ALBERTA BEEKEEPERS COMMISSION

BRIEF

March 19, 2021

FOR

HOUSE OF COMMONS STANDING COMMITTEE ON AGRICULTURE AND AGRI-FOOD REGARDING THE ADULTERATION OF CANADIAN HONEY

OVERVIEW

We thank the Standing Committee on Agriculture and Agri-Food the opportunity to share our critical issues.

Beekeeping is an important agricultural industry in Canada, producing honey and other hive products, and delivering valuable pollination services to farmers of orchard fruits, many berries, vegetables, forage, and the production of hybrid canola seed.

In 2019, AAFC estimated that the total annual economic contribution of honey bee pollination through direct additional harvest value was about $2.57 billion. When the estimated contribution of honey bee pollination to the production of hybrid canola seed is added, the **total estimated contribution ranges from $4.0 to $5.5 billion per year.**

Canada's Honey Trade Balance 2020 – thousands of Canadian dollars

	2015	**2016**	**2017**	**2018**	**2019**
Export	64,883	71,838	76,986	70,018	53,827
Import	41,214	38,064	41,284	35,996	45,394
Trade Balance (exports – imports)	**23,669**	**33,774**	**35,702**	**41,023**	**8,433***
Source: Statistics Canada. (CATSNET, March 2020)					

**2019 & 2020 saw a significant drop in honey production due to a combination of factors including high overwintering losses and poor weather across the country.*

WHAT IS ADULTERATION?

Honey is the world's third most adulterated food. The addition of different types of sugar syrups and the mislabeling of geographic origin are common fraudulent practices in honey markets. A recent CBC article explained:

> *Fake honey is still pouring into Canada, and local beekeepers are feeling the sting. Canadian Food Inspection Agency found loads of fake honey cut with cheap syrup imported as 'pure honey'. Fake honey cut with corn syrup, rice, beet and other sugars is still pouring into Canada and onto grocery store shelves. The producers, who pride themselves on turning out the real thing, have been abuzz about the food fraud for years. They say they are feeling the sting and consumers should be aware.*
> https://www.cbc.ca/news/canada/toronto/food-fraud-fake-honey-cfia-crackdown-1.5222486

HONEY DEMAND, EXPORTS, SUPPRESSION OF HONEY PRICES DUE TO ADULTERATION

Canada is an exporting nation and honey is no exception. Approximately 95% of the honey produced in Canada is exported primarily to the United States, Japan, and the EU. Alberta is Canada's largest honey producer with more than 40% of total honey production.

For the past 20 years, there has been an increasing demand for honey. A sustained increase of prices would be the logical and expected result in a market showing increasing demand and quite inelastic ability to increase supply. The trend of increasing prices related to supply held true during the period between 2005 – 2014.
However, since 2015, prices of honey started to fall. This fall of honey prices in the international market can be mainly explained by the flooding of low-priced and low-quality products exported under the name of "honey" from some eastern countries. This adulterated honey disrupts and distorts the normal supply/demand relationship. https://www.apimondia.com/docs/commissions/decreasing_prices_honey_americas.pdf

The observed steady and dramatic collapse of honey prices defies the laws or economics in that, in context where the demand for honey has increased, the cost of production of authentic honey has increased and the productivity per hive has decreased, the prices of honey to beekeepers should have steadily and significantly risen. This did not happen. In fact, the opposite is true.
https://www.apimondia.com/docs/commissions/decreasing_prices_honey_americas.pdf

ADULTERATED HONEY BEING IMPORTED TO CANADA

In addition to the challenge of the importation of adulterated honey, a second challenge; the importation of cheap honey from other nations also has contributed to driving down the price of honey paid to the Canadian producer.

The honey supply chain in Canada is complex and controlled primarily by packers who purchase honey from Canadian producers, who also import cheap honey from other countries to blend with Canadian honey. While this business model works well for the packers in Canada and their retail clients, it is the consumer and the honey producer who ultimately are cheated.

The combined issues of importing both adulterated and low cost or cheap honey is damaging the Canada brand reputation with its largest trading partner, the United States (US). The US is accusing Canada of 'dumping' cheap honey on the US market.

Ensuring the domestic supply of 100% pure Canadian honey is one of the greatest challenges facing the industry. The steep increase of imported honey, of dubious and adulterated quality has caused multi million-dollar losses to the producer and the honey industry. For more than two decades the importation of both cheap and adulterated honey has found its way into Canada's domestic/retail and export markets at the expense of both beekeepers and Canadian consumers.

There are a number of challenges in Canada when a consumer or export market goes to purchase honey:

1. **Labelling** - **Canada # 1** means nothing in regard to quality anymore. Labelling is also misleading, because if the cheap honey purchased in Argentina is blended with Canadian honey and packed in Canada – combining cheap foreign honey with Canadian honey, it can still be called "Canada #1" and the consumer or buyer would never know.
2. **Pricing** – the honey supply chain is controlled by a small group of packers who set price based on the lowest price they can find globally. This forces Canadian beekeepers to sell honey at the same cost honey is sold for in countries where the input cost of producing honey is much less than it is in Canada.
3. **Blending** – Canadian honey may be blended with cheap off shore honey in Canada and still receive a Canada #1 label. This is completely misleading.
4. **Adulteration** – is not only happening off shore but happens in domestically here in Canada as well. A packer or blender or ingredient supplier could buy syrup – rice, corn, etc. and ship totes of it to Canada, which is legal, and then blend it here, so the cheap adulterated product finds its way to the store shelf and ultimately the consumer.
5. **Food Safety** – Imported honey that is adulterated so readily could become a food safety issue when not properly tested and labeled. When food is not properly labelled, Canadians are not able to make informed decisions on what to buy and feed their families. Ensuring accurately represented food is even more critical when food safety risks arise such as allergens not being declared.

The current grading system has been in place since 1935**. With the current system,** there is no clear way for any retailer, consumer, or export purchaser to know if Canadian honey is truly 100% pure Canadian honey.

That is why we are recommending that it is time for an update on Canada's honey grading system.

Ensuring honey authenticity is one of the greatest challenges facing the Canadian honey industry. In recent years, the Canadian Food Inspection Agency (CFIA) has begun testing for "food fraud" and in 2019 found that,

> *"While all the domestic samples proved to be authentic, more than a fifth of imported honey from a number of countries including Greece, China, India, Pakistan and Vietnam. Twenty-two per cent [of the samples] were found to contain foreign sugars such as corn syrup, rice syrup and cane sugar syrup," Jodi White, a national manager in CFIA's consumer protection and market fairness division, told CBC Toronto."*
> https://www.cbc.ca/news/canada/toronto/food-fraud-fake-honey-cfia-crackdown-1.5222486

Unfortunately, the CFIA which has primarily utilized the dated and questionable isotope method honey testing methods to detect this food fraud, has been **slow to adopt any new technologies in any kind of scale** that would really have a beneficial impact on the Canadian beekeeping industry or provide assurance to consumers. Reliance on external laboratories for testing puts Canada in a precarious and vulnerable position.

For example, Canada imported more than 6.5 million kilograms of honey in 2019. In recent CFIA reports: Enhanced honey authenticity surveillance (2018 – 2019), the report states that 22% of the honey was found to be unsatisfactory, however only 12,762 kilograms of adulterated honey were prevented from entering the Canada market. This seems a bit odd as **12,762 kgs is only 0.002%, not 22%**

We can appreciate that the adoption of a new technology does come with risks and investing in analytical tools including a database is very costly. Technologies such as Nuclear Magnetic Resonance (NMR) imaging is still undergoing change as it is better understood. We are also learning that NMR on its own is not sufficient. In order for an NMR to accurately identify anomalies in honey (or any other food), a database of that particular food must be developed. A database for honey is created from many samples of honey provided from different geographical regions. The current NMR database is primarily made of up samples of honey collected from regions in the European Union. Neither Bruker (NMR) or QSI laboratories (further testing) have a Canadian database of honey so when CFIA is indicating they are testing domestic supply – there is no certainty how accurately the current database would be representative of Canadian honey and therefore accurately test for adulteration. https://www.bruker.com/en/products-and-solutions/mr/nmr-food-solutions/honey-profiling.html

Not only is imported adulterated honey a challenge for the Canadian industry but exporting Canadian honey has become precarious as well. In 2020 packers began testing Canadian honey at the farm level for export knowingly using unreliable testing methods to screen Canadian honey. The current Association of Official Analytical Chemists (AOAC) test for honey authenticity can often result in false positives. Several producers' honey tested positive for adulteration, **when none had occurred,** and entire loads were lost. The laboratories testing and the purchasing company would not allow producers to retest the load and nor would they provide actual test results to the producers. With no national track and traceability system in place for exports or imports, nor accountability on the part of packers and the laboratories they pay for usage, Canadian honey producers are extremely vulnerable to poorly done and inaccurate testing, resulting in a significant economic loss to the producer.

Alberta Beekeepers Commission Recommendations:

1. A moratorium on imported honey with a long enough time span so that the appropriate testing and safe guards be put in place, until the government has a better grasp on understanding where the critical control points are in the honey supply chain, which are suppressing the price of honey for the producer and creating health and safety concerns for the consumer
2. The Canadian honey producers' partner with the Canadian government and stakeholders to:
    - Develop an improved and relevant/meaningful national definition and quality grading system for Canadian honey,
    - Develop a clearer and distinct definition of 100% pure Canadian honey
    - Develop better and clearer labelling and an education program to enable consumers, retailers and other buyers to know they are purchasing pure Canadian honey vs an adulterated blend
    - Establish a national track and trace system for Canadian honey,
    - Establish and maintain Canadian honey database and testing capacity for its domestic supply in order to be able to offer assurance to our own markets domestic or international that Canadian honey is a pure, high quality product,
    - Develop relevant and up to date standard testing protocols for honey.
    - Upgrade existing government laboratories across the country (provincial or federal) in order to support honey producers and industry.