail.com.

All CSA graduate student members are eligible to submit a summary of their research project. CSA graduate student memberships are available for \$25 (<https://agronomycanada.com/membership/sign-up-and-renewal/>)

CSA is Looking for an Executive Director

Executive Director | Canadian Society of Agronomy

Starting date: July 1, 2022

The CSA is looking for a contractor to act as Executive Director, Registrar and Bookkeeper (QuickBooks). The present workload is about 15-20 hours per month. Payment is quarterly based on time sheets. More information on the position is available by clicking the link below.

[CSA Executive Director](#)

If you are interested in this position, please email your application to nzubriski@gmail.com before March 31, 2022. Applications should include a short resume and statement of qualifications for this role.

CSA 2022 Award Nominations

Professional Awards

The CSA professional awards are an important peer recognition benefit. Please consider nominating a deserving colleague for one of the following professional awards by the **April 15, 2022** deadline. Nomination requires submission of a nomination package and 2 supporting letters. For further information including nomination guidelines visit our website at <http://agronomycanada.com/awards/>.

- Early Career Agronomist is intended for individuals actively engaged in research, teaching, extension or administration within 10 years of starting their career or earning their last degree.
- CSA Fellow is intended for individuals actively engaged in research, teaching, extension or administration for at least 10 but less than 20 years of their career.
- Distinguished Agronomist is intended for individuals actively engaged in research, teaching, extension or administration for more than 20 years of their career.

Nominations for the above awards can be made by any active member of CSA who has had continuous active membership in CSA for at least five years. A member may nominate only one person for each award in a given year.

Graduate Student Awards

The Canadian Society of Agronomy is now accepting applications for the 2022 CSA graduate student awards. The deadline for nominations is **April 15, 2022**.

The available awards include:

1. Ali Navabi Grad Student Travel Award

The 2022 award includes reimbursement of up to \$500 of incurred registration fees/travel costs for up to five graduate students to attend the CSA Annual General Meeting, November 13-19, 2022 in Halifax.

2. Pest Management Award

An award of \$500 available to a graduate student enrolled at a Canadian University with research programs relevant to pest management. The award is accompanied by a grant of up to \$1000 for travel expenses and conference registration (if presenting) at the CSA Annual General Meeting to present on his/her research project.

3. Student Presentation and Poster Awards

A number of awards are awarded at the CSA Annual General Meeting for the best oral and poster presentations given by graduate student members. The awards are presented after an assessment conducted by a panel of judges. Up to \$2,000.00 is awarded for graduate student oral and poster presentations.

Graduate students must be a member of CSA to apply for the above awards. For further information including nomination guidelines visit our website at <http://agronomycanada.com/awards/>.

The 2022 CSA awards committee will be chaired by Andrew Burt, CSA past-president.

Upcoming Events

CSA Green Baggers

Register to attend the Canadian Society of Agronomy Graduate Student's 'Green' Baggers

**All sessions will be held on Zoom. Once registered you will receive a link to attend.*

***All times are shown in CST (Manitoba time).*

The agenda for each session is shown below:

| | |
|-------------------------|---|
| 12:15 pm - 12:20 pm CST | Moderator intro to session |
| 12:20 pm - 12:40 pm CST | Speaker 1: live intro, play video, live Q & A |
| 12:40 pm - 1:00 pm CST | Speaker 2: live intro, play video, play video, live Q & A |
| 1:00 pm CST | Moderator adjourn |

Date: March 30, 2022

Time: 12:15 pm CST

Registration: [Click here to register to attend on March 30, 2022](#)



Speaker 1: Adam Fast

Topic: The effects of enhanced efficiency fertilizers on CWRS yield, protein and environmental health.



Speaker 2: Kanishka Senevirathna

Topic: Assessing genetic structure and reconstructing invasion routes of wheat midges (*Sitodiplosis mosellana*) on the Canadian prairies

Date: April 27, 2022

Time: 12:15 pm CST

Registration: [Click here to register to attend on April 27, 2022](#)



Speaker 1: Bharat Yadav

Topic: Identifying novel sources of resistance in oats and studying genetic population structure of *Puccinia coronata* f. sp. *avenae* in Canada. (Title may change depending on results.)



Speaker 2: Vincent Fetterley

Topic: Identification and mapping of a gene conferring immunity to stripe rust in spelt wheat

Pest Managment

Time to Renew Your Membership

Renew Your CSA Membership Today!

The Canadian Society of Agronomy online member registration for 2022 is now open. Join or renew today using the link below.

<http://agronomycanada.com/membership/sign-up-and-renewal/>

New for the 2022 Membership Year - Complimentary CJPS (Electronic)

Canadian Scientific Publishing (CSP) has generously offered to provide **all members of the CSA** with complimentary access to the electronic version of the *Canadian Journal of Plant Science (CJPS)* for the 2022 calendar year.

The **Canadian Journal of Plant Science** contains new research on all aspects of plant science relevant to continental climate agriculture, including:

- plant production and management (grain, forage, industrial, and alternative crops),
- horticulture (fruit, vegetable, ornamental, greenhouse, and alternative crops), and
- pest management (entomology, plant pathology, and weed science).

The journal also publishes cross-disciplinary research in the application of technology, plant breeding, genetics, physiology, biotechnology, microbiology, soil management, economics, meteorology, post-harvest biology, and plant production systems.

Research that makes a significant contribution to the advancement of knowledge of crop, horticulture, and weed sciences (e.g., drought or stress resistance), but not directly applicable to the environmental regions of Canadian agriculture, may also be considered.

CSA Members are eligible for reduced page charges (\$30.00 per published page).

CSA Photo Contest

Start collecting photos for our Photo Contest! The objective is to encourage CSA members to capture excellent agronomy-related images and to share these images with fellow CSA members.

The three best photos submitted in each of three categories will be recognized. Category 1: Agronomy in action; Category 2: Crops and Biological Interactions; Category 3: Landscapes and Fieldsapes. The winning photos will be chosen by a panel of judges selected by the Photo Contest Coordinators at the CSA 2022 annual meeting (November 13-19, 2022). 1st place: \$100, 2nd place: \$50, 3rd place: \$25 in each of three categories.

Photos can be submitted by email (csagronomy@gmail.com) or Twitter, by tweeting a high-resolution image to @AgronomyCanada using the hashtag #CSA2022photocontest. Please provide a short and descriptive caption or title for your photo and the category when submitting. Please submit photos by August 31, 2022.

Thank you to our contest sponsor!



Positions / Opportunities

TIER 1 or 2 CANADA RESEARCH CHAIR IN BIG DATA ANALYTICS IN DIGITAL AGRICULTURE

The College of Agriculture and Bioresources (AgBio) at the University of Saskatchewan (USask) is pleased to invite applications for a Tier 1 or 2 Canada Research Chair appointment in Big Data Analytics in Digital Agriculture. This position will be located at the University of Saskatchewan in Saskatoon, Saskatchewan. The Canada Research Chair (CRC) Program is the flagship of a national strategy to make Canada one of the world's top countries in research and development (www.chairs-chaires.gc.ca).

The Canada Research Chair in Big Data Analytics in Digital Agriculture will lead an innovative research program in AgBio. They will serve as an interdisciplinary leader and integrator between multiple units and research areas in collaborating disciplines. The candidate will have both the research and collaborative skills enabling them to lead and facilitate digital agriculture research at USask.

For more information click the link below:

<https://mcusercontent.com/ca7fd4410b9dab34e3ef8b381/files/396b1d36-73fd-843a-2ecc-a4c5de1c07a7/>

SCIENTIFIC SOFTWARE DEVELOPER

The Global Institute for Food Security (GIFS) is seeking a dynamic and passionate Scientific Software Developer to join a multidisciplinary team focused on root and rhizosphere-based solutions for improved crop health and food production. The incumbent will play an integral role in developing innovative methods for 3D imaging and analysis of plant root system architecture.

For more information click the link below:

https://usask.csod.com/ux/ats/careersite/14/home/requisition/7866?c=usask&_ga=2.60286125.1642818109.1643657674-847580155.1617914519AgBio_CRC_Tier_1_2_Job_Posting_RASI_v3.pdf

MSc GRADUATE STUDENT OPPORTUNITIES

The Cropping System Research Group led by Dr. Linda Gorim in the Department of Agricultural, Food and Nutritional Science at the University of Alberta invites applications for highly motivated graduate students (MSc). The project involves screening of canola germplasm for superior photosynthetic traits and source-sink relationships in canola germplasm.

For more information click the link below.

https://mcusercontent.com/ca7fd4410b9dab34e3ef8b381/files/a3e236c0-7617-92b4-9ce5-86688a653f5b/MSc_U_of_Alberta.pdf

Positions / Opportunities (Con't)

Alberta Beef Producers has the following contract positions available with the Living Laboratories Initiative.

The Living Laboratories Initiative is a \$185 million, 10-year program intended to establish a Canada-wide network of Living Labs, where regional leaders will bring together agricultural producers, stakeholders, and scientists to co-develop, test, and monitor beneficial management practices (BMPs) to enhance climate resiliency. Living Labs are based upon three core principles: focusing on producer needs, broad and diverse partnerships, and testing in the real-life context under real agricultural production conditions. For more information please visit: <https://agriculture.canada.ca/en/agricultural-science-and-innovation/living-laboratories-initiative>.

Please click the links for additional information on the positions.

Living Labs Director

https://mcusercontent.com/ca7fd4410b9dab34e3ef8b381/files/3d2d5dd2-3825-89dc-0b5b-9bc6256bc849/LL_Director_Contract_Opportunity.pdf

Living Labs Engagement Facilitator

https://mcusercontent.com/ca7fd4410b9dab34e3ef8b381/files/e2a4944c-c0d4-8c76-30e6-e757caa674ae/LL_Engagement_Facilitators_Contract_Opportunity.pdf

Living Labs Knowledge Translation & Transfer & Engagement Lead

https://mcusercontent.com/ca7fd4410b9dab34e3ef8b381/files/acf97610-22ae-6600-b8bc-72db1b014ff2/LL_KTT_Engagement_Lead_Contract_Opportunity.pdf

Canadian Journal of Plant Science

We are striving to increase Canadian content in our society journal, The Canadian Journal of Plant Science. If each CSA member would submit at least one manuscript in 2022, we would achieve this goal and strengthen our journal. The CJPS is an important part of the CSA and is one way that we raise funds for society awards. For information on submitting a manuscript visit <https://cdnsiencepub.com/journal/cjps/authors>.

The Canadian journal of Plant Science periodically has openings in its editorial board. If you are interested in volunteering to be an Associate Editor, please contact Dr. Brian Beres at brian.beres@agr.gc.ca

CJPS-CSA Special Issue Call For Papers



Call for Papers

CROPPING SYSTEM ADAPTATION FOR ENHANCED RESILIENCE TO CLIMATE CHANGE IN COLD CLIMATE REGIONS

Understanding how cropping systems may be modified to enhance their resilience to climate change is important to maintain or improve crop yields, ensure food security and protect the environment. In Canada, climate change effects on agriculture are expected to vary depending on the geographical location of the cropping system.

On one hand, climate change is expected to accelerate extreme weather frequency, which is a clear threat to agriculture. On the other hand, climate change is expected to expand the land area under potential agriculture production. This requires that agricultural production is adaptable to ensure cropping systems can pivot to both meet challenges as well as the opportunities driven by a changing climate. This special issue in the *Canadian Journal of Plant Science* will cover all aspects of cropping system research in cold climate regions related to how cropping systems can address the challenges and opportunities of a changing climate.

Structure and Content of the Special Issue

Original research and review articles are invited. Due to the broad nature of the discipline, the Special Issue will consider the following subject areas: Indigenous Agriculture; Agronomy and Crop Management; Soil and Environmental Science; Novel Crops; Crop Physiology and Stress; Integrated Pest Management; Agrometeorology; Modelling; Organic Agriculture; Northern Agriculture; Genotype x Environment Interaction; Water Management. Original research can include field, lab, or greenhouse trials; take place in field settings, controlled, or urban environments. Modelling studies will also be considered.

Manuscript submissions will be peer-reviewed. Authors should follow the instructions and guidelines set by the *Canadian Journal of Plant Science*: cdnsiencepub.com/journal/cjps/authors

Guest Editors

Dr. Joann Whalen, Lead Guest Editor, McGill University

Dr. Helen Booker, Guest Associate Editor, University of Guelph

Dr. Douglas Cattani, Guest Associate Editor, University of Manitoba

Dr. Cameron Wagg, Guest Associate Editor, Agriculture and Agri-Food Canada

SUBMISSION DEADLINE: April 15, 2022



Canadian Journal of
Plant Science

Thank you CSA Gold Sponsor!



ESN: The seed-safe nitrogen fertilizer choice

Seeds have maximum yield potential when put in the ground – from there, it's up to crop management and mother nature to maintain that potential. When placing nitrogen with seed, ensuring the fertilizer source won't damage or set back the seeds is a key part of that equation.

Don't risk damage and nitrogen loss

Many nitrogen sources, like anhydrous ammonia, carry a large risk of seed damage and require a significant waiting period between seeding and application. There is no exact safe waiting period following ammonia injection, and injury may occur even when planting several weeks after application if injection is too shallow. Research has shown that corn planted on ammonia injection bands was susceptible to stand loss, root pruning, and/or stunting if ammonia was injected less than 8-10 inches deep.

Polymer coated for safety

In addition to controlling the release and providing nitrogen when plants need it most, [ESN SMART NITROGEN's](#) unique polymer coating also makes ESN safer for seeds than conventional nitrogen sources. That's because ESN provides a physical barrier between the seed and urea within the coating, and releases slower than conventional sources, typically over a period of 50-80 days. Crops can be planted with or immediately after ESN application – no waiting period necessary.

Maximum safe rates for canola, wheat, and other cereals

For fertilizer placed with the seed, we use a factor of 2 to 3X for ESN, meaning ESN is safe up to about 2 to 3 times the normal safe rate of urea for your soil conditions and planter configuration. If using 100% ESN, you should be safe up to 3X; for a blend using ESN for 75% of the total N, we suggest dropping back to 2X the safe rate of urea to account for the effects of the soluble fertilizer used with the ESN and at 1.5X the safe urea rate indicated when ESN is 50% of the total N source.

For broadcast applications or fertilizer banded with a minimum separation of at least 2-3 inches from the seed, there is no practical limit to how much ESN you can apply.

Visit SmartNitrogen.com to learn more about the seed-safe nitrogen source that will protect against loss.

Canadian Society of Agronomy Executive Committee 2021/2022

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