



Catalogue no. 11-621-MIE — No. 018

ISSN: 1707-0503

ISBN: 0-662-38446-6

Analytical Paper

Analysis in Brief

The Pumpkin—A Growing Vegetable

by Jean Dornan

Agriculture Division
12th Floor, Jean Talon Building, Ottawa, K1A 0T6

Telephone: 1 800 263-1136

This paper represents the views of the author and does not necessarily reflect the opinions of Statistics Canada.



Statistics
Canada

Statistique
Canada

Canada



The Pumpkin—A Growing Vegetable

Jean Dornan

Review Committee: Catherine Cromeey, Steven Danford, Wilson Freeman, Robert Koroluk (Agriculture and Agri-Food Canada), Michel McCartin, Mike Trant and Gaye Ward

Special contribution: Suzanne Olsheskie, Lynda Kemp and Jenny Wang

Editor: Penny Hope-Ross

Managing Editor: Yvan Gervais

Production: Debi Soucy

October 2004

Catalogue No: 11-621-MIE2004018

ISBN: 0-662-38446-6

ISSN: 1707-0503

Frequency: Irregular

How to obtain more information:

National inquiries line: 1 800 263-1136

E-Mail inquiries: analysisinbrief-analyseenbref@statcan.ca

Published by the authority of the Minister responsible for Statistics Canada

© Minister of Industry 2004

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission from Licence Services, Marketing Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

The Pumpkin—A Growing Vegetable¹

Jean Dornan
Agriculture Division

Summary

Halloween is a festival that wouldn't be complete without that brightly coloured orange vegetable—the pumpkin. Although not one of Canada's largest vegetable crops, pumpkins are the fastest growing.

The area planted with pumpkins, squash and zucchini² increased by more than twofold between 1986 and 2001, almost double the rate of that of the next leading growth vegetable crop, green onions. Pumpkins are now the seventh most important vegetable after potatoes, sweet corn, peas, beans, tomatoes and carrots, whereas in 1986 they ranked fifteenth.

About 2,850 census farms across Canada planted just over 5,700 hectares of pumpkins in 2001. This crop year was worth almost \$22 million to producers. This is relatively small compared to potatoes, which were worth \$961 million.

The fast growth in pumpkin crops seems to be related to the popularity of this vegetable during Thanksgiving and Halloween, as 92% of sales came from fresh pumpkins in 2001. Only 8% of pumpkin sales came from pumpkins to be processed into canned pumpkin pie mixes and similar products.

While the pumpkin is mostly grown for fresh sales, it is also grown for processing in some provinces. The farmers, who grow this vegetable, are fast discovering that it can be a lucrative source of income as a tourist attraction in the agri-tourism³ industry. Pumpkin farmers are opening up their farms to day trippers to enjoy such activities as hay rides or pumpkin carving. Once there, these visitors have the opportunity to purchase not only pumpkins but also pumpkin pies and even some non-pumpkin items such as cider, baked goods and candles.

Location is a key element determining the success of an agri-tourism operation. An operation must attract tourists from urban areas. "How far will a consumer drive for this farm experience?" "How will rising gasoline prices affect an agri-tourism operation?" These are questions an operator must explore before embarking on a venture of this type.

Most farms growing pumpkins in Canada are near major urban centres. Of the 5,742 hectares of pumpkin area in 2001, 2,024 hectares were on 473 farms in southern Ontario. The Montérégie region of Quebec, near Montréal, has a large concentration of 170 farms that grew 828 hectares of pumpkins in 2001. In British Columbia, the largest area devoted to this vegetable is found in the Lower Mainland-Southwest, which has 149 farms growing 376 hectares of pumpkins. Most of these are in the Greater Vancouver Regional District.

1. This paper is largely based on an article entitled "The pumpkin patch — a venture in agri-tourism" published in *Canadian Agriculture at a Glance*, Statistics Canada Catalogue no. 96-325-XPB.

2. For simplification purposes, the term "pumpkins" will be used to mean pumpkins, squash and zucchini throughout the article.

3. Agri-tourism is defined as the business of using a working farm as a tourist attraction.

What exactly are pumpkins?

Pumpkins are in fact a winter squash, and a member of the cucurbitaceae or gourd family, which includes squash, pumpkins, cucumbers, muskmelons, honeydew melons, cantaloupe, watermelons and zucchini. These plants are native to Central America and Mexico.

Pumpkins take off

A picture of autumn in Canada wouldn't be complete without pumpkins. Farmers' markets, roadside stands and grocery stores have an abundance of these large orange gourds for sale, in all shapes and sizes.

Long a symbol of harvest and Halloween, the pumpkin is now offering many small farm operations a chance to show off their produce to the public while creating an alternative revenue source. This is being done by opening up their farms to visitors and offering fun activities such as hay rides and pumpkin carving. Their pumpkins are offered for sale in different forms than the whole pumpkin. Visitors can purchase pumpkin pies and jack-o'-lanterns and even non-pumpkin items such as cider and caramel apples. All these activities contribute to an enjoyable day out for urban folk and additional income for pumpkin farmers. This alternative source of revenue activity is known in the trade as agri-tourism.

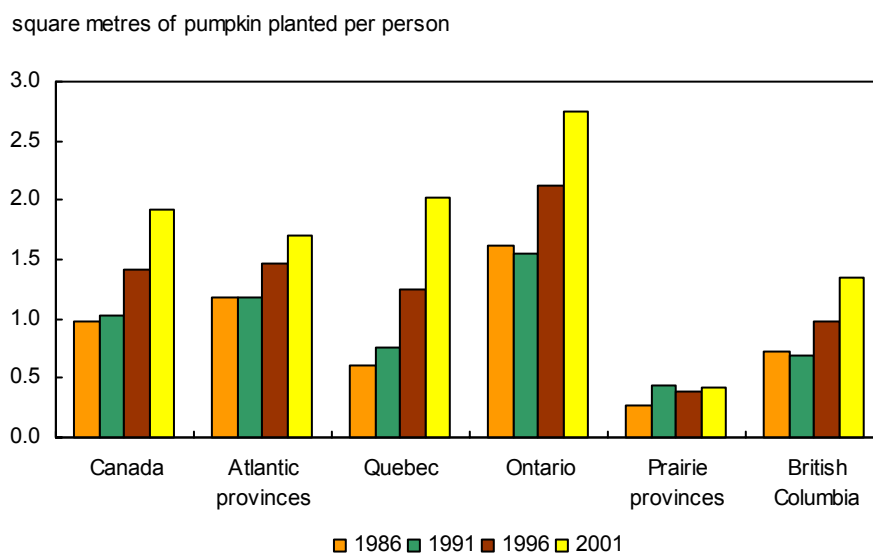
Although not one of Canada's largest vegetable crops, pumpkins are the fastest growing.

The area planted with pumpkins increased by more than twofold between 1986 and 2001, almost double the rate of that of the next leading growth vegetable, green onions. Pumpkins are now the seventh most important vegetable after potatoes, sweet corn, peas, beans, tomatoes and carrots, whereas in 1986 they ranked fifteenth.

About 2,850 census farms across Canada planted just over 5,700 hectares of pumpkins in 2001. This crop year was worth almost \$22 million to producers. This is relatively small compared to potatoes, which were worth \$961 million.

Almost two square metres of pumpkins were planted per person in Canada in 2001. Ontario had the highest average area per person with close to 2.8 square metres.

Pumpkins growing by leaps and bounds



Source: Census of Agriculture and Census of Population, 1986-2001.

The fast growth in pumpkin crops seems to be related to the popularity of this vegetable during Thanksgiving and Halloween, as 92% of sales came from fresh pumpkins in 2001. In terms of sales, only 8% of pumpkins were processed into canned pumpkin pie mixes and similar products.

Ontario was home to more than half of Canada's pumpkin area in 2001. In that year, two-thirds of the area planted in Ontario was for fresh sales, and the remaining one-third went for processing. New Brunswick and Quebec are the only other provinces that grow pumpkins for processing. Very few pumpkins are grown in the prairies because they require a longer growing season than they have most years in that region.

Sold fresh or for processing?

	Pumpkin ¹ area planted, 2001			Sales, 2001		
	For fresh sales	For processing hectares	Total	For fresh sales	For processing \$'000	Total
Canada	4,595	1,147	5,742	20,000	1,705	21,705
Atlantic provinces	343	45	388	1,295	250	1,545
Quebec	1,416	51	1,467	5,670	285	5,955
Ontario	2,090	1,052	3,142	8,095	1,170	9,265
Prairie provinces	216	0	216	1,455	0	1,455
British Columbia	530	0	530	3,485	0	3,485

1. Pumpkin refers to pumpkin, squash and zucchini.

Source: Statistics Canada, Fruit and Vegetable Survey, 2001.

An opportunity for diversification

The rising demand for pumpkins may be partly driven by the emerging agri-tourism industry. The public's interest in spending time in the countryside and exploring their rural heritage is growing. Festivals and events with an agricultural theme, educational tours, pick-your-own operations and farmers' markets are drawing people from urban centres. Decorating with squash and gourds for Halloween and Thanksgiving has become increasingly popular in both Canada and the United States.

As production costs rise and profit margins decrease, many operators of smaller farms are looking for ventures that will enable them to stay on the farm and stay viable. One option is an agri-tourism business, which provides recreational or educational programs, along with promotion and sale of farm products, thereby generating additional farm income. The small farm works well as an agri-tourism business. It portrays a picturesque, traditional view of farming, in contrast with the large consolidated farm operations that are the trend today in Canadian agriculture.

Some farm operations that 15 or 20 years ago sold pumpkins from a wagon by the roadside are now offering creative programs on the pumpkin/Halloween theme intended to entice the public to spend a day and a few dollars at their farm. These imaginative farmers have come up with a wide variety of enjoyable and educational activities, such as haunted barns, giant corn mazes, petting zoos, pumpkin carving demonstrations, scarecrow building contests and, of course, a hay ride to the pumpkin patch to "pick your own."

These ventures are not only a benefit to the small farm operation; they also serve to bring rural and urban people together. They provide an opportunity to educate the Canadian public, nearly 80% of which lives in urban areas, by increasing awareness of agricultural issues as well as sharing the challenges and rewards of a rural lifestyle.

Heavyweights and miniatures

Giant pumpkin weigh-offs are leading attractions at many autumn fairs and festivals across Canada. These gigantic pumpkins, from varieties bred for size and not taste, commonly grow to 175 or 225 kg—winning entrants can top 450 kg. Although admired for their size, these specimens are 90% water, and their stringy flesh would not please pumpkin pie lovers. (They're sometimes chopped up and fed to cattle, however.)

Miniature pumpkins are popular for autumn craft projects, decorating, and for small hands to bring home from the school trip to the pumpkin patch. These pumpkins can be as small as 5 cm high by 7.5 cm wide, and weigh 85 g to 115 g.

Is it the experience or the commodity?

It may be primarily the experience rather than the commodity that attracts visitors to an agri-tourism operation or event. But once at the venue, people are interested in purchasing farm produce. Marketing farm products directly to the consumer is part of an agri-tourism business. For some operations this merely involves a pick-your-own pumpkin sale; others sell a large variety of agricultural produce as well as value-added products. A country store or bakery may be part of the operation, offering farm produce, Halloween crafts or costumes, home-made pumpkin pies, caramel apples or cider. Selling retail involves higher labour costs. Direct sales, however, generate more

income than a producer would receive selling wholesale, while still offering consumers lower-than-supermarket prices.

Location is the key

Location is a key element determining the success of an agri-tourism operation. An operation must attract tourists from urban areas. “How far will a consumer drive for this farm experience?” “How will rising gasoline prices affect an agri-tourism operation?” These are questions an operator must explore before embarking on a venture of this type.

Most farms growing pumpkins in Canada are near major urban centres. Of the 5,742 hectares of pumpkin area in 2001, 2,024 hectares were on 473 farms in southern Ontario. The Montérégie region of Quebec, near Montréal, has a large concentration of 170 farms that grew 828 hectares of pumpkins. In British Columbia, the largest area devoted to this vegetable is found in the Lower Mainland-Southwest, which has 149 farms growing 376 hectares of pumpkins. Most of these are in the Greater Vancouver Regional District. The Vancouver Island–North Coast region has more farms growing pumpkins, but much less area.

The cucurbitaceae family history

Pumpkins and squash played an important role in the agricultural practices of Native North Americans. They were used for food, and were also dried and woven into mats. Early settlers introduced to North America the celebration of the harvest as well as All Hallow’s Eve, based on the Celtic festival Samhain, a ritual honouring the dead. Samhain took place at sundown on October 31. Lanterns carved from turnips, potatoes or gourds were set out to guard against the spirits. These settlers found that pumpkins, which were grown by the Aboriginals, were easier to carve and made an ideal jack-o-lantern.

The pumpkin pie, a favourite Thanksgiving dessert, originated from the practice of cutting the top off a pumpkin, removing the seeds and filling it with a mixture of milk, spices and honey. The pumpkin was then baked in hot ashes.

The spillover effect

Agri-tourism ventures have enabled farms to diversify their operations, which has added stability to their farm income and helped these operations survive as small farms. The spillover effect of this industry is more economic activity to rural communities. Tourists attracted by the agri-tourism operations spend dollars at other local businesses (e.g., service stations, restaurants and grocery stores), businesses that keep rural communities alive and prosperous.