

"Certified Organic" The Status of the Canadian Organic Market in 2003

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Table of Contents

Introduction

1.	Certified	d Organic Production in Canada	3
	1.1. No	umber of "Certified Organic" Farms and Farm Size	3
	1.2. Ad	creage in Organic Production and Farm Gate Value	7
	1.2.1 1.2.2 1.2.3 1.2.4 1.2.5	Fruit and Nut Production	10 12 15
	1.3.1	·	
	1.3.2		
	1.4. Pr	ocessing and Handling of Certified Organic products	20
2.	Domest	ic Sales of Organic Products	23
	2.1. 2.2. 2.3.	Quantity and Value of Organic Products at Canadian Retail Number of stores in Canada retailing Organic Products Comparison of Domestic and Imported products at Retail	25
3.	Exports	of Organic Products	27
4.	Imports	of Organic Products	29
Sı	ımmary		30
Αŗ	pendix 1	. Canadian Organic Certification Organizations and Institutions Providing Data	32
Αŗ	pendix 2	2. Organic Associations & Regional Networks – Not Certifying	33



Introduction

"Organic agriculture is a holistic system of production management designed to optimize the productivity and fitness of diverse communities within the agro-ecosystem, including soil organisms, plants, livestock and people. The principal goal of organic agriculture is to develop productive enterprises that are sustainable and harmonious with the environment."

National draft standard concerning organic agriculture and its foodstuffs. January 2004.

Today the organic food market is described by industry analysts as the most dynamic and rapidly growing sector of the global food industry - what was once a small scale niche market is now a \$23 billion global enterprise¹. In Canada there has been a small but increasing organic agriculture sector since the early eighties and recent years have seen dramatic growth in the organic food market with organic food consumption developing at a faster rate than production.

National governments, including Canada's major trading partners, have developed mandatory regulations defining production standards and labelling requirements for products traded as "Organic". The organic sector in Canada has identified the need for a mandatory regulation at the federal level to support the continued development of the industry and to facilitate trade. The intent of this report is to provide a baseline description of the current status of the organic market in Canada in order to measure the impact of the proposed regulation. The baseline information provided will also be useful to the organic industry as it attempts to measure its progress in achieving the objectives outlined in the National Strategic Plan for the Canadian Organic Food and Farming Sector.

Reliable data on the size of the organic sector is not readily available. It is only recently that Statistics Canada has begun to collect data about organic production and the data has not yet been processed to provide detailed information about all types of organic production. Canadian Organic Growers has tracked the growth in the number of certified farms since 1992 but has not had the resources to obtain detailed statistics on acreage or value of production. In past years studies have been undertaken in some provinces but these are now out of date. More recently British Columbia and Atlantic Canada have undertaken market studies providing some data on the size and potential of the market. As far as we can tell this is the first time an attempt has been made to gather information about all aspects of the organic market across the country.



1. Certified Organic Production in Canada

All organic certification organizations operating in Canada were contacted and information requested on numbers and size of certified operations, acreage, production values, gross sales and market information. Even those organizations with well developed data bases found the request problematic given the time frame involved. Most do not collect sales information and therefore most of the data supplied was limited to numbers certified and acreage in the certification program. Another approach considered was to contact all certified operators but lists of certified operators were not made available by all certifiers and the degree of cooperation by individual farmers was doubtful so it was not attempted. Atlantic Canada is the only region where this has been done and the resulting data was provided for this study by the Atlantic Canadian Organic Regional Network (ACORN). The data presented in this report represents both accurate numbers and estimates based on extrapolations of the data available or "best guesses" by representatives of the various organizations involved. Comparisons with traditional agriculture are made using data from the Statistics Canada 2001 Census of Agriculture and CANSIM tables available from the Statistics Canada website.

1.1. Number of "Certified Organic" Farms and Farm Size

- In 2003 the total number of certified producers was 3317 representing 1.3% of all farms in Canada.
- Saskatchewan has the most certified producers (1049), followed by Quebec (793), Ontario (487) and BC (420). The numbers include maple syrup producers in Quebec (372) and wild rice producers in Saskatchewan (174).
- Transitional or pre-certification year organic farms are not included in the totals. These number at least 250.
- By extrapolation of the data provided it is estimated that 26% of all organic farms have less than \$10,000 gross sales and 46% are considered large with over \$50,000 in gross sales. Clearly many organic farm families, like conventional farm families, have other forms of income.
- The national breakdown by farm size is not reflected in the provinces. In BC 50% of organic farms are small similar to the proportion for all farms in the province, and in Nova Scotia 70%.
- The numbers provided for Saskatchewan are estimates and may not reflect actual gross sales in 2003 because income dropped dramatically in some regions with crop failures because of drought. In a better year the area seeded would have provided income levels in the higher category. Gross sales data for Ontario and Quebec are not available.



Table 1. Number of Certified Farms in Canada and Farm Size - 2003

Numbei	of Certifi	ed Orga	nic Farm	ıs - 2003			
Province			Certifie	d Farms			Transition
	Small	Medium	Large	Unknown	Total	%*	
ВС	212	120	86		420	2.0%	76
AB	43	41	38	110	245	0.4%	8
SK	138	212	609	90	1049	2.0%	25
MB	35	102	47	29	213	1.0%	25
ON		12	62	413	487	0.8%	41
QC				793	793	2.5%	67
NB	23	8	5		36	1.2%	2
NS	28	11	6		45	1.1%	1
PEI	11	8	4		23	1.2%	5
NF	1	1	1		3	0.5%	
YK				3	3		
Total	491	515	858	1438	3317	1.3%**	250

^{* %} of total of all farms in province.

(BC = British Columbia, AB = Alberta, SK = Saskatchewan, MB = Manitoba, ON = Ontario, QC = Quebec, NB = New Brunswick, NS = Nova Scotia, PEI = Prince Edward Island, NF = Newfoundland, YK = Yukon.)

Numbers of male and female operators producing organic products were collected in the 2001 Census but have not been published. According to Statistics Canada analyst Jenny Kendrick, 40% of organic operators in BC are female compared with the national organic average of 31%. This compares with 36% of all farm operators in BC and a national average for all farms of 26%.

The total of 3317 certified producers is 6% more than the figure reported for 2002 (3120) however the accuracy of the numbers reported for Ontario in 2002 has been questioned so a direct comparison may not be valid. The figures do show a decrease in numbers from 2002 to 2003 in Alberta and Saskatchewan which is probably a result of the poor growing conditions in the Prairie Provinces rather than a lack of interest in the organic market possibilities. Numbers of farms in Atlantic Canada also show a small decrease but, according to ACORN, sales increased by 51% from 2002 to 2003.

Some of the certifiers in BC report several small operations discontinuing with certification each year although they are replaced by new entries so overall numbers show little change. This may be an indication that small-scale organic market garden operations, selling directly to consumers, are dropping out of certification programs believing that the increasing costs involved with certification do not provide any additional market benefits. There is no evidence to suggest that organic farms are starting to show similar trends to the overall farm situation in Canada where farms are decreasing in number with higher rates of decrease for small farms and an increase in the number of large farm operations.²

Historical data has been provided by Canadian Organic Growers which show the exponential growth rate in numbers of organic farms from 1997-2001 has levelled off.



^{** %} of total of all farms in Canada (246923), 2001 Census.

Figure 1. Number of Certified Organic Producers in Canada 1992-2003 Source: A. Macey, Canadian Organic Growers³

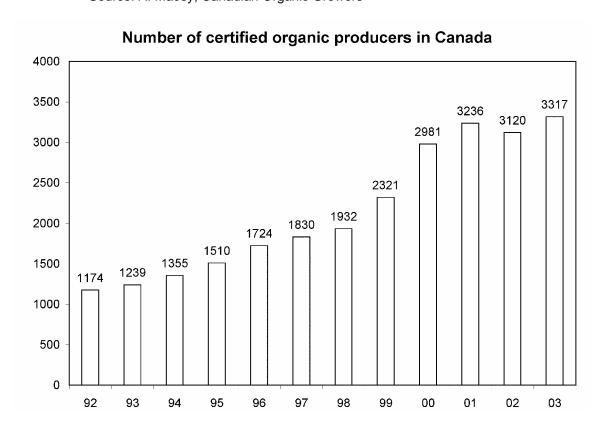
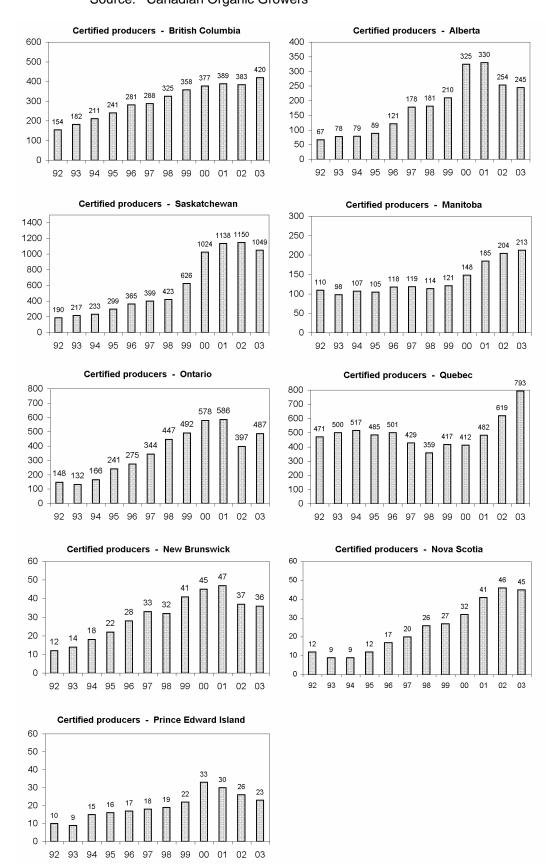


Figure 2. Number of certified producers by province 1992-2003 Source: Canadian Organic Growers³



1.2. Acreage in Organic Production & Farm Gate Value

Acreage data was provided by all but one of the certifiers operating in Canada. The missing data represents relatively few farmers, therefore the acreage figures are considered fairly accurate. The reporting was detailed in some instances, less so in others. Care should be taken in the interpretation of data in the following tables. When detailed breakdowns are provided they do not imply a total value for a particular crop rather a minimum value because other acreage of that crop type may be included in a more general category. For example in British Columbia 567 acres of apples trees were identified but apples will also make up some of the acreage included under 'tree fruit' so the actual acreage of apples is greater than 567.

Land in production is the total of crop acreage, hay and pasture land but does not include crown lands used for cattle range, natural areas on organic farms or wild lands where plants are collected.

- There is a total of 966,482 acres (391123 ha) of agricultural production land in organic certification programs in Canada.
- An additional 295,477 acres (119564 ha) is within the organic program and includes crown lands used for range, natural or wild areas including maple trees and land used for wildcrafting.
- Another 13,402 acres (5,424 ha) of transitional crop land were reported in British Columbia, Ontario and Quebec; data is missing for the other provinces.

Estimates for farm gate value are available for British Columbia where organization fees are collected based on gross sales categories and in Atlantic Canada as a result of a survey of individual producers. The value of organic farm production in British Columbia is \$20 million and in Atlantic Canada \$2.64 million.

Attempts have been made to calculate production values in other provinces by using acreage and livestock numbers to estimate the quantity and value of production but whether this provides a true reflection of the situation is debatable. Estimates based on numbers of farmers in each size category suggest \$4.5 million in Manitoba and \$45 million in Saskatchewan which is close to the value of crop exports reported. Estimates based on crop acreage (see Table 9) suggest a value of \$97 million for the three Prairie Provinces. As the number of farmers in Alberta could not account for the difference these extrapolations are obviously suspect. Without more data on actual gross sales it is impossible to provide a total value for organic production.



Table 2. Organic Acreage in Canada and Value of Production

Orga	anic Cert	ified Acr	eage & F	Productio	n Value	- 2003		
Province	Land in P	roduction	Other land	in program:	Transitio	nal land	Es	timated farm gate value
			crown, wild	, maple etc				
	Hectares	Acres	Hectares	Acres	Hectares	Acres		
ВС	8795.9	21,735	98348.2	243,023	2301.0	5686	\$	20,000,000.00
AB	76205.0	188,306	14538.0	35,924				
SK	227230.1	561,496	5026.2	12,420				\$45 million ?
MB	22569.8	55,771	299.1	739				\$4.5 million ?
ON	36845.5	91,047	197.5	488	3035.5	7501		more than \$25 million
QC	17748.4	43,857			87.0	215		more than \$25 million
NB	908.9	2,246	870.1	2,150			\$	1,150,000.00
NS	414.0	1,023					\$	812,500.00
PEI	370.3	915	284.5	703			\$	590,000.00
NF	34.4	85					\$	92,500.00
YK	0.4	1						
Total	391122.7	966,482	119563.6	295,447	5423.6	13402		

shaded cells indicate missing data

1.2.1. Vegetable and Herb Production

Organic vegetable acreage in Canada is made up of small acreages of mixed vegetables in a "market garden" situation as well as large acreages of commercial production of a few main crops such as beans, broccoli or carrots.

- A total of 6306 acres (2552 ha) of vegetable production were identified representing less than 1% of the land in organic production and 1.9% of the total vegetable production area in Canada.
- BC has the largest acreage in organic vegetables (2283 acres/924 ha) and the majority of farms (at least 215), followed by Quebec (1701 acres/ 688ha) and Ontario 1311acres/531 ha).
- BC has the highest proportion of land in organic vegetables or 12.7% of the total vegetable area in the province. In comparison Quebec has 1.6% and Ontario less than 1% of total vegetable land in the province.

Statistics Canada has published three papers by William Parsons (Sept. 2000, Sept. 2002 & Jan. 2004) on organic vegetable and fruit production^{4.} The most recent states that most of the farms involved are relatively small - 10 acres or less and are clustered around large population centres. The September 2000 article reported 1340 acres of organic vegetables in BC. The 2003 figure of 2283 acres represents a 70% increase in 3 years, a result of large farms in the lower mainland converting to organic production.

The <u>Fédération d'agriculture biologique du Québec (FABQ)</u> reported 400 ha of organic vegetable production in 2001⁵; 443 ha were reported for 2003 representing an 11% increase in 2 years. Detailed breakdowns by vegetable crop were not provided for this survey but according to the 2001 figures the most important vegetable crops are potatoes, carrots, followed by onions, squash, broccoli and lettuce. 10% of the producers specialize in a few crops on large acreages whereas small diversified farms average 20 types of vegetables.



Table 3. Acreage: Organic Vegetable and Herb Production

cres												
	Total	ВС	AB	SK	МВ	ON	QC	NB	NS	PEI	NF	ΥI
Mixed vegetables	3429	897	201	25	261	545	1354	56	78	11	2	
Greenhouse	54	23					23	2	5	1	0	
Larg scale misc. Beets	1345	1076	- 1			50	219					
Carrots	10 47	4 15	1 8			5 23						
Cole crops	91	2	1			76				13		
Corn	270	10		1		142	100	18				
Onions	44	5	1	2		37						
Peas	30	30										
Rutabag	2	2										
Squash	88	16		3		69 15	1					
Tomato Salad greens	18 42	2 10	6	0		26	- 1					
Parsnips	1	10	1			20						
Potatoes	723	158	115	53	49	249	2	5	7	87	0	
Asparagus	45	3				43						
Garlic	68	31	0	1		32	3	1	1			
Subtotal	6306	2283	333	83	309	1311	1701	81	90	112	2	
Herbs	443	165	22	53	7	34	147	4	5	6	1	
Echinacea	48	8	8 279	19 348		11		2				
Borage Burdock	627 29		219	346			29					
Ginsing	3	3					20					
Caraway	110			110								
Coriander	89			89								
Fenugreeek	76			76								
yellow dock	25			25								
Seed Production	1	1	074									
Wildcrafting - herbs	4454	<615>	<871> 309	740	-	45	470	6	5	-	1	
Subtotal Total	1451 7757	177 2460	643	719 802	7 316	1356	176 1877	87	95	118	3	
Total	Total	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NF	Υ
ectares			-	-								
	Total	ВС	AB	SK	МВ	ON	QC	NB	NS	PEI	NF	Υ
Mixed vegetables	1387.7	363.1	81.2	10.1	105.5	220.6	547.7	22.5	31.4	4.5	0.8	0.
Greenhouse	21.7	9.3					9.3	0.8	1.8	0.4	0.0	
Larg scale misc.	544.3	435.4				20.2	88.6					
Beets	4.1	1.7	0.4			2.0						
Carrots	18.8	6.2	3.2			9.4						
Cole crops	36.8	0.8	0.4			30.6				5.1		
Corn	109.3	3.8		0.2		57.5	40.5	7.3				
Onions Peas	17.8 12.1	1.8 12.1	0.4	0.6		15.0						
reas												
	ופח ן	ופח										
Rutabag	0.8 35.4	0.8 6.5		1.0		27.9			l l			
	0.8 35.4 7.1	0.8 6.5 0.8		1.0		27.9 5.9	0.3					
Rutabag Squash	35.4	6.5	2.4				0.3					
Rutabag Squash Tomato	35.4 7.1 17.1 0.4	6.5 0.8	2.4	0.1		5.9	0.3					
Rutabag Squash Tomato Salad greens Parsnips Potatoes	35.4 7.1 17.1 0.4 292.6	6.5 0.8 4.0 64.0			19.6	5.9 10.6 100.8	0.3	2.0	2.6	35.2	0.0	
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus	35.4 7.1 17.1 0.4 292.6 18.2	6.5 0.8 4.0 64.0 1.0	0.4 46.4	21.2	19.6	5.9 10.6 100.8 17.2	0.6			35.2	0.0	
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic	35.4 7.1 17.1 0.4 292.6 18.2 27.4	6.5 0.8 4.0 64.0 1.0 12.3	0.4 46.4 0.0	21.2		5.9 10.6 100.8 17.2 12.9	0.6	0.2	0.4			
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus	35.4 7.1 17.1 0.4 292.6 18.2	6.5 0.8 4.0 64.0 1.0	0.4 46.4	21.2	19.6 125.1	5.9 10.6 100.8 17.2	0.6			35.2 45.1	0.0	0.
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8	6.5 0.8 4.0 64.0 1.0 12.3 923.9	0.4 46.4 0.0 134.9	0.1 21.2 0.2 33.5	125.1	5.9 10.6 100.8 17.2 12.9 530.6	0.6 1.2 688.3	0.2 32.8	0.4 36.2	45.1	0.9	0
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic	35.4 7.1 17.1 0.4 292.6 18.2 27.4	6.5 0.8 4.0 64.0 1.0 12.3	0.4 46.4 0.0 134.9 9.0	21.2		5.9 10.6 100.8 17.2 12.9	0.6	0.2	0.4			0
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8	6.5 0.8 4.0 64.0 1.0 12.3 923.9	0.4 46.4 0.0 134.9	0.1 21.2 0.2 33.5	125.1	5.9 10.6 100.8 17.2 12.9 530.6	0.6 1.2 688.3	0.2 32.8	0.4 36.2	45.1	0.9	0
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal Herbs Echinacea Borage Burdock	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8 179.5 19.3 253.7 11.7	6.5 0.8 4.0 64.0 1.0 12.3 923.9 66.8 3.2	0.4 46.4 0.0 134.9 9.0 3.2	0.1 21.2 0.2 33.5 21.2 7.5	125.1	5.9 10.6 100.8 17.2 12.9 530.6	0.6 1.2 688.3	0.2 32.8	0.4 36.2	45.1	0.9	0
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal Herbs Echinacea Borage Burdock Ginsing	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8 179.5 19.3 253.7 11.7	6.5 0.8 4.0 64.0 1.0 12.3 923.9	0.4 46.4 0.0 134.9 9.0 3.2	0.1 21.2 0.2 33.5 21.2 7.5 140.8	125.1	5.9 10.6 100.8 17.2 12.9 530.6	0.6 1.2 688.3 59.5	0.2 32.8	0.4 36.2	45.1	0.9	0
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal Herbs Echinacea Borage Burdock Ginsing Caraway	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8 179.5 19.3 253.7 11.7 1.2	6.5 0.8 4.0 64.0 1.0 12.3 923.9 66.8 3.2	0.4 46.4 0.0 134.9 9.0 3.2	0.1 21.2 0.2 33.5 21.2 7.5 140.8	125.1	5.9 10.6 100.8 17.2 12.9 530.6	0.6 1.2 688.3 59.5	0.2 32.8	0.4 36.2	45.1	0.9	C
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal Herbs Echinacea Borage Burdock Ginsing Caraway Coriander	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8 179.5 19.3 253.7 11.7 1.2 44.5 36.0	6.5 0.8 4.0 64.0 1.0 12.3 923.9 66.8 3.2	0.4 46.4 0.0 134.9 9.0 3.2	0.1 21.2 0.2 33.5 21.2 7.5 140.8 44.5 36.0	125.1	5.9 10.6 100.8 17.2 12.9 530.6	0.6 1.2 688.3 59.5	0.2 32.8	0.4 36.2	45.1	0.9	0
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal Herbs Echinacea Borage Burdock Ginsing Caraway Coriander Fenugreeek	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8 179.5 19.3 253.7 11.7 1.2 44.5 36.0 30.8	6.5 0.8 4.0 64.0 1.0 12.3 923.9 66.8 3.2	0.4 46.4 0.0 134.9 9.0 3.2	21.2 0.2 33.5 21.2 7.5 140.8 44.5 36.0 30.8	125.1	5.9 10.6 100.8 17.2 12.9 530.6	0.6 1.2 688.3 59.5	0.2 32.8	0.4 36.2	45.1	0.9	0
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal Herbs Echinacea Borage Burdock Ginsing Caraway Coriander Fenugreeek yellow dock	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8 179.5 19.3 2537.7 11.7 1.2 44.5 36.0 30.8 10.1	6.5 0.8 4.0 64.0 1.0 12.3 923.9 66.8 3.2	0.4 46.4 0.0 134.9 9.0 3.2	0.1 21.2 0.2 33.5 21.2 7.5 140.8 44.5 36.0	125.1	5.9 10.6 100.8 17.2 12.9 530.6	0.6 1.2 688.3 59.5	0.2 32.8	0.4 36.2	45.1	0.9	0
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal Herbs Echinacea Borage Burdock Ginsing Caraway Coriander Fenugreeek yellow dock Seed Production	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8 179.5 19.3 253.7 11.7 1.2 44.5 36.0 30.8	6.5 0.8 4.0 1.0 12.3 923.9 66.8 3.2	0.4 46.4 0.0 134.9 9.0 3.2 112.9	21.2 0.2 33.5 21.2 7.5 140.8 44.5 36.0 30.8	125.1	5.9 10.6 100.8 17.2 12.9 530.6	0.6 1.2 688.3 59.5	0.2 32.8	0.4 36.2	45.1	0.9	0
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal Herbs Echinacea Borage Burdock Ginsing Caraway Coriander Fenugreeek yellow dock Seed Production Wildcrafting - herbs	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8 179.5 19.3 253.7 11.7 1.2 44.5 36.0 30.8 10.1	6.5 0.8 4.0 64.0 12.3 923.9 66.8 3.2 1.2	0.4 46.4 0.0 134.9 9.0 3.2 112.9	0.1 21.2 0.2 33.5 21.2 7.5 140.8 44.5 36.0 30.8 10.1	125.1	5.9 10.6 100.8 17.2 12.9 530.6 13.8 4.5	0.6 1.2 688.3 59.5	0.2 32.8 1.4 0.8	0.4 36.2 2.0	2.4	0.9	0
Rutabag Squash Tomato Salad greens Parsnips Potatoes Asparagus Garlic Subtotal Herbs Echinacea Borage Burdock Ginsing Caraway Coriander Fenugreeek yellow dock Seed Production	35.4 7.1 17.1 0.4 292.6 18.2 27.4 2551.8 179.5 19.3 2537.7 11.7 1.2 44.5 36.0 30.8 10.1	6.5 0.8 4.0 1.0 12.3 923.9 66.8 3.2	0.4 46.4 0.0 134.9 9.0 3.2 112.9 <352.5>	21.2 0.2 33.5 21.2 7.5 140.8 44.5 36.0 30.8	125.1	5.9 10.6 100.8 17.2 12.9 530.6	0.6 1.2 688.3 59.5	0.2 32.8	0.4 36.2	45.1	0.9	0



Land used for herb production includes both small mixed herb operations for culinary and medicinal purposes and large acreage of specialty crops such as borage grown in Alberta and Saskatchewan. The total of 1467acres (594 ha) does not include wild land which is used for the harvesting of native plants that are then processed as certified organic products (wildcrafting).

Table 4. Number of Certified Farms with vegetable and or herb production

Number of farm oper	ations ı	eporti	ng										
	Total	ВС	AB	sĸ	MB	ON	QC	NB	NS	3	PEI	NF	YK
Mixed vegetables	557	202	31	11	20	117	118	S	17	26	13		2
Greenhouse	101	54				16	21		2	6			1
Large scale misc.	8	8											
Beets	6	3	2			1							
Carrots	5	2	2			1							
Cole crops	4	1	1			2							
Corn	20	5		5	5	10							
Onions	14	5	1	6	3	2							
Peas	2	2											
Rutabaga	1	1											
Squash	17	6		- 4	ı.	7							
Tomato	10	1)								
salad greens	6	4	2										
parsnips	1		1										
Potatoes	86	25	9	15	5 3	19			3	4	7		1
Asparagus	11	2				9							
Garlic	36	13		7	,	15			1				
Herbs	135	46	20	16	3 4	7	21		4	9	6		2
Echinacea	24	2	4	12	2	4			2				
Borage	7		1	6	3								
Ginsing	1	1											
Caraway	3			3	3								
Coriander	3			3	3								
Fenugreeek	0												
Yellow dock	1			1									
Mushrooms	11	7				1	2	2	1				
Seed production	3	3											
Wildcrafting - herbs	3		3										

Shaded cells indicate missing data - numbers of operators were not provided by all CBs

1.2.2. Fruit and Nut Production

- 3630 acres (1469 ha) were reported to be in fruit and nut production.
- The majority are in British Columbia (1716 acres/694 ha) with 3.5% of the total fruit acreage in the province and Ontario (1056 acres/427 ha) with 1.6 % of the total fruit acreage in the province.
- In BC organic apples, an export crop, comprise the largest acreage and make up about 5% of the total apple area. The organic grape area in the Okanagan is 7% of the total grape land in the province.
- Most of the organic fruit production in Ontario is apples (873 acres, 3.6 % of total in province) and in Quebec cranberries - another export crop.
- Organic fruit and nut producers make up 2.6 % of the total farms reporting fruit in Canada and have 1.4% of the acreage.



Table 5. Acres in Organic Fruit and Nut Production

Acres												
	Total	ВС	AB	SK	МВ	ON	QC	NB	NS	PEI	NF	,
Mixed berries & grapes	97	97										
Misc tree fruit & berries	4	4										
Mixed berries	110		10	3	2	12	45	12	24	2		
Blueberries	86	3				0		18			65	
Cranberries	339					9	261	69				
Currants	10	5				5						
Grapes	549	518				30	1					
Raspberries	16	2	7	1		7						
Strawberries	24	2	3	1		16	3					
Saskatoons	118	1	28	88	1							
Tree fruit-unidentified	433	176		1		93	60	19	69		16	
Apples	1449	567	9			873						
Apricots	21	21										
Cherries	16	15				1						
Nectarines	16	16										
Peaches	48	48				0						
Pears	69	59	9			1						
Plums/Prunes	18	16				2						
Hops	13	13										
Nursery/Flowers	50	47				0			2	1	1	
Nuts	1	1									- 1	
Hazelnuts/Filberts	108	107				1						
	108	107				- '						
Walnuts		- 1		20								
Sea buckthorn	30			30		7						
Misc: melon,rhubarb	7	4740				7						
Totals	3630 Total	1716 BC	66 AB	124 SK	3 MB	1056 ON	370 QC	117 NB	94 NS	9 PEI	82 NF	,
Hectares	Total	ВС	АВ	SK	МВ	ON	QC	NB	NS	PEI	NF	
Mixed berries & grapes	39.1	39.1	,,,,									
Misc tree fruit & berries	1.4	1.4										
Mixed berries	44.3	1	4.0	1.2	0.8	5.0	18.2	4.7	9.5	0.9		
Blueberries	34.8	1.2	4.0	1.2	0.0	0.0	10.2	7.3	9.5	0.5	26.3	
		1.2				0.0	105.0	27.9			20.5	
Cranharriae	127 2					3.6						
Currents	137.2	2.0				3.6	105.6	27.0				
Currants	3.8	2.0				1.8						
Currants Grapes	3.8 222.1	209.6	2.0	0.4		1.8 12.1	0.4	21.0				
Currants Grapes Raspberries	3.8 222.1 6.6	209.6 0.7	2.9	0.4		1.8 12.1 2.6	0.4	21.0				
Currants Grapes Raspberries Strawberries	3.8 222.1 6.6 9.9	209.6 0.7 0.9	1.2	0.2	0.4	1.8 12.1		2.10				
Currants Grapes Raspberries Strawberries Saskatoons	3.8 222.1 6.6 9.9 47.6	209.6 0.7 0.9 0.4		0.2 35.6	0.4	1.8 12.1 2.6 6.5	0.4		07.0		0.5	
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified	3.8 222.1 6.6 9.9 47.6 175.4	209.6 0.7 0.9 0.4 71.2	1.2	0.2	0.4	1.8 12.1 2.6 6.5	0.4	7.6	27.9		6.5	
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples	3.8 222.1 6.6 9.9 47.6 175.4 586.4	209.6 0.7 0.9 0.4 71.2 229.4	1.2	0.2 35.6	0.4	1.8 12.1 2.6 6.5	0.4		27.9		6.5	
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6	209.6 0.7 0.9 0.4 71.2 229.4 8.6	1.2	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4	0.4		27.9		6.5	
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.4	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9	1.2	0.2 35.6	0.4	1.8 12.1 2.6 6.5	0.4		27.9		6.5	
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.4 6.3	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3	1.2	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4	0.4		27.9		6.5	
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.4 6.3 19.6	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4	1.2 11.1 3.6	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5	0.4		27.9		6.5	
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches Pears	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.4 6.3 19.6	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4 23.7	1.2	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5 0.2	0.4		27.9		6.5	
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches Pears Plums/Prunes	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.4 6.3 19.6 27.7 7.1	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4 23.7 6.5	1.2 11.1 3.6	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5	0.4		27.9		6.5	
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches Pears Plums/Prunes Hops	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.4 6.3 19.6 27.7 7.1 5.2	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4 23.7 6.5 5.2	1.2 11.1 3.6	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5 0.2 0.4 0.6	0.4					
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches Pears Plums/Prunes Hops Nursery/Flowers	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.4 6.3 19.6 27.7 7.1 5.2 20.2	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4 23.7 6.5 5.2 18.9	1.2 11.1 3.6	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5 0.2	0.4		27.9	0.4	6.5	
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches Pears Plums/Prunes Hops Nursery/Flowers Nuts	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.4 6.3 19.6 27.7 7.1 5.2	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4 23.7 6.5 5.2	1.2 11.1 3.6	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5 0.2 0.4 0.6	0.4			0.4		
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches Pears Plums/Prunes Hops Nursery/Flowers	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.4 6.3 19.6 27.7 7.1 5.2 20.2	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4 23.7 6.5 5.2 18.9	1.2 11.1 3.6	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5 0.2 0.4 0.6	0.4			0.4		
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches Pears Plums/Prunes Hops Nursery/Flowers Nuts	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.3 19.6 27.7 7.1 5.2 20.2	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4 23.7 6.5 5.2 18.9 0.4	1.2 11.1 3.6	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5 0.2 0.4 0.6	0.4			0.4		
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches Pears Plums/Prunes Hops Nursery/Flowers Nuts Hazelnuts/Filberts	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.3 19.6 27.7 7.1 5.2 20.2 0.4 43.7	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4 23.7 6.5 5.2 18.9 0.4 43.3	1.2 11.1 3.6	0.2 35.6	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5 0.2 0.4 0.6	0.4			0.4		
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches Pears Plums/Prunes Hops Nursery/Flowers Nuts Hazelnuts/Filberts Walnuts	3.8 222.1 6.6 9.9 47.6 175.4 586.4 6.3 19.6 27.7 7.1 5.2 20.2 0.4 43.7	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4 23.7 6.5 5.2 18.9 0.4 43.3	1.2	0.2 35.6 0.4	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5 0.2 0.4 0.6	0.4	7.6		0.4		
Currants Grapes Raspberries Strawberries Saskatoons Tree fruit-unidentified Apples Apricots Cherries Nectarines Peaches Pears Plums/Prunes Hops Nursery/Flowers Nuts Hazelnuts/Filberts Walnuts Sea buckthorn	3.8 222.1 6.6 9.9 47.6 175.4 586.4 8.6 6.4 6.3 19.6 27.7 7.1 5.2 20.2 20.2 0.4 43.7 0.4	209.6 0.7 0.9 0.4 71.2 229.4 8.6 5.9 6.3 19.4 23.7 6.5 5.2 18.9 0.4 43.3	1.2	0.2 35.6 0.4	0.4	1.8 12.1 2.6 6.5 37.4 353.4 0.5 0.2 0.4 0.6	0.4			0.4		



Table 6. Number of farm operations reporting organic fruit or nut production

			- 2003									
Number of farm oper	rations	repor	ting									
	Total	ВС	AB	SK	МВ	ON	QC	NB	NS	PEI	NF	Υ
Mixed berries & grapes	46	46										
Misc tree fruit & berries	37	2					35					
Mixed berries	31		3	2	1			8	13	4		
Blueberries	6	2				1		1			2	
Cranberries	3					1		2				
Currants	2	1				1						
Grapes	19	13				6						
Raspberries	14	5	2	3		4						
Strawberries	18	6	1	5		6						
Saskatoons	14	1	4	8	1							
Tree fruit - unidentified	76	54		2				6	12		2	
Apples	96	75	1			20						
Apricots	23	23										
Cherries	19	19										
Nectarines	16	16										
Peaches	34	34										
Pears	24	24										
Plums/prunes	34	33	1									
Nursery/ flowers	18	14							2	1	1	
Hops	3	3										
Nuts	2	2										
Hazelnuts	13	13										
Walnuts	4	4										
Sea Buckthorn	4			4								

Shaded cells indicate missing data - numbers of operators were not provided by all CBs

1.2.3. Grains & Oilseeds

Some certifiers provided detailed breakdown of crop types, others did not, therefore the acreage figures for specific crops in Table 7 are likely to be less than the total area of that crop seeded. Also amounts for durum were not separated from wheat totals in all cases and therefore the combined figure is used in percentage calculations.

- A total of 549,091 acres (222,210 ha) were seeded to organic grains and oilseeds in 2003 with an additional 39,425 acres (15955 ha) of lakes harvested for wild rice. Most of this is wheat with at least 178,646 acres (72294.7 ha) followed by flax 79,041 acres (31986.7 ha) and oats 70,645 acres (28589 ha).
- At least 941 producers planted wheat, 656 oats and 601 flax.
- As would be expected from the large number of certified producers, Saskatchewan has the largest acreage of organic crop production in Canada with 385,961 acres (156,193 ha) in grain and oilseed crops (wild rice not included).
- Ontario has close to 54,829 acres (22188ha) with 38% of it spelt (20,782 acres/8410 ha) and 23% soybeans (12857 acres/5203 ha).
- Acreage of most crops is less than 1% of the total acreage for that crop in Canada. The
 exceptions are flax at 4.3%, rye at 3% and lentils 2%. Comparative figures for spelt were
 not found and it is thought most of the spelt acreage is organic.



Table 7. Organic Grains and Oilseeds

Acres												
	Total	ВС	АВ	SK	МВ	ON	QC	NB	NS	PEI	NF	Y
Arable/crops unidentified	55752	45		49235	4000	2472						
Barley	20777	451	3649	13534	582	1438	1123					
Buckwheat	4695	3	20	1846	806	1222	798					
Canola	3367		2376	429	473		89					
Corn	6650					3993	2657					
Flax	79041	0	8167	65109	5194	536	35					
Hemp	2631	30	15	160	635	1772	19					
Kamut Millet	9389 494		299	9090 420	22	12	40					
Mixed grains	10413		458	420	16	2984	6955					
Mustard	2981		233	2597	80	71	0933					
Oats	70645	1573	10050	48707	5476	1374	3302	112	3	50		
Oilseeds - unidentified	71	11	10000	40707	60	1074	3302	112		30		
Pulses (beans & lentils)	27107	2	1044	25514	338	134	75			1		
Peas	12769	_	907	10978	451	408	25					
Quinoa	267			267								
Rye	18402	23	4512	11377	1242	943	305					
Soybeans	20726	0		39	369	12857	7379			82		
Spelt	23132	250	77	1162		20782	811	5	6	39		
Spring grains	175							45	83	47		
Sunflowers	265	0	3	42	85	59	76					
Triticale	639	7	70	412	35	115						
Tabacco	2					2						
Wheat	166291	140	17885	132631	6989	3656	4847	27		117		
Wheat - Durum	12412			12412								
Wild Rice	39425	0		31580	5375	2470						
Total	588516	2534	49764	417541	32228	57299	28535	189	92	336	0	
	Total	ВС	AB	SK	MB	ON	QC	NB	NS	PEI	NF	
											INI	Υ
Hectares				1				115		, _,	INI	
Hectares	Total	ВС	АВ	sĸ	МВ	ON	QC	NB	NS	PEI	NF	Y
Arable/crops unidentified	22562.1	18.2		19924.8	1618.7	1000.4	QC					
Arable/crops unidentified Barley	22562.1 8408.2	18.2 182.5	1476.7	19924.8 5477.0	1618.7 235.5	1000.4 581.9	QC 454.5					
Arable/crops unidentified Barley Buckwheat	22562.1 8408.2 1899.8	18.2	1476.7 8.1	19924.8 5477.0 747.1	1618.7 235.5 326.2	1000.4	QC 454.5 322.9					
Arable/crops unidentified Barley Buckwheat Canola	22562.1 8408.2 1899.8 1362.6	18.2 182.5	1476.7	19924.8 5477.0	1618.7 235.5	1000.4 581.9 494.5	QC 454.5 322.9 36.0					
Arable/crops unidentified Barley Buckwheat Canola Corn	22562.1 8408.2 1899.8 1362.6 2691.0	18.2 182.5 1.0	1476.7 8.1 961.5	19924.8 5477.0 747.1 173.6	1618.7 235.5 326.2 191.4	1000.4 581.9 494.5	454.5 322.9 36.0 1075.1					
Arable/crops unidentified Barley Buckwheat Canola Corn Flax	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7	18.2 182.5 1.0	1476.7 8.1 961.5 3305.1	19924.8 5477.0 747.1 173.6 26348.8	1618.7 235.5 326.2 191.4 2101.7	1000.4 581.9 494.5 1615.9 216.9	454.5 322.9 36.0 1075.1 14.2					
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7	18.2 182.5 1.0	1476.7 8.1 961.5 3305.1 6.1	19924.8 5477.0 747.1 173.6 26348.8 64.7	1618.7 235.5 326.2 191.4	1000.4 581.9 494.5	454.5 322.9 36.0 1075.1					
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6	18.2 182.5 1.0	1476.7 8.1 961.5 3305.1	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6	1618.7 235.5 326.2 191.4 2101.7 257.0	1000.4 581.9 494.5 1615.9 216.9 717.1	454.5 322.9 36.0 1075.1 14.2 7.7					
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7	18.2 182.5 1.0	1476.7 8.1 961.5 3305.1 6.1 121.0	19924.8 5477.0 747.1 173.6 26348.8 64.7	1618.7 235.5 326.2 191.4 2101.7 257.0	1000.4 581.9 494.5 1615.9 216.9 717.1	QC 454.5 322.9 36.0 1075.1 14.2 7.7					
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9	18.2 182.5 1.0	1476.7 8.1 961.5 3305.1 6.1 121.0	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4	454.5 322.9 36.0 1075.1 14.2 7.7					
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9	18.2 182.5 1.0 0.0 12.1	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7	NB	NS	PEI		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2	18.2 182.5 1.0 0.0 12.1	1476.7 8.1 961.5 3305.1 6.1 121.0	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4	QC 454.5 322.9 36.0 1075.1 14.2 7.7					
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7	18.2 182.5 1.0 0.0 12.1 636.4 4.5	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1951.0	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7	NB	NS	PEI 20.2		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils)	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7	18.2 182.5 1.0 0.0 12.1	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1051.0 19710.9	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2	NB	NS	PEI		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils) Peas	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28599.2 28.7 10970.0 5167.4	18.2 182.5 1.0 0.0 12.1 636.4 4.5	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1951.0 19710.9	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7	NB	NS	PEI 20.2		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7 10970.0 5167.4	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9 422.4 367.1	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1951.0 19710.9	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9 182.5	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0 54.2	9C 454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2 30.1 10.1	NB	NS	PEI 20.2		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils) Peas Quinoa Rye	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7 10970.0 5167.4 108.1 7447.0	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1051.0 19710.9 10325.2 4442.7 108.1 4604.1	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0 54.2 165.1	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2	NB	NS	PEI 20.2		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7 10970.0 5167.4	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9 422.4 367.1	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1951.0 19710.9	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9 182.5	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0 54.2	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2	NB	NS	PEI 20.2 20.2 0.3		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils) Peas Quinoa Rye Soybeans Spelt	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7 10970.0 5167.4 108.1 7447.0 8387.4	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9 422.4 367.1	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 1051.0 19710.9 10325.2 4442.7 108.1 4604.1 15.8	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9 182.5	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0 54.2 165.1 381.6 5202.9	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2 30.1 10.1	NB 45.3	NS 1.2	PEI 20.2 20.2 0.3 33.2		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils) Peas Quinoa Rye Soybeans	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 1206.3 28589.2 28.7 10970.0 5167.4 108.1 7447.0 8387.4 9361.2	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9 422.4 367.1	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 1051.0 19710.9 10325.2 4442.7 108.1 4604.1 15.8	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9 182.5	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0 54.2 165.1 381.6 5202.9	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2 30.1 10.1	NB 45.3	NS 1.2	20.2 0.3 33.2 15.8		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils) Peas Quinoa Rye Soybeans Spelt Spring grains	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7 10970.0 5167.4 108.1 7447.0 8387.4 9361.2 70.8	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8 9.3 0.0	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9 422.4 367.1 1826.0	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1051.0 19710.9 10325.2 4442.7 108.1 4604.1 15.8 470.2	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9 182.5 502.5 149.3	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0 54.2 165.1 381.6 5202.9 8410.2	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2 30.1 10.1 123.3 2986.2 328.2	NB 45.3	NS 1.2	20.2 0.3 33.2 15.8		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils) Peas Quinoa Rye Soybeans Spelt Spring grains Sunflowers	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7 10970.0 5167.4 108.1 7447.0 8387.4 9361.2 70.8	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8 9.3 0.0 101.2	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9 422.4 367.1 1826.0 31.2	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1051.0 19710.9 10325.2 4442.7 108.1 4604.1 15.8 470.2	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9 182.5 502.5 149.3	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0 54.2 165.1 381.6 5202.9 8410.2	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2 30.1 10.1 123.3 2986.2 328.2	NB 45.3	NS 1.2	20.2 0.3 33.2 15.8		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils) Peas Quinoa Rye Soybeans Spelt Spring grains	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7 10970.0 5167.4 108.1 7447.0 8387.4 9361.2 70.8	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8 9.3 0.0 101.2	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9 422.4 367.1 1826.0 31.2	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1051.0 19710.9 10325.2 4442.7 108.1 4604.1 15.8 470.2	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9 182.5 502.5 149.3	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0 54.2 165.1 381.6 5202.9 8410.2	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2 30.1 10.1 123.3 2986.2 328.2	NB 45.3	NS 1.2	20.2 0.3 33.2 15.8		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils) Peas Quinoa Rye Soybeans Spelt Spring grains Sunflowers Triticale Tabacco	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3796.3 1206.3 28589.2 28.7 10970.0 5167.4 108.1 7447.0 8387.4 9361.2 70.8 107.1 258.6 1.0	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8 9.3 0.0 101.2	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9 422.4 367.1 1826.0 31.2 28.3	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 19710.9 10325.2 4442.7 108.1 4604.1 15.8 470.2	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 138.9 182.5 502.5 149.3	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0 54.2 165.1 381.6 5202.9 8410.2	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2 30.1 10.1 123.3 2986.2 328.2	45.3 45.3	NS 1.2	20.2 0.3 33.2 15.8 19.0		
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils) Peas Quinoa Rye Soybeans Spelt Spring grains Sunflowers Triticale Tabacco Wheat Wheat - Durum Wild Rice	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7 10970.0 5167.4 108.1 7447.0 8387.4 9361.2 70.8 107.1 258.6 1.0 67226.0 5023.0 15954.8	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8 9.3 0.0 101.2 2.8 56.7	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9 422.4 367.1 1826.0 31.2 28.3	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1051.0 19710.9 10325.2 4442.7 108.1 4604.1 15.8 470.2 17.0 166.7 53674.0 5023.0 12780.0	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9 182.5 502.5 149.3 34.4 14.2	1000.4 581.9 494.5 1615.9 216.9 717.1 1207.4 28.7 556.0 54.2 165.1 381.6 5202.9 8410.2 23.7 46.5 1.0 1479.5	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2 30.1 10.1 123.3 2986.2 328.2 30.8	45.3 45.3 2.0 18.2	1.2 2.4 33.6	20.2 0.3 33.2 15.8 19.0	NF	,
Arable/crops unidentified Barley Buckwheat Canola Corn Flax Hemp Kamut Millet Mixed grains Mustard Oats Oilseeds - unidentified Pulses (beans & lentils) Peas Quinoa Rye Soybeans Spelt Spring grains Sunflowers Triticale Tabacco Wheat	22562.1 8408.2 1899.8 1362.6 2691.0 31986.7 1064.7 3799.6 199.7 4213.9 1206.3 28589.2 28.7 10970.0 5167.4 108.1 7447.0 8387.4 9361.2 70.8 107.1 258.6 1.0 67296.0 5023.0	18.2 182.5 1.0 0.0 12.1 636.4 4.5 0.8 9.3 0.0 101.2 0.1 2.8	1476.7 8.1 961.5 3305.1 6.1 121.0 185.3 94.2 4066.9 422.4 367.1 1826.0 31.2 28.3	19924.8 5477.0 747.1 173.6 26348.8 64.7 3678.6 170.0 1051.0 19710.9 10325.2 4442.7 108.1 4604.1 15.8 470.2 17.0 166.7 53674.0 5023.0	1618.7 235.5 326.2 191.4 2101.7 257.0 8.9 6.5 32.4 2216.1 24.3 136.9 182.5 502.5 149.3 34.4 14.2	1000.4 581.9 494.5 1615.9 216.9 717.1 4.7 1207.4 28.7 556.0 54.2 165.1 381.6 5202.9 8410.2 23.7 46.5 1.0	454.5 322.9 36.0 1075.1 14.2 7.7 16.2 2814.7 1336.2 30.1 10.1 123.3 2986.2 328.2	45.3 45.3	NS 1.2	20.2 0.3 33.2 15.8 19.0		



Table 8. Number of farm operations reporting grain and oilseed crops

	ions repor	ting										
	Total	ВС	AB	SK	МВ	ON	QC	NB	NS	PEI	NF	Ył
Arable/crops unidentified	22	1			20	1						
Barley	269	9	30	151	15	59	5					
Buckwheat	81	2	2	25	8	40	4					
Canola	9		4	3	2							
Corn	109					97	12					
Flax	601		22	514	56	9						
Hemp	17	1	1	4	3	8						
Kamut	43		2	41								
Millet	19			12	2	4	1					
Mixed grains	75		3		1	62	9					
Mustard	34		1	31	1	1						
Oats	656	5	61	426	60	90	9	3	1	1		
Oilseeds	0											
Pulses (beans & lentils)	222	2	9	203	2	4	2					
Peas	148		8	110	11	18	1					
Quinoa	2			2								
Rye	224	2	23	141	13	45						
Soybeans	185			4	3	145	29			4		
Spelt	112	10	2	9		85	3	1	1	1		
Spring grains	10							3	3	4		
Sunflowers	8	1	1	2	1	3						
Triticale	21	2	1	11		7						
Wheat	941	1	40	652	141	87	15			5		
Wheat durum	78			78								
Wild Rice	176			162	14							

Shaded cells indicate missing data - numbers of operators were not provided by all CBs

 $(BC = British\ Columbia,\ AB = Alberta,\ SK = Saskatchewan,\ MB = Manitoba,\ ON = Ontario,\ QC = Quebec,\ NB = New Brunswick,\ NS = Nova\ Scotia,\ PEI = Prince\ Edward\ Island,\ NF = Newfoundland,\ YK = Yukon.)$

Table 9. Value of Prairie Organic Grain Crops

Prairie Organic Gr	ain Cr	ops - 2	2003				
		Acres		Total			Estimated
Crop	AB	SK	MB	acres	\$/MT	fa	rm gate value
Arable/crops unidentified		49235	4000	53235	?		
Barley	3649	13534	582	17765	250	\$	2,931,225
Buckwheat	20	1846	806	2672	500	\$	881,760
Canola	2376	429	473	3278	600	\$	1,298,088
Flax	8167	65109	5194	78470	1000	\$	12,947,468
Hemp	15	160		175	1870	\$	215,985
Kamut	299	9090		9389	550	\$	852,052
Millet		420	22	442	425	\$	123,981
Mixed grains	458		16	474	?		
Mustard	233	2597	80	2910	?		
Oats	10050	48707	5476	64232	200	\$	8,478,624
Oilseeds - unidentified			60	60	?		
Pulses (beans & lentils)	1044	25514	338	26896	1000	\$	17,751,426
Peas	907	10978	451	12336	750	\$	925,200
Quinoa		267		267	?		
Rye	4512	11377	1242	17131	280	\$	3,165,809
Soybeans		39	369	408	700	\$	188,496
Spelt	77	1162		1239	500	\$	102,218
Sunflowers	3	42	85	130	1000	\$	85,800
Triticale	70	412	35	517	400	\$	136,488
Wheat*	17885	132631	6989	157505	425	\$	44,180,012
Wheat - Durum		12412		12412	425	\$	3,481,566
Total	49764	385961	26218	461942		\$	97,746,197

shaded cells indicate missing data



The acreage seeded to the various crops has been used to estimate the production value in the Prairie Provinces. Potential yield per acre was reduced by 30% to account for losses from weeds, drought, etc. although in dry areas yields might be even lower. The resulting figures estimate a crop value of \$98 million.

Similar calculations were done for Ontario and Quebec based on potential yield and prices being paid to farmers for 2003 crop. There was considerable variation in prices quoted to the researchers which may be due to confusion as to whether it was the price paid to the farmer or the selling price.

Based on acreage planted, the estimated value of the organic crops listed in table 10 in Ontario and Quebec is \$32 million.

Table 10. Value of Organic Grain Crops in Ontario and Quebec

Estimated fa	arm value	e of field	crops in	Ontario	& Quebe	С
Crop	ON	QC	Total Ha	Yield*	Price	Value
Barley	582	454	1036	3.4	270	951,048
Buckwheat	495	323	817	1.4	350	400,330
Corn	1616	1075	2691	8	265	5,704,920
Mixed grains	1207	2815	4022	3		
Oats	556	1336	1892	2.8	250	1,324,400
Rye	382	123	505	2.5	300	378,750
Soybeans	5203	2986	8189	1.7**	690	9,605,697
Spelt	8410	328	8738	3**	400	10,485,600
Wheat	1480	1961	3441	3.5	250	3,010,875

^{*} Yield figures MT/ha taken from 2003 OMAF figures for estimated production -John Cumming

1.2.4. Forages, Green Manures and Other Land Use

Reporting of forage crops and green manure was highly variable and it is impossible to get an accurate picture of the amount of acreage for forage seed and the amount being used for forage production. It is assumed that land identified as pasture and hay was for the most part arable land; with native pasture and range land being identified as a separate category. Fallow was combined with acreage identified as fallow/green manure but not with land identified as planted to a green manure crop. Some of the Quebec acreage reported for pasture and hay also included green manures.



^{**}MT/ha means from 2003 Case studies of Organic farmers - Ann Clark soy price is for food grade, wheat price is for feed wheat

Table 11.

Acres												
	Total	вс	AB	sĸ	МВ	ON	QC	NB	NS	PEI	NF	Y
Alfalfa	12090	327	2856	7835		1036	36					
Alfalfa seed	4585		870	3412	303							
Alfalfa/Grains/Grass	6101		75	5991	35							
Brome	826			826								
Clover	9390		65	7835	266	1224						
Clover Seed	2948		790		2158							
Fallow/Green manure	22258	950	14661	5951	65	611	20					
Fescue	80		80									
Forage	205			155		50						
Grass/Clover mix	103	103										
Grass Seed various	557			557								
Green Feed	2492		1718	774								
Green Manures	93910	22	6249	84978	453	1531	678					
Lupin	5					4.5	5					
Oilradish	48	40500	400450	04050	40000	48	07707	1000	7.40	450		
Pasture and hay	222072	13506 96	109459	21650	19896	26733	27707	1922	742	458		
Silage	248	96	140		40	4.4	12					
Sorghum	59	110			48	11						
Timothy	110	110		2707								
Vetch/Medic/Sainfoin Total	2797 380884	15114	136962	2797	23224	31244	28457	1922	742	458		
ıotai	380884	10114	130962	142760	23224	o1244	∠640/	1922	742	408		
Range/Crown land	17150	430	8206	7775	739							
Native pasture	21079	430	18927	2152	739							
Land	2401	130	328	1943								
Native brush/Bush/Prairie	9116	103	8463	550								
Sod	88	105	0400	330		88						
Total	49834	663	35924	12420	739	88						
	43004	000	00324	12420	700	00						
Hectares												
	Total	вс	AB	SK	МВ	ON	QC	NB	NS	PEI	NF	Υ
Alfalfa	4892.7	132.3	1155.8	3170.7		419.3	14.6					
Alfalfa seed	1855.3		352.1	1380.6	122.6							
Alfalfa/Grains/Grass	2400.0				122.0							
	2469.0		30.4	2424.5	14.2							
Brome	334.3		30.4	2424.5 334.3								
Brome Clover			30.4 26.3			495.3						
	334.3			334.3	14.2	495.3						
Clover	334.3 3800.0	384.5	26.3 319.7 5933.2	334.3	14.2	495.3 247.3	8.1					
Clover Clover Seed	334.3 3800.0 1193.0 9007.6 32.4	384.5	26.3 319.7	334.3 3170.7 2408.3	14.2 107.6 873.3	247.3	8.1					
Clover Clover Seed Fallow/Green manure Fescue Forage	334.3 3800.0 1193.0 9007.6 32.4 83.0		26.3 319.7 5933.2	334.3 3170.7	14.2 107.6 873.3		8.1					
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7	384.5	26.3 319.7 5933.2	334.3 3170.7 2408.3 62.7	14.2 107.6 873.3	247.3	8.1					
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4		26.3 319.7 5933.2 32.4	334.3 3170.7 2408.3 62.7 225.4	14.2 107.6 873.3	247.3	8.1					
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3	41.7	26.3 319.7 5933.2 32.4 695.0	334.3 3170.7 2408.3 62.7 225.4 313.2	14.2 107.6 873.3 26.3	247.3						
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2		26.3 319.7 5933.2 32.4	334.3 3170.7 2408.3 62.7 225.4	14.2 107.6 873.3	247.3	274.3					
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2	41.7	26.3 319.7 5933.2 32.4 695.0	334.3 3170.7 2408.3 62.7 225.4 313.2	14.2 107.6 873.3 26.3	247.3						
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0	41.7	26.3 319.7 5933.2 32.4 695.0 2528.7	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5	14.2 107.6 873.3 26.3	247.3 20.2 619.6	274.3					
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4	41.7 8.9 5465.7	26.3 319.7 5933.2 32.4 695.0 2528.7	334.3 3170.7 2408.3 62.7 225.4 313.2	14.2 107.6 873.3 26.3	247.3	274.3 2.0 11212.5	777.8	300.3	185.3		
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4	41.7	26.3 319.7 5933.2 32.4 695.0 2528.7	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5	14.2 107.6 873.3 26.3 183.3	247.3 20.2 619.6 19.4 10818.5	274.3					
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage Sorghum	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4 23.9	41.7 8.9 5465.7 38.8	26.3 319.7 5933.2 32.4 695.0 2528.7	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5	14.2 107.6 873.3 26.3	247.3 20.2 619.6	274.3 2.0 11212.5					
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage Sorghum Timothy	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4 23.9 44.5	41.7 8.9 5465.7	26.3 319.7 5933.2 32.4 695.0 2528.7	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5	14.2 107.6 873.3 26.3 183.3	247.3 20.2 619.6 19.4 10818.5	274.3 2.0 11212.5					
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage Sorghum Timothy Vetch/Medic/Sainfoin	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4 23.9 44.5 1131.9	8.9 5465.7 38.8 44.5	26.3 319.7 5933.2 32.4 695.0 2528.7 44296.6 56.7	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5 8761.3	14.2 107.6 873.3 26.3 183.3 8051.7	247.3 20.2 619.6 19.4 10818.5	274.3 2.0 11212.5 4.9	777.8	300.3	185.3		
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage Sorghum Timothy	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4 23.9 44.5	41.7 8.9 5465.7 38.8	26.3 319.7 5933.2 32.4 695.0 2528.7	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5	14.2 107.6 873.3 26.3 183.3	247.3 20.2 619.6 19.4 10818.5	274.3 2.0 11212.5		300.3			
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage Sorghum Timothy Vetch/Medic/Sainfoin Total	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4 23.9 44.5 1131.9 154138.6	41.7 8.9 5465.7 38.8 44.5	26.3 319.7 5933.2 32.4 695.0 2528.7 44296.6 56.7	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5 8761.3	14.2 107.6 873.3 26.3 183.3 8051.7 19.4	247.3 20.2 619.6 19.4 10818.5	274.3 2.0 11212.5 4.9	777.8	300.3	185.3		
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage Sorghum Timothy Vetch/Medic/Sainfoin Total Range/Crown land	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4 23.9 44.5 1131.9 154138.6	8.9 5465.7 38.8 44.5	26.3 319.7 5933.2 32.4 695.0 2528.7 44296.6 56.7 55426.8	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5 8761.3 1131.9 57773.1	14.2 107.6 873.3 26.3 183.3 8051.7	247.3 20.2 619.6 19.4 10818.5	274.3 2.0 11212.5 4.9	777.8	300.3	185.3		
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage Sorghum Timothy Vetch/Medic/Sainfoin Total Range/Crown land Native pasture	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4 23.9 44.5 1131.9 154138.6	41.7 8.9 5465.7 38.8 44.5 6116.4	26.3 319.7 5933.2 32.4 695.0 2528.7 44296.6 56.7 55426.8 3320.9 7659.5	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5 8761.3 1131.9 57773.1	14.2 107.6 873.3 26.3 183.3 8051.7 19.4	247.3 20.2 619.6 19.4 10818.5	274.3 2.0 11212.5 4.9	777.8	300.3	185.3		
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage Sorghum Timothy Vetch/Medic/Sainfoin Total Range/Crown land Native pasture Land	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4 23.9 44.5 1131.9 154138.6	41.7 8.9 5465.7 38.8 44.5 6116.4 174.0	26.3 319.7 5933.2 32.4 695.0 2528.7 44296.6 56.7 55426.8 3320.9 7659.5 132.7	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5 8761.3 1131.9 57773.1 3146.4 870.9 786.3	14.2 107.6 873.3 26.3 183.3 8051.7 19.4	247.3 20.2 619.6 19.4 10818.5	274.3 2.0 11212.5 4.9	777.8	300.3	185.3		
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage Sorghum Timothy Vetch/Medic/Sainfoin Total Range/Crown land Native pasture Land Native pasture Land Native brush/Bush/Prairie	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4 23.9 44.5 1131.9 154138.6 6940.4 8530.4 971.7 3689.1	41.7 8.9 5465.7 38.8 44.5 6116.4	26.3 319.7 5933.2 32.4 695.0 2528.7 44296.6 56.7 55426.8 3320.9 7659.5	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5 8761.3 1131.9 57773.1	14.2 107.6 873.3 26.3 183.3 8051.7 19.4	247.3 20.2 619.6 19.4 10818.5 4.5	274.3 2.0 11212.5 4.9	777.8	300.3	185.3		
Clover Clover Seed Fallow/Green manure Fescue Forage Grass/Clover mix Grass Seed various Green Feed Green Manures Lupin Oilradish Pasture and hay Silage Sorghum Timothy Vetch/Medic/Sainfoin Total Range/Crown land Native pasture Land	334.3 3800.0 1193.0 9007.6 32.4 83.0 41.7 225.4 1008.3 38004.2 2.0 19.4 89869.7 100.4 23.9 44.5 1131.9 154138.6	41.7 8.9 5465.7 38.8 44.5 6116.4 174.0	26.3 319.7 5933.2 32.4 695.0 2528.7 44296.6 56.7 55426.8 3320.9 7659.5 132.7	334.3 3170.7 2408.3 62.7 225.4 313.2 34389.5 8761.3 1131.9 57773.1 3146.4 870.9 786.3	14.2 107.6 873.3 26.3 183.3 8051.7 19.4	247.3 20.2 619.6 19.4 10818.5	274.3 2.0 11212.5 4.9	777.8	300.3	185.3		



Table 12.

Number of farm ope	rations repoi	rting										
	Total	ВС	AB	SK	MB	ON	QC	NB	NS	PEI	NF	YK
Alfalfa	99	3	19	54		23						
Alfalfa seed	40		8	30	2							
Alfalfa/Grains/Grass	29		1	27	1							
Brome	5			5								
Clover	109		1	63	3	42						
Clover Seed	25		4	5	16							
Fallow/Green manure	104	6	22	38	1	37						
Forage	1			1								
Grass/Clover mix	1	1										
Grass seed various	7			7								
Green Feed	18		11	7								
Green Manures	479	52	37	291	6	93						
Oilradish	3					3						
Pasture and hay	738	108	91	111	126	279		7	10	6		
Silage	2	1	1									
Sorghum	3				1	2						
Timothy	1	1										
Vetch/Medic/Sainfoin	16			16								
Range/Crown land	73	4	14	51	4							
Native Pasture	10		7	3								
Land	11	1	2	8								
Native brush/Bush/Prairie	7	2	4	1								
Sod	1					1						

Shaded cells indicate missing data - numbers of operators were not provided by all CBs

1.2.5. Other: Maple syrup

Based on information provided by certification agencies maple syrup producers make up 47% of the certified operators in Quebec. The <u>CAAQ</u> reports 372 syrup producers, close to the figure of 366 provided by the <u>Fédération de producteurs acéricoles du Quebec (FPAQ)</u>. 3,232,933 taps were reported.

In Atlantic Canada there are 6 organic syrup operations (73,050 taps), and 3 reported in Ontario with 17,200 taps. Total production value of maple products is estimated at \$680,000 in Atlantic Canada; the Ontario value is not known.

Two different values were obtained for organic syrup production in Quebec in 2003

- 5,800,000 pounds or 8% of all syrup production
- 9,381,321 pounds or 12% of all syrup production (7.4% AA, 25% A; 34% B, 22% C, 9.5% D)

Sources: Mr. Roméo Bouchard, Union Paysanne; Mrs.GuylaineTarte, FPAQ

Based on 2003 grade prices and an average 15% price premium for organic these figures represent a value of either \$10.25 million for bulk syrup or as much as \$20 million depending on which figures are correct.



1.3. Certified Livestock Operations

1.3.1. Beef & Dairy Cattle, Sheep, Pigs

Dairy production has been one of the main growth areas in organic production in the last few years whereas meat products are the least developed sector in the organic market. The distribution of animals reflects that in the conventional industry with the majority of organic dairy cattle in Ontario and Quebec and the majority of beef cattle in Alberta and Saskatchewan.

Table 13. Certified Organic livestock

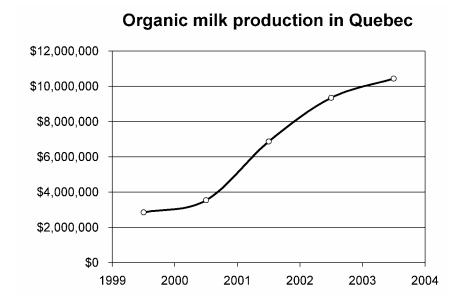
ivestock totals.											
	Total	ВС	AB	SK	МВ	ON	QC	NB	NS	PEI	ΥK
BEEF Cattle	15608	873	5148	3839	918	1988	2573	97	140	32	
BISON	665	34	436	107	14		74				
DAIRY Cattle	7113	1174	25			3401	2513				
SHEEP	5062	911	108	390	57	620	2926		50		
GOATS	320	219	38			1	57		5		
PIGS	3690	235	211		81	119	3033		11		
DEER/ELK	220	120		100							
BEES hives	5412		4000				1412				
umber of Certif	ed Livest	ock Er	nterpris	ses - 20	003						
lumber of Certif	ed Livest	ock Er	nterpris	ses - 20 SK	003 MB	ON	QC	NB	NS	PEI	YK
lumber of Certif						ON 47		NB	NS 4	PEI 1	YK
	Total	ВС	AB	SK	МВ		QC			PEI 1	YK
BEEF Cattle	Total 163	BC	AB 30	SK	MB		QC			PEI 1	YK
BEEF Cattle BISON	Total 163	BC 18	AB 30	SK	MB	47	QC 6			PEI 1	YK
BEEF Cattle BISON DAIRY Cattle	Total 163 8 102	18 1 1 5	30 3 1	SK 39	MB 14 1	47 46	QC 6 50		4	PEI 1	YK
BEEF Cattle BISON DAIRY Cattle SHEEP	Total 163 8 102 32 7	18 1 1 5 8	AB 30 3 1 2	SK 39	MB 14 1	47 46 8	QC 6 50 8	4	2	PEI 1	YK
BISON DAIRY Cattle SHEEP GOATS	Total 163 8 102 32	18 1 5 8 3	30 3 1 2	SK 39	14 1	47 46 8 1	QC 6 50 8	4	2	PEI 1	YK
BEEF Cattle BISON DAIRY Cattle SHEEP GOATS PIGS	Total 163 8 102 32 7 23	18 1 5 8 3 5	30 3 1 2	SK 39 3	14 1	47 46 8 1	QC 6 50 8	4	2	PEI 1	YK
BEEF Cattle BISON DAIRY Cattle SHEEP GOATS PIGS	Total 163 8 102 32 7 23	18 1 5 8 3 5	30 3 1 2	SK 39 3	14 1	47 46 8 1	QC 6 50 8	4	2	PEI 1	YK
BEEF Cattle BISON DAIRY Cattle SHEEP GOATS PIGS DEER/ELK	Total 163 8 102 32 7 23 23	18 1 5 8 3 5	AB 30 3 1 2 1 4	SK 39 3	14 1	47 46 8 1	QC 6 50 8 1 5 5	4	2	PEI 1	YK

Shaded cells indicate missing data - numbers of operators were not provided by all CBs

- 163 certified producers reported beef cattle with a total of 15,608 head which is still very small compared with total beef cattle population in Canada. The largest herds are found in Alberta where 5148 head are reported.
- Dairy cattle numbers include both milking cows and heifers with 7113 head reported. This represents .05% of all Canadian dairy cattle as of July 1, 2003; the percentage is slightly higher in BC (1%). There are 102 organic dairy farms reported in Canada. A detailed analysis of the organic dairy industry in Quebec was presented by Mr. Hubert Bovin, the general secretary of the Syndicat des producteurs de lait biologiques du Québec, SPLBQ (FABQ-UPA) in January, 2004. The reported trend in production is shown in Figure 3 below.

Figure 3. Value of Organic milk production in Quebec

Source: SPLBQ (FABQ-UPA)



Quebec is the only province with significant numbers of pigs and sheep and in both cases
the numbers reported are lower than the numbers reported by the organic meat
producers of Quebec for the year 2001/02. Pigs have declined by 60%.

1.3.2. Poultry & Egg Production

Large scale egg producers and broiler producers are starting to take an interest in the organic market but numbers are still very small compared with the conventional industry. Egg production is estimated at 0.46% of total Canadian egg production based on Statistics Canada numbers available for 2002. Chickens and turkeys have an even smaller share of the market but appear to be a new growth area with annual growth rates estimated at 30%.

The poultry cull in British Columbia as a result of the Avian influenza crisis affects organic as well as conventional flocks which will limit growth in 2004.

Table 14. Egg Production and Poultry

Certified Organ	Certified Organic Egg Production - Canada 2003												
	Livestock Total	Farms reporting	Estimated egg production	% Canadian total	Estimated retail \$								
Layers	118,347	89	2,642,393 doz	0.46	9,908,972								

Certified Organ	ic Poultry - Can	ada 2003
	Livestock Total	Farms reporting
Meat Birds	305,662	62
Unidentified	455	
Turkeys	5,264	12
Geese	268	6
Ducks	2,587	5
Pheasants	200	1
Guinea	424	2

Shaded cells indicate missing data - numbers of operators were not provided by all CBs

1.4. Processing and Handling of Certified Organic products

Numbers and types of certified manufacturing and processing enterprises were obtained from information provided by certifiers, from product labels in retail outlets and from company websites. Efforts were made to avoid double counting when an operation is certified by more than one certifier but some may have been overlooked because client lists were not provided by the certifiers. Numbers include on-farm processing. There are at least 499 certified enterprises and although the chart in figure 4 shows a decline this may not be the case given the incomplete data and possible duplications in previous years.

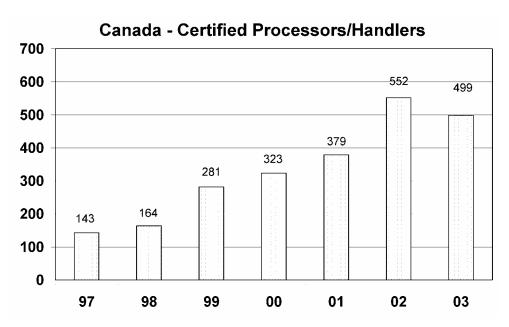
Some companies cooperated when approached for sales data but the majority declined to provide information because of proprietary concerns and the competitive nature of the marketplace. In tables 15-18 below the numbers represent only those identified as such; the total number of certified enterprises is greater than these numbers suggest.

Table 15. Total number of certified processors and handlers by province

Certif	ied Pr	ocessing	and Hand	ling Opera	ations		
Province	Total	Unidentified	Manufacturers	Seed /Feed	Handlers	Retail	Value Processing
ВС	85	11	60	1	13		at least \$16 million
AB	52	16	22	13	1		unknown
SK	94	58	18	13	5		unknown
МВ	27	3	4	15	5		unknown
ON	64	12	43	3	6		unknown
QC	152	51 a/90 i **			19	1	unknown
NB*	9		8	1 seed house			\$1,075,000
NS*	13		13				\$1,582,139
PEI	3		1	1 seed house	1		at least \$120,000
Total	499	100	169	45	50	1	

^{*} syrup production not included

Figure 4. Numbers of certified processors and handlers 1992 -2003



^{**} a:artisan; i:industrial (more than 5 employers)

Table 16. Food, Beverage and Herbal Products

Product category Dairy Dairy	Product type Milk & cream Butter Cheese Yogurt plain & fruit Sour cream Ice cream	BC 4 1 3 3 3 1	AB 1	SK	Ce MB	rtified ON 3	enter _l QC	orises NB	NS	PEI	Tot
Dairy	Milk & cream Butter Cheese Yogurt plain & fruit Sour cream Ice cream	4 1 3 3	1	SK	МВ		QC	NB	NS	PEI	Tot
Dairy	Butter Cheese Yogurt plain & fruit Sour cream Ice cream	1 3 3				2					
Dairy	Cheese Yogurt plain & fruit Sour cream Ice cream	3 3				J					
Dairy	Yogurt plain & fruit Sour cream Ice cream	3	1			2					
Dairy Dairy Dairy Dairy Dairy Dairy	Sour cream Ice cream		• •			2					
Dairy Dairy Dairy Dairy Dairy	lce cream	1				2					
Dairy Dairy Dairy Dairy						1					
Dairy Dairy Dairy	On at Mills	2	1			1	1				
Dairy Dairy	Goat Milk	3									
Dairy	Goat Yogurt	1									
	Goat Cheese	2									
Dairy	Sheep cheese	1									
Dany							5				
Grains	Barley Malt	1									
Grains	Breads	1				1	11	2	2		
Grains	Breakfast cereals/waffles	2	2			2		1	1		
Grains	Flours/flakes & mixes	3	2	6	1	1	3	1			
Grains	Pasta	2	2								
Grains	Rice Cakes	1									
Grains	Tortilla chips		1								
Grains	Wild Rice			2							
Soy products	Miso	1									
Soy products	Soy milk	1									
Soy products	Tofu, tempeh, soy products	3					5			1	
	Flax products		2	5	3		2				
	Pulses (consumer ready)			5							
	Oils	2	3	2							
	Hemp foods			1		1					
	Nut butters	2				2			1		
Fruit products	Apple Juice	3				2	1		1		
Fruit products	Apple chips	1									
Fruit products	Applesauce								1		
Fruit products	Bars (fruit, nut, etc.)	2					1				
Fruit products	Fruit spreads/jams/jellies	5				1	3				
Fruit products	Fruit juice/smoothies	1									
Fruit products	Fruit puree concentrates	1									
/ege/fruit products	Relish, chutney, pickles	2									
/ege/fruit products	Powders-vegetable & fruit		2								
	Frozen vegetables	1	1								
	Sprouts	1									
	Pasta Sauce	1					1				
	Soup & chili	1		1		1			1		
Herbal	Essential Oils	1									
Herbal	Medicinal herbs & lozenges	3		1			2		1		
Herbal	Herbal extracts		1								
	Dulse								1		
	Vinegar	2					1				
	Meats/Poultry	2	6	1	1	5	6				
Beverage	Roasting coffee	2					4		1		
Beverage	Tea packaging	1									
Beverage	Hot Chocolate					1					
Beverage	Beer	2									
Beverage	Wine					1	1				
	Chocolate	2				1	2				



*Total # is NOT the total of the columns because one enterprise can produce several products

Table 17.

Non-food Organic F	Produ	cts -	2003												
				Number	of certi	fied ent	erprises	3							
Product type	BC AB SK MB ON QC NB NS PEI Tota														
Livestock Feeds	1	1	1		3			1		7					
Bird seed			1							1					
Compost	1				1		3	1		6					
Organic Fertilizer							1	1		2					
Worm castings							1			1					
Alfalfa dehydration			1							1					
Total	2	1	3		4		5	3		18					

Table 18.

				Numbe	r of ce	rtified	enterp	rises		
	вс	AB	sĸ	МВ	ON	QC	NB	NS	PEI	Total
Packing - fruit & vege	7				3					10
Repack frozen	1									1
Repack sugar							1			1
Herbs									1	1
Handler - syrup						2				2
Handler - eggs					1	1				2
Handler - unidentified			1			9				10
Seeds - Vegetable	4				4		1			1 10
Seed/bulk Grains		7	10	15	5					37
Distributor grocery & produce	3				1	6				10
Retail						1				1
Broker/trader/marketer			4	5		4				13
Total	15	7	15	20	14	23	2		1 1	98

shaded cells indicate missing data



2. Domestic Sales

In previous studies retail sales have been estimated by using US figures as a baseline and calculating Canadian sales assuming the Canadian market is 10% of the US market. Also used in the calculations is the fact, according to the major organic distributors, that retail sales are increasing by an average of 20% a year although the situation is quite variable across the country. Produce sales, for example, are reported to have increased by 60-70% in Ontario in recent years. Estimates have also been made using the value of 1.3% as the organic share of the retail market - again based on US data. Depending on the original data used estimates of the 2003 organic retail market vary from 800 million to 1.3 billion.

Research was carried out to try and verify the estimates for retail sales. Retail sales data for organic products is not readily available. Companies and organizations were contacted with varying responses, and although some agreed to receive the survey forms no data was forthcoming from the mainstream retail sector. Various other approaches to obtaining data were attempted which provide some information but not the complete picture.

2.1. Quantity and Value of Organic Products at Canadian Retail

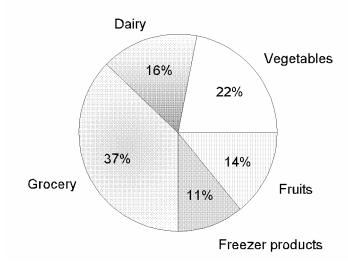
- A survey was sent to 550 retail members of the Canadian Health Food Association. The return rate was only 5% and of these 50% said they sold no organic products. 14 retail outlets reported sales of \$7,532,323 (29% fresh produce; 59% grocery 12% dairy) with 10% obtained directly from farmers or individual processors. With such a small sample it is not possible to simply extrapolate the data to the 1008 non-mainstream retail outlets selling organic products (1008 was the number estimated from information provided by wholesalers and other sources). However if large natural food stores are removed from the sample a value of \$264 million is obtained for sales in smaller non-mainstream food outlets.
- Wholesalers of organic food products were contacted for sales information. Several responded but not all and it is known that the majority of sales in the mainstream grocery stores are not represented in the figures obtained. Although the wholesale figures can be used to estimate retail sales values it is not know what proportion of the total retail sales they represent. Total wholesale value of sales reported were \$134,990,803 with 22% vegetables, 14% fruits, 16% dairy/cooler; 36% grocery and 11% freezer products. This is equivalent to \$219,410,042 in retail sales, calculated from average retail margins reported for organic product categories.



assumption.

Figure 5. Percentage of Organic Retail Sales by Product Type

Organic retail sales - 2003



- If it is assumed that private label sales and product sourced directly by mainstream supermarkets are at least equal to that sourced through the organic distributors, retail sales are at least \$440 million. However we have no way of knowing if this is a correct
- Individual manufacturers known to distribute product directly rather than going through distributors were approached for sales information; some responses were received and included in the wholesale total above.
- AC Neilson data is available for mainstream cash register sales in Atlantic Canada for some organic fruit and vegetable categories. The values obtained for organic retail sales are published in the marketing study commissioned by <u>ACORN</u>: Organic Market Research and Action Plan, ProAgri Consulting and Morton Horticulture Associates, 2004. This study provides a good analysis of the organic market using statistics reported in the US and Europe and can be obtained from the <u>ACORN</u> website. It was not possible to obtain AC Neilson data for the rest of Canada within the time frame of the project but it is recommended that Agriculture and Agri-food Canada purchase data in future years to provide information on the trends in organic retail sales.
- In Atlantic Canada organic fresh fruit represents 1.3% of total fresh fruit sales or approximately \$1,850,000, and 1% of total fresh vegetable sales or \$1,437,706 (from AC Neilson SPINS data for 52 weeks to October 2003 combined with estimates for private label sales⁴). The top organic sales categories are broccoli, carrots, potatoes, tomatoes and onions. Packaged salads are the fastest growing category in the retail sector for fresh vegetables. Apples (\$536,473) and bananas (\$506,141) are the top 2 categories for fruits.
- High growth products are organic chicken and turkey 30% annually and organic breakfast cereals 25-30% annually.
- Retail sales of organic coffee are at least \$14,812,500 equivalent to 79% of certified fair trade coffee. There is also certified organic coffee which is not certified fair trade but volumes were not determined. Source: Trans Fair Canada January 2004 & Sustainable Coffee Survey of North America, Specialty Coffee Ass. July 2001

ÉquiTerre reports a 2003 value of \$1,470,000 for direct to consumer sales through CSA programs in Quebec but it is not all 'certified organic'. Direct to consumer sales are also significant in British Columbia and Ontario. These include product obtained directly from farmers and through distributors.

Unfortunately the retail sales figures remain as elusive as ever but it seems likely that the lower estimate of \$800 million rather than the higher estimate of 1.3 billion is more realistic.

2.2. Number of stores in Canada retailing Organic Products

The numbers in table 19 were compiled from a number of sources: information provided by wholesalers; direct communications with company personnel; company websites; the Canadian Council of Grocery Distributors and listings of organic sales outlets complied by organizations promoting organic agriculture and food. 10 years ago the proportion of organic food sold in mainstream stores was less than 5% of the total organic sales. The majority was sold in natural food stores and at farmers markets. Today the impact of the large retail outlets is significant and their market share of total organic sales is believed to be between 45-50%. Loblaw in particular has been a major driving force with the expansion of its "President's Choice Organic" product lines in its stores in Central and Eastern Canada.

Data from the Canadian Council of Grocery Distributors indicates that their membership represents 21976 grocery stores in Canada. If this is close to the total number of grocery stores in Canada, 13% sell organic products.

Table 19. Number of Organic Retail Outlets

Organic Retail Sales - 2003											
Non-mainstream outlets											
	Total	ВС	AB	sĸ	МВ	ON	QC	NB	NS	PEI	Other
Number of identified outlets	1060	400	59	17	30	334	151	18	39	7	5
Percentage of total	100%	38%	6%	2%	3%	32%	14%	2%	4%	1%	0%
Mainstream outlets	1				1						
	Total	вс	AB	SK	MB	ON	QC	NB	NS	PEI	Other
Number of identified outlets	1473	297	73	3	17	364	495	80	124	20	
Number of Identified Oddets											0
Loblaw group not included in above	461										0

(BC = British Columbia, AB = Alberta, SK = Saskatchewan, MB = Manitoba, ON = Ontario, QC = Quebec, NB = New Brunswick, NS = Nova Scotia, PEI = Prince Edward Island, NF = Newfoundland, YK = Yukon.)



2.3. Comparison of domestic and imported products at retail

The majority of organic grocery item's food sold in retail stores is imported from the United States. Dairy products are Canadian except for some yogurt that is imported to meet the demand. Produce varies seasonally and by product. According to Gunta Vitnins of Proorganics, 70% of the organic apples sold in Canada were Canadian except during May, June and July, but now imports are increasing from China.

The percentages given in the table below are based on estimates provided by the wholesalers reporting. There was considerable variation in the individual percentages reported suggesting a deliberate policy on the part of some distributors to only or primarily source from domestic suppliers.

Table 20. Imported product versus Canadian product at retail

Imported V	ersus Canad	lian at retai	I											
	Canadian US imports Other import													
Produce	22%	62%	16%											
Grocery	10%	60%-85%	5%-30%											
Dairy	90%	10%												



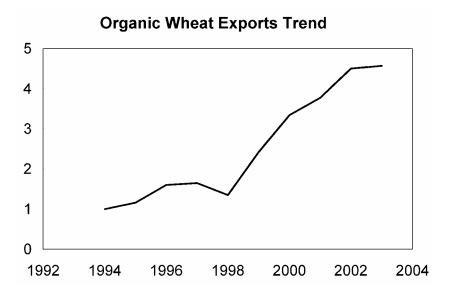
3. Exports of Organic Products

An attempt was made to contact all the companies involved with exporting crops or products from Canada. Information was received from many of those identified but certainly not all and it is difficult to estimate the amounts missing. Figures presented in this section should be considered minimum values, actual numbers will be higher. In order to maintain confidentiality, information related to processed products is not separated out into different product types; with so few companies involved they would be easily identified.

Grains and Cereal preparations

Wheat is the largest export crop with a value of at least \$14,015,928. Organic wheat sales have been steadily rising since 1998 but are still less than 1% of total Canadian wheat exports. 73% of wheat exports are to Europe and 25% to the United States. There are concerns this growing market could be adversely affected or disappear altogether if GE wheat is approved for cultivation in Canada.

Figure 6. Organic Wheat Export Trends
Source: Data collected during the organic market survey



- Flax is the second most valuable crop with at least \$6 million; 44% to the EU and 41% to the US.
- 50% of Canadian organic grain exports go to the European Union; 41 % to the United States and 5% to Japan.

Table 21. Organic Grain and Seed Exports

Organic Grain	Ехр	orts (Data	incon	nplete) - 20	03								
Commodity	МТ	Total value	% total	EU	%	us	%	Japan	%	Other	%	Unknown	%
Wheat	40686	\$ 14,015,928	35%	\$ 10,261,047	73%	\$ 3,515,419	25%	\$ 223,462	2%	\$ 1,600			
Flax	5061	\$ 6,027,000	15%	\$ 2,659,000	44%	\$ 2,456,000	41%			\$432,000	7%	\$480,000	8%
Soy	4697	\$ 3,929,755	10%	\$ 1,671,000	43%	\$ 753,755	19%	\$1,505,000	38%				
Peas/Lentils	5377	\$ 3,474,612	9%	\$ 1,841,052	53%	\$ 1,456,200	42%	\$ 127,360	4%	\$ 50,000	1%		
Miscellaneous	7011	\$ 3,233,444	8%	\$ 954,300	30%	\$ 1,960,394	61%	\$ 95,000	3%	\$223,750	7%		
Milled grains/flours		\$ 2,995,800	8%			\$ 2,995,800	100%						
Spelt	5100	\$ 2,662,500	7%	\$ 2,220,000	83%	\$ 442,500	17%						
Oats	5000	\$ 1,550,000	4%			\$ 1,550,000	100%						
Wild rice	180	\$ 1,080,000	3%	\$ 420,000	39%	\$ 600,000	56%			\$ 60,000	6%		
Barley all types	3700	\$ 970,400	2%	\$ 102,780	11%	\$ 746,840	77%	\$ 120,780	12%				
Totals		\$ 39,939,439	100%	\$ 20,129,179	50%	\$ 16,476,908	41%	\$2,071,602	5%	\$767,350	2%	\$480,000	1%

All currency fields are Canadian dollars. MT Metric Tons.

Miscellaneous includes rye, buckwheat, corn, mustard, unidentified grains, livestock feeds.

Fruit and Vegetables: The majority of Canadian organic fruit and vegetable exports go to the US.

- Vegetable exports are thought to be around \$2,000,000 with the majority from British Columbia. This includes tomatoes, beans, (fresh & frozen) broccoli, potatoes, Asian vegetables, beets, spinach, squash, radish and herbs.
- Apples are the most important fruit export with a market valued at \$3,212,181 with 96% to the US and 4 % to the UK.
- Stone fruits (peaches, plums, apricots, nectarines and cherries), cranberries and blueberries are also exported to the US.
- There is a small volume of specialty mushrooms being exported to the US.

Maple Syrup: Maple syrup is a significant export crop but a total dollar value was not obtained. It is likely to be at least \$7 million. Data on the destination of exports was only obtained from one company - 30.5 % EU, 56.5 % US and 13 % to Japan. It is not know if this is representative of all syrup exports.

Processed organic products: Exports include a range of organic food products including breakfast cereals, fruit smoothies, fruit spreads, nut butters, chocolate, hot chocolate and raw cultured vegetables and may amount to \$10 million or more.

Destination countries are: US, UK, Australia; New Zealand, Mexico, Costa Rica, Israel, South Africa, Korea, Japan, Singapore, Hong Kong.

Table 22. Summary Canadian Organic Exports

Summary of O	rganic Exp	orts - 2003	}								
	Total value	EU	%	US	%	Japan	%	Other	%	Unknown	%
Grains/seeds/flour	\$ 39,939,439	\$ 20,129,179	52%	\$16,476,908	40%	\$2,071,602	5%	\$767,350	2%	\$ 480,000	1%
Apples	\$ 3,212,181	\$ 128,487	4%	\$ 3,080,694	96%						
Misc. Fruit	\$ 898,000			\$ 898,000	100%						
Vegetables	\$ 2,000,000			\$ 2,000,000	100%						
Maple Syrup	\$ 7,000,000	\$ 2,135,000		\$ 3,995,000		\$ 910,000					
Food & beverages	\$ 10,000,000									\$10,000,000	
Total	\$ 63,049,620	\$ 22,392,666	36%	\$ 26,450,602	42%	\$2,981,602	5%	\$767,350	1%	\$10,480,000	17%

Shaded cells indicate missing data

Total Canadian organic exports of \$63 million were identified - there is likely more. The export market for organic products is 36% to Europe, 42% to the United States and 5% to Japan with a higher percentage of grain crops going to Europe. Note that in Table 21 & Table 22 it is possible that Switzerland has been included in the "other" column and also in the EU column. Also 17% of exports are not accounted for in the regional percentage breakdowns.



4. Imports of Organic Products

Certified organic products are imported for retail sales, for manufacturing and for livestock feeds, mainly from the United States but also from many different countries around the world. The responses to the survey were insufficient to draw any conclusions concerning the total quantities or value of imports. The table below lists products that were mentioned by respondents and we know that products imported for processing are worth at least at least \$7 million. Products imported for the retail market are probably worth at least \$74 million for fresh produce and \$82 million for grocery items (based on the domestic sales estimates above). Organic coffee imports are estimated at \$7 million.

Table 23. Countries of Origin for Organic Imports

	Product	Country
Grains & seeds	Corn	US
	Soybean meal	US, Bolivia, China
	Soybeans	Paraquay, Brazil
	Buckwheat	US
	Molasses	US
	Wheat	US
	Spelt	US
	Oats	US
	Malted barley	US
	Hops	US
	Millet	US
	Popcorn	US
	Sunflowers	US, China
	Rice	US
	Sugar	Paraguay, Brazil,Cuba
	Cocoa powder	Dominican Repulic via Holland
	Chocolate	Switzerland
	Essential Oils	France, Australia, US, Madagasca
For retail market		
	Coffee	Columbia, Costarica, Indonesia, Mexico, Peru, Nicaragua, Guatemala
	Bulk foods, nuts,dried fruit, grains	US, China, Turkey, other
	Vegetables	US, Mexico,
	Fruits	US, Brazil, Mexico, Ecuador, Fiji, China
	Misc non-perishable	From all over world, EU



Summary

The figures obtained during the study indicate that the organic market is still small compared with total agriculture production in Canada but the sector is showing strong growth with increases in sales and production volumes. The value of the organic export market is also increasing with no signs of slowing down. Data concerning actual retail sales is still lacking.

The 2003 numbers:

- Certified organic farmers in Canada: 3134
- Certified organic farmers represent 1.3% of all farmers in Canada
- 34% of all certified producers are in Saskatchewan
- Certified processors and handlers: 456
- Certified acreage in crop production: 966,482 acres (391123 ha)
- Other land in the certification programs: 295,477 acres (119564 ha)
- BC has the highest proportion of land in organic vegetables with 12.7% of vegetable acreage.
- Organic fruit and nut producers make up 2.6 % of the total farms reporting fruit in Canada and have 1.4% of the acreage.
- Organic maple syrup production is at least 8% of total syrup production in Quebec.
- A total of 549, 091 acres (222,210 ha) were seeded to organic grains and oilseeds in 2003 with an additional 39,425 acres (15955 ha) of lakes harvested for wild rice.
- The organic export market is worth at least \$63 million.
- Wheat is the most important export crop valued at over \$14 million
- Exports are equally divided between Europe and the United States; only 5% go to Japan.
- Organic retail sales continue to grow with more organic food being sold through mainstream grocery stores.
- Canadian organic product accounts for 90% of organic dairy products, 22% of organic produce and 10% of organic grocery items in the stores.



Data Sources & References not detailed in text:

- 1. The Global Status, Prospects, and Challenges of a Changing Organic Market. Micheal Sligh and Carolyn Christman, RAFI-USA, 2003
- 2. Farms by gross farm receipts. Statistics Canada, 2001 Census of Agriculture.
- 3. The state of organic farming in Canada in 2002, Anne Macey, published in the magazine of Canadian Organic Growers, Eco-farm & Garden Winter 2004
- 4. Statistics Canada bulletin *Vista on the Agri-Food Industry and the Farm Community* articles by William Parsons: 'Organic fruit and vegetable production: Do farmers get a premium price?" 2004; "Organic fruit and vegetable production: Is it for you?" Sept. 2002; "Organic Growing Practices establish clear market position." Sept. 2000
- 5. Information provided by Mr Victor Larivière, Editor in Chief of Bio-Terre quoting studies done by MAPAQ, <u>FABQ</u> and others

Acknowledgements

During the course of the study all the organizations certifying organic production and processing were asked to provide statistical information related to the operations they certify. See Appendix 1 for the list of the CBs operating in Canada. Their efforts to provide the data required are greatly appreciated. Thanks are also extended to the many individuals who assisted by providing detailed information about their organic business and to organizations providing data already collected especially ACORN in Atlantic Canada and the Conseil des appellations agroalimentaires du Quebec (CAAQ), FABQ and the FPAQ in Quebec. The Canadian Health Food Association assisted by sending the survey to its members. I am grateful to David Powell, Charles-Eugène Bergeron, Janet Wallace and Tina Fraser who assisted with identification of organic businesses and data collection in different parts of the country and to Charles-Eugène Bergeron for translating survey forms into French.



Appendix 1. Canadian Organic Certification Organizations & Institutions Providing Data

ACORN – Atlantic Canadian Organic Regional Network, <u>www.acornorganic.org</u>

BCARA - British Columbia Association for Regenerative Agriculture, www.certifiedorganic.bc.ca

BFPA – Biological Food Producers Association

BIO D - Biodynamic Agricultural Society of British Columbia, www.certifiedorganic.bc.ca

Biodynamic/Demeter

BOPA – Boundary Organic Producers Association, <u>www.certifiedorganic.bc.ca</u>

CAAQ - Conseil des appellations agroalimentaires du Québec, www.caaq.org

CCOF – California Certified Organic Farmers, www.ccof.org

COCC – Canadian Organic Certification Co-op, www.cocert.ca

FABQ – Fédération d'agriculture biologique du Québec, <u>www.fabqbio.ca</u>

FPAQ – Fédération des producteurs acéricoles du Québec, www.siropderable.ca

FVO-ICS – Farm Verified Organic - International Certification Services, www.ics-intl.com

FVOPA - Fraser Valley Organic Producers Association, www.certifiedorganic.bc.ca

Garantie-Bio/Ecocert, www.garantiebio-ecocert.qc.ca

IOPA – Islands Organic Producers Association, www.certifiedorganic.bc.ca

KOGS - Kootenay Organic Growers Society, <u>www.certifiedorganic.bc.ca</u>

LEOGA – Living Earth Organic Producers Association, www.certifiedorganic.bc.ca

NOOA - North Okanagan Organic Association, www.certifiedorganic.bc.ca

OCIA - Organic Crop Improvement Association, www.ocia.org

OCPP - Organic Crop Producers and Processors, www.ocpro-certcanada.com

OPAM – Organic Producers Association of Manitoba, www.opam.mb.ca

OVONA – Organic Verification Association of North America

PACS – Pacific Agricultural Certification Society, www.certifiedorganic.bc.ca

PEI Certified Organic Producers Cooperative

PROCERT – Pro-Cert Organic Systems, <u>www.ocpro-certcanada.com</u>

QAI – Quality Assurance International, www.qai-inc.com

QCB - Organic Inc (parent company is Quality Certification Bureau Inc), www.qcborganic.com



Québec Vrai, www.quebecvrai.org

SOCA – Saskatchewan Organic Certification Association

SOFS – Surrey Organic Farming Society

SOOPA - Similkameen Okanagan Organic Producers Association, www.certifiedorganic.bc.ca

SPLBQ – Syndicat des producteurs de lait biologique du Québec

STOPA - Shuswap Thompson Organic Producers Association, www.certifiedorganic.bc.ca

TILTH - Oregon Tilth Inc, www.tilth.org

UPA – Union des producteurs agricoles, <u>www.upa.qc.ca</u>

Appendix 2. Organic Associations & Regional Networks – Not Certifying

COG - Canadian Organic Growers, www.cog.ca

SOD - Saskatchewan Organic Directorate, <u>www.saskorganic.com</u>

ACORN - Atlantic Canadian Organic Regional Network, www.acornorganic.org

COABC - Certified Organic Associations of British Columbia, www.certifiedorganic.bc.ca

EFAO - Ecological Farmers Association

Organic Trade Association

FABQ - Fédération d'agriculture biologique du Québec

Filière biologique du Québec-MAPAQ

UBP - Union Biologique Paysanne

Association de Biodynamie du Québec

