

June 2016

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## OFC's Blog - Aquaponics - an organic production system?

Aquaponics is a combination of fish and plant production using aquaculture and hydroponics systems. But hydroponics, the cultivation of plants in aqueous nutrient solutions, is prohibited in organic production systems in Canada (clause 7.5.2 of <u>CAN/CGSB-32.310</u>).

Can a terrestrial plant such as lettuce, grown in aquaponics systems, be certified organic?

Aquaculture, that includes aquatic animal and plant production, as well as plants grown under aquaponics systems, will soon be integrated to the <u>Organic Products Regulations</u> (OPR). The OPR will reference the <u>Organic Aquaculture</u> <u>Standard</u> with which aquaculturists have to comply to have their products certified and labeled as organic.

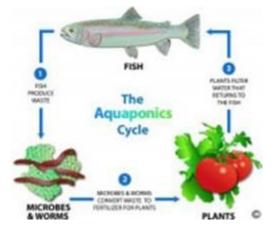
Principles guiding organic aquaculture and aquaponics are similar to the principles established in organic agriculture production: GMOs, synthetic growth regulators, antibiotics, clones and other synthetic substances are prohibited.

But, hydroponics is prohibited under the current Canadian Organic Standards. As the roots of terrestrial plants grown in aquaponics systems are immersed in water, the OFC wants to know your opinion. Can we have organic aquaponics while prohibiting hydroponics?

Does organic lettuce grown in water in symbiosis with cultured fish meet organic consumer expectations? How can we reconcile the marketing of the same product certified under two different organic standards that have contradictory clauses?

We want to know what your opinion!

Please comment https://ofcfbc.wordpress.com/



Aquaponics combines aquaculture with the cultivation of plants in a symbiotic relationship. Fish manure as well as feed waste are metabolized by bacteria and absorbed by plants grown on the surface of the aquaculture tank. When absorbing nutrients, plants also filter the water that is recirculated in the system.



### The 2<sup>nd</sup> Canadian Organic Science Conference

Preparations well underway for the 2<sup>nd</sup> Canadian Organic Science Conference!

The preliminary program is posted here.



Urs Niggli, from FIBL

'You will see that I am the comparison guy. I always like to know what is really special, what is different about organic farming, why it is different, and what can farmers learn from that'.

Urs Niggli, from FIBL, will speak Monday September 19, from 8:30 to 9:30, and Wednesday, September 21, at 8:15 at the Hotel Sandman, in Montreal's suburb. It is a rendez-vous!



Dr. Andy Hammermeister represented the Technology Innovation Platform of IFOAM Organics International, at the first <u>Organic Science Day in China</u> and also delivered a presentation to food safety students and faculty at Soochow University

### An invitation from Andy Hammermeister OACC Director The Second Canadian Organic Science conference is back once again as a result of popular demand!

It will offer more than just opportunities to network within the organic scientific community, but will also feature global and national leaders who will present overviews of organic science as it now stands in their respective fields. The conference will also feature field tours to some of Quebec's leading organic operations.

This is a tremendous opportunity for multidisciplinary interaction among scientists, students, professionals and producers from across Canada. Don't miss this tremendous event! A special thanks to the sponsors of the Conference!



# GOLD













**SILVER** 



POUVOIR NOURRIR POUVOIR GRANDIR

L'Union des producteurs agricoles



**BRONZE** 



AGROPUR

**Pro-Cert** 

Fruit dor







Dairy Farmers of Canada



## Summer videos Organic research in Canada involves the producers and the researchers

#### **Organic Science Cluster II**

Guillaume Gosselin, an organic hop producer, talks about how he cooperates with Dr Martine Dorais, to increase organic hop yield.

https://www.youtube.com/watch?v=kAuQI9\_jyBw

#### The 1<sup>st</sup> Canadian Organic Science Conference

In Winnipeg, discussions were very productive at the producers' panel of the 1<sup>st</sup> Canadian Organic Science Conference, held in Winnipeg in 2012. Youtube video (20 min) presents interesting extracts!

#### Organic Farmers and Researchers Sharing Knowledge





Martin Meinert, a Saskatchewan producer

#### Summer readings

### Organic evidence at the Senate meeting

The Standing Senate Committee on Agriculture and Forestry <u>met May 18 2016 in Calgary</u> to study international market access priorities for the Canadian agricultural and agri-food sector. Carmen Wakeling (<u>COABC</u>), Becky Lipton (<u>Organic Alberta</u>), Marla Carlson (<u>SaskOrganics</u>), Kate Storey (<u>Manitoba Organic Alliance</u>) and Terry Tyson (<u>Grain Millers</u>) covered the major issues impeding the growth of the sector.

In order to take advantage of export opportunities, the organic sector requires highfunctioning data systems. This has been a challenge for us all. Creating these will allow participants to identify market opportunities and fully understand the economic impact. Understanding areas for potential growth will encourage businesses to scale up production, which is a benefit for both the international and domestic markets.

Carmen Wakeling – COABC



The major threat to our competitiveness is lack of supply. Currently, imports are flooding into Canada and North America to fill the demand. This is reducing the price obtained by Canadian farmers. It is allowing purchasers of organic grain to build a reliance on foreign markets and is threatening the integrity of organic because of lack of confidence in the integrity of those foreign commodities.

Becky Liption – Organic Alberta

Canada's major trading partners, the U.S. and the European Union, have standard development and maintenance systems that are funded entirely by their respective governments. Canada has negotiated equivalency agreements with both partners, providing Canadian organic exporters easy access to these large and growing markets. Imposing the responsibility for funding the maintenance of COR on organic producers could create a competitive disadvantage for the Canadian market. To help mitigate this risk, SaskOrganics is recommending that the government reconsider its decision to stop funding the maintenance of COR.

Marla Carlson – Saskorganics

The new GM alfalfa is a threat because its pollen travels for miles from farm to farm, carried on the wind and by bees. When GM alfalfa pollen lands on an organic field, it crosspollinates, contaminating the organic crop with new GM alfalfa plants. This will ruin many of Canada's key organic export sales because we will no longer be able to declare our products to be GMO free. GM alfalfa was approved for sale in Canada without any consideration of the economic damage it will do to organics

#### Kate Storey – Manitoba Organic Alliance

Besides the economic risks of the decision (of transitioning), cultural factors also play a huge role. In many areas of the prairies, there is still a stigma associated with organic farming, one of unpaid bills and dirty fields. In addition to that peer pressure, there is also the uncertainty of departing from long-held and relatively easy practices. I don't want to imply that conventional farming is easy, but compared to organic farming, there is an ease factor.

Terry Tyson, Grain Millers









To read all evidences, <u>click here</u>.

## The State of the Canadian Agriculture and Agri-Food Sector

Agriculture and Agri-Food Canada presented a document to a group of Canadian associations and stakeholders at a meeting held in Ottawa June 16 2016 to analyze Growing Forward 2 programs. Main trends are:

- Farm incomes at historically high levels;
- Canada can position itself to take advantage of shifts in global food consumption Two-thirds of the global middle class will reside in the Asia-Pacific region;
- Innovation is key to positioning for success in world markets;
- Public perceptions about agriculture can affect consumption choices;
- Demonstrating environmental sustainability can enhance public trust.

<u>Click here</u> to read the pdf presentation.

The Gulf of Mexico Is About to Experience a "Dead Zone" the Size of Connecticut

# Crop rotation and cover crops would help preventing the creation of the Gulf of Mexico 'dead zone'

The Gulf of Mexico teems with biodiversity and contains some of the <u>globe's most productive fisheries</u>. Yet starting <u>in</u> <u>the early 1970s</u>, large swaths of the Gulf began to experience annual dead zones in the late summer and early fall. This year's will likely be nearly a third larger than normal, about the size of Connecticut, according to a <u>recent</u> <u>report</u> from the Louisiana Universities Marine Consortium and Louisiana State University.

The problem is tied to industrial-scale meat production. To churn out huge amounts chicken, beef, and pork, the meat industry relies on corn as cheap feed. The US grows about a third of the globe's corn, the great bulk of it in the Midwest, on <u>land that drains into the Mississippi River</u>. Every year, fertilizer runoff from Midwestern farms leaches into the Mississippi and makes its way to the Gulf of Mexico.

This renegade nitrogen instead feeds vast aquatic algae blooms in the early summer. When the algae blooms die and decay, they tie up oxygen from the water underneath. As a result, as the National Oceanic and Atmospheric Organization puts it, "habitats that would normally be teeming with life become, essentially, biological deserts."

Are dead zones inevitable, a sacrifice necessary to feeding a nation of 300 million people? Turns out, not so much. A 2012 lowa State University <u>study</u> found that by simply adding one or two crops to the Midwest's typical corn-soy crop rotation, farmers would reduce their synthetic nitrogen fertilizer needs by 80 percent, while staying just as productive. And instead of leaving fields bare over winter, they could plant them with cover crops—a practice that, according to the <u>US Department of Agriculture</u>, "greatly reduces soil erosion and runoff" (among many other ecological benefits)—meaning cleaner streams, rivers, and ultimately, lakes, bays, and gulfs. Moreover, when animals are rotated briskly through pastures—and not crammed into <u>factorylike structures where their manure accumulates into a dramatic waste problem</u>—they, too, can <u>contribute to healthy soil</u> that traps nutrients, protecting waterways from runoff.

For complete report from Mother Jones, click here.