



WHAT'S NEW IN B.C.

SPOTLIGHT ON: BLUEBERRIES



TABLE OF CONTENTS

SECTOR INFORMATION

Click to navigate

Sector Information.....	1
Blueberry Research in B.C.....	2
Industry Association.....	3
In the News.....	3

BLUEBERRIES ARE

RICH in antioxidants

HIGH in fibre & nutrients

LOW in calories

CANADA IS THE WORLD'S

#1 producer & exporter
of **LOWBUSH BLUEBERRIES**

#2 largest producer
of **HIGHBUSH BLUEBERRIES**

#3 largest exporter
of **HIGHBUSH BLUEBERRIES**

Canada is the world's second-largest producer and third-largest exporter of highbush (cultivated) blueberries and lead producer of lowbush (wild) blueberries. Out of the provinces, British Columbia is one of the largest highbush blueberry-growing regions in the world, producing about 96% of Canada's cultivated blueberries.

Canada's blueberries are commercially grown in both wild and cultivated varieties. No other Canadian fruit shares this distinction. Most highbush crop is sold fresh and frozen, whereas lowbush crop is typically destined for processing and freezing.

Blueberries are usually sold to processors or fresh packers that grade, pack, and market the berries. They may be packed as IQF (individually quick frozen), block frozen in various pack sizes, or processed as purée or juice.

In response to market demand, there has been a significant increase in blueberry production

in the past decade. This demand is fuelled by an increased awareness of the health benefits that blueberries offer, including various nutrients and dietary antioxidants.

In 2015, national exports of fresh, cultivated blueberries were about 57 million pounds, valued at \$125 CAD million; a 5% increase in volume and 26% increase in export value, from 2014. Of the 57 million pounds of exports, British Columbia exported 55 million pounds (96%). The largest fresh export markets were the United States, followed by Chile and Japan. In 2015, 66 million pounds of frozen cultivated blueberries worth \$94 CAD million were exported. The largest frozen export markets were the United States, followed by Japan and Australia.

For more information about Canadian blueberries, please visit:

<http://www.agr.gc.ca/eng/industry-markets-and-trade/exporting-and-buying-from-canada/buying-canadian-food/canadian-blueberries/>

CANADIAN Highbush BLUEBERRIES: MARKETING PRODUCTION



Source: Statistics Canada

For more information, please contact the Northwestern Departmental Regional Office in B.C. at 604-292-5858 or at atsbc@agr.gc.ca.

Aussi disponible en français.



RESEARCH ON BLUEBERRIES IN B.C.

Agriculture and Agri-Food Canada (AAFC) scientists are hard at work conducting research to help farmers improve their crops and environmental performance. One of these scientists, Dr. Martine Dorais, who specializes in greenhouse crops and small fruits, is currently based at the Agassiz Research and Development Centre. She and her team have initiated several studies on blueberries, aiming to increase their yield, quality and sustainability.

One long-term project, instigated in 2008 by Dr. David Ehret, examines effective nitrogen management to increase nutrient use efficiencies. In the experiment, fertigation is applied to the blueberry throughout the growing season, as opposed to applying nitrogen three times with broadcast fertilization. Implications of the study suggest that fertigation produces greater growth and yield when using less nitrogen than broadcast nitrogen application. In other words, fertigation offers a higher profitability at a lower nitrogen rate and reduces the

environmental footprint.

As the study continues, Dr. Dorais plans to investigate productivity and fruit quality in diverse summer conditions while monitoring soil NH_4 and NO_3 content and salinity buildup, leading to an improved understanding of nitrogen uptake. Over the next three years, she and her team will look into applying fertigation under the sawdust mulch to avoid mobilization of nitrogen and reduce nitrogen loss. The goal of this particular study is to create sustainable nitrogen nutrient management, as well as growth development models to help growers' better use their resources and predict the size and timing of the coming yield.

Dr. Dorais is participating in a number of additional blueberry studies. One project examines the use of silicone and other bio-stimulants to increase plant resilience and to extend the shelf life of fruits. Another focuses on researching plant physiology to better understand flower bud initiation in order to



Dr. Martine Dorais, Research Scientist at Agriculture and Agri-Food Canada

optimize plant pruning, yield and fruit quality.

Dorais' ultimate goal is to produce blueberries organically and sustainably. She stresses the need for Canadian growers to increase their competitiveness by enhancing their product's uniqueness and entering the expanding organic small fruits market. Ideally, the outcome will produce an equivalent yield and quality as conventional blueberries, and have a price that appeals to consumers.

Dr. Dorais and her colleagues must continue their on-going studies before they can make clear recommendations to growers. Projects may take up to six years before solid results are produced as blueberries are a field crop with varying growing seasons. For the time being, Dr. Dorais advises growers not to use broadcast fertilization, avoid over-applying nitrogen, examine the soil and understand what is happening, and be conscious of the salinity, as well as the pH when monitoring their plants.

High Tunnels and Greenhouses!

Dr. Dorais' goal is to develop a soilless, organic growing system in high tunnels or greenhouses. These growing methods have a number of advantages:

1. They offer a controlled environment; there is no wind or hail and the crop is protected from frost. New varieties that are not well adapted to the climate can be optimally grown and are protected from pests and diseases.
2. Growers can optimize land use by increasing or decreasing the space between their crops. Plants with root diseases can be easily removed.
3. Growing seasons can be extended, enabling growers to produce small fruits during the winter.

One possible disadvantage of growing under high tunnels and greenhouses is that temperatures may become too hot. However, growers can solve this problem by rolling up the tunnel's plastic film or using fans.

Dorais strongly believes that growing under high tunnels and greenhouses using soilless growing media will be beneficial. The needs to increase sustainability, improve nitrogen management and develop a new growing system for fresh blueberries all provide support for the approach. She states that the method will be "local, organic, safe and healthy".



Greenhouses offer a number of advantages, including a controlled growing environment



Debbie Etsell, Executive Director

Founded in 1989, The BC Blueberry Council conducts promotional activities, funds research projects, facilitates educational programs and builds industry relations in the interests of blueberry growers. Presently, the council represents approximately 800 growers across B.C.

The Council is devoted to helping growers adapt to current conditions. By providing them with sufficient resources, growers can make the changes necessary to meet the evolving demands of the industry. Some of the programs that the council delivers include the *Berry Breeding Program*, *Bird Management Program* and *Market Safe Program*, the latter which is specifically geared towards farm-direct growers. Another tool that the council offers is recipes, created by culturally adept chefs. These recipes help introduce blueberries to new consumers each time the industry ventures into a new market. In addition, one-on-one food safety education is available in a variety of languages to achieve the highest level of communication with growers.

Internationally, the industry is planning for success in South Korea and China as a result of recent market access agreements. While the trade-off isn't cost-free, the council believes that there is a strong need to open new markets considering the amount of growth and production that the industry is undergoing.

Over the next few years, the council plans to direct its market development efforts in Asia, especially Southeast Asia. Asia's desire to have a healthy product, combined with free trade agreements, make Asia a big opportunity region for the industry. Although currently active in the European Union, the industry is looking forward to the ability to ship tariff free once the Comprehensive Economic and Trade Agreement (CETA) is ratified. With this change, B.C. will become more attractive to potential buyers there.

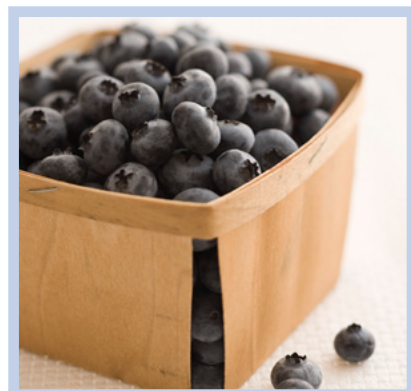
This summer was the industry's third year having an early season, prompting some marketing challenges. At the front end, the warm, hot climate advanced the crop berry very quickly and slowed down afterwards, condensing the season. The council predicts that the 2016 season will be similar to 2015 and expects a slight decrease in production numbers compared to the previous year.

"In 1989, our production was less than 20 million pounds and in 2016, is 172 million pounds. We are still continuing to grow as an industry and there is more production to come. Our goal as a council is to open new markets as well as keep growers abreast of any growing challenges and have the resources to be able to help them."

- Debbie Etsell, Executive Director

Website: <http://www.bcblueberry.com>

Social Media:



In the News

Blueberries from British Columbia to finally be shipped to China

Globe and Mail - After almost a decade spent trying to tap into the Chinese market, fresh British Columbia blueberries are heading there this season – following a deal the provincial government says could lead to \$65-million in exports each year.

B.C. blueberry glut fuelled as buyers play land value 'long game'

CBC - Veteran farmers and entrepreneurial newcomers have snapped up the cheap leases, eager to cash in on the blueberry's ascent as a super food and the promise that a trade deal with China would open the world's second-largest economy to fresh Canadian exports.

BRITISH COLUMBIA EXPORTS OF CULTIVATED, HIGHBUSH BLUEBERRIES (FRESH & FROZEN) WORLDWIDE



Source: Global Trade Tracker