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Agriculture and Agri-Food Canada

Agriculture et Agroalimentaire Canada



Canada

Overview of the Canadian special crops industry 2009 © Her Majesty the Queen in Right of Canada, 2010 AAFC No. 10654E ISBN 978-1-100-16659-9 Catalogue A71-16/2009E-PDF

Paru également en français sous le titre Survol de l'industrie canadienne des cultures spéciales 2009 No. AAC 10654F ISBN 978-1-100-95443-1 Catalogue A71-16/2009F-PDF

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Size of the Special Crops Industry in Canada

From 1996 to the 2006 Census of Agriculture, farm numbers decreased for a majority of the special crops. However, certain crops experienced an increase in the number of farms, with forage and grass seed farm numbers increasing nearly 8 percent by 1996 and 2006, and sunflower seed farm numbers increasing by 23 percent during the same period. The farm area also increased between 46 percent and 130 percent for forage grass seed and sunflower seed, respectively.

The number of farms for hay and clover declined by 9 percent between 1996 and 2006 although the amount of hectares farmed increased by 28 percent during the same period. According to the Canadian Federation of Agriculture (CFA), Canadian farms are on average 22 percent larger today than they were 20 years ago.

	1996	2001	2006	1996	2001	2006
Buckwheat	1,261	954	686	19,726	18,161	13,179
Canary Seed	3,803	2,168	1,424	248,752	166,529	137,025
Caraway Seed	n.a.	221	145	n.a.	9,526	8,089
Forage & Grass Seed ²	2,856	3,808	3,069	183,835	325,512	267,871
Ginseng	n.a.	380	289	n.a.	2,880	3,330
Hay & Clover (Tame Hay only)	162,124	155,704	147,404	6,210,871	7,314,268	7,969,209
Mustard Seed	3,398	2,018	1,339	239,021	162,176	136,395
Safflower Seed	43	14	n.a.	1,496	581	n.a.
Sugar Beets	499	302	314	23,951	14,462	19,488
Sunflower Seeds	734	935	905	37,101	70,561	85,402

1: 1 hectare ≈ 2.47 acres

²: Mainly grass seed.

Source: Statistics Canada, Census of Agriculture: 1996, 2001 and 2006.

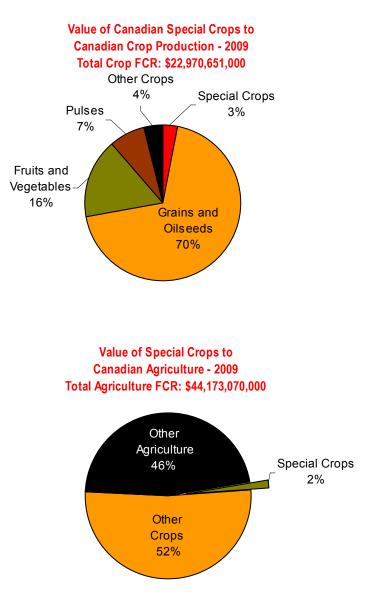
Value of the Special Crops Industry to the Canadian Economy

Farm cash receipts (FCR) includes revenues from the sale of agricultural commodities, program payments from government agencies, and payments from private and livestock insurance program.

Special crops represent almost two percent of total FCR in the Canadian agriculture sector. In 2009, hay and clover represented the largest share of special crops FCR with 43 percent. Mustard seed and ginseng followed with 15 percent and 14 percent, respectively.

	Farm Cash Receipts ('000 \$)				
	2006	2007	2008	2009	
Canary Seed	46,627	78,088	109,222	69,514	
Forage & Grass Seed	90,737	85,775	71,567	56,580	
Ginseng	64,364	91,386	73,294	95,541	
Hay & Clover	138,629	257,506	274,587	294,657	
Mustard Seed	51,951	75,848	145,010	102,142	
Sugar Beets	38,180	34,726	23,543	22,690	
Sunflower Seed	34,979	55,620	57,997	38,757	
Total Special Crops	465,467	678,949	755,220	679,881	
Total All Crops ¹	14,685,464	18,414,176	22,953,640	22,970,651	
Total All Canadian Agriculture	36,954,824	40,745,494	45,887,990	44,173,070	

¹: All crops also include grains and oilseeds, fruits, vegetables, floriculture and nursery, maple and forest products. *Source: Statistics Canada, Farm Cash Receipts, May 2010.*



Source: Statistics Canada, Farm Cash Receipts, May 2010.

Canadian Production of Special Crops

The majority of canary seed and mustard seed are grown in the province of Saskatchewan with smaller quantities in Manitoba and Alberta, respectively. In 2009, canary seed production decreased 27 percent from 2008, as a result of fewer seeded hectares mainly in the province Saskatchewan. During this time, mustard seed production increased by almost 30 percent as a result of increased hectares (10 percent). Hay and clover are grown in all Canadian provinces. Sunflowers seeds are grown mainly in the province of Manitoba, while sugar beets are grown in Alberta.

(hectares)				
Area Seeded	2006	2007	2008	2009
Buckwheat	7,200	2,000	n.a.	n.a.
Canary Seed	135,600	178,100	167,900	127,500
Mustard Seed	133,800	176,000	194,200	212,400
Sugar Beets	15,700	13,800	7,300	12,100
Sunflower Seeds	77,000	80,900	68,800	64,700
Hay & Clover (Tame Hay only)	8,237,000	8,239,200	8,201,600	8,183,100

Source: Statistics Canada, Field Crop Reporting Series, December 2009.

	(hectares)				
Area Harvested	2006	2007	2008	2009	
Buckwheat	6,900	2,000	n.a.	n.a.	
Canary Seed	130,900	174,000	163,900	109,300	
Mustard Seed	129,500	176,000	186,100	208,400	
Sugar Beets	15,000	13,800	6,900	10,900	
Sunflower Seeds	76,900	78,900	68,800	63,500	
Hay & Clover (Tame Hay only)	7,324,800	7,468,300	7,379,100	7,227,500	

Source: Statistics Canada, Field Crop Reporting Series, December 2009.

		(tonnes	/hectares)	
Yield	2006	2007	2008	2009
Buckwheat	1.10	1.20	n.a.	n.a.
Canary Seed	1.01	0.93	1.15	2.51
Mustard Seed	0.84	0.65	0.87	2.02
Sugar Beets	58.10	55.20	49.96	60.34
Sunflower Seeds	2.05	1.58	1.63	1.60
Hay & Clover (Tame Hay only)	4.10	4.05	4.12	3.46

Source: Statistics Canada, Field Crop Reporting Series, December 2009.

	(tonnes)					
Production	2006	2007	2008	2009		
Buckwheat	7,400	2,300	n.a.	n.a.		
Canary Seed	132,800	162,000	195,600	141,900		
Mustard Seed	108,200	114,300	161,000	208,300		
Sugar Beets	870,900	762,000	344,700	657,700		
Sunflower Seeds	157,300	124,800	112,200	101,900		
Hay & Clover (Tame Hay only)	29,999,800	30,244,600	30,431,500	25,022,000		

Source: Statistics Canada, Field Crop Reporting Series, December 2009.

Canada's Trade Balance for all Special Crops

The value of Canada's trade balance has grown 18 percent over the past decade from \$263 million in 1999 to \$310 million in 2009. Canada is the largest exporter and the second largest producer of mustard seed in the world. It also accounts for approximately 90 percent of world exports of canary seed. Seeds for sowing are the most exported special crop, accounting for 20 percent of all special crops in 2009. Forages Hay and clover are the second largest exported special crop (16 percent), followed by mustard seed (16 percent), forages and grass seed (16 percent), and ginseng root (12 percent).

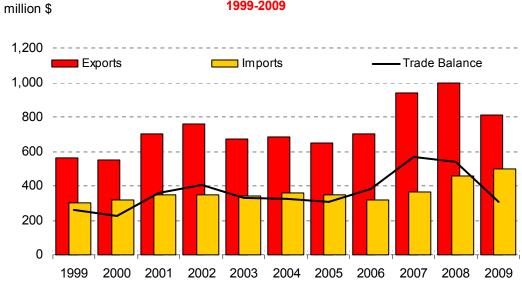
	(million \$)				
	Exports	Imports	Balance		
1999	565	302	263		
2000	548	320	228		
2001	703	346	357		
2002	759	351	408		
2003	672	342	330		
2004	682	357	325		
2005	652	347	304		
2006	704	320	383		
2007	936	366	570		
2008	998	457	540		
2009	810	500	310		

Source: Statistics Canada, June 2010.

Canada's Trade Balance in 2009 by Product

		(million \$)		
		Exports	Imports	Balance
1	Mustard Seed	129	1	128
2	Forages, Hay & Clover	131	12	119
3	Canary Seed	90	0	90
4	Forage & Grass Seeds	106	35	71
5	Ginseng Roots	95	5	90
6	Sunflower Seeds	64	23	41
7	Hemp Seed & Hemp Products	8	0	8
8	Buckwheat	1	1	0
9	Seeds for sowing	163	294	-131
	Other ¹	23	129	-106
	TOTAL VALUE	810	500	310

¹: Other special crops include wild rice, safflower seeds and sugar beets. *Source: Statistics Canada, March 2010.*



Canada's Trade Balance for Special Crops 1999-2009

Source: Statistics Canada, March 2010.

Canadian Exports of Special Crops

			(million \$)			
		2006	2007	2008	2009	
1	Seeds for sowing	143.0	219.5	212.8	162.5	
3	Forages, Hay & Clover	172.8	198.4	152.7	131.3	
2	Mustard Seed	62.7	93.9	171.4	128.7	
4	Forage & Grass Seed	116.1	139.8	144.7	106.2	
5	Canary Seed	65.4	94.2	134.4	89.9	
6	Sunflower Seeds	31.7	72.2	78.9	64.2	
7	Ginseng Roots	84.0	91.7	70.2	95.3	
8	Herbs, Spices & Medicinal Plants	20.9	17.9	23.6	23.7	
9	Hemp Seeds & Hemp Products	2.1	3.5	4.5	8.1	
10	Buckwheat	1.7	2.5	1.6	0.9	
	Other ¹	3.3	2.9	2.8	2.0	
	TOTAL VALUE	703.6	936.4	997.7	810.0	

¹: Other special crops include wild rice, safflower seeds and sugar beets.

Source: Statistics Canada, March 2010.

Canada's Top Destinations for Special Crops

The value of Canadian special crops exports increased 15 percent nearly \$704 million in 2006 to \$810 million in 2009. United States was Canada's largest market for special crops with exports valued at almost \$1.4 billion or 41 percent of total exports during the period 2006 to 2009.

			(million \$)				
		2006	2007	2008	2009		
1	United States	268.9	360.2	399.7	364.4		
2	Hong Kong	143.4	85.1	62.3	88.1		
3	Japan	21.4	168.4	109.5	85.7		
4	Belgium	71.7	30.0	64.5	40.5		
5	Mexico	11.7	23.9	37.4	26.8		
6	United Arab Emirates	21.4	14.4	23.1	20.8		
7	Germany	0.4	29.5	53.4	17.1		
8	Brazil	11.6	15.2	27.0	9.7		
9	United Kingdom	9.3	18.1	23.1	9.2		
10	Austria	6.9	17.5	27.4	5.8		
	Other	137.0	173.8	170.3	141.7		
	TOTAL VALUE	703.6	936.4	997.7	810.0		

Source: Statistics Canada, March 2010.

Buckwheat

Buckwheat is native to Central Asia, and has been grown on the eastern Prairies in Canada for over a century. The first large-seeded buckwheat variety, Koto, is of interest to millers due to increased starch content and soft starch characteristics. Koto was released in 1998 with Canadian commercial production beginning in the summer of 2000. Honey from this plant's blossoms is dark and is considered highly flavoured. Buckwheat is not a cereal grain, but is actually a member of the same plant family as rhubarb.

Buckwheat is used to make flour; for example in Japan, it is mixed with other varieties to produce "Soba" noodles, a traditional dish. In North America, buckwheat is also used in the chocolate bar and snack food industries. Buckwheat contains a high level of rutin, which is extracted from the leaves and is used in medicine to check blood vessels for haemorrhagic diseases and to treat high blood pressure.

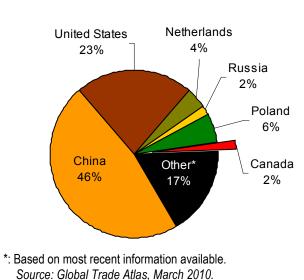
Although Canada only produces a small percentage of the world's buckwheat supply, it exports approximately half of its production to other countries mainly to Japan and the United States. The Japanese market is attractive for Canada, where it is processed into soba noodles. Japan imports approximately 78 percent of its buckwheat supply. Canada competes with China, the United States, and Australia for the Japanese market. While imports to Japan from China have decreased in the last five years, imports from Canada have also declined due to low Canadian production.¹

1: Global Trade Atlas May 2010.

Canada's Top Destinations for Buckwheat

				n Exports on \$)¹		Canadian percent Share of Import Market (Value)2				
		2006	2007	2008	2009	2006	2007	2008	2009	
1	Japan	0.7	1.4	0.9	0.1	3%	6%	4%	1%	
2	United States	0.6	1.0	0.6	0.8	27%	37%	25%	27%	
3	Belgium	0.0	0.0	0.1	0.0	0%	1%	0%	3%	
	Other	0.3	0.1	0.0	0.0					
тс	TAL VALUE	1.7	2.5	1.6	0.9					

¹: Source: Statistics Canada, March 2010; ²: Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.



Canada's Share of World Buckwheat Exports 2009

Food for Thought...

Buckwheat recipes can be found at: <u>http://www.specialcrops.mb.ca/crops/buckwheat.html</u>. Buckwheat is gluten free so it is a handy food for people who suffer from coeliac disease, and who are allergic to gluten. Buckwheat is a complete protein and it contains all eight essential amino acids. It is good for the bladder, the kidneys and the lungs. *Source: Canadian Special Crops Association*

Canary Seed

Canary seed is native to southern Europe and the Middle East, and is a major component of feed mixtures for caged and wild birds. Commercial production of the crop began in Western Canada in the late 1970's and early 1980's.

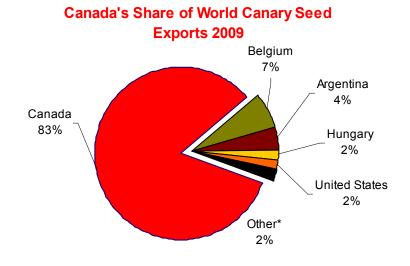
Canary seed is a cool-season crop grown in Saskatchewan and other parts of Western Canada. There are two types of canary seeds; glabrous and non-glabrous. Canada developed a new glabrous (hairless) kind of canary seed registered under the trademark Canario. Canary seed has a high starch content making it suitable for some industrial uses, such as the cosmetics industry.

As populations and incomes continue to grow, and as an increasing number of people around the world are keeping birds as pets, the demand for canary seed looks strong.

		(Canadian Expo	orts (million \$)	1	Canadiar	n % Share of	Import Marke	t (Value) ²
		2006	2007	2008	2009	2006	2007	2008	2009
1	Mexico	17.8	20.7	31.5	24.2	99%	100%	99%	100%
2	Brazil	10.5	14.2	25.3	8.1	85%	75%	89%	70%
3	Belgium	9.0	15.5	19.1	12.3	94%	92%	93%	93%
4	United States	4.4	6.6	9.5	5.8	100%	100%	100%	100%
5	Spain	5.1	7.1	8.6	6.8	97%	99%	95%	96%
6	Colombia	2.3	7.1	8.1	6.4	100%	99%	100%	99%
7	Venezuela	2.3	3.0	5.5	2.1	100%	79%	74%	100%
8	Portugal	1.7	2.3	3.1	2.4	88%	96%	97%	98%
9	Italy	1.0	1.7	2.6	2.8	24%	53%	72%	83%
10	Chile	1.9	1.7	2.5	1.3	100%	100%	100%	100%
	Other	9.3	14.2	18.6	17.8				
тот	AL VALUE	65.4	94.2	134.4	89.9				

Canada's Top Destinations for Canary Seed

¹: Source: Statistics Canada, ²: Source: Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.



*: Based on most recent information available.

Source: Global Trade Atlas, March 2010.

Food for Thought...

The Canary Seed Development Commission of Saskatchewan is continuing its work towards the approval of canary seed for human and livestock consumption. Canary seed may have potential as an ingredient in the health food market. *Source: Canary Seed Development Commission of Saskatchewan.*

Forages, Hay & Clover

Forages are plants consumed by livestock, and they include pasture and browse plants, baled hay, silage, alfalfa pellets and cubes, immature cereals, and cereal straw. Most forage species belong to the grass and legume families. The commonly grown grass species in Canada include timothy, bromegrass, and the fescues, while the main legume species include alfalfa and red clover. Hay and clover are grown in all provinces; however, the majority of forage production for export is grown in Alberta and Manitoba. Alfalfa is considered the queen of forage and is the most widely grown forage legume in Canada. Forages are very important in soil conservation, as they are used in crop rotation to improve soil structure and add nitrogen to the soil.

Canada's Top Destinations for Forages, Hay & Clover¹

		0000	0007	0000	0000
		2006	2007	2008	2009
1	Japan	120.9	133.3	89.4	76.1
2	United States	32.5	46.3	52.8	46.0
3	United Arab Emirates	0.3	0.2	1.2	2.8
4	South Korea	11.9	10.3	4.2	2.0
5	Taiwan	4.0	5.2	3.0	1.8
6	Ireland	0.3	0.3	0.1	0.8
7	United Kingdom	0.7	1.0	0.3	0.7
8	Qatar	0.1	0.2	0.3	0.1
9	Mexico	0.0	0.1	0.4	0.0
10	Bahrain	0.1	0.3	0.2	0.0
	Other	2.0	1.2	0.9	1.0
тот	AL VALUE	172.8	198.4	152.7	131.3

Canadian Exports (million \$)²

Source: 1: Forages, hay and clover excludes forage and grass seeds.

²: Statistics Canada, March 2010

			Canadian Exports (Thousand Tonnes) ¹			Canadian % Share of Import Mar				
		2006	2007	2008	2009	2006	2007	2008	2009	
1	Japan	455.7	492.6	300.6	235.5	16%	16%	13%	11%	
2	United States	117.4	184.7	193.1	142.5	86%	90%	78%	93%	
3	South Korea	41.9	31.8	13.2	6.6	8%	5%	3%	1%	
4	Taiwan	21.9	25.9	12.2	5.7	16%	19%	11%	3%	
5	United Arab Emirates	1.0	0.5	2.8	7.0	n.a.	n.a.	n.a.	n.a.	
6	Mexico	0.0	0.9	2.0	0.0	14%	40%	48%	0%	
7	Qatar	0.2	0.6	0.9	0.4	n.a.	n.a.	n.a.	n.a.	
8	United Kingdom	1.4	3.1	1.1	2.1	10%	9%	16%	12%	
9	Bahrain	0.2	0.8	0.8	0.0	n.a.	n.a.	n.a.	n.a.	
10	Ireland	0.7	0.7	0.3	2.2	0%	9%	2%	4%	
	Other	36.6	4.5	2.8	2.6					
TOT	AL VALUE	676.9	746.0	529.7	404.7					

Source: ¹ Statistics Canada March 2010, ²Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.

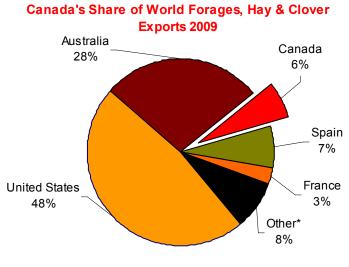
Canada's Top Destinations for Varieties of Forages, Hay & Clover

			(milli	on \$)	
		2006	2007	2008	2009
1	Timothy Hay	104.8	123.4	77.4	75.1
2	Dehydrated Alfalfa Meal & Pellets	22.4	29.5	23.3	18.7
3	Dehydrated Alfalfa in Cubes	15.3	17.2	17.2	11.7
4	Other Hay	7.4	9.4	13.1	9.9
5	Other Alfalfa, Loose or in Bales	6.0	7.7	10.8	7.2
	Other	16.9	11.3	10.9	8.7
TO	TAL VALUE	172.8	198.4	152.7	131.3

Source: Statistics Canada, March 2010.

			(Thousan	d Tonnes)	
		2006	2007	2008	2009
1	Timothy Hay	386.4	421.1	248.0	226.1
2	Dehydrated Alfalfa Meal & Pellets	104.0	136.3	89.2	65.2
3	Dehydrated Alfalfa in Cubes	64.2	68.3	58.0	33.1
4	Other Hay	29.4	40.0	53.1	35.0
5	Other Alfalfa, Loose or in Bales	26.0	38.0	48.1	28.0
	Other	66.9	42.3	33.3	17.3
TO	TAL VALUE	676.9	746.0	529.7	404.7

Source: Statistics Canada, March 2010.



*: Based on most recent information available. Source: Global Trade Atlas, March 2010.

Canada's Top Destinations for Forage & Grass Seeds

			Canadia (millio	n Exports on \$) ¹	
		2006	2007	2008	2009
1	United States	88.0	106.6	106.7	85.3
2	Germany	5.5	7.5	9.2	5.1
3	China	2.9	3.3	4.2	2.9
4	Netherlands	2.8	5.2	6.8	2.7
5	Argentina	2.4	1.9	1.4	2.0
6	United Kingdom	1.7	1.7	2.2	1.4
7	Italy	6.3	5.9	4.9	0.9
8	Uruguay	0.5	0.4	0.8	0.8
9	Spain	0.6	0.6	1.1	0.6
10	Russia	1.0	0.8	1.2	0.0
11	Other	4.4	6.7	7.4	4.5
тот	AL VALUE	116.1	139.8	144.7	106.2

1: Source: Statistics Canada, March 2010

	_								
		2006	2007	2008	2009	2006	2007	2008	2009
1	United States	55.8	58.0	49.2	33.7	74%	78%	73%	83%
2	Germany	2.7	3.9	4.5	2.2	3%	4%	4%	3%
3	China	1.5	2.8	3.6	1.4	10%	9%	12%	9%
4	Netherlands	3.2	3.1	2.6	0.5	10%	12%	14%	9%
5	Argentina	0.6	0.5	0.4	0.4	7%	12%	11%	7%
6	United Kingdom	0.7	0.7	1.2	0.6	3%	2%	4%	3%
7	Italy	2.2	3.9	4.5	2.2	11%	10%	6%	3%
8	Uruguay	0.1	0.1	0.2	0.2	3%	6%	10%	n.a.
9	Spain	0.5	0.3	0.5	0.3	1%	2%	3%	2%
10	Russia	0.3	0.2	0.3	0.0	1%	1%	4%	2%
11	Other	2.6	1.1	1.0	2.0				
TOT	AL VALUE	70.2	74.8	68.0	43.7				

Canadian Exports (Thousand Tonnes)¹

Canadian % Share of Import Market (Value)²

¹: Source: Statistics Canada, March 2010,

² Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.

Canada's Top Exports for varieties of Forage & Grass Seeds

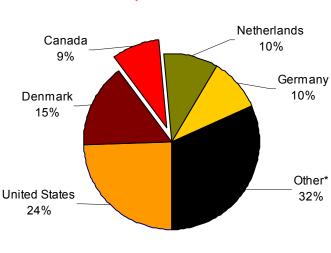
			(milli	on \$)	
		2006	2007	2008	2009
1	Perennial Rye Grass Seeds	16.8	23.3	25.3	15.5
2	Creeping Red Fescue Seeds - Not Certified	27.0	26.4	25.1	16.2
3	Lucerne (Alfalfa) Seeds - Not Certified	17.6	26.6	25.0	21.4
4	Certified Lucerne (Alfalfa) Seeds	13.0	16.4	18.6	19.4
5	Seeds of Other Forage Plants	3.5	9.1	11.0	7.3
	Other	38.2	38.0	39.8	26.4
тс	DTAL VALUE	116.1	139.8	144.7	106.2
	<u> </u>				

Source: Statistics Canada, March 2010.

Canada's Top Exports for Varieties of Forage & Grass Seeds

		(Thousan	d Tonnes)	
	2006	2007	2008	2009
1 Perennial Rye Grass Seeds	11.5	15.9	16.4	10.1
2 Creeping Red Fescue Seeds - Not Certified	22.3	19.5	15.3	8.7
3 Lucerne (Alfalfa) Seeds - Not Certified	6.7	8.9	6.5	5.2
4 Certified Lucerne (Alfalfa) Seeds	4.7	5.1	5.1	4.2
5 Seeds of Other Forage Plants	1.7	5.8	5.8	3.5
Other	23.2	19.6	18.9	12.0
TOTAL VALUE	70.1	74.8	68.0	43.7

Source: Statistics Canada, March 2010.





*: Based on most recent information available. Source: Global Trade Atlas, March 2010.

Ginseng

North American Ginseng (NAG) is native to the hardwood forests of Eastern Canada and the North Eastern U.S. region. It needs to go through the process of cold, freezing winter so that the seed is forced to germinate in the spring. The world's main NAG growing regions are the Canadian provinces of Ontario and British Columbia, Wisconsin in the U.S., and the northeastern and northern regions of China. Canada is currently the largest producer of NAG in North America, of which about 90 percent is produced in the Simcoe area of Ontario. Canadian NAG is unequalled in quality, taste and aroma.

Since the 18th century, Ontario ginseng has been primarily exported to China where it is highly valued for its perceived superior quality and sweeter taste. Today, about 2,700 tonnes of Canadian ginseng roots are exported to China and other Asian markets annually. It was recognized by the Europeans in the Canadian province of Quebec, in 1716, and was gathered and exported to China. At one time, the ginseng trade rivalled the fur trade. However, with time, the wild ginseng population became severely depleted from over-harvesting and wild ginseng is now considered an endangered species in Canada.

North American ginseng has a special place in the history of Canada. The roots have been used in traditional Aboriginal medicines for thousand of years. Ginseng is cultivated for its root and is one of the most widely used medicinal herbs in the world, especially in Asia.

Canada's Top Destinations for Ginseng Roots

			Canadiaı (millio	n Exports on \$)¹		Canadian % Share of Import Market (Value) ²				
		2006	2007	2008	2009	2006	2007	2008	2009	
1	Hong Kong	71.7	84.9	62.2	87.9	45%	40%	56%	36%	
2	China	1.4	1.5	3.9	3.6	20%	44%	62%	28%	
3	United States	8.6	2.0	2.0	1.7	27%	7%	11%	9%	
4	Singapore	0.8	0.5	0.6	1.0	21%	12%	24%	23%	
5	Guatemala	0.5	2.2	0.9	0	0%	82%	97%	0%	
	Other	1.0	0.5	0.6	1.0					
тс	ΤΔΙ VΔΙ ΠΕ	84.0	91 7	70.2	95.3					

 TOTAL VALUE
 84.0
 91.7
 70.2
 95.3

 7: Source: Statistics Canada, March 2010, ²Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.
 Canadian % Share of Import Market" represents share of Canadian

2009 South Korea 23% Hong Kong 8% United States 17% Canada 30% Other* 7%

Canada's Share of World Ginseng Root Exports

Food for Thought...

Part of the Latin name for ginseng, *Panax*, comes from the Greek word meaning "all-healing". *Source: NaturalPedia*

Herbs, Spices & Medicinal Plants

The term spice refers to any dried plant product used primarily for seasoning. It differs from culinary herbs, in that the parts of importance are the seed, bark, and flowers of plants, rather than the leaves. Spices originated in the Far East with China being the historic supplier of ginger, Indonesia supplying the world with cinnamon and nutmeg, and India being a major source of cumin and turmeric.

Canadian spice production is centred in Western Canada, primarily Saskatchewan. The two major spice crops grown in Canada are caraway and coriander.

Caraway, a member of the carrot family, is a biennial spice crop native to Europe and western Asia. Coriander, a member of the carrot family, is an annual, heat-loving spice crop native to Southern Europe and the Mediterranean.

A medicinal plant is a plant that is either cultivated or wild crafted (collected from the wild) for its medicinal value. It has recently been estimated that there are about 400,000 species of vascular plants globally, with somewhere between a quarter and a third of these plants having been used for medicinal purposes by indigenous societies. Medicinal plants have a long history of use in Canada. Hundreds of species were used by the First Nations Canadians in traditional medicine, with the potential for many of these plants to be valuable in modern medicine.

The entire caraway plant is edible; the roots may be cooked similar to carrots and the leaves can be used in salads. The primary use of caraway is for culinary purposes; however it has broad medicinal uses and may be used as an antiseptic.

The seeds can also be scattered over breads, cakes, and soups as decoration. The coriander plant yields both the fresh herb and spice seed, which are used primarily for culinary purposes. Coriander also has medicinal and cosmetic functions in the extracted essential oil form.

Coriander seeds are used as a spice to flavour such foods as liqueurs, candies, sausages, and pickles. The essential oil that is extracted from the coriander spice seed is used to mask the taste of unpleasant medicine as well as to calm the irritating effects of other medicines on the stomach. The oil is also used to scent soaps, perfumes, and other cosmetics.

		C	anadian Exp	orts (million	\$) ¹	Canadian % Share of Import Market (Valu			
		2006	2007	2008	2009	2006	2007	2008	2009
1	United States	5.9	7.2	10.3	11.6	1%	1%	2%	2%
2	United Kingdom	2.4	1.0	1.9	0.5	1%	1%	0%	0%
3	Germany	0.5	0.6	1.8	1.0	0%	0%	0%	0%
4	Jamaica	1.6	0.9	1.6	1.1	n.a.	n.a.	n.a.	n.a.
5	China	2.5	0.8	1.5	0.0	3%	1%	3%	0%
6	Czech Republic	2.0	1.1	1.1	4.0	10%	6%	9%	12%
7	Barbados	1.1	0.7	1.0	0.9	n.a.	n.a.	n.a.	n.a.
8	Netherlands	0.2	0.7	0.7	0.6	0%	0%	1%	0%
9	Trinidad-Tobago	0.7	0.8	0.7	0.9	n.a.	n.a.	n.a.	n.a.
10	Japan	1.4	0.6	0.6	0.3	0%	0%	0%	0%
	Other	2.6	3.4	2.3	3.7				
тот	AL VALUE	20.9	17.9	23.6	23.7				

Canada's Top Destinations for Herbs, Spices & Medicinal Plants

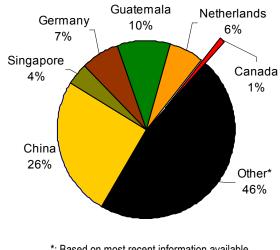
¹: Source: Statistics Canada, March 2010; ²Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.

Canada's Top Exports of Herbs, Spices & Medicinal Plants

	(million \$)					
2006	2006 2007 2008 2009					
3.4	7.6	7.2	6.2			
9.8	4.0	5.6	6.4			
1.7	2.0	5.6	6.5			
0.0	3.5	4.1	3.4			
0.5	0.4	0.3	0.5			
	3.4 9.8 1.7 0.0	3.4 7.6 9.8 4.0 1.7 2.0 0.0 3.5	3.4 7.6 7.2 9.8 4.0 5.6 1.7 2.0 5.6 0.0 3.5 4.1			

Source: Statistics Canada, March 2010.

Canada's Share of World Exports of Herbs, Spices & Medicinal Plants - 2009



*: Based on most recent information available. Source: Global Trade Atlas, March 2010.

Hemp

Hemp has been the source of food and a source of reservable fibre for the past 10,000 years. Like the marijuana plant, industrial hemp belongs to the species *Cannabis sativa L*. However, unlike marijuana, it only contains minute quantities of the psychoactive drug delta-9 tetrahydrocannabinol (THC). Whole hemp seed is composed of approximately 45 percent oil, 35 percent protein and 10 percent carbohydrates and fibre. As a result of the numerous nutritional benefits, many new food products containing hemp seed and its oil are finding their way onto the Canadian market, including protein powder, salad dressings, snack products, and frozen desserts.

			Canadian Exports Can (million \$) ¹			Canadia	an percent Share of Import Market (Value) ^{2,3}			
		2006	2007	2008	2009	2006	2007	2008	2009	
	United									
1	States	1.9	3.2	4.0	6.6	47%	52%	26%	45%	
2	Belgium	0.0	0.0	0.2	0.1	0%	0%	0%	0%	
3	Japan	0.0	0.1	0.1	0.1	0%	0%	0%	0%	
4	Ireland	0.1	0.1	0.1	0.1	0%	0%	0%	1%	
5	United Kingdom	0.1	0.0	0.1	0.1	0%	0%	0%	0%	
	Other	0.0	0.1	0.1	1.0					
тс	TAL VALUE	2.1	3.5	4.5	8.1					

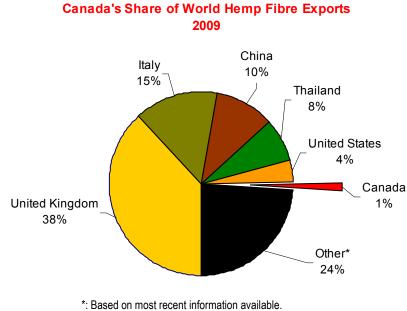
Canada's Top Destinations for Hemp Seed & Hemp Products

¹: Source: Statistics Canada, March 2010, ²: Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represent share of Canadian export in the importing country. ³Canadian % share of import market (value) is for hemp fibre only.

Canada's Top Exports of Hemp Seed & Hemp Products

		(million \$)					
		2006	2007	2008	2009		
1	Hemp Seeds	1.6	2.7	3.6	8.8		
2	Hemp oil and its fractions	0.5	0.7	0.8	1.7		
3	True hemp fibre (not spun) & tow and waste of true hemp	0.0	0.1	0.0	0.1		
4	True hemp fibre raw or retted	0.1	0.0	0.0	0.0		
2011000	Chatiatian Comada May 2010						

Source: Statistics Canada, May 2010.



Source: Global Trade Atlas, March 2010.

Food for Thought...

Hemp is a source of gamma-linolenic acid (GLA), an essential omega-6 fatty acid which may reduce inflammation, arthritis and play a role in cardiovascular disease.

Source: Agriculture and Agri-food Canada.

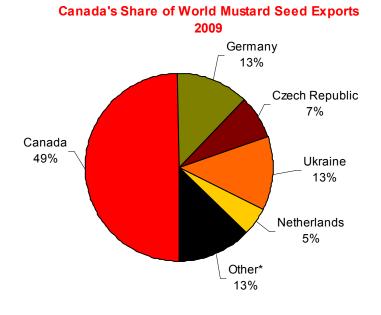
Mustard Seed

Canada is considered the largest exporter (nearly half of the world's exports come from Canada) and the second largest producer of mustard seed in the world. Mustard seed is an annual, cool season crop that can be grown in a short growing season, commonly in rotation with small grains. Canada produces three mustard types: yellow, brown, and oriental. Mustard seed is used primarily as a condiment in the food industry, in the form of whole seed, meal or oil. Mustard seed is also used as an emulsifier, a water binding agent, and for texture control in many food products.

Canada's Top Destinations for Mustard Seed

			Canadian Exports (million \$) ¹			Canadian % Share of Import Market (Value) ²			
		2006	2007	2008	2009	2006	2007	2008	2009
1	United States	27.5	36.7	74.8	64.3	99%	100%	99%	100%
2	Belgium	11.3	13.1	43.3	27.0	56%	61%	58%	40%
3	Germany	3.4	17.9	16.6	5.5	26%	57%	34%	22%
4	Netherlands	2.6	4.7	11.6	5.6	73%	85%	82%	80%
5	Japan	3.2	3.2	4.0	6.9	87%	84%	90%	95%
6	Venezuela	0.8	1.1	1.7	2.8	100%	100%	98%	88%
7	India	1.6	1.7	1.5	0.8	100%	99%	98%	n.a.
8	South Korea	1.6	1.3	1.4	1.3	94%	92%	97%	96%
9	Poland	0.1	0.4	1.4	0.2	2%	8%	11%	4%
10	Thailand	1.4	1.5	1.3	3.5	4%	11%	31%	86%
	Other	9.2	12.1	13.9	10.7				
тот	AL VALUE	62.7	93.9	171.4	128.7	-			

¹: Source: Statistics Canada, March 2010, ²Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.



*: Based on most recent information available. Source: Global Trade Atlas, March 2010.

Food for Thought...

Mustard recipes can be found at: www.saskmustard.ca/consumer/recipes/index.html.

Seeds for Sowing

The Canadian seed industry produces a wide variety of quality seeds for sowing including major cereals and oilseeds, special crops, pulses, forages and turf grasses, ornamental, and garden seeds. The seed industry sustains Canada's vibrant agriculture sector as well as meeting the needs of foreign agricultural sectors.

Canada's Top Destinations for Seeds for Sowing

			(milli	on \$)	
		2006	2007	2008	2009
1	United States	81.4	99.0	89.0	104.9
2	Austria	0.0	16.8	27.2	5.4
3	Germany	0.8	1.4	23.6	4.3
4	United Kingdom	3.4	13.5	17.3	4.9
5	United Arab Emirates	1.8	2.1	2.3	2.5
6	Italy	1.0	8.3	5.6	1.3
7	New Zealand	0.0	0.9	2.4	1.3
8	Algeria	0.8	0.7	2.8	1.0
9	Mexico	0.5	1.9	4.4	0.9
10	Japan	16.5	28.4	12.8	0.7
	Other	53.3	74.9	38.3	35.3
тот	AL VALUE	143.0	219.5	212.8	162.5

Source: Statistics Canada, March 2010.

Canada's Top Exports of Seeds for Sowing¹

		(million \$)				
		2006	2007	2008	2009	
1	Yellow dent corn seed	17.5	46.5	74.7	47.5	
2	Navy/white pea bean seeds of a kind for sowing, dried, shelled	11.1	29.2	29.9	8.7	
3	Bean seeds of a kind for sowing, nes, dried, shelled	28.0	31.7	23.0	34.4	
4	Lentil seeds of a kind used for sowing, dried, shelled	11.5	22.0	21.0	17.2	
5	Barley seed	21.8	20.8	10.1	2.5	
	Other	53.0	69.3	54.1	52.3	
		143.0	219.5	212.8	162.5	

TOTAL VALUE

¹Seeds for sowing excludes forages and grass seed.

Source: Statistics Canada, March 2010.

Sunflower Seeds

Sunflower is an annual broadleaf plant that can be successfully grown in most regions of Canada. It is the only oilseed native to the northern Great Plains of North America and has been commercially grown in Canada since the early 1940s. Canada produces both confectionery and oilseed varieties of sunflower seed, and is a competitive partner in the growing international market for this special crop.

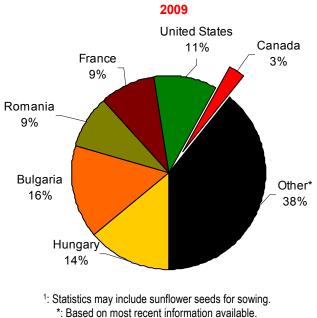
Sunflower seeds fall into three categories: in shell, kernel, and birdseed. Compared with other vegetable oils and animal fats, sunflower oil is very high in polyunsaturated fatty acids, making it easily digestible and provides a good option when choosing cooking oil, particularly if high cholesterol is a concern. The oil is used for frying or to produce salad dressings, shortening, and margarine. The protein content of sunflower seeds is high, and they can serve as a meat substitute.

Canada's Top Destinations for Sunflower Seeds¹

		Canadian % Share of Import							
	_		anadian Exp	orts (million \$	5) ²	N	Market (Value) ³		
		2006	2007	2008	2009	2006	2007	2008	2009
1	United States	16.1	51.1	48.8	38.7	63%	83%	75%	70%
2	United Arab Emirates	4.5	12.0	19.2	14.6	n.a.	n.a.	n.a.	n.a.
3	Mexico	2.6	1.0	1.1	1.6	25%	15%	16%	15%
4	Syria	2.1	1.6	1.1	2.1	n.a.	n.a.	n.a.	n.a.
5	Saudi Arabia	0.4	0.3	0.9	0.0	n.a.	n.a.	n.a.	n.a.
6	Kuwait	0.4	0.3	0.6	0.4	n.a.	n.a.	n.a.	n.a.
7	Costa Rica	0.5	0.4	0.6	0.5	81%	99%	79%	n.a.
8	Lebanon	0.3	0.4	0.6	0.3	n.a.	n.a.	n.a.	n.a.
9	Japan	0.0	0.1	0.5	0.7	8%	19%	25%	29%
10	Guatemala	0.3	0.4	0.5	0.5	79%	84%	80%	81%
	Other	4.3	4.7	5.0	4.8				
TOT	AL VALUE	31.7	72.2	78.9	64.2				

¹ Statistics may include sunflower seeds for sowing.

²: Source: Statistics Canada, March 2010, ³: Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.



Canada's Share of World Sunflower Seed Exports¹

Source: Global Trade Atlas, March 2010.

Canada's Top Exports of Other Special Crops

		(million \$)					
		2006	2007	2008	2009		
1	Wild Rice	2.6	3.0	2.8	2.0		
2	Safflower Seeds	0.7	0.0	0.0	0.0		
3	Sugar Beets	0.0	0.0	0.0	0.0		
тс	TOTAL VALUE 3.3 3.0 2.9 2.0						
n	Anna Otatiatian Canada Manah 2010						

Source: Statistics Canada, March 2010.

Canada's Top Destinations for Wild Rice

		(million \$)					
		2006	2007	2008	2009		
1	United States	1.1	0.6	1.1	0.8		
2	Germany	0.6	1.1	0.6	0.4		
3	Netherlands	0.2	0.0	0.2	0.3		
	Other	0.7	1.3	0.9	0.6		
ТС	TAL VALUE	2.6	3.0	2.8	2.0		
· · · · · ·	aurea Chabiatian Canada March 2010						

Source: Statistics Canada, March 2010.

Canadian Special Crops Export Growth 2006-2009

From 2006 to 2009, Canadian special crops export volume dropped by 19 percent and export value grew by 15 percent. Hemp seeds and hemp products exports experienced the highest percentage growth in terms of volume and value. Different factors can impact export and import growth; for example, major economic factors such as commodity prices and on-farm costs of production.

Commodity prices are influenced by market demand, domestic and international agreements, and government policies and programs, agronomic conditions, weather, and relative prices. The level of world supply can also be influenced by changes in prices.

		Volume	Value
1	Buckwheat	-55%	-46%
2	Canary Seed	-18%	37%
3	Forage & Grass Seed	-38%	-9%
4	Forages, Hay & Clover	-40%	-24%
5	Ginseng Roots	24%	13%
6	Hemp Seeds & Hemp Products	970%	282%
7	Herbs, Spices & Medicinal Plants	-11%	13%
8	Mustard Seed	-21%	105%
9	Seeds for sowing	-23%	14%
10	Sunflower Seeds	21%	103%
	Other ¹	-76%	-38%
	All Special Crops Exports	-19%	15%

¹: Other includes wild rice, safflower seeds and sugar beets.

Source: Statistics Canada, March 2010.

World Import Growth 2006-20091

		Volume	Value
1	Buckwheat	136%	133%
2	Canary Seed	-48%	179%
3	Forage & Grass Seed	-19%	-2%
4	Forages, Hay & Clover	15%	104%
5	Ginseng Roots	-39%	-52%
6	Hemp Seed & Hemp Products	-87%	-84%
7	Herbs, Spices & Medicinal Plants	24%	47%
8	Mustard Seed	789%	661%
9	Seeds for Sowing	-8%	76%
10	Sunflower Seeds ²	39%	130%
	Other ³	-25%	-9%
	All Special Crops Exports	7%	56%

1: Based on the most recent information available.

²: Statistics may include sunflower seeds for sowing.

³: Sugar beets only.

Source: Global Trade Atlas, March 2010.

Select Emerging Markets for Forage & Grass Seed

		 	 2006-2009 World Import Growth ¹			
			%	Tonnes		
1	India		250%	7,175		
2	Australia		30%	2,308		

¹: Based on most recent information available.

Source: Global Trade Atlas, March 2010.

Select Emerging Markets for Forages, Hay & Clover

		2006-2009 Worl	d Import Growth ¹
		%	Tonnes
1	China	16880%	76,298
2	Romania	1609%	10,571
1. Bas	ed on most recent information available		

¹: Based on most recent information available.

Source: Global Trade Atlas, March 2010.

Select Emerging Markets for Mustard Seed

			2006-2009 World Import Growth ¹				
			% Tonnes				
1	Hungary		974%	3,887			
2	Austria		39%	1,064			
3	Germany		19%	6,671			
-	1 1	 					

1: Based on most recent information available.

Source: Global Trade Atlas, March 2010.

Select Emerging Markets for Sunflower Seeds¹

		2006-2009 World Import Growth ²					
		% Tonnes					
1	Paraguay	3616%	17,121				
2	Serbia	305%	25,353				
3	Hungary	147%	24,475				

¹: Based on most recent information available. Source: Global Trade Atlas, March 2010.

24

Top Markets for Forage & Grass Seed

			Imports (00)0' tonnes) ¹	2009 Canadian Share of Import Market (Value)	
		2006	2007	2008	2009	%
1	United States	55.8	58.0	49.2	33.7	84%
2	Germany	2.7	3.9	4.5	2.2	3%
3	China	1.9	2.0	2.4	1.9	9%
	Total World Imports	70.2	74.8	68.0	43.7	

1: Based on most recent information available.

Source: Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.

Top Markets for Forages, Hay & Clover

	p markets for Torage		Imports (0	00' tonnes) ¹	2009 Canadian Share of Import Market (Value)	
		2006	2007	2008	2009	%
1	Japan	455.7	492.6	300.6	235.5	10%
2	United States	117.4	184.7	193.0	142.5	92%
3	South Korea	41.9	31.8	13.2	6.6	1%
	Total world Imports	676.9	746.0	529.7	404.7	

¹: Based on most recent information available.

Source: Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.

Т	op Markets for Mustard	Seed	Imports (00)0' tonnes)1		2009 Canadian Share of Import Market (Value)
		2006	2007	2008	2009	%
1	United States	62.3	74.6	69.2	57.2	100%
2	Belgium	26.7	24.9	42.4	22.0	48%
3	Germany	6.9	24.7	12.8	5.3	23%
	Total world Imports	140.8	168.6	159.8	111.2	

¹: Based on most recent information available.

Source: Global Trade Atlas, March 2010. "Canadian % share of import market" represents share of Canadian exports in the importing country.

Top Markets for Sunflower Seeds¹

			Imports (000' tonnes) ¹				
		2006	2007	2008	2009	%	
1	United States	37.5	117.0	68.4	48.5	88%	
2	United Arab Emir.	6.0	12.8	15.9	10.9	30%	
3	Syrian Arab. Rep.	1.7	1.6	1.0	1.7	7%	
	Total world Imports	57.6	140.3	95.3	69.7		

1: Based on most recent information available.

Global Trade Atlas, March 2010. "Canadian % Share of Import Market" represents share of Canadian exports in the importing country.

Canadian Imports of Special Crops 2006-2009

		(million \$)			
		2006	2007	2008	2009
1	Seeds for sowing	166.9	213.3	266.6	293.7
2	Herbs, Spices & Medicinal Plants	86.3	93.4	115.7	126.8
3	Forage & Grass Seed	35.3	33.1	41.0	34.7
4	Sunflower Seeds	10.4	10.8	17.7	23.4
5	Forages, Hay & Clover	5.7	5.7	5.7	11.6
6	Ginseng Roots	11.3	4.9	5.6	5.4
7	Buckwheat	0.2	0.2	0.4	0.5
8	Hemp Seeds & Hemp Products	1.2	0.5	0.5	0.2
9	Mustard Seed	0.2	0.9	0.3	1.2
10	Canary Seed	0.0	0.1	0.0	0.0
	Other ¹	2.6	3.3	3.8	2.4
	TOTAL VALUE	320.2	366.1	457.4	499.9

1: Other includes wild rice, safflower seeds and sugar beets.

Source: Statistics Canada, March 2010.

Canada's Top Suppliers of Special Crops 2006-2009

			(million \$)			
		2006	2007	2008	2009	
1	United States	197.4	228.8	292.9	300.2	
2	China	33.2	26.8	35.0	40.2	
3	Netherlands	17.2	19.4	24.4	29.2	
4	Chile	8.0	17.1	18.6	40.2	
5	India	8.8	9.3	11.5	11.8	
6	Madagascar	3.9	5.7	5.3	9.3	
7	Turkey	2.9	3.8	5.0	4.3	
8	Mexico	2.2	3.9	4.9	5.3	
9	France	2.9	3.4	4.3	3.6	
10	Guatemala	0.8	1.9	3.9	2.6	
	Other	42.8	45.9	51.4	53.3	
	TOTAL VALUE	320.2	366.1	457.2	499.9	

Source: Statistics Canada, March 2010.

Canadian Agriculture Labour Force

The number of people of employed in Canadian agriculture decreased by 7 percent from an estimated 346,000 employees in 2006 to nearly 321,000 employees in 2009. Canadian agriculture now represents almost 9 percent of people employed in the total goods-producing sector and nearly 2 percent in all Canadian industries. In 2009, about 70 percent of agriculture employees were men and 30 percent were women. Of the number of Canadian agriculture employees in 2009, Ontario represented 26 percent followed by Quebec (18 percent), Alberta (17 percent), Saskatchewan (14 percent) and Manitoba (8 percent). Newfoundland, Prince Edward Island, Nova Scotia and New Brunswick, collectively had a 6 percent share of total agriculture employees. In the 2006 Census of Agriculture, the average age of farm operators was 52 years, up from 49.9 years in 2001 and 48.4 years in 1996. In contrast, the average age of the Canadian labour force is 41.2 years.

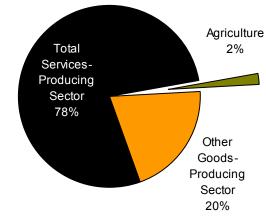
		Employees (thousands)						
	2006	2006 2007 2008 2009						
Agriculture	346.4	337.2	327.0	320.5				
Other Goods-Producing Sector	3,639.5	3,655.7	3,694.4	3,416.0				
Total Goods-Producing Sector ¹	3,985.9	3,993.0	4,021.3	3,736.4				
Total Services-Producing Sector ²	12,498.4	12,873.5	13,104.5	13,112.5				
Total All Industries	16,484.3	16,866.4	17,125.8	16,848.9				

¹: Total goods-producing sector consists of the following industries: agriculture; forestry, fishing, mining, oil and gas; utilities; construction and manufacturing.

²: Total services-producing sector consists of the following industries: trade; transportation and warehousing; finance, insurance, real estate and leasing; professional, scientific and technical services; business, building and other support services; educational services; health care and social assistance; information, culture and recreation; accommodation and food services; other services and public administration.

Source: Statistics Canada, 71F0004XCB, Labour Force Survey, January 2010.





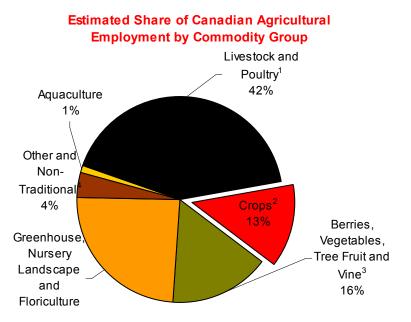
Source: Statistics Canada, 71F0004XCB, Labour Force Survey, January 2010.

Food for Thought...

It is estimated that the Canadian ingredient market processes 50,000 to 70,000 tonnes of pulses into flour or its constituent parts.

Source: Alberta Agriculture and Food.

In their study, Labour Market Information on Recruitment and Retention in Primary Agriculture, the Canadian Agricultural Human Resource Council (CAHRC) estimates that crop commodities (all farm sizes), which includes pulses, employed an estimated 13 percent of Canadian agricultural employees. The largest employing commodity group was livestock and poultry (42 percent) followed by the greenhouse, nursery landscape and floriculture group (24 percent) and the commodity group berries, vegetables, tree fruit and vine (16 percent). The remaining commodity groups, other and non-traditional, and aquaculture employed an estimated 4 percent of Canadian agricultural employees, respectively.



¹: Beef and dairy cattle, poultry and eggs, swine, and other animals including sheep, goats, bison, elk, alpaca, horses, rabbits, deer, fox and mink.

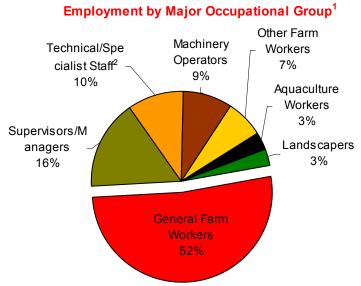
²: Grains, cereals, oilseeds, pulses, pastures, forages, fibre and seed production.

³: Field fruit and vegetables, melons, potato, tree fruit and vine.

⁴: Herbs and spices, maple, sod, bees, tobacco, hemp and non-timber forest products.

Source: Labour Market Information on Recruitment and Retention in Primary Agriculture, Canadian Agricultural Human Resource Council, 2009.

The CAHRC study also provides estimates of employment by major occupational group (non-seasonal positions). General farm workers represented approximately half of the share of Canadian agricultural employment (52 percent). The second largest occupational group were supervisors/managers with an estimated 16 percent followed by technical/specialist staff (10 percent), machinery operators (9 percent) and other farm workers (7 percent). Aquaculture workers and landscapers had the smallest shares of Canadian agricultural employment with 3 percent each.



Estimated Share of Canadian Agricultural

¹: Non-seasonal positions.

²: Science professionals, agricultural consultants and specialists, technicians and engineers, and professional/technical animal health workers (formally trained).

Source: Labour Market Information on Recruitment and Retention in Primary Agriculture, Canadian Agricultural Human Resource Council, 2009.

Food for Thought...

Europe and Oceania are the two regions of the world where pulses are still consistently used in large quantities for livestock feed. In Europe, it is mainly dry peas and dry beans that are used as feed and in Oceania, lupins are consumed as livestock feed. Source: Saskatchewan Pulse Growers.

Business Risk Management Programs

Under the federal-provincial-territorial initiative, Growing Forward, a suite of Business Risk Management programs is available to producers to help protect their income and manage risks such as drought, flooding, low prices, and increased input costs. Together, these programs provide protection for different types of losses, as well as cash flow options.

Agrilnvest

Agrilnvest is a savings account for producers, supported by governments, which provides coverage for small income declines and allows for investments that help mitigate risks or improve market income.

For more information about Agrilnvest, please visit: <u>www.agr.gc.ca/agriinvest</u> or call AAFC toll free at 1-866-367-8506.

AgriStability

The AgriStability program provides support when a producer experiences larger farm income losses. The program covers declines of more than 15 percent in a producer's average income from previous years.

For more information about AgriStability, please visit: <u>www.agr.gc.ca/agristability</u> or contact AAFC toll free at 1-866-367-8506.

Agrilnsurance

Agrilnsurance is an existing program which includes insurance against production losses for specified perils (weather, pests, disease) and is being expanded to include more commodities.

For more information about Agrilnsurance, please visit: <u>www.agr.gc.ca/agriinsurance</u> or contact AAFC toll free at 1-866-367-8506.

AgriRecovery

AgriRecovery is a disaster relief framework which provides a coordinated process for federal, provincial and territorial governments to respond rapidly when disasters strike, filling gaps not covered by existing programs.

For more information about AgriRecovery, please visit: <u>www.agr.gc.ca/agrirecovery</u> or contact AAFC toll free at 1-866-367-8506.

Advance Payments Program (APP)

APP is a complementary program to the Business Risk Management suite. It helps crop and livestock producers with cash flow and provides flexibility for marketing of commodities.

For more information about the APP, please visit: <u>www.agr.gc.ca/app</u> or contact AAFC toll free at 1-866-367-8506.

Useful Links

AAFC Programs and Services

Information on Growing Forward Programs and Services is available at: www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1204137480722&lang=eng

Statistics

For the latest market information and analysis available from Agriculture and Agri-Food Canada, please consult the following publication:

Canada: Pulse and Special Crops Outlook www.agr.gc.ca/pol/mad-dam

Associations

The Canadian Special Crops Association represents most exporters, dealers, brokers, and processors involved in trading Canada's special crops. These crops include dry peas, lentils, mustard seed, buckwheat, dry beans, chickpeas, faba beans, safflower seeds, canary seeds, and sunflower seeds. A request for prices can be submitted at: www.specialcrops.mb.ca/request.html.

Canadian Special Crops Association 1215 - 220 Portage Avenue Winnipeg, Manitoba R3C 0A5 Canada Email: office@specialcrops.mb.ca Tel: 204-925-3780/925-3783 Fax: 204-925-3785 Web: <u>www.specialcrops.mb.ca</u>

Canaryseed Association of Canada 212-111 Research Drive Saskatoon, Saskatchewan S7N 3R2 Canada Email: office@agribiz.ca Tel: 306-975-6624 Fax: 306-975-0136 Web: <u>www.canaryseed.ca</u>

Saskatchewan Herb and Spice Association P.O. Box 18 Phippen, Saskatchewan S0K 3E0 Canada Email: shsa@sasktel.net Tel: 306-694-4622 Fax: 306-694-2182 Web: www.saskherbspice.org Alberta New Crops Network (ANCN) Upper 5303 - 91 Street Edmonton, Alberta T5B 4K3 Canada Email: newcrops@telusplanet.net Tel: 780-490-6462 Fax: 780-490-6472

Alberta Natural Health Agriculture Network (ANHAN) P.O. Box 67314, Hawkstone RPO Edmonton, AB, T6M 0J4 Canada Email: info@anhan.org Tel: 780-986-0262 Toll-free: 1-888-986-0262

B.C. Herb Growers Association 998 Skeena Drive Kelowna, British Columbia V1V 2K7 Canada Email: info@bcherbgrowers.com

Canadian Herb Society VanDusen Botanical Gardens 5251 Oak Street Vancouver, British Columbia V6M 4H1 Canada Email: info@herbsociety.ca Tel: 604-224-0457 Fax: 604-222-9613

Canadian Spice Association 160 Eglinton Avenue, East, Suite 300 Toronto, Ontario M4P 3B5 Canada Email: info@canadianspiceassociation.com Tel: 416-595-5333 ext.41 Fax: 416-595-8226 Web: www.canadianspiceassociation.com

Fédération de l'agriculture biologique du Québec 555 Boul Roland Therrien Longueuil, Quebec J4H 3Y9 Canada Email: fabq@upa.gc.ca Tel: 450-679-0530 Fax: 450-670-4867 Filière des plantes médicinales biologiques du Québec C.P. 43, Magog, Quebec J1X 3W7 Email: fpmq@plantesmedicinales.qc.ca Tel: 819-847-1862 Fax: 819-847-1814 Web: www.plantesmedicinales.qc.ca (available in French only)

Flower and Herb Growers Association of Alberta 244034 Range Road 32 Calgary, Alberta T3Z 2E3 Southern Alberta Tel: 403-686-4434 Peace Region Tel: 403-538-1429 Fax: 403-242-8018

Herb Society of Manitoba c/o Assiniboine Park Conservatory 15 Conservatory Drive Winnipeg, Manitoba R3P 2N5 Canada Email: info@herbsociety.com Web: www.herbsocietymb.com

Medicinal & Aromatic Plants Association of Manitoba PO Box 20024 Selkirk, Manitoba R1A 1S0 Canada Tel: 204-766-2669 Fax: 204-482-8667

Newfoundland Herb Association 55 Springdale Street St. John's, Newfoundland A1C 5B2 Canada Email: di3@talkherbs.net Tel: 709-726-3271

P.E.I. Medicinal Plants Association c/o Island Root Company RR 1 Montague, P.E.I. COA 1R0 Canada Email: julius@iqu.pe.ca Tel: 902-962-3613 Fax: 902-962-3613

Western Canadian Organic Herb and Spice Association P.O. Box 16 Opal, Alberta T0A 2R0 Email: wcdnherb@telusplanet.net Tel: 780-909-1634 Fax: 780-942-3992 Canadian Grassland and Forage Association Email: mfc@mbforagecouncil.mb.ca Tel: 204-726-9393 Interim Director: Wayne Digby

Canadian Dehydrators Association 203 - 12904, 50th Street NW Edmonton, Alberta T5A 4L2 Canada Email: thinkalfalfa@dehyassoc.ca Tel: 780-450-0169 Fax: 780-450-0604 Web: www.dehyassoc.ca

Associated Ginseng Growers of British Columbia Box 241 Vermon, British Columbia V1T 6M2 Canada Tel/Fax: 250-957-9367

Ontario Ginseng Growers Association 191 Queensway West, Unit 2 Simcoe, Ontario N3Y 2M8 Canada Email: admin@ginsenggrowers.com Tel: 519-426-7046 Fax: 519-426-9087 Web: www.ginsengontario.com

Canadian Hemp Trade Alliance (CHTA) Box 1484 Steinbach, Manitoba R5G 1N2 Canada Email: info@hemptrade.ca Tel: 204-326-9542 Fax: 204-346-1029 Web: www.hemptrade.ca

Saskatchewan Mustard Development Commission 212-111 Research Drive Saskatoon, Saskatchewan S7N 3R2 Canada E-mail: info@saskmustard.com Tel: 306-975-6629 Fax: 306-975-0136 Web: www.saskmustard.ca Canadian Seed Growers' Association P.O. Box 8455 202 - 240 Catherine Street Ottawa, Ontario K1G 3T1 Canada Email: seeds@seedgrowers.ca Tel: 613-236-0497 Fax: 613-563-7855 Web: www.seedgrowers.ca

Canadian Seed Trade Association 39 Robertson Road, Suite 505 Ottawa, Ontario K2H 8R2 Canada Email: csta@cdnseed.org Tel: 613-829-9527 Fax: 613-829-3530 Web: www.cdnseed.org

Commercial Seed Analysts Association of Canada 915 Highway #7 Oakwood, Ontario K0M 2M0 Canada Email: csaac@rogers.com Tel: 705-953-9459 Fax: 705-953-9384 Web: www.seedanalysts.com

Canadian Seed Institute Suite 200 - 240 Catherine Street Ottawa, Ontario K2P 2G8 Canada E-mail: jmccullagh@csi-ics.com Tel: 613-236-6451 Fax: 613-236-7000 Toll Free: 1-800-516-3300 Web: www.csi-ics.com

National Sunflower Association of Canada 38-4th Avenue N.E. Box 1269 Carman, Manitoba R0G 0J0 Canada Email: info@canadasunflower.com Tel: 204-745-6776 Web: www.canadasunflower.com

Provincial Links

Buckwheat

Alberta Agriculture and Rural Development www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/agdex103?opendocument

Manitoba Agriculture, Food and Rural Initiatives www.gov.mb.ca/agriculture/crops/specialcrops/bib01s01.html

Ontario Ministry of Agriculture, Food and Rural Affairs www.omafra.gov.on.ca/english/crops/pub811/9buck.htm

Canary Seed

Alberta Agriculture and Rural Development www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/agdex120?opendocument

Saskatchewan Ministry of Agriculture www.agriculture.gov.sk.ca/Default.aspx?DN=b3b1fd99-df9c-4da2-bd0e-6342bdef9e69

Manitoba Agriculture, Food and Rural Initiatives www.gov.mb.ca/agriculture/crops/specialcrops/bic01s01.html

Caraway Seed

Alberta Agriculture and Rural Development www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/agdex123?opendocument

Saskatchewan Ministry of Agriculture www.agriculture.gov.sk.ca/Default.aspx?DN=3ab32959-9a01-4d97-b97d-feb19a251b86

Manitoba Agriculture, Food and Rural Initiatives www.gov.mb.ca/agriculture/crops/specialcrops/bid01s01.html

Ontario Ministry of Agriculture, Food and Rural Affairs www.omafra.gov.on.ca/english/crops/hort/herbs/carawa.htm

Coriander Seed

Alberta Agriculture and Rural Development www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/agdex121?opendocument

Saskatchewan Ministry of Agriculture www.agriculture.gov.sk.ca/Default.aspx?DN=bbd5605d-c129-478d-bde3-bbd6da56aa34

Manitoba Agriculture, Food and Rural Initiatives www.gov.mb.ca/agriculture/crops/specialcrops/bie01s01.html

Forages

British Columbia Ministry of Agriculture and Lands www.agf.gov.bc.ca/aboutind/products/plant/forage.htm

Alberta Agriculture, Food and Rural Development www.agric.gov.ab.ca/app21/seltopic?cat1=Crops&cat2=Forages+%26+Range

Saskatchewan Ministry of Agriculture www.agriculture.gov.sk.ca/Forages-Annual www.agriculture.gov.sk.ca/Forages-Native www.agriculture.gov.sk.ca/Forages-Perennial

Manitoba Agriculture, Food and Rural Initiatives www.gov.mb.ca/agriculture/crops/forages/

Ontario Ministry of Agriculture, Food and Rural Affairs www.omafra.gov.on.ca/english/crops/field/forages.html

Québec Ministère de l'agriculture, des pêcheries et de l'alimentation (available only in French) www.mapaq.gouv.gc.ca/Fr/Regions/bassaintlaurent/Infofourrage

Prince Edward Island Agriculture, Fisheries and Aquaculture www.gov.pe.ca/af/agweb/index.php3?number=69212&lang=e

Newfoundland and Labrador Natural Resources and Agrifoods <u>www.nr.gov.nl.ca/agric/crops/forage.stm</u>

Ginseng

British Columbia Ministry of Agriculture and Lands www.agf.gov.bc.ca/aboutind/products/plant/ginseng.htm

Ontario Ministry of Agriculture, Food and Rural Affairs www.omafra.gov.on.ca/english/crops/hort/ginseng.html

Industrial Hemp

Saskatchewan Agriculture and Food www.agriculture.gov.sk.ca/Default.aspx?DN=bee18d0a-c34d-4496-a706-f295f172fb6e

Manitoba Agriculture, Food and Rural Initiatives www.gov.mb.ca/agriculture/crops/hemp/bko01s00.html

Alberta Agriculture, Food and Rural Development www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/agdex126?opendocument

Ontario Ministry of Agriculture, Food and Rural Affairs www.omafra.gov.on.ca/english/crops/hort/hemp.html Nova Scotia Department of Agriculture and Nova Scotia Fisheries and Aquaculture www.gov.ns.ca/agri/marketing/research/hempms02.shtml

Herbs, Spices and Medicinal Plants

Alberta Agriculture, Food and Rural Development www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/crop4220

Manitoba Agriculture, Food and Rural Initiatives www.manitoba.ca/agriculture/crops/medicinal/index.html

Ontario Ministry of Agriculture, Food and Rural Affairs www.omafra.gov.on.ca/english/crops/hort/herbs/profiles.htm

Government of Newfoundland and Labrador Natural Resource www.nr.gov.nl.ca/agric/crops/herbs.stm

Mustard Seed

Alberta Agriculture, Food and Rural Development www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/crop764

Manitoba Agriculture, Food and Rural Initiatives www.gov.mb.ca/agriculture/crops/specialcrops/big01s01.html

Saskatchewan Agriculture and Food www.agriculture.gov.sk.ca/mustard

Safflower Seed

Alberta Agriculture, Food and Rural Development www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/crop767

Sunflower Seed

Alberta Agriculture, Food and Rural Development www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/crop768?opendocument

Saskatchewan Agriculture and Food www.agriculture.gov.sk.ca/Sunflower

Manitoba Agriculture, Food and Rural Initiatives www.gov.mb.ca/agriculture/crops/oilseeds/bgd01s01.html

Sugar Beets

Alberta Agriculture, Food and Rural Development www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/econ7509

Wild Rice

Saskatchewan Agriculture and Food www.agriculture.gov.sk.ca/Default.aspx?DN=9f6b2ff8-1ece-4603-b2c9-3025b777e594

Canadian Agricultural Human Resource Council

Labour Market Information on Recruitment and Retention in Primary Agriculture www.cahrc-ccrha.ca/docs/Labour%20Market%20Information%20Final%20Report.pdf

Notes:

Notes:

For further information, please contact:

Market Analysis and Information Section Agriculture and Agri-Food Canada 1341 Baseline Road, Tower 5, 5th floor Ottawa, ON Canada K1A 0C5 <u>SpecialCrops-CulturesSpéciales@agr.gc.ca</u>