

September 2, 2020

Countdown to the publication of the 2020 Canadian Organic Standards The weekly review

Helping honeybees survive Canadian winters the organic way



Surviving Canadian winters can be a challenge for honeybees, which originally came from Africa or Asia, and were domesticated in southern Europe. Non-organic beekeepers often add sugar syrup or fondant to the hives in late fall to provide the bees with enough energy reserves to survive our long, cold winters. For organic beekeepers, there are standards to comply with and the issue is more complex.

The 2015 Canadian Organic Standard (COS) states that "organic honey and pollen shall be the primary food source for adult bees." From late spring to early fall, the bees collect their own food from flowers, but when the blooms are gone, they must rely on the reserves in the hive. This is in addition to the honey the beekeepers have removed in order to have a financially sustainable business. In areas with a short frost-free season, the food collected by the bees might not be adequate (in terms of quantity or quality) to enable the bees to withstand the winter.

The 2015 COS permits providing bees with food other than the honey to address a temporary shortage of feed due to "climatic or other exceptional circumstances." Organic honey or organic sugar can be used, and "when the health of the colony cannot be maintained with honey or sugar that is organic, non-organic, refined sugar may be used."



But can organic beekeepers justify supplying sugar reserves each winter? Every winter causes a temporary food shortage and, some argue, with climate change, many winters are unpredictable and "exceptional." Beekeepers need to anticipate the winter needs of the bees and supply the food in the fall. There is no opportunity during the winter to provide more food.

In December 2019, the <u>Standards</u> <u>Interpretation Committee</u> (SIC) ruled that feeding organic honey or sugar should not be a recurring annual event; winter alone is not considered "exceptional" enough to justify the routine feeding of bees.

This interpretation by the SIC caused an outcry after it was submitted for public review. The SIC soon discovered that a significant number of organic beekeepers provide honey or sugar every winter because they consider that our harsh, long winters are "exceptional" for bees adapted to warm European climates. In addition, many organic beekeepers are located in remote or northern regions of Canada, because in southern areas where there is more agriculture, there is a greater risk of contamination by agrochemicals and genetically engineered crops. In these colder areas with longer winters and shorter foraging seasons, there is a greater need to supply bees with food to survive the winter.

Given that the COS was under revision, the SIC consulted the Beekeeping Working Group involved in the COS review. The Working Group passionately discussed the issue at length. No one wants to see mass mortality of organic bees due to starvation during the winter but the issue is complicated. Refer to the <u>OFC article</u> published in February 2020 to find the highlights of the WG's discussions. The SIC decided to suspend its interpretation: the status quo would therefore be maintained pending the publication of the COS 2020.

The clause governing the feeding of bees will be revised. The COS 2020 states that bees may be fed organic honey, organic sugar or even non-organic sugar for winter feeding, as well as "in the event of a regional or seasonal shortage of forage." So, feeding the bees every winter will be allowed. The preference is for organic honey or organic sugar, however liquid organic sugar might not be available by the tanker truckload in remote parts of the country. Consequently, beekeepers will be permitted to supplement the hive with non-organic sugar provided it is not derived from genetically engineered plants (such as genetically engineered sugar beets). The use of non-organic sugar will be reviewed by 2025.

🦻 The revised clause 🛹

- 7.1.11.1 The primary food source for adult colonies shall be nectar and pollen collected from sources conforming to this standard and food sources stored by the bees in the hive (honey, pollen, etc.).
 - a) In the event of a regional or seasonal shortage of forage and for winter feeding of colonies, the following is allowed in order of preference:
 - 1) organic honey from within the operation;
 - 2) organic sugar (e.g., inverted, syrup, fondant);
 - 3) non-organic transitional honey;
 - non-organic, non-genetically engineered (non-GE) sugar (compliant with 1.4 and 1.5);
 - b) In the case of the use of non-organic, non-GE refined sugar, the operator shall:
 - 1) maintain and document appropriate practices to prevent the mixing of organic and non-organic feeds in honey supers; and
 - 2) develop a plan to reduce, and potentially eliminate, the use of non-organic refined sugar from the bee production system by November 2025.
 - c) Feeding shall only occur between the last honey harvest and 15 days before the start of the next nectar or honeydew flow-period.

NOTE: Article 7.1.11.1 will be reviewed by 2025.



Organic advocates across Canada are encouraged to celebrate the <u>Organic Week</u>, organized by COTA and COG.

In Canada, there's a lot to celebrate to support a growing organic sector, transparent food source and a source of food that is sustainable in the future.

The Organic Week events are listed here.





Discover the science behind organic farming, one podcast at a time

Sourcing phosphorus from human wastewater to feed organic soils [12:14]

Phosphorus is an essential nutrient which is often in short supply on organic farms, particularly Prairie farms. Kimberley Schneider and her colleague Henry Wilson are conducting a unique research activity: using struvite, derived from wastewater, to address the phosphorus deficit in certain organically managed soils and to provide a renewable source of phosphorus. <u>Read more</u>

To listen -_click here

No time to listen? You can read the interview with Dr Schneider - **click here**

All the information on the Organic Science Cluster 3

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