

# CANARY SEED SECTOR

## OVERVIEW OF THE CANARY SEED SECTOR IN MANITOBA



- Western Canada is the world's largest producer and exporter of canary seed (*Phalaris canariensis*).
  - Saskatchewan is the main canary seed producing province, Manitoba is generally the second largest producer, followed by Alberta.
  - Canary seed is a cool season crop, well adapted to the long warm days and cool nights characteristic of the growing season in Manitoba.
- In 2011, Manitoba reported 84 canary seed farms compared to 71 in 2006. This represents 7.4% of canary seed farms in Canada and approximately 5 to 6% of Canada's total canary seed production.

Canary Seed	Manitoba	Manitoba	Canada	Canada
	2011	2006	2011	2006
Number of farms	84	71	1,132	1,424
Acres	16,795	8,989	319,296	338,595
Hectares	6,797	3,638	129,214	137,025

- Source: Census of Agriculture 2011
- Canary seed production was first recorded in Manitoba in 1963 when 1,500 acres were harvested. The area seeded to canary seed then increased steadily until 1986, when 57,000 acres were harvested.
- Since this time, the area seeded to canary seed has varied significantly with the volatility of the price, reaching levels greater than 60,000 acres, but also declining to levels as low as 15,000 acres.
- The 10-year average yield is 965 pounds per acre, with the largest ever yield occurring in 1990 when over 1,330 pounds per acre were harvested.
- Canary seed does not fall under a grade standard. Visual appearance is important. It is usually sold as 99 per cent pure seed, with no more than 4 per cent dehulled seeds.

## **PROCESSING CANARY SEED IN MANITOBA**

- Canary seed is used almost exclusively as birdseed, in commercial bird feed mixes for domestic and wild birds.
- Commercial bird feed is made by blending crops such as millet, safflower, canaryseed, flax and canola. Bird feed is sold into two main markets, indoor and outdoor. No standards exist for mixes or packaging.
- Once the canary seed is harvested, it is delivered to cleaning facilities where the foreign material is removed and the seed is cleaned to 98 percent purity (five percent hulled).
- At the present time, canary seed is not graded at the cleaning facilities because it is not a crop that is regulated under the Canadian Grain Act and therefore it does not fall under a grade standard.
- Locally, the seed is cleaned and bagged, or cleaned and mixed with other seed and bagged for sale as birdseed.
- Traditionally, the two registered canary seed varieties produced in Canada are Keet and Elias. Canada developed a new glabrous (hairless) kind of canary seed registered under the trademark Canario™.
- Canario™ has the high protein of regular canary seed and is less irritating to the skin during handling. This makes it the perfect option for birdseed processors and packagers. It will also further enhance Canada's competitive edge in the canary seed market by increasing the volume of seed per shipping container and by eliminating the oiling and polishing steps in processing.
- New Canario™ varieties are subject to strict quality standards. Based on commercial pedigreed seed standards, Canario™ varieties must be 97% hairless in order to bear the Canario™ trademark, which is the processor's guarantee of purity.
- Western Canada supplies most of the bird feed ingredients required by both the indoor and outdoor domestic packaging industry. Packagers distribute bird feed mixes locally through retail and grocery chains and pet stores. Some processors package, label and customize products exclusively for pet, grocery and hardware store chains. Large processors distribute to large and small retail stores and major users such as zoos and wild animal farms.
- Canary seed is high in protein and unsaturated edible oil content. Its high starch content makes it suitable for some industrial uses, such as the cosmetics sector.
- Research is underway to uncover potential new markets for canaryseed. Possible human consumption uses are sesame seed replacement, specialty starch, and vermicelli noodles. Other research is being conducted into the potential use of canary seed husks through the extraction of organic silica, a significant health market product.

## Trade

- The international canary seed market is characterized by large price swings reflecting fluctuations in production and supply. Large markets exist in countries such as the United States, Belgium, Spain, Italy, Mexico, and Brazil, with high urban populations and where birds are popular pets for apartment dwellers.
- World consumption of canaryseed remains fairly constant regardless of price, indicating little substitution of other crops for canaryseed. Demand and consumption does not fluctuate greatly during periods of recession.
- 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.
- Approximately one-half of Manitoba's canary seed production is shipped to a large cleaning facility outside of the province where it is cleaned and loaded onto ships for export to Western Europe, mainly Belgium and the United Kingdom.
- A portion of locally cleaned seed is shipped directly to the United States, Mexico and the South American countries of Brazil and Venezuela.
- Internationally, Canada accounts for about three-quarters of the total world Canary seed production. The bulk of the remainder is grown in Argentina (12 per cent), Australia (3 per cent), Hungary (2.5 per cent) and Mexico (2.5 per cent). Over 94 per cent of the total Canadian production is exported.
- Development of hairless canary seed enhances Canada's competitive position in the canary seed market by increasing the volume of seed per shipping container. It contains the same high protein as traditional canary seed varieties with less dust and less itch due to its hairless properties.
- Prior to export, canaryseed is cleaned to exporters' specifications. Most canaryseed is sold to export markets in bulk or in bags.
- Canaryseed does not fall under the authority of the Canada Grain Act, so the Canadian Grain Commission (CGC) has not established grades for the crop. However, the CGC does perform dockage analysis on samples submitted.
- Canaryseed production contracts are available from a number of special crop marketing companies. A contract provides producers with the option of locking in a price and a market for a portion of their production before the growing season.
- Canary seed production contracts are available from a number of grain companies. Although 80 per cent of producers sell into the cash market, production contracts are still encouraged to help manage risk because of a volatile market place.

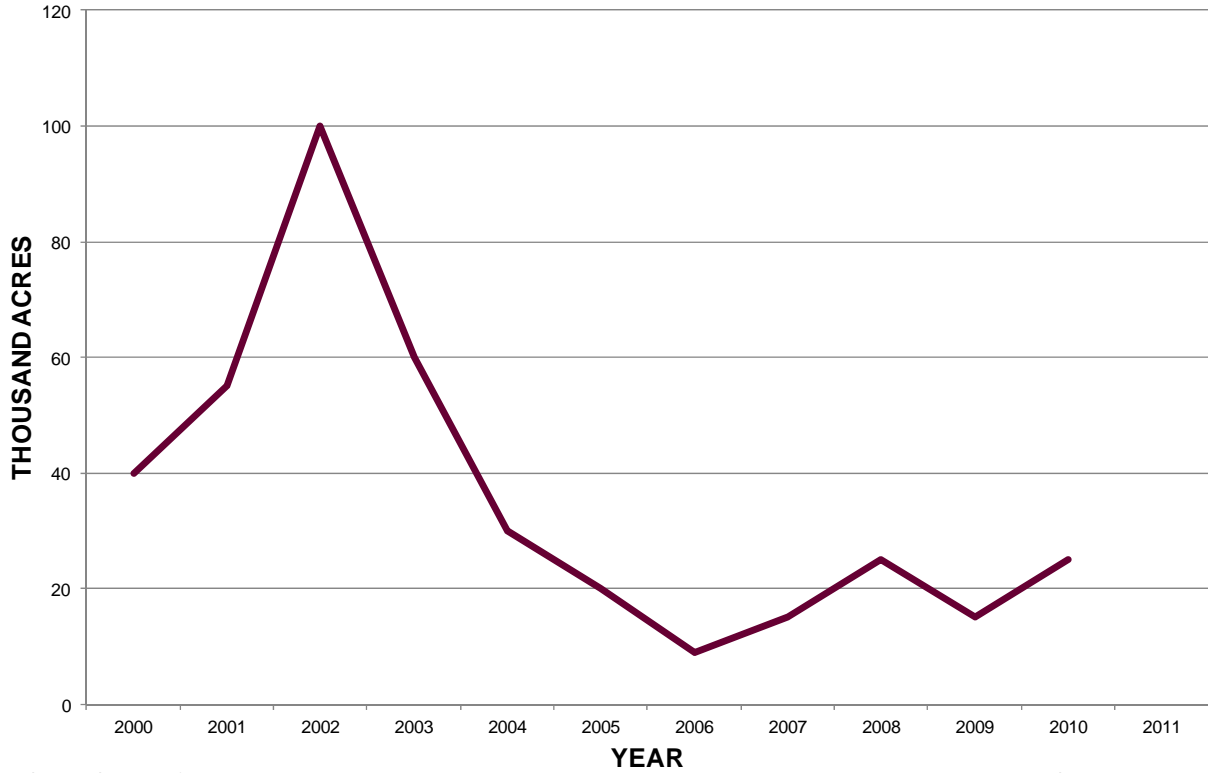
## Canary Seed Outlook for Canada 2012-2013

- For 2012-13, the area seeded is forecast to rise despite lower returns relative to other crops and lower carry-in stocks.
- Production is expected to rise 18% due to increased area and trend yields.
- Due to extremely tight carry-in stocks, supply is forecast to fall by 13% and remain historically tight.
- Exports are expected to be limited due to the lower supply.
- The EU-27 and Mexico are forecast to remain the main markets for Canadian canary seed, with smaller volumes going to the US.
- Carry-out stocks are expected to continue to remain historically low.
- The average price is forecast to fall marginally, but remain near the historical high set in 2011-12.

<b>Outlook for Canary Seed</b>	<b>2010-2011</b>	<b>2011-2012p</b>	<b>2012-2013f</b>
Area Seeded (kha)	158	95	111
Area Harvested (kha)	152	93	108
Yield (t/ha)	1.01	1.10	1.11
Production (kt)	154	102	120
Imports (kt)	0	0	0
Total Supply (kt)	235	143	125
Exports (kt)	179	125	105
Total Domestic Use (kt)	15	13	10
Carry-out Stocks (kt)	41	5	10
Stocks-to-use Ratio (%)	21	4	9
Average Price (\$/t)	560	565-595	560-590

Source: Statistics Canada and Agriculture and Agri-Food Canada, June 2012

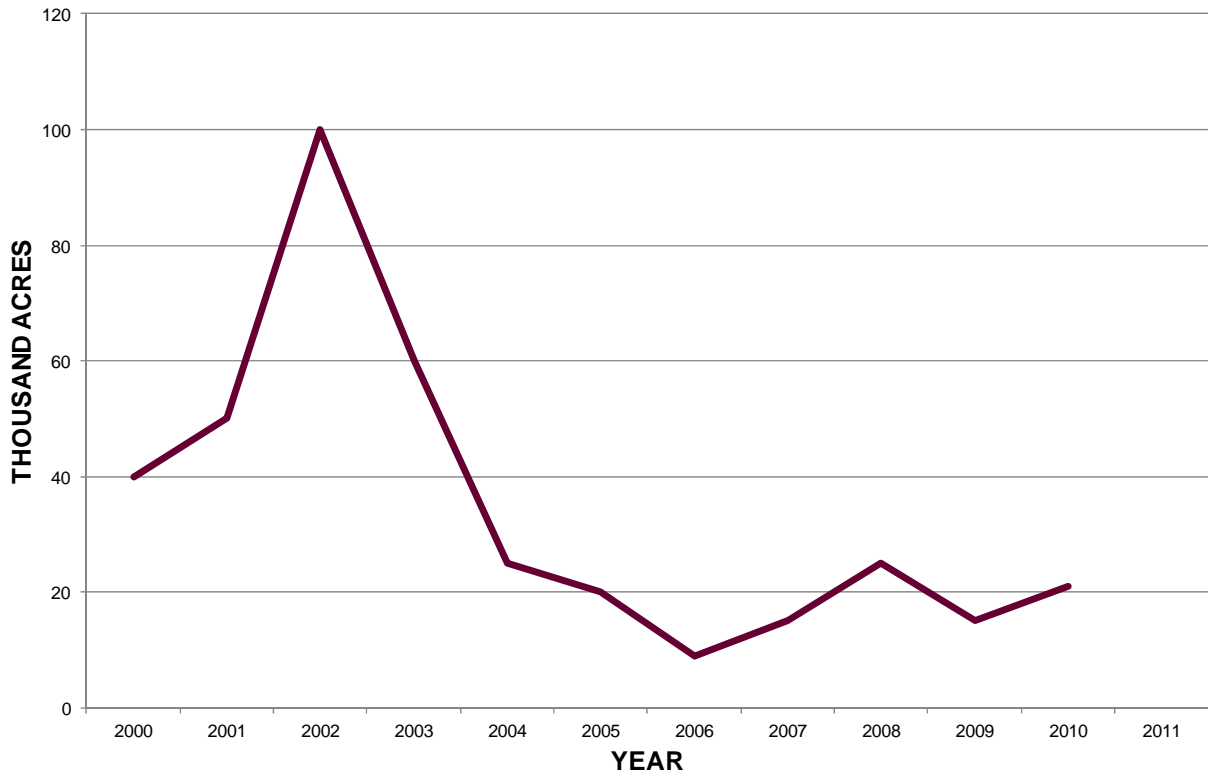
### Canary Seed - Seeded Acres in Manitoba 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

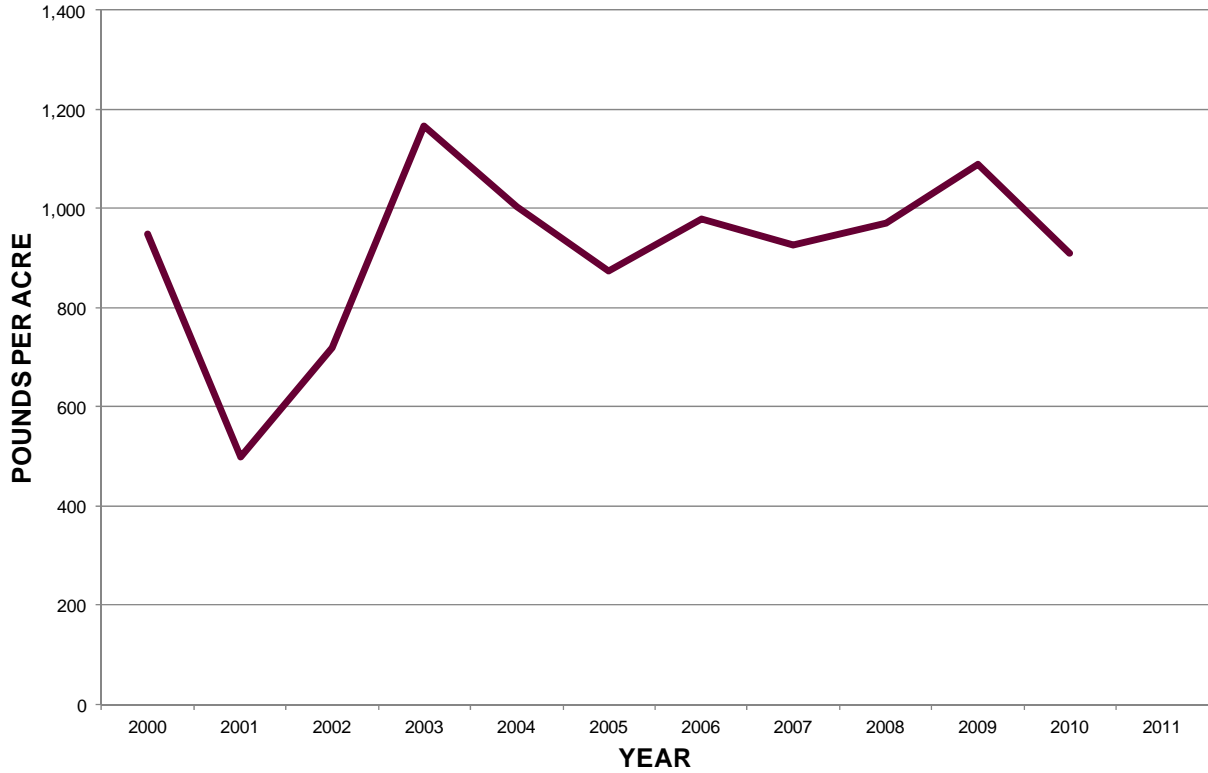
### Canary Seed - Harvested Acres in Manitoba 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

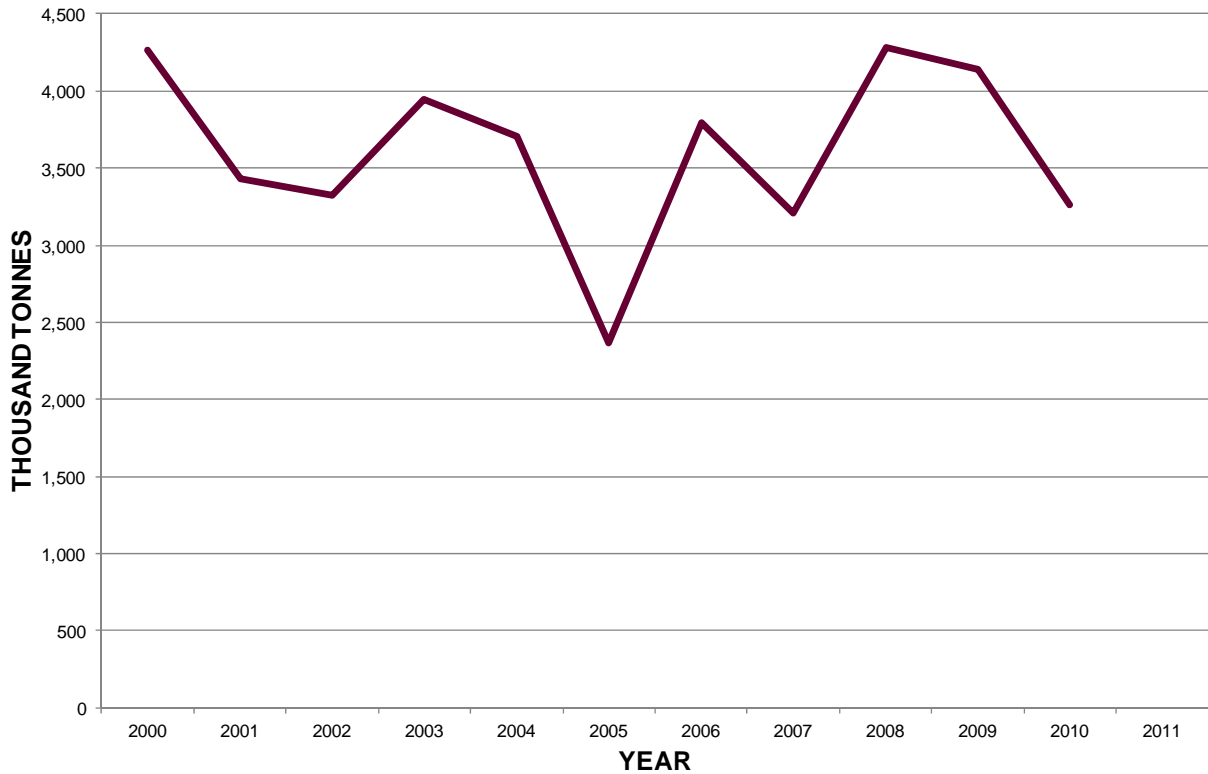
### Canary Seed - Yield per Acre in Manitoba 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

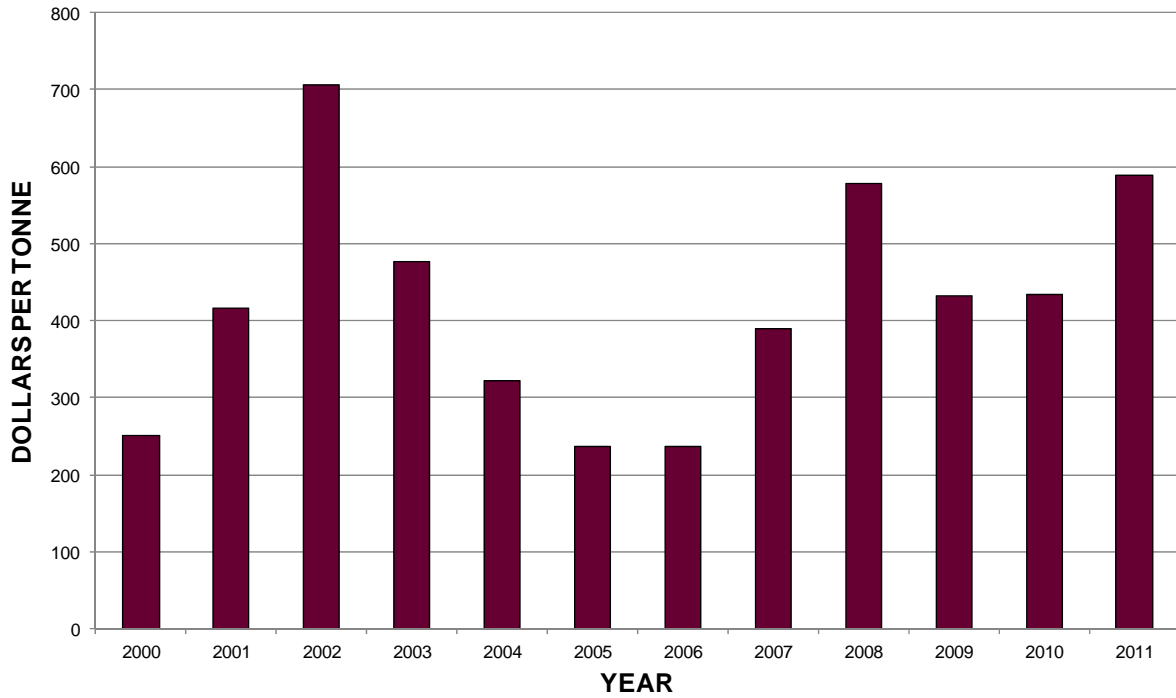
### Canary Seed Production in Manitoba 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

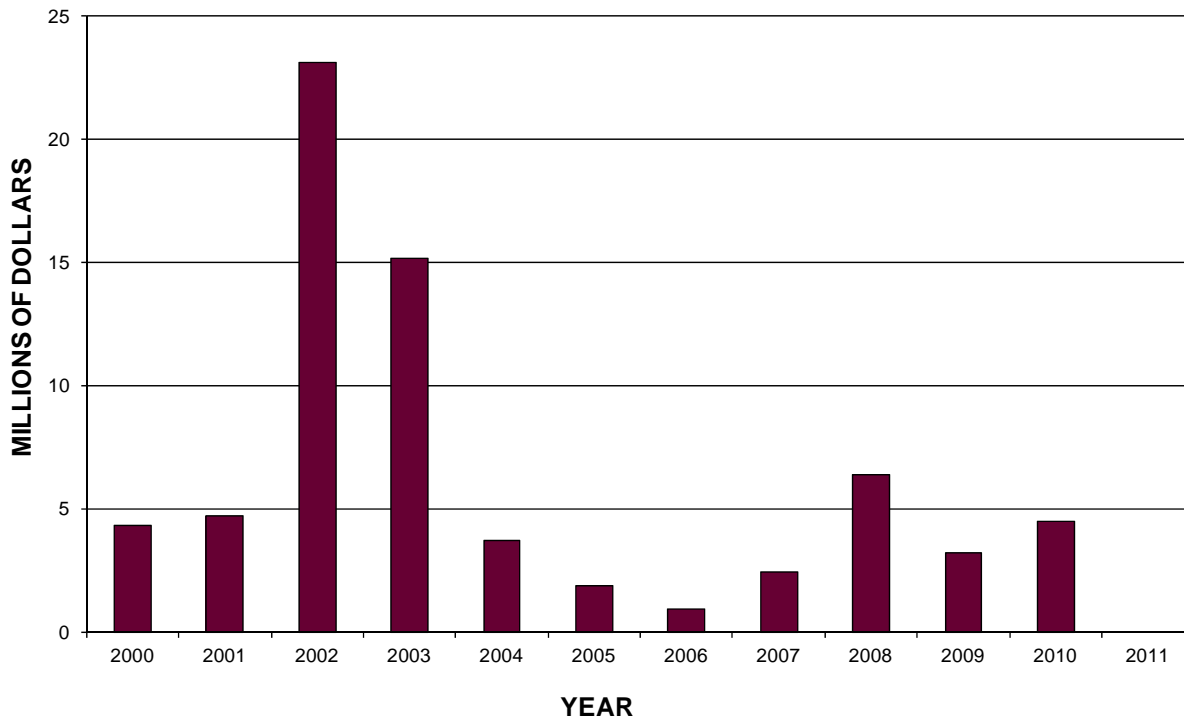
### Canary Seed Prices in Manitoba 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section,

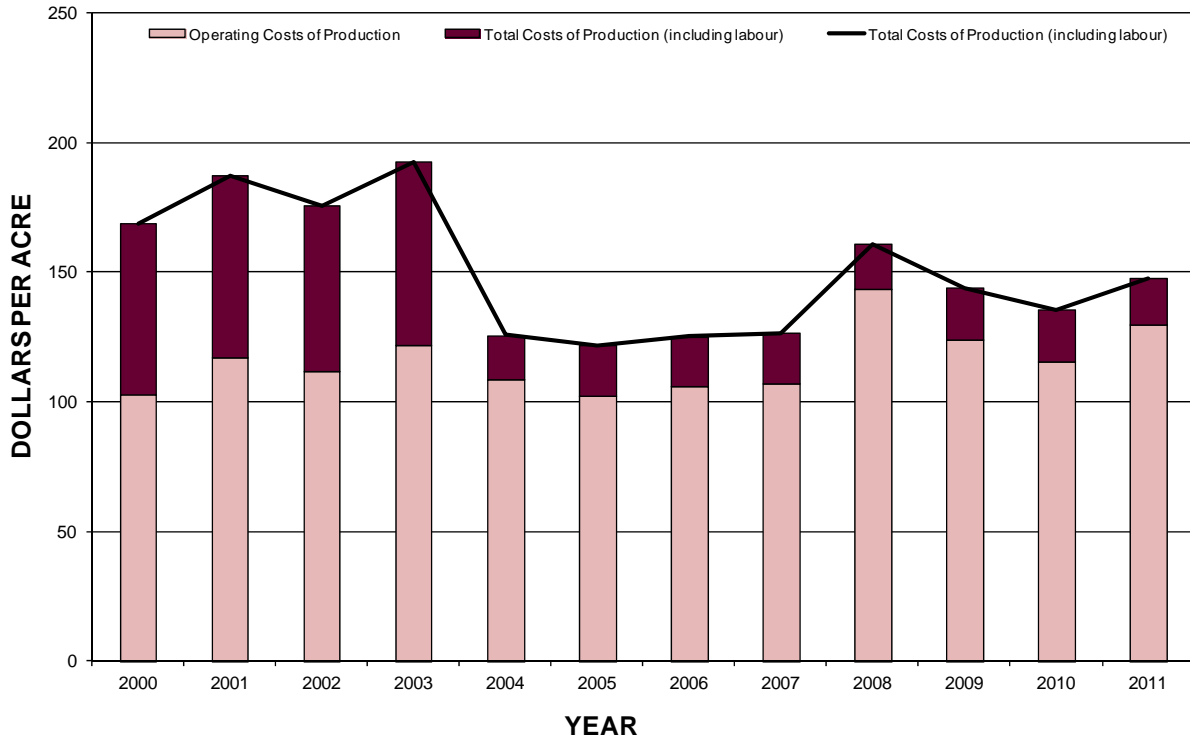
### Value of Canary Seed Production in Manitoba 2000 - 2011



Source: STC, AAFC, MAFRI

Industry Intelligence Section, MAFRI

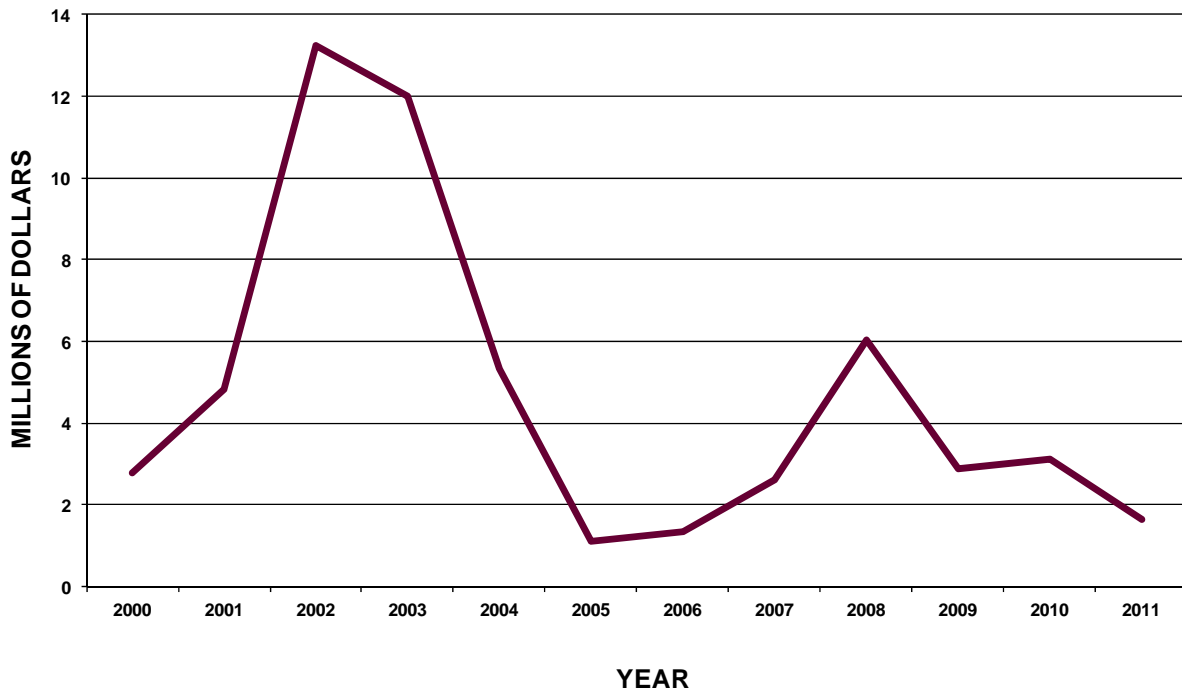
## Cost of Canary Seed Production in Manitoba 2000 – 2011



Source: MAFRI

Industry Intelligence Section, MAFRI

## Farm Cash Receipts for Canary Seed in Manitoba 2000 – 2011

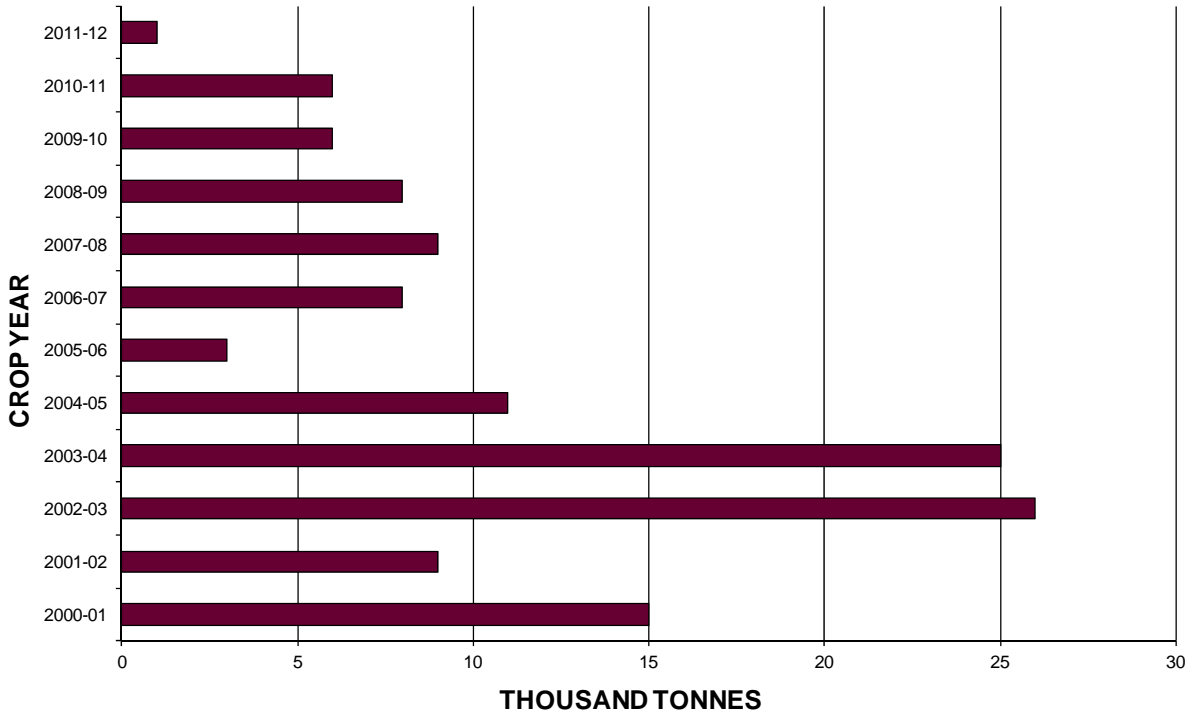


Source: Statistics Canada

Industry Intelligence Section, MAFRI



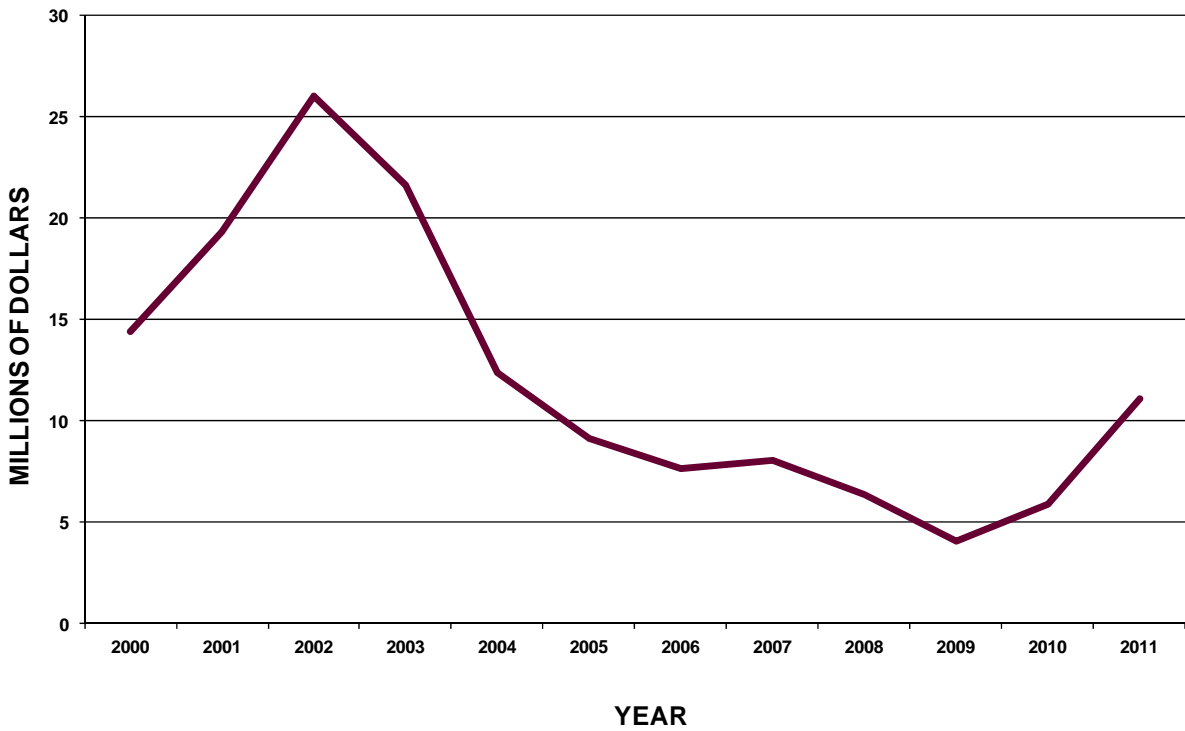
## Marketings of Manitoba Canary Seed 2000 - 2011



Source: STC, AAFC, MAFRI

Industry Intelligence Section, MAFRI

## Manitoba Canary Seed Exports 2000 - 2011



Source: Statistics Canada

Industry Intelligence Section, MAFRI

**Farm Supply and Disposition of Manitoba Canary Seed Crop, 2000/01 to 2011/12**

<i>000 tonnes</i>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
Opening Stocks Aug1	5	10	4	0	0	0	1
Production	8	4	6	11	7	10	0
<b>Total Supply</b>	<b>13</b>	<b>14</b>	<b>10</b>	<b>11</b>	<b>7</b>	<b>10</b>	<b>1</b>
Marketings	3	8	9	8	6	6	1
Seed	0	0	0	0	0	0	0
Carry-over	10	5	0	0	0	0	0
Feed/Waste/Dockage	0	1	1	3	1	4	0
<b>Total Disposition</b>	<b>13</b>	<b>14</b>	<b>10</b>	<b>11</b>	<b>7</b>	<b>10</b>	<b>1</b>

<i>000 pounds</i>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>
Opening Stocks Aug1	11,023	22,046	8,818	0	0	0	2,205
Production	17,637	8,818	13,228	24,251	15,432	22,046	0
<b>Total Supply</b>	<b>28,660</b>	<b>30,865</b>	<b>22,046</b>	<b>24,251</b>	<b>15,432</b>	<b>22,046</b>	<b>2,205</b>
Marketings	6,614	17,637	19,842	17,637	13,228	13,228	2,205
Seed	0	0	0	0	0	0	0
Carry-over	22,046	11,023	0	0	0	0	0
Feed/Waste/Dockage	0	2,205	2,205	6,614	2,205	8,818	0
<b>Total Disposition</b>	<b>28,660</b>	<b>30,865</b>	<b>22,046</b>	<b>24,251</b>	<b>15,432</b>	<b>22,046</b>	<b>2,205</b>

- **CANARY SEED - Common Conversions**

1 metric tonne canary seed = 44.092 bushels.

There are 50 pounds in 1 bushel of canary seed (itchy varieties), while the glabrous (itchless) varieties are typically 56 pounds per bushel.

### Production and Value of Manitoba Canary Seed

Year	Seeded Area (hectares)	Harvested Area (hectares)	Average Yield (kg per ha)	Production (tonnes)	Price/Tonne (\$/tonne)	Total Value (\$000)
1990	12,100	12,100	1,500	18,100	212	3,837
1991	8,131	8,131	898	7,300	182	1,329
1992	7,300	7,300	1,000	7,300	218	1,591
1993	4,900	4,000	775	3,100	260	806
1994	10,100	10,100	1,347	13,600	305	4,148
1995	10,100	10,100	1,208	12,200	433	5,283
1996	28,300	26,300	1,281	33,700	330	11,121
1997	8,100	8,100	1,136	9,200	325	2,990
1998	20,200	18,200	1,368	24,900	257	6,399
1999	6,100	6,100	1,250	7,600	244	1,854
2000	16,200	16,200	1,060	17,200	251	4,311
2001	22,300	20,200	560	11,300	416	4,702
2002	40,500	40,500	810	32,700	706	23,097
2003	24,300	24,300	1,310	31,800	477	15,182
2004	12,100	10,100	1,130	11,400	323	3,680
2005	8,100	8,100	980	7,900	236	1,865
2006	3,600	3,600	1,110	4,000	237	947
2007	6,100	6,100	1,030	6,300	389	2,452
2008	10,100	10,100	1,090	11,000	578	6,358
2009	6,100	6,100	1,210	7,400	432	3,197
2010	12,100	8,500	1,020	10,300	435	4,476
2011	5,700	3,800	970	3,686	589	2,169

Year	Seeded Area (acres)	Harvested Area (acres)	Average Yield (lb per acre)	Production (000 pounds)	Price/Bushel (\$/pound)	Total Value (\$000)
1990	30,000	30,000	1,333.0	40,000	0.10	3,837
1991	20,091	20,091	796.0	16,000	0.08	1,329
1992	18,000	18,000	889.0	16,000	0.10	1,591
1993	12,000	10,000	680.0	6,800	0.12	806
1994	25,000	25,000	1,200.0	30,000	0.14	4,148
1995	25,000	25,000	1,080.0	27,000	0.20	5,283
1996	70,000	65,000	1,142.0	74,200	0.15	11,121
1997	20,000	20,000	1,010.0	20,200	0.15	2,990
1998	50,000	45,000	1,218.0	54,800	0.12	6,399
1999	15,000	15,000	1,113.0	16,700	0.11	1,854
2000	40,000	40,000	950.0	38,000	0.11	4,311
2001	55,000	50,000	500.0	25,000	0.19	4,702
2002	100,000	100,000	720.0	72,000	0.32	23,097
2003	60,000	60,000	1,167.0	70,000	0.22	15,182
2004	30,000	25,000	1,004.0	25,100	0.15	3,680
2005	20,000	20,000	874.0	17,475	0.11	1,865
2006	8,989	8,989	979.0	8,800	0.11	947
2007	15,000	15,000	927.0	13,900	0.18	2,452
2008	25,000	25,000	972.0	24,300	0.26	6,358
2009	15,073	15,073	972.0	16,350	0.20	3,197
2010	29,900	21,004	1,084.7	19,120	0.23	4,476
2011	14,085	9,390	910.3	8,126	0.40	3,254

SOURCE: Statistics Canada; Agriculture and Agri-Food Canada; Manitoba Agriculture, Food and Rural Initiatives.