

Review of the Canadian Organic Standards

THE MERGER OF THE CANADIAN ORGANIC AQUACULTURE STANDARDS WITH THE ORGANIC AGRICULTURE STANDARDS IS A DYNAMIC PROCESS

With the modernization of the Canadian food inspection regulatory system, the Canadian Food Inspection Agency will be able to regulate all organic food production standards under one merged organic standard that includes both terrestrial and aquaculture products.

To perform this integration, in January the Organic Federation of Canada established a combined AGRI-AQUA Working Group composed of 19 members representing the aquaculture and agriculture communities, as well as consumer groups, provincial and federal regulators, organic associations, and the CGSB.



The two convenors, Tim Rundle (chair) and Rochelle Eisen, with the help of Jane Barnett from Fisheries and Oceans Canada, have led the Agri-Aqua Working Group through a total of 10 teleconferences, held from January 21 to March 18, 2015. The Working Group went through each of the organic agriculture standards and integrated references to aquaculture, where applicable.



The production-related elements of the original aquaculture standards (CAN/CGSB-32.312) were imported directly into the organic agriculture standards (CAN/CGSB-32.310 and 32.311).

The Working Group took the opportunity to strengthen several sections of the aquaculture standard, particularly in those areas, such as feed, known to be controversial. This was an iterative process: 21 versions of CAN/CGSB-32.310 were produced, along with 16 versions of CAN/CGSB-32.311, and many different versions of individual elements of the standards. At its meeting in May, the CGSB Organic Technical Committee, with ten additional aquaculture members as voting members, will consider the aquaculture amendments proposed by the Working Group. The Committee will vote on whether to proceed further, which would entail sending the merged document out for ballot to the entire Committee and submitting it to public review.

Do you know organic aquaculture?

50% of global seafood supply comes from aquaculture, but aquaculture production systems are not as well-known as terrestrial farming. The organic aquaculture standard's objective is to reduce the environmental impact of fish farming, and to offer organic aquaculture products to Canadian consumers. But, do organic fish farmers really reduce the impact of their systems? What do you know about organic aquaculture?

In order to inform stakeholders and consumers, the OFC is requesting your attention and input. What are your concerns? What would you like to ask about organic aquaculture systems? Do you have questions about the life cycle and nutrition of seafood and finfishes?

We are preparing an extension document and your questions will help us in addressing your issues and delivering the information that you will need to have when the public review is launched after the May meeting of the Technical Committee. Please email your questions to info@organicfederation.ca!

Ted Zettel steps down from the post of OFC President



After six years as OFC President, Ted Zettel is stepping down. He will remain on the OFC Board for one year as the OCO representative and will help the future president take on his new mandate.

Ted summarized his concerns at the OFC AGM held March 10th. He confirmed the essential role of OFC, expressed his wish to see improved cooperation between Canadian organic associations, strongly asserted the need for financial sustainability for all provincial organic associations and the necessity of integrating the young farmers into the organic production system.

'The organic food movement needs passionate young people. They are coming into the movement in new ways, but we are not attracting them into our old organizations which sometimes seem to them to have been co-opted by business interests or to have strayed from the original ideals. For me personally, this is a wake-up call to reassess my goals and get back to the root of the matter, to what motivated me to make the radical conversion to organic farming way back then.'

His thoughtful and heart-felt presentation can be read [by clicking here](#).

Canadian Standards Interpretation Committee

Reminder - Comment Period - February 13 to April 13 2015

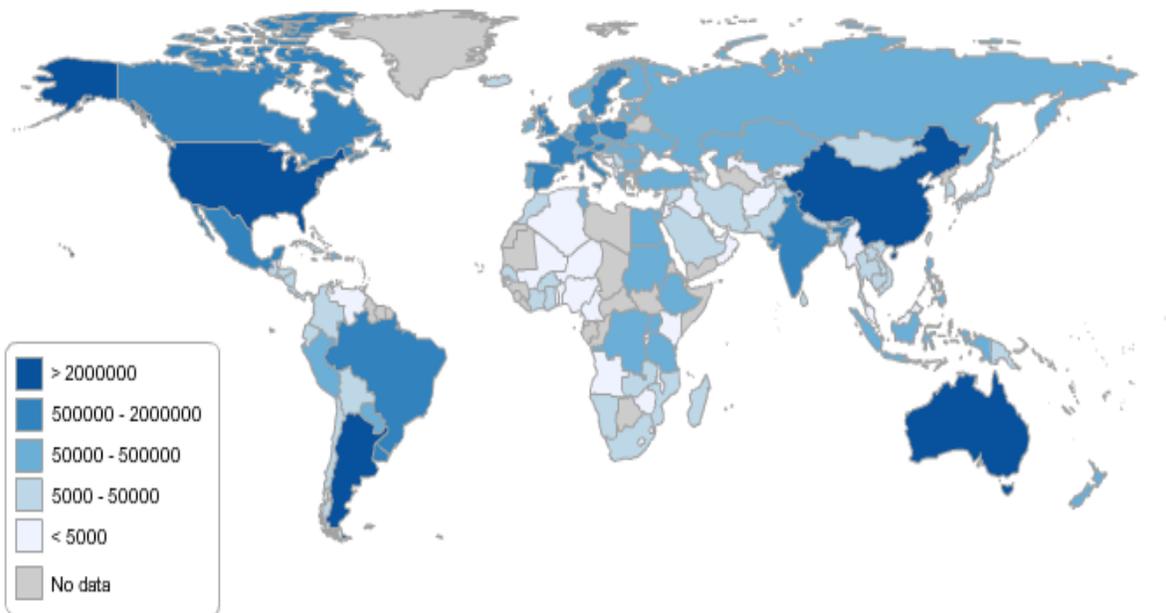
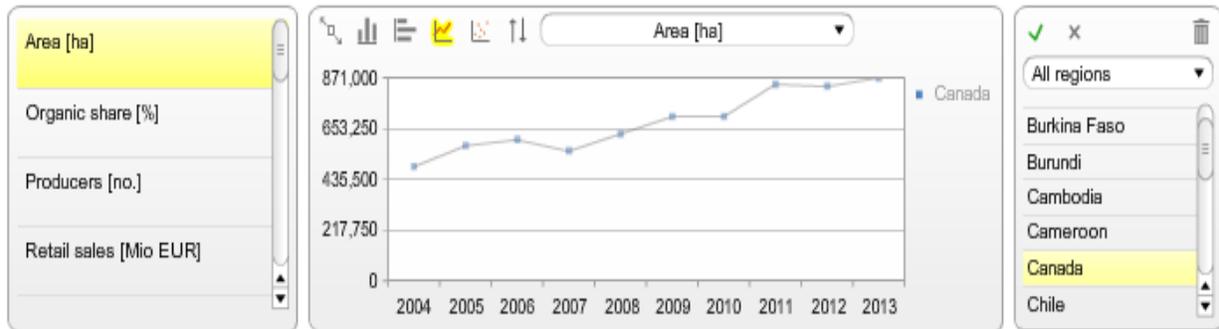
- **Can wild seaweed meal be certified?**
- **Can bean sprout grown hydroponically be certified organic?**
- **Can citric acid be used as a pH adjuster during the extraction of Fulvic Acid?**

The Organic Standards Interpretation Committee (SIC) provides interpretive guidance to the Canada Organic Office on issues related to the National Standards for Organic Agriculture (CAN/CGSB 32.310 and CAN/CGSB 32.311). [Click here](#) to see the proposed answers to various questions raised by organic stakeholders, regarding the National Standards for Organic Agriculture. **The proposed responses are subject to a 60-day comment period from February 13 to April 13 2015.**

All comments regarding these answers should be sent to OPR.RPB@inspection.gc.ca

Canadian Production on Organic Map of Organic World Website

The Organic World Website is presenting a global survey on organic farming in an interactive map that displays various data – such as organic share, retail sales, and number of producers.



[Click here](#) to consult this map.

UPA hires a full-time development agent for organic agriculture in Quebec

The Quebec organic sector is now supported by the Quebec Farmers Union; Jérôme-Antoine Brunelle was hired, starting late January 2015, to coordinate the development of organic production in the province of Quebec. Brunelle is an agro economist, with a Master in business administration.

The Organic Quiz

A successful organic learning session



Lindsay Sutton, one of the four winners of the Organic Quiz
Photo Jacob Marfo

There are many ways to provide extension services and promote organic agriculture. The OFC created and presented the Organic Quiz at the Organic Alberta Conference, where participants were asked to answer 30 questions about organic production. All quiz-takers were very attentive, even discussing amongst themselves when issuing contradictory answers. They felt so involved that they decided not to count their correct answers, but rather opted to have a name draw to select who would win the prize: a T-Shirt printed with 'I am an organic standard expert' s on the back.

The OFC is planning to further develop the quiz concept in order to educate organic stakeholders about the new Canadian Organic Standards that will be published in late summer 2015.

Organic Science Cluster II - The People Behind the Research

A Conversation with Dr. Chantal Hamel

Agriculture and Agri-Food Canada
Semiarid Prairie Agricultural Research Centre

Activity A.9: Phosphorus sources for organic growers of the Prairie, and agronomic strategies for effective soil microbiology to make better use of these P sources

Industry Partners:

- International Plant Nutrition Institute
- Premier Tech Biotechnologies
- Saskatchewan Organic Directorate
- Saskatchewan Pulse Growers
- Western Ag Innovations

Collaborating Researchers:

- Yantai Gan, Agriculture and Agri-Food Canada
- Miranda Hart, University of British Columbia Okanagan
- Newton Lupwayi, Agriculture and Agri-Food Canada
- Ramon Rivera, Instituto Nacional de Ciencias Agrícolas
- Marc St-Arnaud, Université de Montréal

Dr Hamel, can you tell us a bit about yourself?

I come from Québec City, and studied at McGill University. I then worked for the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec, where I had a chance to work with agrologists. This is where I started to become very interested in agriculture, particularly applied work in agriculture. I now work for Agriculture and Agri-Food Canada in Swift Current, Saskatchewan. I love the Prairies, particularly the native prairie, and the beautiful landscape that we have, the big sky.



Can you briefly explain your Research Activity in Organic Science Cluster II (OSCII)?

When left with unanswered questions, scientists often want to keep digging. That is the case with this activity, which stems from our work in the first Organic Science Cluster that explored phosphorus levels on Prairie organic farms and delved deep into the soil to examine soil biology. When faced with our findings that soil phosphorus is often low and shifts in soil biology in cultivated fields may be limiting yields on organic farms, we embarked on this activity in OSCII.

In OSCII, we are exploring potential phosphorus sources for Prairie organic growers, which often have limited access to inputs, due to locations, field sizes and expense. We will examine the impacts of using amendments, such as locally available composted animal manures and rock phosphate, to boost soil phosphorus.

We are also looking at ways to bolster soil diversity, in an effort to increase soil resilience and limit root-borne diseases in economically important crops such as lentil. We are exploring the impacts of mycorrhizal fungal inoculants and the use of diverse, mixed cultivar plantings on crop yield and soil communities.

What brought you to this research, and what excites you the most about this project?

The previous work that we did. Researchers are like that, we get excited about what we are doing! So, I want to answer some questions that were raised from the previous work, and, at the same time, try to improve the production of organic growers. We're looking for ways to do more with what we have, to use soil resources better, rather than relying on inputs.

You were also involved in the first Organic Science Cluster.

Can you briefly explain your project and its outcomes?

Has your current Research Activity developed as a result of the first Organic Science Cluster?

[Editor's note: Arbuscular mycorrhizal fungi live in symbiosis with their host plants, providing them otherwise unavailable soil nutrients, particularly phosphorus, in exchange for carbohydrates synthesized by the plant host.]

Our work in the first [Organic Science Cluster](#) revealed some very interesting and sometimes unexpected things about soil biology, particularly mycorrhizal fungi. We had very little knowledge of fungal diversity before this study, and this new base of information, and the other questions that it raised, led to our current research in OSCII.

In the first Organic Science Cluster, we looked at the distribution of fungi in a range of soil environments, namely cultivated fields, native prairie and roadsides. We found that the fungal community shifts under these different environments. Fungal diversity was highest in the roadsides, which is good news because we have lots of roadsides that could be used to restore depleted soils. The native prairie and cultivated fields had about the same level of fungal diversity, although the communities are changed. So, agriculture is not wiping out mycorrhizal fungi, but shifting the prevalence of certain groups.

We found one fungi in particular, named *Funneliformis mosseae*, which becomes very abundant in agricultural soil, and can actually be used as an indicator of agricultural soils. We also discovered something unexpected: a mycorrhizal fungi that lives deep in the soil and that seems to have a negative impact on crops. We always thought that mycorrhizal fungi are invariably good, but this goes to show that, in nature, nothing is totally black or white.

Where is your project taking place?

We will have field sites in Swift Current, Saskatchewan on the Agriculture and Agri-Food Canada farm, as well as at another site in Beaverlodge, Alberta. We also hope to work on-farm, and are looking for volunteers.

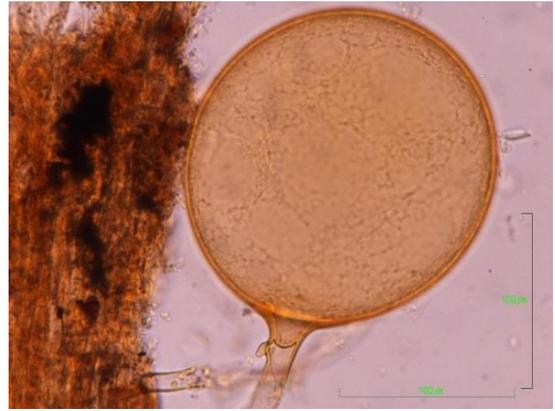
Growers will benefit by being able to see if treatments work on their fields, and we are trying to make it easy for farmers to participate, asking for one field that will have the treatment just once.

How do you envision that your research will help organic producers in Canada?

We hope that we can do our part for the organic industry.

We want to further explore whether phosphorus is limiting yields on organic farms, and give farmers more

information about their yield potentials. From there, we hope to show producers what resources are available on the Prairies. When looking at managing diversity, if we can increase yield, plant health and soil health with increasing diversity, then this is something that farmers could really use.



Spore of *Funneliformis mosseae*, a common arbuscular mycorrhizal fungi in agricultural

How have the organic community and your industry partners helped to shape your research?

During the first Organic Science Cluster, I visited many different farms. The people who volunteered for our study helped me a lot – if they had not let me take samples, put flags in their fields and such, I could not have done that research and might not have wanted to continue in this line of work. It was wonderful to talk to people in the field. I was in the middle of nowhere, and people would come to chat with me.

Are there graduate students, undergraduate students, or postdoctoral fellows involved in this research?

We currently have a post-doctoral fellow who is working part-time on this project. We are lining up a full time post-doctoral fellow, who will be starting soon. Summer students are also important, I know because that is how I started out, so we will also have summer students involved.

For more information on Chantal Hamel's work in Organic Science Cluster II, please visit <http://www.dal.ca/oacc>. Read the full interview with Dr. Hamel [here](#).

The [Organic Science Cluster II](#) (OSCII) project described in this article is supported by the [AgrInnovation Program](#) of [Agriculture and Agri-Food Canada's Growing Forward 2 \(GF2\) Policy Framework](#) and [industry partners](#). OSCII and this article are collaborative initiatives of the [Organic Agriculture Centre of Canada](#) at [Dalhousie University](#) and the [Organic Federation of Canada](#).