

Introduction to Organic Farming in Ontario

INTRODUCTION

Why Farm Organically

The main reasons farmers state for wanting to farm organically are their concerns for the environment and about working with agricultural chemicals in conventional farming systems. There is also an issue with the amount of energy used in agriculture, since many farm chemicals require energy intensive manufacturing processes that rely heavily on fossil fuels. Organic farmers find their method of farming can be profitable and personally rewarding. Organic production in Ontario includes both certified and uncertified production.

Why Consumers Buy Organic

Consumers purchase organic foods for many different reasons. Many want to buy food products that are free of conventional pesticides or grown without synthetic fertilizers. Some simply like to try new and different products. Product taste, concerns for the environment and the desire to avoid foods from genetically engineered organisms are among the many other reasons some consumers state for buying organic food products. According to the Canada Organic Trade Association, 76% of households with children reported purchasing organic products. [1]

DEFINING “ORGANIC”

The Government of Canada describes organic production as a holistic system designed to optimize the productivity and fitness of diverse communities within the agro-ecosystem, including soil organisms, plants, livestock and people. The principal goal of organic production is to develop enterprises that are sustainable and harmonious with the environment. [2]

Although many people assume organic farming is avoiding the use of conventional pesticides, synthetic fertilizers, genetically modified organisms, antibiotics and growth hormones, it is actually much more involved. In fact, most organic growers use some pest control products and fertilizers provided they are permitted for use by the Canadian Organic Standards (2020) and [Permitted Substances List](#) (PSL).

The general principles of organic production, from the Canadian Organic Standards (2020) [2], include the following:

- protect the environment, minimize soil degradation and erosion, decrease pollution, optimize biological productivity and promote a sound state of health
- maintain long-term soil fertility by optimizing conditions for biological activity within the soil
- maintain biological diversity within the system
- recycle materials and resources to the greatest extent possible within the operation
- provide attentive care that promotes the health and meets the behavioural needs of livestock
- prepare organic products, emphasizing careful processing and handling methods in order to maintain the organic integrity and vital qualities of the products at all stages of production
- rely on renewable resources in locally organized agricultural systems

Organic farming promotes the use of crop rotations and cover crops and encourages balanced host/predator relationships. Organic residues and nutrients produced on the farm are recycled back to the soil. Cover crops and composted manure are used to maintain soil organic matter and fertility.

Preventive insect and disease control methods are practised, including crop rotation, growing improved genetics and resistant varieties. Integrated pest management (IPM) and soil conservation systems are valuable tools on an organic farm. Organically approved pesticides include “natural” or other pest management products included in the PSL of the organic standards. The PSL identifies substances permitted for use in organic agriculture such as pesticides, soil amendments and livestock product aids.

All grains, forages and protein supplements fed to livestock must be organically grown.

The organic standards generally prohibit products and practices of genetic engineering and animal cloning, synthetic pesticides, growth regulators, synthetic fertilizers, sewage sludge, synthetic drugs, synthetic food processing aids and ingredients, and ionizing radiation. Prohibited products and

practices must not be used on organic farms for at least 3 years prior to harvest of the certified organic products. Livestock must be raised organically and fed 100% organic feed ingredients.

Organic farming presents many challenges. Some crops and livestock are more challenging to grow or raise organically than others. It is important to do background research before transitioning to organic production. However, most commodities can be produced organically for commercial production.

WHAT CERTIFIED “ORGANIC” MEANS

Certified “organic” is a term given to products produced according to organic standards as verified by a certification body (CB). There are several CBs operating in Ontario.

A grower wishing to certify organic products must apply to a CB requesting an independent inspection of their farm to verify that the farm complies with the organic standards. Farmers, processors and traders are each required to maintain the organic integrity of the product and to maintain a document trail for audit purposes. Products from organic farms that meet the requirements of the organic standards and are verified by a CB can be labelled and promoted as “organic.”

In June 2009, the Canadian government introduced regulations to regulate organic products. Under these regulations, the Canadian Food Inspection Agency (CFIA) oversees organic certification, including accreditation of Conformity Verification Bodies (CVBs) and Certification Bodies (CBs). This regulation also references the [Canadian Organic Production Systems — General Principles and Management Standards](#) (CAN/CGSB-32.310) and the [Organic Production Systems — Permitted Substances List](#) that were revised in 2020.

The Canadian organic regulations require certification to these standards for agricultural products represented as organic in import, export and inter-provincial trade, or that bear the federal organic agricultural product legend or logo (Figure 1).



Figure 1. Being able to display the Canada Organic Logo provides more opportunities for organic producers. Source: Canadian Food Inspection Agency, 2014. [3]

Products that are both produced and sold within provinces are regulated by provincial organic regulations where they exist or the oversight of the organic labelling is done through the federal [Food and Drugs Act](#) and the [Safe Food for Canadians Act](#).

As of 2021, British Columbia, Manitoba, New Brunswick, Nova Scotia and Quebec have provincial regulations that refer to the Canadian Organic Standards.

The federal regulations apply to most food and drink intended for human consumption and food intended to feed livestock, including agricultural crops used for those purposes. They also apply to the cultivation of plants. As of January 15, 2021, aquaculture products must be certified in accordance with CAN/CGSB-32.312 – *Organic Production Systems – Aquaculture – General principles, management standards and permitted substances lists*. The regulations do not apply to organic claims for other products such as cosmetics, fibres, health care products, fertilizers, pet food, lawn care, etc.

Food products labelled as organic must contain at least 95% organic ingredients (not including water and salt) and can bear the Canada Organic Logo. Multi-ingredient products with 70%–95% organic product content may be labelled with

the declaration: “% organic ingredients” and must include the name of the CB that certified it. Multi-ingredient products with less than 70% organic content may identify the organic components in the ingredient list.

Exporting Organic Materials

Exported products must meet the requirements of the importing country or standards negotiated through international equivalency agreements. Products exported to the U.S. must meet the terms of the Canada-U.S. equivalency agreement signed in June 2009. All products that meet the requirements of the Canada Organic Regime can be exported to the U.S. with the exception that any animal or agricultural product derived from animals treated with antibiotics cannot be marketed as organic in the U.S.

As of January 2021, a number of other equivalency arrangements are in place between Canada and Costa Rica, the European Union, Japan, Switzerland, Taiwan and the United Kingdom. [4] More information about the particular equivalency arrangements with other countries can be found on the Canadian Food Inspection Agency’s (CFIA) website. Canada continues to explore international equivalency agreements with other trading partners to enhance trade opportunities for export and to assure the organic integrity of imported products. [4]

Producing Certified Organic Products

When considering organic certification, know the requirements and accreditation(s) needed in the marketplace where your products will be sold. When comparing CBs, make sure they have the certification requirements and accreditations needed to meet market requirements. As a minimum, CBs should be accredited under the Canadian Organic Regime (COR). Some markets may require accreditation or equivalency agreements with countries or other international organic certification systems. As Canada continues to develop international equivalency agreements, the need for the CB to have these international accreditations will diminish.

The [CFIA website](#) has more information on certification and links to Canadian regulations and standards.

Producing Uncertified Organic Products

Growers of uncertified organic products in Ontario are still subject to Section 5(1) of the [Food and Drugs Act](#) and the [Safe Food for Canadians Act](#) regarding the fact that all labelling must be true and the farmers/manufacturer/seller must be able to prove that the product is organic.

It is a federal criminal offence to engage in false labelling, including labelling a product organic when it is not. Further information can be found on the [Canadian Food Inspection Agency](#) (CFIA) website.

To be compliant with Section 5(1), it is advised that the seller of uncertified organic products contact the CFIA through the [Contact CFIA online](#) page.

For the uncertified organic products, the CFIA uses the Standard Regulatory Response Process to guide its enforcement actions. Details of the enforcement actions are available on [their website](#).

THE VALUE OF INTERNATIONAL AND DOMESTIC ORGANIC MARKETS

The world market for organic food has continued to grow over many years. In 2020, global sales of organic products were estimated at \$156 billion. [5] The retail organic food market in Canada is estimated at over \$8.1 billion [6] and \$83 billion in the U.S. in 2020. [7]

Canada imported organic products valued at over \$832.1 million in 2020 and exported organic products valued over \$607.9 million in the same year. [8] Canada exports many organic products, particularly soybeans and grains.

FARMING ORGANICALLY Organic Acreage in Ontario

The Canadian Organic Trade Association (COTA) reported 926 organic producers in Ontario in 2020 [9] with over 161,000 organic acres of crops and pastureland reported in 2018. [10]

Approximately 52.5% of the organic cropland in Ontario in 2018 was seeded to field crops, 43.9% produced hay, pasture and naturalized areas, and about 3.6% was used to produce certified organic fruits and vegetables. [11] Livestock production (meat, dairy and eggs) has also been steadily increasing in recent years.

The total area cultivated for organic fruit in Canada totalled 14,435 ha (35,655 acres) in 2020. Ontario accounted for 5.6% or 808 ha (1,997 acres) of the total organic fruit area. [12]

The total area cultivated for organic vegetables in Canada (excluding potatoes, greenhouse vegetables and seeds) totalled 5,071 ha (12,525 acres). Ontario accounted for 8.3% or 421 ha (1,040 acres) of this area. [12]

Transition Period for Certification

The first few years of organic production are the hardest. Organic standards require that organic lands must be managed using organic practices for 36 months prior to harvest of the first certified organic crop. This is called the “transition period” when both the soil and the manager adjust to the new system. Insect and weed populations also adjust during this time. The farm operation must be under the full supervision of a CB during the last 12 months of the 36-month transition period.

Cash flow can be a problem due to the unstable nature of crop yields and the fact that price premiums are frequently not available during transition since products do not qualify as “organic.” For this reason, some farmers choose to convert to organic production in stages. Crops with a low cost of production are commonly grown during the transition period to help manage this risk.

Carefully prepare a plan for conversion. Try 10%–20% the first year. Pick one of the best fields to start with and expand organic acreage as knowledge and confidence are gained.

It may take 5–10 years to become entirely organic, but a long-term approach is often more successful than a rapid conversion, especially when financial constraints are considered. Parallel production (producing both organic and conventional versions of the same crop or livestock product) is not allowed. Use good sanitation, visually different varieties, individual animal identification and other systems to maintain separation and integrity of the organic and conventional products. Good records are essential.

Things to Consider for Successful Organic Farming

In organic production, farmers choose not to use some of the convenient chemical tools available to other farmers. Design and management of the production system are critical to the success of the farm. Select enterprises that complement each other and choose crop rotation and tillage practices to avoid or reduce crop problems.

Yields of each organic crop vary, depending on the success of the manager. During the transition from a conventional to organic system, production yields are generally lower than conventional yields, but after a 3–5-year period, the organic yields typically increase.

Organic cereal and forage crops can be grown relatively easily due to lower pest pressures and nutrient requirements compared to other crops. Soybeans also perform well but weeds can be a challenge. Corn is being grown more frequently on organic farms but careful management of weed control and fertility is needed. Meeting nitrogen requirements is particularly challenging. Corn can be successfully grown after forage legumes or if manure has been applied.

The adoption of genetically engineered (GMO) corn and canola varieties on conventional farms has created the issue of buffer zones or isolation distance for organic corn and canola crops. Farmers producing corn and canola organically are required to manage the risks of GMO contamination in order to produce a “GMO-free” product. The main strategy to manage this risk is through appropriate buffer distances between organic and genetically engineered crops. Cross-pollinated crops such as corn and canola require much greater isolation distance than self-pollinated crops such as soybeans or cereals.

Fruit and vegetable crops present greater challenges, depending on the crop species. Some farms have been very successful, while other farms with the same crop have had significant problems. Certain insects or diseases are more serious in some regions than in others. Many pest problems are difficult to manage with organic methods. This is less of an issue as more approved organic biopesticides become available.

Marketable yields of organic horticultural crops are usually below non-organic crop yields. The yield reduction varies by crop and farm. Some organic producers have added value to their products with on-farm processing. An example is to make jams, jellies, juice, etc., using produce that does not meet fresh market standards.

Livestock products can also be produced organically. In recent years, organic dairy and meat products have become popular. Animals must be fed only organic feeds (except under exceptional circumstances). Feed must not contain mammalian or avian byproducts.

All genetically engineered organisms and substances are prohibited. Antibiotics, growth hormones and insecticides are generally prohibited. If an animal becomes ill and antibiotics are necessary for recovery, they should be administered. The animal must then be segregated from the organic livestock herd and cannot be sold for organic meat products. Vaccinations are permitted when diseases cannot be controlled by other means. Artificial insemination is permitted.

Always check with your certification body to determine if a product or technique is allowed in the *Permitted Substances List* and the organic standards. Organic production must also respect all other federal, provincial and municipal regulations.

Organic products usually qualify for higher prices than non-organic products. These premiums vary with the crop and may depend on whether you are dealing with a processor, wholesaler, retailer or directly with the consumer. Prices and premiums are negotiated between buyer and seller and will fluctuate with local and global supply and demand.

Higher prices offset the higher production costs (per unit of production) of management and labour, and for lower farm yields. These differences vary with commodity. Some experienced field crop producers, particularly of cereals and forages, report very little change in yield while in some horticultural crops, such as tree fruits, significant differences in marketable yield have been observed. There may also be higher costs to develop markets where there is less infrastructure than for conventional commodities.

USING THE FOODLAND ONTARIO ORGANIC LOGO

Foodland Ontario is a consumer promotion program of the Ontario Ministry of Agriculture, Food and Rural Affairs. It was established in 1977, and since then, has partnered with Ontario's agri-food sector to champion and drive consumer propensity to anticipate, identify and choose Ontario foods first.

In 2011, the ministry worked with the Organic Council of Ontario to launch the Foodland Ontario Organic Logo (Figure 2), which businesses can use at no cost to identify their food products that are organic and grown or produced in Ontario.

Currently, over 50 businesses are using the Foodland Ontario Organic Logo on their packaging or other marketing materials covering all different categories, including produce, protein, dairy, eggs, grains, maple syrup and honey. In retail grocery stores, some businesses are also permitted to use the organic logo on their packaging or shipping cartons, and some retailers also use the organic sub-brand to identify Ontario organic products in their weekly flyers.



Figure 2. Foodland Ontario Organic Logo.

To use the Foodland Ontario Organic Logo, a business must demonstrate that their product(s) meet the [consumer- and industry-approved definitions of Ontario food products](#) and provide documentation that their product is recognized by the [Canadian Organic Standards](#) as an organic product. Further, a business must also identify how they intend to use the logo, such as on their packaging or labels.

If a business's product meets the above criteria, they will be sent a licensing agreement to complete and return. If approved, a business will be provided with the Foodland Ontario Organic Logo artwork and a Brand Standards Guide that advises how to properly use the logo (e.g., sizing, colours).

For more information on how to obtain the Foodland Ontario Organic Logo, visit the Foodland Ontario website: [How to Use the Foodland Ontario Logo](#).

Almost 90% of Ontarians recognize the Foodland Ontario Logo and 50% recognize the program's Organic Logo. The strongest driver for consumers to purchase Ontario food is their ability to find that product while shopping at the grocery store, farmers' market or on-farm market.

Usage of the Foodland Ontario Organic Logo is an effective way to help consumers easily identify and choose the Ontario option when shopping. Co-branding with Foodland Ontario can also help strengthen a business's brand image to consumers by promoting that they are supporting other local businesses in the community or region.

With a licensing agreement in place, a business can then access a wide assortment of Foodland Ontario's point-of-sale materials, such as price cards, base wrap, balloons and stickers, and information resources, such as availability guides or recipe cards.

The web page [Foodland Ontario Merchandising Materials](#) has more information on the types of merchandising materials available at no cost.

SUMMARY

Organic farming can be a viable alternative production method for farmers, but there are many challenges. One key to success is being open to alternative organic approaches when solving production problems. Determine the cause of the problem and assess strategies to avoid or reduce it in the long term rather than relying on a short-term fix for the symptom.

ADDITIONAL RESOURCES

Canadian Organic Growers (COG)
56 Sparks Street, Suite 600
Ottawa, ON K1P 5B1
Phone: 613-216-0741; 1-888-375-7383
E-mail: office@cog.ca
Web: www.cog.ca

Ecological Farmers Association of Ontario (EFAO)
5420 Highway 6 North,
Guelph, ON N1H 6J2
Phone: 519-760-5606
E-mail: info@efao.ca
Web: www.efao.ca

Ontario Ministry of Agriculture, Food and Rural
Affairs (OMAFRA)
1 Stone Road West,
Guelph, ON N1G 4Y2
Agriculture Information Contact Centre
Phone: 877-424-1300
Web: ontario.ca/organic

Organic Agriculture Centre of Canada (OACC)
Dalhousie University
Faculty of Agriculture
Department of Plant, Food, and Environmental Sciences
P.O. Box 550
Truro, NS B2N 5E3
Phone: 902-893-7256
E-mail: oacc@dal.ca
Web: www.dal.ca/faculty/agriculture/oacc/en-home.html

Guelph Organic Conference
c/o Organic Council of Ontario (OCO)
Orchard Park Business Centre
5420 Highway 6 North
Guelph, ON N1H 6J2
E-mail: info@guelphorganicconf.ca
Web: www.guelphorganicconf.ca

Organic Council of Ontario (OCO)
Orchard Park Business Centre
5420 Highway 6 North
Guelph, ON N1H 6J2
Phone: 519-827-1221
Web: www.organiccouncil.ca

REFERENCES

- Canada Organic Trade Association. Globe Newswire
Press Release: [*New data from Canada Organic Trade Association showing dramatic growth in organic food sector as Canadians spend \\$6.9 billion annual on organic groceries.*](#)
October 2020.
- Canada Organic Trade Association. [*Organic Agriculture in Canada by the Numbers.*](#)
March 2017.
- Canada Organic Trade Association. [*Quick Facts About Organic in Canada.*](#) 2020.
- Government of Canada. [*Canada Organic Regime Operating Manual.*](#)
- Government of Canada. [*Organic Production Systems: Permitted Substances Lists.*](#)
December 2020.
- Government of Canada. [*Organic Production Systems: General Principles and Management Standards*](#) (CAN/CGSB-32.310-2020).
March 2021.
- Organic Trade Association. [*Press Release: U.S. organic sales soar to new high of nearly \\$62 billion in 2020.*](#) May 2021.
- Statista. [*Worldwide sales of organic food from 1999 to 2020.*](#) February 2022.
- Willer, Helga, and Julia Lernoud. The world of organic agriculture. *Statistics and emerging trends 2019*. Research Institute of Organic Agriculture FiBL and IFOAM Organics International, 2019.

END NOTES

1. Canada Organic Trade Association. [Choose Canada organic](#). 2022. Accessed January 2023.
2. Canadian Food Inspection Agency. *Organic Production Systems: General Principles and Management Standards* (CAN/CGSB-32.310-2020). December 2020. https://publications.gc.ca/collections/collection_2020/ongc-cgsb/P29-32-310-2020-eng.pdf
3. Canadian Food Inspection Agency. *Canada Organic Regime: A Certified Choice*. Canada Organic Logo reproduced or adapted with the permission of the Canadian Food Inspection Agency, 2014.
4. Government of Canada. [Organic Equivalence Arrangements with Other Countries](#). 2021.
5. Statista. *Worldwide sales of organic food from 1999 to 2020*. www.statista.com/statistics/273090/worldwide-sales-of-organic-foods-since-1999/
6. Organic Council of Ontario. *Organic Industry Quick Facts for 2020–2021*. www.canada-organic.ca/sites/default/files/2020-2021_organic_quick_facts.pdf
7. Organic Trade Association. Press Release: [U.S. organic sales soar to new high of nearly \\$62 billion in 2020](#). May 2021.
8. Organic Council of Ontario. [Organic Industry Quick Facts for 2020-2021](#). 2022.
9. Organic Council of Ontario. [Organic Industry Quick Facts for 2020-2021](#). 2022.
10. Canada Organic Trade Association. *Ontario Organic Market Report 2021*.
11. Canada Organic Trade Association. *Ontario Organic Market Report 2021*.
12. Statistics Canada. *Certified organic fruit and vegetable production estimates, 2020*. July 2021.

This factsheet was updated by OMAFRA staff.