VISTA on the Agri-Food Industry and the Farm Community

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# Organic fruit and vegetable production: Do farmers get a premium price?

By William Parsons

**In general, organic food in supermarkets tends to cost more compared with the same food grown in a non-organic fashion. Consumers may believe, as a result, that producers of organic food must be receiving more for their product than do their non-organic farming counterparts.**

**Thus, the question begs to be asked: Are organic farmers able to charge more for their produce than non-organic producers? In other words, do organic producers receive a price premium? This is difficult to answer, as there is limited information on prices that farmers receive directly for their produce.**

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# Vista on the Agri-Food Industry and Farm Community

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Special thanks to: John Flanders and Josée Bourdeau.

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The following standard symbols are used in Statistics Canada publications :

| | |
|---|---|
| . | not available for any reference period |
| - | not available for a specific reference period |
| … | not applicable |
| p | preliminary |
| r | revised |
| x | confidential |
| A | excellent |
| B | very good |
| C | good |
| D | acceptable |
| E | use with caution |
| F | too unreliable to be published |

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**Statistics Canada's Fruit and Vegetable Survey provides some information on prices, particularly those that consumers pay when buying fresh fruit and vegetables directly from farmers. This article examines estimated prices that farmers receive for organic and non-organic produce when selling fruits and vegetables directly to the public. It does not include farmers who sell to co-operatives, wholesalers or retailers.**

**Data show that farmers who sell organic fruit and vegetables directly to the public at outlets such as farmers' markets or roadside stands do not always receive a premium price for their produce.**

## Organic and non-organic farms remarkably similar

The characteristics of the farms examined in this study are remarkably similar between organic and non-organic producers. For the most part, farms are relatively small, usually 10 acres of land or less. The majority of farmers cultivate fewer than five acres. Both organic and non-organic farms are generally clustered around population centres where access to a favourable market is enhanced.

The most common organically grown fruit in Canada is apples, while sweet corn is the most popular organic vegetable. The proportion of area used for fruit as opposed to vegetable production is almost equal.

One province – British Columbia – has both the highest concentration of organic fruit and vegetable producers in Canada, as well as the highest proportion of land area dedicated to organic fruit and vegetable production.

*Note to readers*

*This study uses data from the 2001 and 2002 Fruit and Vegetable Survey to examine prices that farmers receive for organic and non-organic produce sold directly to the public. The survey is a census of all known commercial fruit and vegetable growers in Canada.*

*For the purposes of this analysis, only those producers who sell all their produce directly to the public were included in the study. Those producers who sold produce through wholesale or retail outlets, or a combination of direct and wholesale sales were excluded. Direct-to-the-public includes sales from U-picks, farmers' markets, roadside stands, door-to-door or similar direct marketing programs developed by the producer.*

*The direct sales data were sub-divided into organic and non-organic producers. By grouping the data in this fashion, it was anticipated that the prices organic producers receive for their product would show a clear price premium over the non-organic product sold under similar market conditions. The method of sales, 100% direct to the public is an important refinement to the study. This refinement allowed a pure comparison of price differences between organic and non-organic produce eliminating the method of sales as a reason for price variations.*

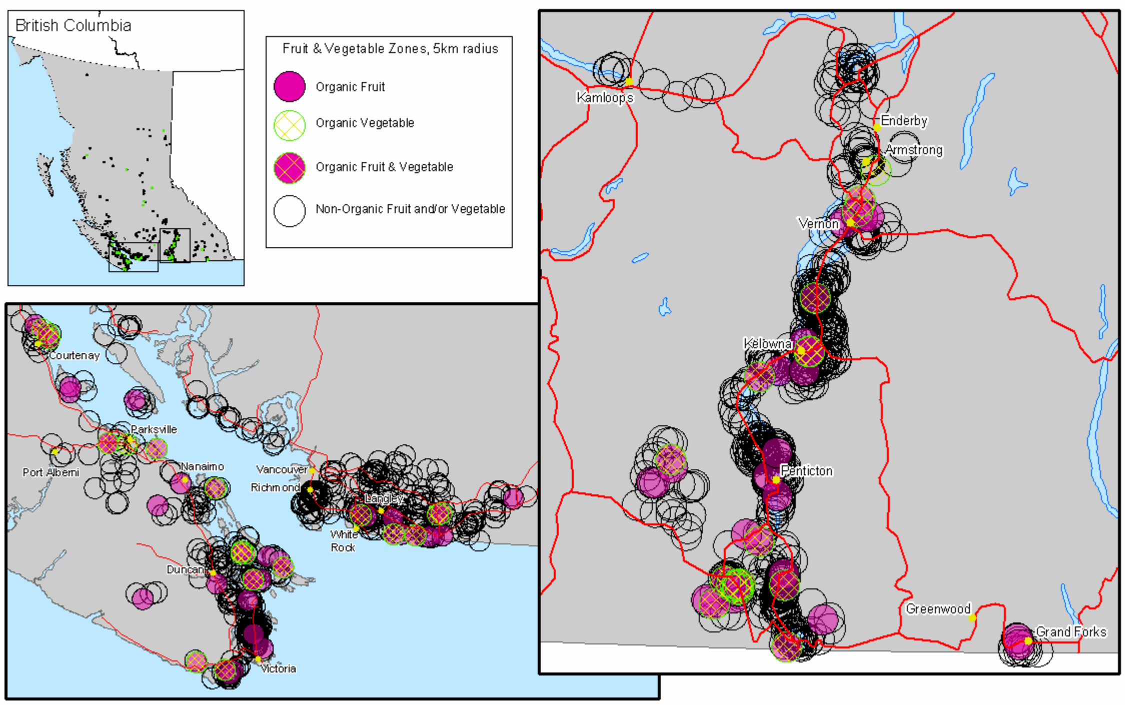
*This is the second article concerning organic fruit and vegetable production. The first, published in September 2002 and titled Organic fruit and vegetable production: Is it for you?, analyzed the emerging agricultural industry involved in producing these crops and their relative income generating capacities. It is available on Statistics Canada's Web site (www.statcan.ca).*

Map 1, which uses selected areas of British Columbia as examples, shows that organic and non-organic farms are interspersed within a geographic location. This indicates that organic production is not clustered. Nor does it require special agronomic characteristics over and above those needed for fruit and vegetable production. The two production methods are being used alongside each other within a community. As a result, organic and non-organic products are competing for market share from the same customer base.

In addition, direct sales fruit and vegetable farms tend to cluster around metropolitan centres. They feed into existing local markets, reducing transportation costs and building up local networks of customers for their produce.

## Map 1

**Fruit and Vegetable Production in British Columbia, 2001-2002**




Produced by Spatial Analysis & Geomatics Applications, Agriculture Division, Statistics Canada, June 2003. Préparé par Analyse spatiale et applications géomatiques, Division de l'agriculture, Statistique Canada, juin 2003.

One important item to note is that producers of non-organic produce in the direct sales market outnumber organic producers in the same market. The ratios are quite startling, as Table 1 shows.

**Table 1: Number of non-organic farms for every organic farm - direct sales**

| | 2002 | |
|---|---|---|
| **Province** | **Fruits** | **Vegetables** |
| Quebec | 23 to 1 | 16 to 1 |
| Ontario | 62 to 1 | 82 to 1 |
| British Columbia | 12 to 1 | 14 to 1 |

## Regional observations: Fruit production

The number of producers participating in direct sales of organic fruit and vegetables in Ontario is relatively low, as indicated by the ratios in Table 1.

Organic fruit is difficult to sell, as consumers base some of their decisions to purchase on appearance. According to the government of Alberta study entitled *Farmers' Markets in Alberta: A Direct Channel of Distribution*, consumers look for freshness and product quality. They use visual cues such as colour, blemishes, size and uniformity of shape to confirm freshness and quality of the product.

Organic produce has difficulty maintaining a uniform appearance and size. It is more prone to non-consequential surface blemishes due to the nature of the production method.

Table 2 shows the variability of pricing experienced by organic producers. Fruit prices for non-organic production show less variability during the two-year study period, compared with prices for organic fruit.

The stability of the prices for non-organic produce indicates a more mature market, as the stability is due to high producer participation and a competitive market. Alternatively, the prices of organic produce may be more variable because of the need to adjust prices depending on product quality.

Organic fruit producers in Quebec and Ontario are having a difficult time capturing a price premium for their produce. Prices for production of non-organic fruit are relatively consistent from year to year, but this is not the case for organic prices.

British Columbia is well-suited for growers producing and selling fresh organic fruit directly to the public. Almost all fruit varieties that were surveyed, and sold into the direct sales fresh market, were able to capture a price premium for organic production.

So why is B.C.'s market able to show characteristics that are completely opposite from the other two major organic producing regions in Canada? The movement towards organic production was fully embraced by B.C. farmers before their counterparts in the rest of the country.

One can also speculate about the impact of regional factors on B.C. consumers. Two of these factors are the ease of transportation in north/south direction, and the influence of California consumers, who have traditionally demanded more health-conscious food choices. It is possible that in Canada, the demand for organic food found a voice first on the West Coast before moving east.

At any rate, the organic market in British Columbia appears to be a better developed, more mature and well-established market, with consumers who are more in tune with the concept of organic foods. British Columbia contains a well-developed group of producers who are feeding an established niche market.

**Table 2: Price differential between organic and non-organic sales of fresh fruit directly to the public, 2001 and 2002**

| | Quebec | | Ontario | | British Columbia | |
|---|---|---|---|---|---|---|
| | **2001** | **2002** | **2001** | **2002** | **2001** | **2002** |
| **Crop** | $/lb. | $/lb. | $/lb. | $/lb. | $/lb. | $/lb. |
| Apples | –0.01 | –0.06 | 0.01 | 0.03 | 0.19 | 0.06 |
| Blueberries | 0.22 | –1.64 | 0.73 | n/a | 0.45 | 1.37 |
| Peaches | n/a | n/a | –0.04 | n/a | 0.38 | 0.2 |
| Pears | 0.48 | n/a | –0.19 | 0.52 | 0.28 | 0.2 |
| Plums / Prunes | 0.33 | –0.05 | –0.41 | 0.28 | 0.15 | 0.03 |
| Raspberries | –0.41 | 0.33 | –0.90 | 2.91 | 1.22 | 0.92 |
| Strawberries | 0.69 | 0.88 | –0.24 | 1.07 | 0.02 | –0.39 |

***Note:*** The non-organic price was subtracted from the organic price to establish a price differential. A negative indicates that the non-organic price was greater than the organic price.

## Vegetable production: One-third of organic crops sold for less than non-organic crops

Data shown in Table 3 do not support the current belief that organic vegetables sold fresh directly to the public would obtain a price premium compared with the non-organic vegetables. In fact, all three provinces showed cases in which certain organic vegetables sold for less than the same non-organically grown vegetables.

Also surprising is the number of organic crops in British Columbia that did not have a price premium. Data showed that for all provinces studied, roughly one-quarter to one-third of the organic vegetable crops obtained prices that were less than those of non-organic crops. For example, in British Columbia, organically grown sweet corn captured a price premium of $0.88 a pound in 2001. The next year, it sold for $0.02 a pound less than its non-organic counterpart did.

Overall, this lower organic pricing situation runs counter-intuitive to the reasons that consumers buy fresh from the producer. It is generally believed that the consumer who buys fresh produce directly from the producer is looking for a source of food that is of better quality, tastes better and is healthier to eat. These are exactly the qualities promoted by producers advertising organically grown fruits and vegetables. It is generally believed that the organic produce tastes better and is healthier than the non-organic counterparts, justifying the price premium.

However, the visual aspects of the product quality may be the deciding factor. If the organic product does not look as good as or is smaller than the non-organic product, then the price may have to be lowered to attract and/or keep customers.

**Table 3: Price differential between organic and non-organic sales of fresh vegetables directly to the public, 2001 and 2002**

| | Quebec | | Ontario | | British Columbia | |
|---|---|---|---|---|---|---|
| | **2001** | **2002** | **2001** | **2002** | **2001** | **2002** |
| **Crop** | $/lb. | $/lb. | $/lb. | $/lb. | $/lb. | $/lb. |
| Asparagus | –0.19 | 1.63 | 0.5 | n/a | –0.53 | –0.43 |
| Beans | –0.07 | 1.35 | 0.22 | 0.19 | 0.86 | 0.44 |
| Broccoli | 0.08 | 0.06 | 0.18 | 0.33 | 0.28 | 0.04 |
| Sweet Corn | 0.02 | –0.08 | 0.11 | 0.34 | 0.88 | –0.02 |
| Regular Cabbage | 0.11 | 0.17 | 0.06 | –0.01 | 0.06 | 0.05 |
| Baby Carrots | n/a | –0.10 | –0.54 | n/a | 0.26 | 0.2 |
| Cauliflower | –0.02 | 0.38 | –0.01 | –0.16 | 0.33 | 0.2 |
| Celery | 0.11 | 0.83 | 0.02 | n/a | –0.06 | 0 |
| Head Lettuce | 0.69 | 0.08 | –0.06 | –0.19 | 0.04 | –0.57 |
| Shallots | 0.27 | –0.52 | –0.64 | 0.18 | –0.09 | –0.09 |
| Green Peas | –0.47 | 0.84 | 0.04 | 0.19 | 0.35 | 0.61 |
| Peppers | 0.02 | –0.01 | 0.12 | 0.04 | 0.2 | –0.18 |
| Radishes | –0.06 | 0.96 | –0.15 | 0.01 | –0.01 | –0.06 |
| Squash / Zucchini | –0.06 | 0.36 | 0.07 | 0.28 | 0.33 | –0.10 |
| Tomatoes | 0.05 | 0.56 | –0.42 | 0.31 | 0.46 | 0.69 |

***Note:*** The non-organic price was subtracted from the organic price to establish a price differential. A negative indicates that the non-organic price was greater than the organic price.

## Do producers really get a premium price for organic crops?

So why do the survey data appear to counter the popular perception that consumers should expect to pay a premium for organic products? From the point of view of the consumer who buys fresh fruit and vegetables from a supermarket or retail outlet, organically grown produce costs more than regular produce.

Consumers have begun to accept the concept of premium prices for organic products, as demonstrated by the current pricing strategies of the major retail chains. The price differential implies that it is more expensive, and perhaps more labour intensive, to grow organic crops than conventional non-organic crops.

Price competition, product volume and product quality may dampen organic prices. However, one would expect that the properties of organically grown fruits and vegetables should be sufficiently strong to mitigate price dampening and retain the premium prices or at least positive price differentials.

These expectations do not appear to be true for those consumers who buy their fresh produce directly from the producer. Data show that fresh fruit and vegetables bought directly from the producer do not necessarily provide producers with a premium. There appear to be other factors affecting product prices when consumers are dealing directly with the producer.

Consumers who buy produce directly from the producer may place a greater premium on the relationship with the producer than on any particular method of production. Buying directly from the producer gives the consumer a chance to ask about production methods; get a feel for how responsible the producer is in terms of insecticide, fungicide and fertilizer use; perhaps visit the fields, equipment and storage sheds; and obtain a general sense of how the food was produced.

The consumer might also feel more comfortable with a non-organic producer who takes a sustainable approach to production, but at the same time uses modern production practices to bring a healthy, attractive product to market.

The consumer may judge through discussions and observation that the producer is comfortable with the product and may even consume his produce at home. This type of endorsement may be better than the marketing spin that advertisers place on a generic organic product.

The crop's appearance could also make a difference. When two stalls in a market are competing head-to-head, one organic the other non-organic, the preference may go to the product that looks the best, has the least number and size of blemishes, or is insect-free.

In situations of direct visual product comparison, the organic producer may have to reduce prices below that of the non-organic produce to attract customers.

## Conclusions

Organic products do not always attract a price premium when sold directly to the public by the producer. Several factors that may contribute to this finding:

- Product quality considerations may force organic producers to reduce their prices below those of the non-organic producer to remain competitive.

- Consumers may prefer freshness and product quality which organic farmers may not always be able to deliver.

- Consumers value fresh produce from a producer they trust and respect as much as they value a product with an organic label.

While this study challenges the perception that farmers get a premium price for organic produce, it was limited to the organic producers who sell directly to the consumer. It did not include those who sell to co-operatives, wholesalers or retailers.

An interesting extension to this study would be a comparison of the production costs between the two methods. Unfortunately, data for this type of study are not yet available.

Consumer interest and demand for organic products are growing. However, sales still represent a niche market in most parts of Canada. It is clear that the emerging niche market for organic produce is composed of sub-structures and interactions that are a great deal more complicated than may first appear.

It is also clear that organic producers should not expect to receive or sustain a premium price for the product unless they can produce a premium product and sell it in the right market.

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