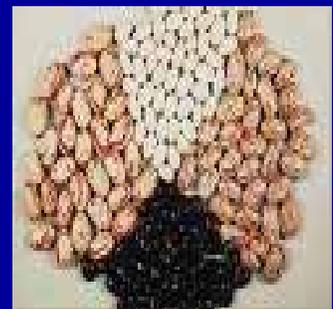


Alberta 2009 Specialty Crop Report



Acknowledgment

The Statistics and Data Development Branch of Alberta Agriculture and Rural Development (ARD) wishes to thank all of the producers who participated in the Alberta 2008 Specialty Crop Survey conducted in the winter of 2008/2009. Without their cooperation and assistance, this report would not have been possible.

Several ARD staff members have made significant contributions to the successful completion and dissemination of this report. Those staff include Charlie Pearson of Competitiveness and Market Analysis Branch, Nabi Chaudhary of Economics Branch, Reynold Jaipaul, Roy Larsen, Melodie Mynzak, Guangzhi Liu, Gail Atkinson, Marion Harry, and Marian Elson of Statistics and Data Development Branch.

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This report is also available on the Internet at:

[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/sdd12862](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/sdd12862)

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Alberta 2008 Specialty Crop Survey

Chuanliang Su

Purpose of Survey

To address some of the data and information needs of the specialty crop industry in Alberta, the Statistics and Data Development (SADD) Branch of Alberta Agriculture and Rural Development (ARD) conducts an annual specialty crop survey. Now into its twenty-sixth year, the survey captures data on area, yield and production for specialty crops grown in the province.

Data gathered from the survey are used primarily to generate related provincial and sub-provincial estimates. In turn, these estimates are used to validate some of the Alberta statistics produced by Statistics Canada, as well as to provide industry and other stakeholders with benchmark data for some of the “new” and emerging crops.

Methodology

The Alberta Specialty Crop Survey, which is provincial in scope, collects data through a non-probability sampling procedure. In February 2009, survey questionnaires were mailed out to 3,582 specialty crop producers across the province. The questionnaires specifically asked survey participants to provide information on the type of specialty crop grown, area (seeded and harvested acres), and yield for 2008. Survey participants were informed that participation in the survey was voluntary. Moreover, all individual responses would be kept confidential under the provisions of the Federal Statistics Act, as well as under the Provincial Freedom of Information and Protection of Privacy (FOIP) Act. As of May 22, 2009, a total of 814 questionnaires were returned. Of this total, 635 were usable and partly formed the basis in the generation of the Alberta 2008 specialty crop estimates.

Survey responses received were reviewed for data completeness, validated and entered into an electronic database. The data was then subjected to computerized analyses, the results of which were rolled up into group summaries, to preserve data confidentiality of individual survey respondents. In turn, the group summaries, in conjunction with information from provincial specialists of ARD, industry, and published sources (e.g. Statistics Canada), were used to generate the provincial and sub-provincial (Census Division) estimates, where appropriate.

It cannot be over emphasized that extensive consultation is done with ARD’s provincial specialists and industry in the development of the provincial/sub-provincial estimates. Provincial specialists are acknowledged for the invaluable insights they offer on crop conditions and yields, particularly when attempting to firm up some of the sub-provincial estimates generated from the survey. Similarly, administrative data on yield and crop area grown under private contracts also add value to the estimates.

It should be noted that the estimates are subject to error. Some of the possible sources of error include data coding, data entry and tabulation. Nonetheless, we believe that the statistics published in this report are reliable estimates for Alberta.

Survey Results

Area, Yield and Production in Alberta

The six major crops grown in Alberta refer to wheat, barley, oats, rye, canola and flaxseed. All other field crops, excluding vegetables and tame hay, are considered as specialty crops. They include dry peas, chick peas, dry beans, fababeans, lentils, mustard seed, sunflower seed, grain corn, silage corn, triticale, canary seed, sugar beets, potatoes, forage seeds and other field crops.

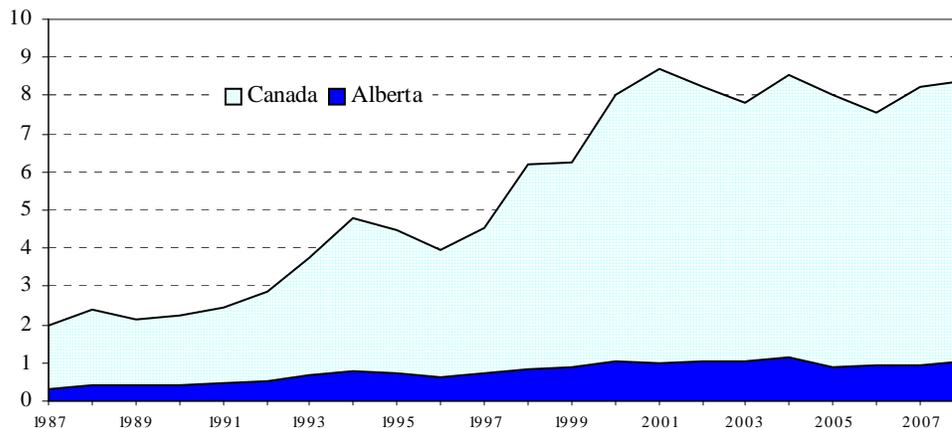
In 2008, producers in Alberta seeded more acres to specialty crops, compared to a year earlier. The total provincial seeded area, excluding potatoes and forage seeds, was estimated at 1.03 million acres, up eight per cent, from 0.96 million acres in 2007 (see Figure 1). Of the total seeded area, over 0.95 million acres or 93 per cent were harvested for grain production. To offer some perspective, shown in Figure 3 on page 4, is the percentage distribution of specialty crop seeded acreage in 2008, by crop type (i.e., pulse crops, oilseeds, corn, forage seeds and other crops).

Crop growing conditions during the 2008 crop season were generally favorable, although cool spring temperatures did cause some delays in seeding and crop emergence. The favorable conditions contributed to above average yields for most specialty crops grown on dryland. For specialty crops under irrigation, yields were mostly similar to their 10-year averages.

The provincial average yield for dry peas in 2008 was estimated at 38.4 bushels per acre, 18 per cent higher than in 2007, and ten per cent above the 10-year average (see Tables 1 and 4). For triticale, the provincial average yield was 54.6 bushels per acre, 40 per cent higher than in 2007, and 31 per cent above the 10-year average. With the majority of its acreage in southern Alberta, mustard seed produced an average yield of 780 pounds per acre, or 11 per cent higher than in 2007, and three per cent above the 10-year average.

The estimated provincial average yields for specialty crops under irrigation were mostly similar to the 10-year averages (see Tables 1 and 4). For dry beans, the provincial average yield was estimated at 2,200 pounds per acre, or two per cent higher than the 10-year average. The provincial average yield for sugar beets was 21.2 tonnes per acre, compared to 21.1 tonnes per acre for the 10-year average. For potatoes, the provincial average yield was 336 cwt per acre, or four per cent above the 10-year average.

**Figure 1 - Specialty Crop Seeded Area, Alberta and Canada
1987-2008 (million acres)**



Source: Statistics Canada; and Alberta Agriculture and Rural Development

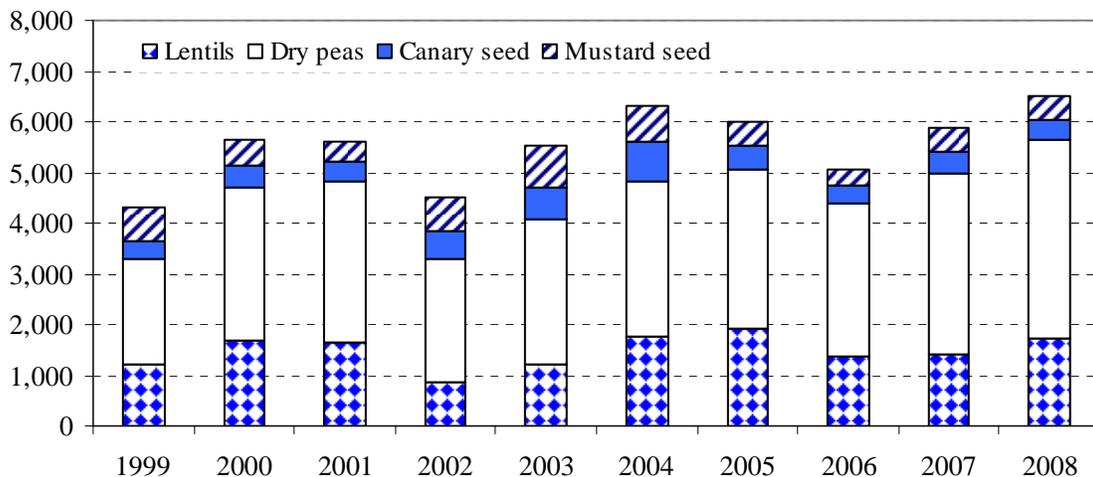
Specialty Crops in Western Canada

Based on the results of “Alberta 2008 Specialty Crop Survey” and Statistics Canada’s “November Estimate of Production of Principal Field Crops, Canada, 2008”, total seeded and harvested acres of specialty crops in Western Canada in 2008 increased from a year earlier. This stemmed mainly from larger areas in Alberta and Saskatchewan, as Manitoba was up only marginally, and area in British Columbia was almost negligible.

In 2008, the total seeded area of specialty crops in Western Canada was estimated at 7.88 million acres, up four per cent from 7.61 million acres in 2007. On a provincial basis, Saskatchewan with its 5.86 million acres accounted for 74 per cent of the 2008 total, while Manitoba and Alberta accounted for 13 per cent each. The specialty crop seeded area in British Columbia was extremely small. Similar to seeded area, the total harvested acreage in Western Canada in 2008 increased three per cent from a year earlier, to 7.61 million acres.

Based on seeded area, the four largest specialty crops grown in Western Canada in 2008 were dry peas, lentils, canary seed and mustard seed. Altogether, these crops accounted for 6.64 million acres, or 84 per cent of the total area seeded to specialty crops. Dry peas, with a total seeded area of 4.00 million acres, was the largest specialty crop, representing more than one-half (51 per cent) of the Western Canada total. Lentils was next, with seeded acres totaling 1.75 million acres (22 per cent of the total), while mustard seed and canary seed accounted for six per cent and five per cent, respectively. Shown in Figure 2 below is the harvested area of the top four specialty crops in Western Canada. Historical statistics on seeded area and production for selected specialty crops are presented in Table 5 on page 13.

**Figure 2 - Harvested Area of Selected Specialty Crops
Western Canada ('000 acres)**

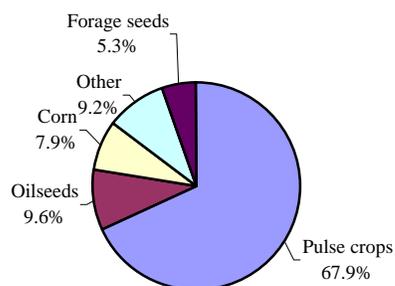


Source: Statistics Canada; and Alberta Agriculture and Rural Development

Table 1: Alberta 2008 Specialty Crops

		Seeded Area (acres)	Harvested Area (acres)	Yield (per acre)	Production (tonnes)
Pulse crops	Dry peas, green	62,500	61,500	37.5 bu	62,700
	Dry peas, yellow	646,000	637,000	38.5 bu	667,400
	Dry peas, other	1,500	1,500	32.0 bu	1,300
	All dry peas	710,000	700,000	38.4 bu	731,400
	Chick peas, desi	500	500	-	-
	Chick peas, kabuli	12,500	12,000	-	-
	All chick peas	13,000	12,500	1,355.0 lbs	7,700
	Dry beans	40,000	35,000	22.0 cwt	34,900
	Fababeans	4,500	4,500	30.0 cwt	6,100
	Lentils	10,000	9,800	1,536.0 lbs	6,800
Oilseeds	Mustard seed, brown	13,000	12,500	665.0 lbs	3,800
	Mustard seed, yellow	87,500	83,500	788.0 lbs	29,800
	Mustard seed, oriental	9,500	9,000	860.0 lbs	3,500
	All mustard seed	110,000	105,000	780.0 lbs	37,100
	Sunflower seed	-	-	-	-
Corn	Grain corn	20,000	15,000	93.3 bu	35,600
	Silage corn	70,000	40,000	15.8 ton	571,500
Other	Potatoes (1)	52,500	52,000	336.0 cwt	792,530
	Triticale	35,000	14,000	54.6 bu	19,400
	Canary seed	-	-	-	-
	Sugar beets (2)	18,270	18,211	21.2 tonne	385,219
Forage seeds (3)	Alfalfa seed	17,600	17,600	520.0 lbs	4,151
	Clover seed	1,962	1,962	180.0 lbs	160
	Brome grass seed	9,515	9,515	280.0 lbs	1,208
	Fescue seed	14,492	14,492	420.0 lbs	2,761
	Timothy seed	13,094	13,094	230.0 lbs	1,366
	Other	4,533	4,533
All crops		1,144,466	1,067,207	...	2,637,896

Figure 3 - Percentage Distribution of Specialty Crop Seeded Acreage, Alberta, 2008 (Total area: 1,144,466 acres)



Source: Alberta 2008 Specialty Crop Survey, ARD; and Field Crop Reporting Series, Statistics Canada

Except for:

- (1) Statistics Canada, Canadian Potato Production, November 2008
- (2) Alberta Sugar Beet Growers
- (3) Canadian Seed Growers' Association - Inspected Pedigreed Crop Acres; Yield estimates are generated from the Alberta 2008 Specialty Crop Survey, including pedigreed and common seeds.

cwt - hundredweight (hundred pounds)

ton = 2,000 lbs tonne = 1.1023 tons = 2,204.6 lbs

- Not available

... Not applicable

Table 2 Alberta 2008 Specialty Crops by Census Division

C.D.	Dry Peas	Mustard Seed	Lentils	Dry Beans	Chick Peas
Harvested Area (acres)					
1	102,872	19,444	-	13,950	-
2	59,147	33,232	-	19,875	-
3	18,343	10,121	-	-	-
4	38,757	32,090	-	-	-
5	134,727	9,339	-	-	-
6	17,088	-	-	-	-
7	89,565	-	-	-	-
8	16,092	-	-	-	-
9	-	-	-	-	-
10	82,301	-	-	-	-
11	17,066	-	-	-	-
12	4,823	-	-	-	-
13	12,330	-	-	-	-
14	-	-	-	-	-
17	42,528	-	-	-	-
18	-	-	-	-	-
19	62,252	-	-	-	-
Alberta	700,000	105,000	9,800	35,000	12,500
Yield Per Acre					
	(bushels)	(pounds)	(pounds)	(cwt)	(pounds)
1	34.1	736.6	-	19.3	-
2	40.0	982.5	-	23.7	-
3	44.0	928.6	-	-	-
4	31.8	580.0	-	-	-
5	43.2	704.5	-	-	-
6	43.0	-	-	-	-
7	34.8	-	-	-	-
8	53.2	-	-	-	-
9	-	-	-	-	-
10	44.2	-	-	-	-
11	53.1	-	-	-	-
12	41.5	-	-	-	-
13	51.9	-	-	-	-
14	-	-	-	-	-
17	35.8	-	-	-	-
18	-	-	-	-	-
19	23.5	-	-	-	-
Alberta	38.4	780.0	1,536.0	22.0	1,355
Production (tonnes)					
1	95,551	6,497	-	12,212	-
2	64,419	14,810	-	21,366	-
3	21,956	4,263	-	-	-
4	33,563	8,442	-	-	-
5	158,320	2,984	-	-	-
6	20,007	-	-	-	-
7	84,862	-	-	-	-
8	23,301	-	-	-	-
9	-	-	-	-	-
10	99,094	-	-	-	-
11	24,643	-	-	-	-
12	5,441	-	-	-	-
13	17,400	-	-	-	-
14	-	-	-	-	-
17	41,458	-	-	-	-
18	-	-	-	-	-
19	39,761	-	-	-	-
Alberta	731,400	37,100	6,800	34,900	7,700

Note: Totals may not add up due to rounding or insufficient data for generating estimates for some census divisions.
cwt - hundredweight (hundred pounds) - Not available

Source: Statistics Canada; and Alberta Agriculture and Rural Development

Table 3 Alberta 2007 Specialty Crops by Census Division

C.D.	Dry Peas	Mustard Seed	Lentils	Dry Beans	Chick Peas
Harvested Area (acres)					
1	89,542	6,454	-	26,274	21,928
2	68,055	28,730	-	24,628	16,176
3	23,839	7,604	-	-	-
4	29,290	29,773	-	-	-
5	111,366	12,439	-	-	5,014
6	17,099	-	-	-	-
7	61,599	-	-	-	-
8	9,037	-	-	-	-
9	-	-	-	-	-
10	80,844	-	-	-	-
11	16,039	-	-	-	-
12	9,616	-	-	-	-
13	7,185	-	-	-	-
14	-	-	-	-	-
17	27,392	-	-	-	-
18	-	-	-	-	-
19	42,202	-	-	-	-
Alberta	595,000	85,000	-	53,000	50,000
Yield Per Acre					
	(bushels)	(pounds)	(pounds)	(cwt)	(pounds)
1	21.2	754.6	-	22.3	871.7
2	27.9	699.5	-	22.8	1,205.4
3	29.2	644.6	-	-	-
4	24.5	652.9	-	-	-
5	37.6	817.4	-	-	1,575
6	44.6	-	-	-	-
7	31.2	-	-	-	-
8	35.4	-	-	-	-
9	-	-	-	-	-
10	35.0	-	-	-	-
11	31.6	-	-	-	-
12	39.1	-	-	-	-
13	44.7	-	-	-	-
14	-	-	-	-	-
17	35.8	-	-	-	-
18	-	-	-	-	-
19	45.1	-	-	-	-
Alberta	32.6	702.0	-	22.6	1,176.0
Production (tonnes)					
1	51,563	2,209	-	26,553	8,670
2	51,699	9,116	-	25,461	8,845
3	18,968	2,223	-	-	-
4	19,496	8,817	-	-	-
5	113,996	4,612	-	-	3,582
6	20,738	-	-	-	-
7	52,303	-	-	-	-
8	8,697	-	-	-	-
9	-	-	-	-	-
10	76,990	-	-	-	-
11	13,795	-	-	-	-
12	10,236	-	-	-	-
13	8,744	-	-	-	-
14	-	-	-	-	-
17	26,676	-	-	-	-
18	-	-	-	-	-
19	51,856	-	-	-	-
Alberta	527,500	27,000	-	54,400	26,700

Note: Totals may not add up due to rounding or insufficient data for generating estimates for some census divisions.
cwt - hundredweight (hundred pounds) - Not available

Source: Statistics Canada; and Alberta Agriculture and Rural Development

Specialty Crops by Census Division in Alberta

This section presents estimates of area, yield and production at the Census Division level in Alberta, for dry peas, mustard seed, and dry beans. Just to note, the Census Division estimates were generated from a small sample, and as such, caution should be exercised when interpreting and using the data. Also, for reference, the Alberta Census Division and municipality map is shown on page 5 – Figure 4.

Dry Peas

In 2008, a total of 710,000 acres were seeded to dry peas (see Table 1). Of this total, 700,000 acres were harvested, or 18 per cent higher than in 2007, and 23 per cent above the 10-year average. Due to favorable crop growing conditions during the 2008 crop season, the average yield, estimated at 38.4 bushels per acre, was 18 per cent higher than in 2007, and ten per cent above the 10-year average.

The total provincial production of dry peas was estimated at 731,400 tonnes, up 39 per cent from 2007. The higher production was attributed to a combination of higher yield and an increase in harvested area.

Although dry peas are grown primarily on dryland across the province, the largest acreages are in Census Divisions 1 (Medicine Hat area), and 5 (Drumheller area) - see Table 2 and Figure 5. In 2008, these two Census Divisions (1 and 5) accounted for 34 per cent of the provincial total harvested area. Just to note, dry pea yields were quite varied across the province.

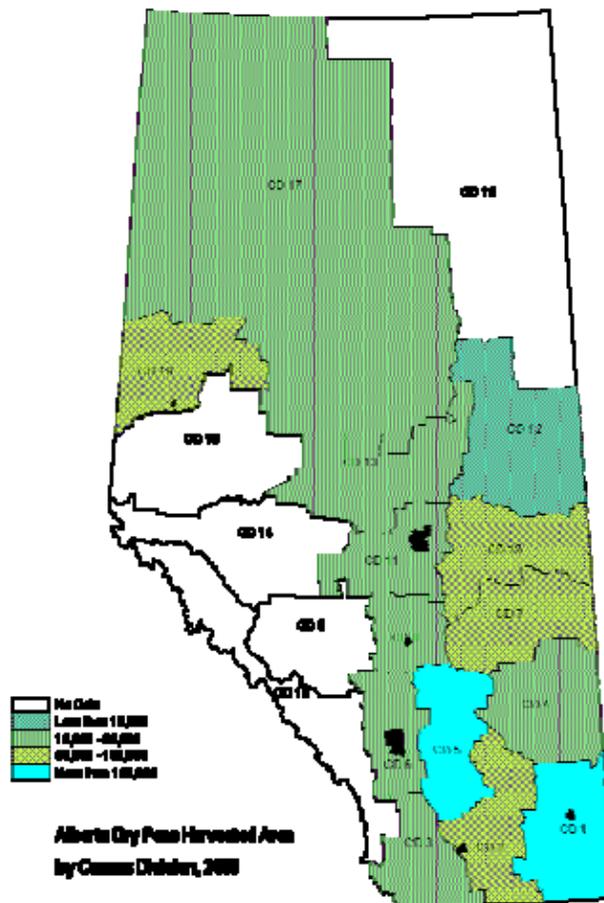


Figure 5

Mustard Seed

In 2008, producers in the province seeded a total of 110,000 acres of mustard seed, with 105,000 acres harvested (see Table 1). Due to improved crop growing conditions, the provincial average yield increased 11 per cent from 2007, to 780 pounds per acre.

The total provincial production of mustard seed was estimated at 37,100 tonnes, up 37 per cent from 2007. The higher production was attributed to a 24 per cent increase in the harvested area, and 11 per cent increase in yield.

Of the three types of mustard seed produced in Alberta, yellow mustard seed continues to dominate, accounting for 80 per cent of the provincial total production in 2008, while brown and oriental mustard seed each represented ten per cent.

Mustard seed is mostly grown on dryland in southern Alberta. In 2008, nearly 81 per cent of the total harvested area in the province was in Census Divisions 1, 2 and 4 (see Table 2 and Figure 6). Also, mustard seed yields varied significantly across Census Divisions. For example, Census Division 2 had the highest yield of 983 pounds per acre, while the lowest yield of 580 pounds per acre was in Census Division 4.

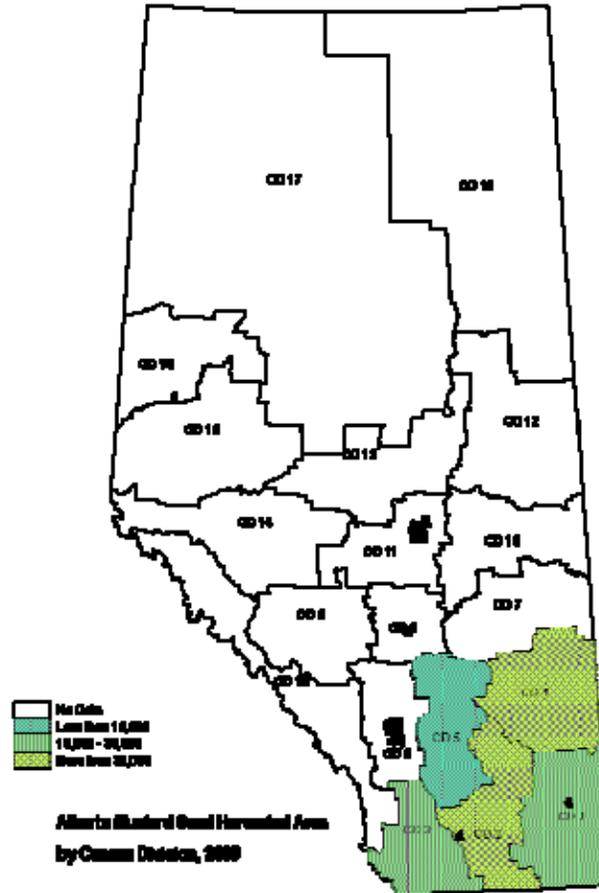


Figure 6

Dry Beans

The total seeded area of dry beans in 2008 was estimated at 40,000 acres (see Table 1). Due to hailstorm damage, only 35,000 acres were harvested, with an average yield of 2,200 pounds per acre. The 2008 yield was three per cent lower than in 2007, but two per cent above the 10-year average.

In 2008, total production of dry beans was estimated at 34,900 tonnes, down 36 per cent from 2007. Mainly driving the lower production was a substantial decline (34 per cent) in harvested area, as the average yield was just slightly lower than in 2007.

Dry beans are grown mostly under irrigation in southern Alberta. In 2008, a total of 37,815 acres or 95 per cent of the provincial dry bean seeded area was irrigated, according to information from the Water Resources Branch of Alberta Agriculture and Rural Development.

Also, Census Divisions 1 and 2 collectively accounted for 97 per cent of the provincial total harvested area (see Table 2 and Figure 7). Dry beans are generally grown under contract in Alberta.

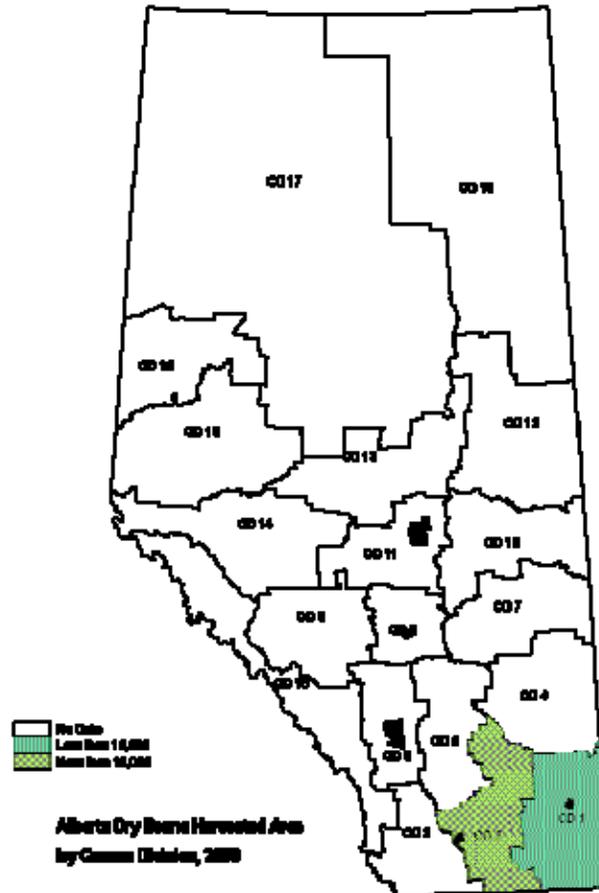


Figure 7

Table 4: Alberta Specialty Crop Area, Yield and Production, 1999-2008

		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Alfalfa Seed (1)											
Inspected area	(acres)	16,461	17,117	15,381	12,709	11,292	10,345	10,050	14,458	17,030	17,600
Yield	(lbs/acre)	200.0	525.0	385.0	265.0	550.0	370.0	270.0	585.0	600.0	520.0
Production	(tonnes)	1,493	4,076	2,686	1,528	2,817	1,736	1,231	3,836	4,635	4,151
Canary Seed											
Harvested area	(acres)	10,000	10,000	4,000	10,000	10,000	10,000	6,000	3,300	-	-
Yield	(lbs/acre)	1,400.0	1,100.0	775.0	520.0	900.0	1,040.0	1,200.0	-	-	-
Production	(tonnes)	6,400	5,000	1,400	2,400	4,100	4,700	3,266	-	-	-
Corn for Grain											
Harvested area	(acres)	10,000	10,000	3,000	10,000	5,000	5,000	5,000	3,000	7,000	15,000
Yield	(bu/acre)	80.0	110.0	86.7	80.0	60.0	65.0	104.0	130.0	128.6	93.3
Production	(tonnes)	20,300	27,900	6,600	20,300	7,600	8,300	13,200	9,900	22,900	35,600
Corn Silage											
Harvested area	(acres)	15,000	30,000	30,000	30,000	30,000	35,000	35,000	55,000	50,000	40,000
Yield	(tons/acre)	13.3	17.0	16.0	16.0	16.7	18.6	14.3	19.1	18.5	15.8
Production	(tonnes)	181,400	462,700	435,400	435,453	453,606	589,701	453,638	952,500	839,100	571,500
Fababeans											
Harvested area	(acres)	-	-	3,000	3,000	2,000	5,000	4,000	4,000	4,000	4,500
Yield	(cwt/acre)	-	-	17.0	5.0	20.0	26.0	27.5	26.3	-	30.0
Production	(tonnes)	-	-	2,300	700	1,800	5,900	5,000	4,800	-	6,100
Dry Beans											
Harvested area	(acres)	47,000	45,000	59,000	40,000	52,000	34,000	55,000	61,500	53,000	35,000
Yield	(cwt/acre)	20.0	21.3	22.3	17.5	25.6	22.2	21.2	21.8	22.6	22.0
Production	(tonnes)	42,700	43,500	59,700	31,700	60,300	34,200	52,800	60,800	54,400	34,900
Dry Peas											
Harvested area	(acres)	455,000	640,000	570,000	440,000	585,000	600,000	530,000	565,000	595,000	700,000
Yield	(bu/acre)	42.9	35.6	32.6	18.5	30.9	39.3	42.8	35.9	32.6	38.4
Production	(tonnes)	530,800	620,500	506,200	221,600	491,300	642,300	617,500	552,600	527,500	731,400
Lentils											
Harvested area	(acres)	22,000	32,000	15,000	6,000	15,000	18,000	20,000	10,600	-	9,800
Yield	(lbs/acre)	1,245.0	684.0	722.0	713.0	1,013.0	1,372.0	1,563.0	1,400.0	-	1,536.0
Production	(tonnes)	12,400	9,900	5,000	1,900	6,900	11,300	14,100	6,731	-	6,800
Mustard Seed											
Harvested area	(acres)	90,000	50,000	50,000	70,000	135,000	125,000	75,000	60,000	85,000	105,000
Yield	(lbs/acre)	1,100.0	606.0	373.0	603.0	634.0	902.0	915.0	939.2	702.0	780.0
Production	(tonnes)	44,800	13,800	8,500	19,100	38,800	51,200	31,100	25,600	27,000	37,100
Safflower Seed											
Harvested area	(acres)	5,000	3,000	1,000	2,000	2,500	3,200	-	-	1,800	-
Yield	(lbs/acre)	900	625	750	320	1,215	-	-	-	1,080	-
Production	(tonnes)	2,000	900	300	300	1,378	-	-	-	880	-
Sugar Beets (2)											
Harvested area	(acres)	44,522	42,017	28,457	27,754	27,389	34,954	33,667	36,992	34,067	18,211
Yield	(tonnes/acre)	18.9	21.9	18.4	15.2	22.9	21.2	19.9	26.0	25.1	21.2
Production	(tonnes)	839,773	920,252	523,110	422,389	628,081	740,508	668,141	963,165	853,669	385,219

Source: Statistics Canada; and Alberta Agriculture and Rural Development cwt - hundredweight (hundred pounds) - Not available

(1) Inspected pedigreed acres are from Canadian Seed Growers' Association; yield and production data are from the Alberta Specialty Crop Survey.

(2) Alberta Sugar Beet Growers, Annual Report

Table 4: Alberta Specialty Crop Area, Yield and Production, 1999-2008 (Cont'd)

		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Sunflower Seed											
Harvested area	(acres)	5,000	5,000	5,000	6,000	3,000	5,000	3,500	1,790	-	-
Yield	(lbs/acre)	1,600.0	2,240.0	1,250.0	1,500.0	1,500.0	800.0	-	1,850.0	-	-
Production	(tonnes)	3,600	5,100	2,800	4,100	2,000	1,800	-	1,502	-	-
Triticale											
Harvested area	(acres)	60,000	50,000	20,000	10,000	35,000	25,000	20,000	15,000	18,000	14,000
Yield	(bu/acre)	53.3	41.0	37.0	32.5	33.9	44.0	43.0	39.3	38.9	54.6
Production	(tonnes)	81,300	52,100	18,800	8,300	30,100	27,900	21,800	15,000	17,800	19,400
Potatoes											
Harvested area	(acres)	42,300	47,700	57,300	55,800	61,000	57,000	51,500	53,500	54,800	52,000
Yield	(cwt/acre)	290.0	310.0	315.0	280.0	330.0	350.0	344.0	342.0	341.0	336.0
Production	(tonnes)	556,400	670,700	818,700	708,700	913,097	904,932	803,598	829,952	847,642	792,530

Source: Statistics Canada; and Alberta Agriculture and Rural Development

cwt - hundredweight (hundred pounds)

- Not available

Table 5: Western Canada Specialty Crops Area and Production

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Mustard Seed											
	Seeded Area ('000 acres)										
Alberta	110.0	100.0	50.0	60.0	85.0	140.0	130.0	80.0	62.5	85.0	110.0
Saskatchewan	580.0	585.0	465.0	330.0	600.0	675.0	600.0	400.0	268.2	375.0	370.0
Manitoba	10.0	7.0	10.0	20.0	30.0	25.0	8.0	-	-	-	-
Western Canada	700.0	692.0	525.0	410.0	715.0	840.0	738.0	480.0	330.7	435.0	480.0
	Production ('000 tonnes)										
Alberta	39.7	44.8	13.8	8.5	19.1	38.8	51.2	31.1	25.6	27.0	37.1
Saskatchewan	195.5	259.7	185.1	91.2	125.2	176.9	232.8	152.7	82.6	95.3	123.9
Manitoba	3.4	1.9	3.3	5.1	10.0	10.4	2.7	-	-	-	-
Western Canada	238.6	306.4	202.2	104.8	154.3	226.1	286.7	183.8	108.2	122.3	161.0
Sunflower Seed											
	Seeded Area ('000 acres)										
Alberta	5.0	5.0	5.0	5.0	6.0	3.0	5.0	3.5	1.8	-	-
Saskatchewan	40.0	65.0	25.0	20.0	30.0	45.0	30.0	30.0	15.9	10.0	-
Manitoba	125.0	140.0	155.0	155.0	210.0	220.0	165.0	185.0	190.2	190.0	170.0
Western Canada	170.0	210.0	185.0	180.0	246.0	268.0	200.0	218.5	207.9	200.0	170.0
	Production ('000 tonnes)										
Alberta	4.3	3.6	5.1	2.8	4.1	2.0	1.8	-	1.5	-	-
Saskatchewan	21.3	35.4	12.4	8.1	17.2	15.6	6.4	11.7	-	5.0	-
Manitoba	86.2	82.9	101.8	92.9	136.1	124.7	44.0	72.7	157.3	119.8	112.2
Western Canada	111.8	121.9	119.3	103.8	157.4	142.3	52.2	84.4	158.8	124.8	112.2
Lentils											
	Seeded Area ('000 acres)										
Alberta	20.0	25.0	32.0	20.0	15.0	15.0	18.0	24.0	10.8	-	10.0
Saskatchewan	900.0	1,210.0	1,660.0	1,720.0	1,320.0	1,250.0	1,800.0	1,960.0	1,400.0	1,335.0	1,745.0
Manitoba	15.0	16.0	35.0	10.0	-	4.0	7.0	-	-	-	-
Western Canada	935.0	1,251.0	1,727.0	1,750.0	1,335.0	1,269.0	1,825.0	1,984.0	1,410.8	1,335.0	1,755.0
	Production ('000 tonnes)										
Alberta	8.0	12.4	9.9	5.0	1.9	6.9	11.3	14.1	6.7	-	6.8
Saskatchewan	465.9	702.6	888.1	557.9	326.1	475.0	902.7	1,150.2	692.8	733.9	1,043.2
Manitoba	5.9	8.8	16.1	3.4	-	2.7	1.8	-	-	-	-
Western Canada	479.8	723.8	914.1	566.3	328.0	484.6	915.8	1,164.3	699.5	733.9	1,050.0
Dry Peas											
	Seeded Area ('000 acres)										
Alberta	510.0	470.0	660.0	610.0	650.0	600.0	640.0	555.0	587.3	610.0	710.0
Saskatchewan	1,900.0	1,520.0	2,240.0	2,550.0	2,135.0	2,145.0	2,375.0	2,550.0	2,430.5	2,925.0	3,175.0
Manitoba	260.0	105.0	155.0	150.0	200.0	135.0	150.0	110.0	91.4	95.0	110.0
Western Canada	2,680.0	2,104.0	3,065.0	3,320.0	2,990.0	2,890.0	3,170.0	3,220.0	3,115.5	3,630.0	3,995.0
	Production ('000 tonnes)										
Alberta	488.0	530.8	620.5	506.2	221.6	491.3	642.3	617.5	552.6	527.5	731.4
Saskatchewan	1,613.8	1,623.4	2,072.4	1,388.0	881.8	1,292.7	2,291.5	2,313.4	1,861.5	2,309.6	2,732.4
Manitoba	225.9	92.0	160.5	146.1	176.9	137.4	160.0	56.9	103.5	97.7	107.5
Western Canada	2,336.8	2,251.9	2,864.3	2,044.8	1,283.8	1,930.9	3,097.2	2,993.6	2,519.9	2,934.8	3,571.3
Canary Seed											
	Seeded Area ('000 acres)										
Alberta	20.0	15.0	10.0	5.0	10.0	10.0	10.0	6.0	3.3	-	-
Saskatchewan	450.0	340.0	360.0	360.0	580.0	570.0	820.0	435.0	326.2	425.0	390.0
Manitoba	50.0	15.0	40.0	55.0	100.0	60.0	30.0	20.0	9.0	15.0	25.0
Western Canada	520.0	370.0	410.0	420.0	690.0	640.0	860.0	461.0	338.5	440.0	415.0
	Production ('000 tonnes)										
Alberta	8.6	6.4	5.0	1.4	2.4	4.1	4.7	3.3	-	-	-
Saskatchewan	201.8	152.0	148.6	101.2	142.4	198.7	284.4	219.3	129.1	155.7	184.6
Manitoba	24.9	7.6	17.2	11.3	32.7	31.8	11.4	7.9	4.0	6.3	11.0
Western Canada	235.3	166.0	170.8	113.9	177.5	234.6	300.5	230.5	133.1	162.0	195.6

Source: Statistics Canada; and Alberta Agriculture and Rural Development

- Not available

Markets for Selected Specialty Crops

Charlie Pearson

The following section presents some analysis on markets for selected specialty crops, specifically dry peas, lentils, chick peas, canary seed, and mustard seed.

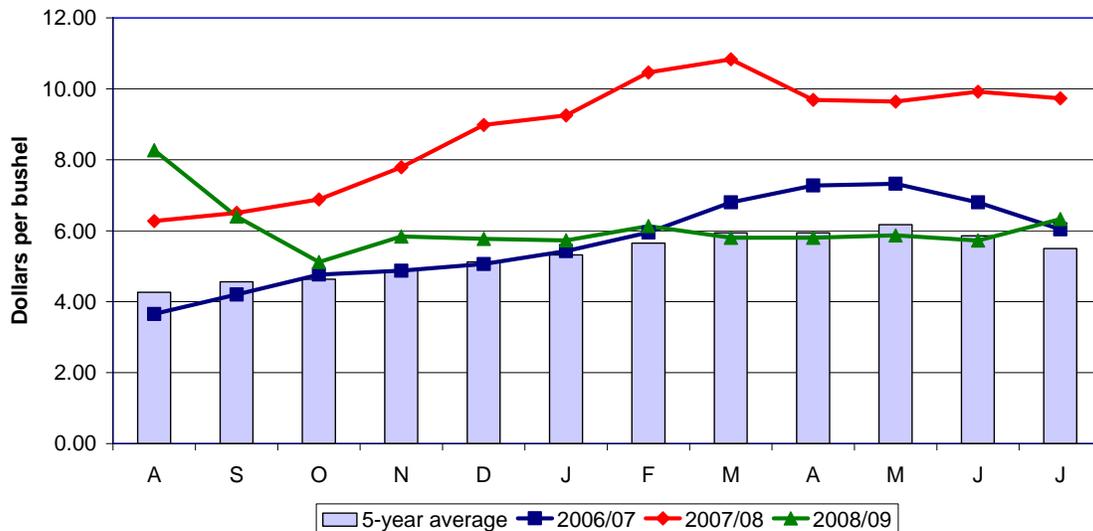
Dry Peas

Prices for yellow edible peas were in the \$5.50 to \$6.00 per bushel range over much of the 2008/09 crop year, well below the \$9.00 to \$10.00 per bushel range in 2007/08. Prices for other dry peas were also significantly lower, compared to a year earlier. Green peas prices hovered around the \$8.00 per bushel mark in 2008/09, while for feed peas, prices were mostly below \$5.00 per bushel.

The major factor behind the lower prices was the record Canadian field pea production in 2008/09, which was estimated at 3.6 million tonnes. Canadian pea exports reached 2.8 million tonnes, up markedly from 2007/08. Total domestic usage was estimated at 570,800 tonnes. The carryover of dry peas at July 31, 2009 was estimated at 445,000 tonnes, or 75 per cent higher than the level at the same date a year earlier.

In 2009, total seeded area of dry peas in Canada totaled 3.7 million acres, based on Statistics Canada's estimates. Total Canadian production is projected to be down significantly from last year, mainly due to dry conditions experienced during much of the 2009 crop season in many areas of the Prairies. Despite the lower production, total supplies of dry peas are expected to be adequate to meet needs for domestic consumption and international exports.

Figure 8 - Yellow Edible Pea Prices (August to July)

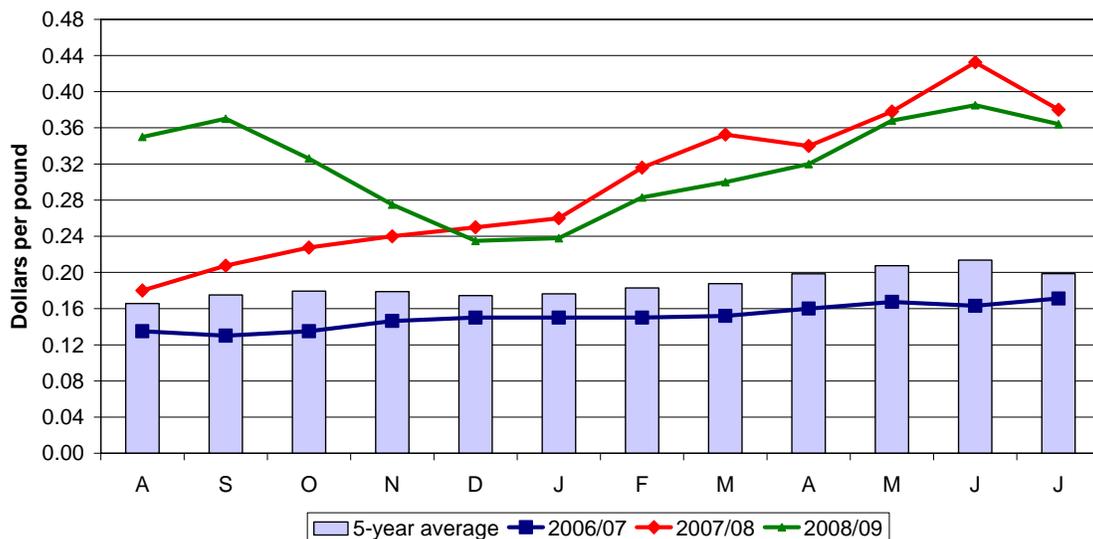


Lentils

Prices for high quality large green lentils held mostly in the 24-36 cents per pound range over the 2008/09 crop year. Total lentil production in 2008 in Canada was estimated at one million tonnes, up from 733,900 tonnes in 2007. Strong exports in 2008/09, estimated at 972,100 tonnes, reduced the lentil stocks. The carryover of lentils at July 31, 2009 was estimated at 32,000 tonnes, lowest in the last five years.

In 2009, Saskatchewan producers seeded a record 2.3 million acres of lentils, based on Statistics Canada's estimates. Less than desirable growing conditions during the summer impacted negatively on lentil yields. Despite the lower yields, total lentil production is projected to be up significantly from 2008, a result of larger harvested area. Bids for new crops range from 24 to 28 cents per pound for top grade green lentils, and 24 to 27 cents per pound for red lentils.

Figure 9 - Large (Laird) Lentil Prices (August to July)

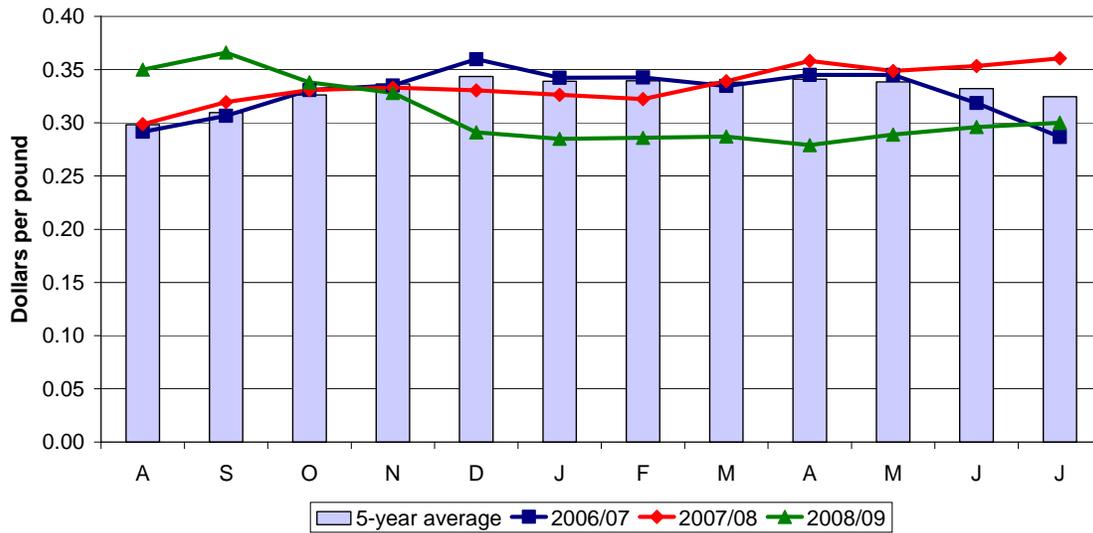


Chick Peas

Prices for Kabuli chick peas were slightly below the 30 cents per pound level over the last eight months of the 2008/09 crop year, lower than the same period a year earlier. Total 2008 chick pea production in Canada was estimated at 74,700 tonnes, about one third of the total production in 2007.

In 2009, producers in Saskatchewan seeded a total 145,000 acres of chick peas, up markedly from 110,000 acres in 2008. Total 2009 production is projected to be higher, although yields are expected to be lower, a result of less than desirable growing conditions during the summer. Bids for new crops range from 27 to 30 cents per pound for nine millimeter Kabuli chick peas, and 24 to 26 cents per pound for Desi chick peas.

Figure 10 - Kabuli Chickpea Prices - 9 mm (August to July)

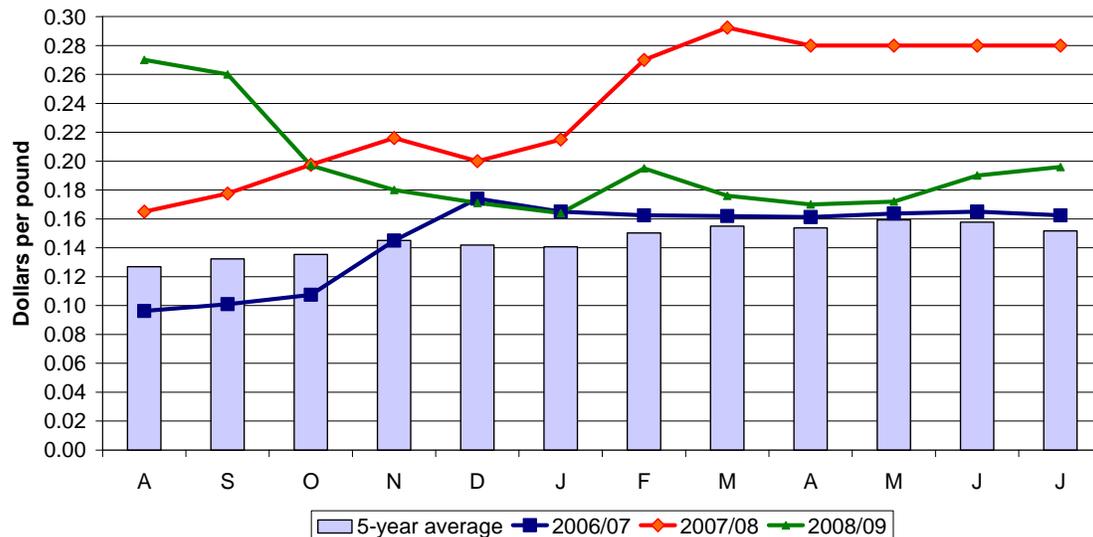


Canary Seed

Prices for canary seed slipped into the 16 to 20 cents per pound range since October 2008, down significantly from the same period of previous year. Total canary seed production in 2008 in Canada was estimated at 195,600 tonnes, up 21 per cent from 2007.

In 2009, Saskatchewan producers seeded a total 300,000 acres of canary seed, down from 390,000 acres a year earlier. As well, total 2009 production of canary seed is projected to be markedly lower, due to reduced yields and smaller harvested area. Bids for new crops are in the 16 to 17 cents per pound range.

Figure 11 - Canary Seed Prices (August to July)



Mustard Seed

During the period of January to July 2009, prices were in the 35 to 40 cents per pound range for yellow mustard seed, 25 to 30 cents per pound for brown mustard seed, and 30 to 40 cents per pound for oriental mustard seed. These prices, with the exception for oriental mustard seed in some months, were much lower than in the same period a year earlier.

Total 2008 mustard seed production in Canada was estimated at 161,000 tonnes, up 32 per cent from 2007. Despite the higher production, total supplies (188,900 tonnes) were tight, due to a small carryover from the previous year. This contributed to the relatively strong prices for all types of mustard seeds in 2008/09, compared to their 5-year averages.

Total seeded area of mustard seed in 2009 in Canada was estimated at 545,000 acres, up about 14 per cent from 2008. The higher acreage will likely result in an increase in production, although yields could be lower, due to less than desirable growing conditions during the summer. Total mustard seed supplies in Canada are expected to improve from the 2008/09 crop year.

As a result, prices for mustard seed, particularly the yellow type, are expected to be down significantly from the previous year. Bids for new crops are 19 to 22 cents per pound for oriental and brown mustard seeds, and 25 to 28 cents for yellow mustard seed.

Figure 12 - Yellow Mustard Seed Prices (August to July)

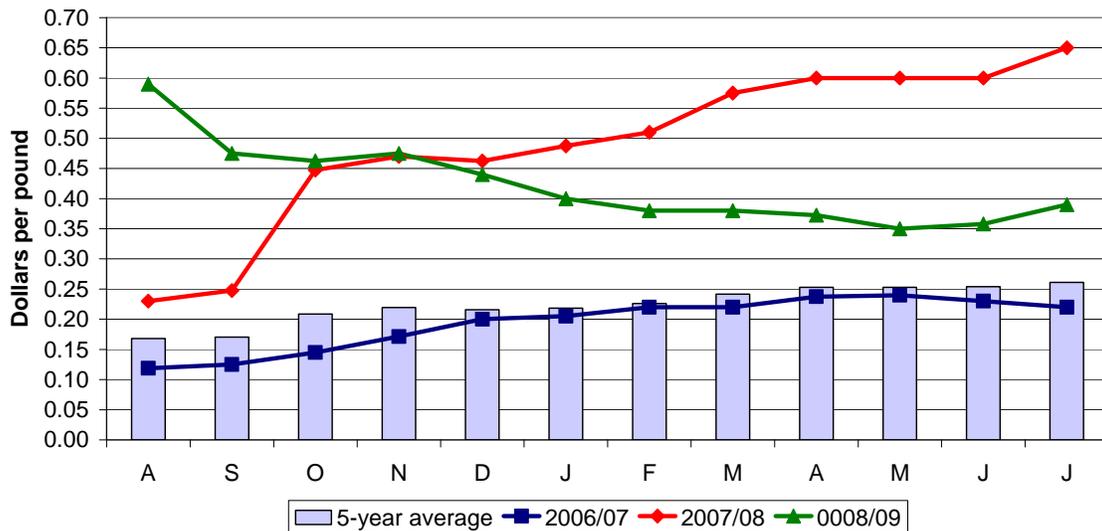


Figure 13 - Brown Mustard Seed Prices (August to July)

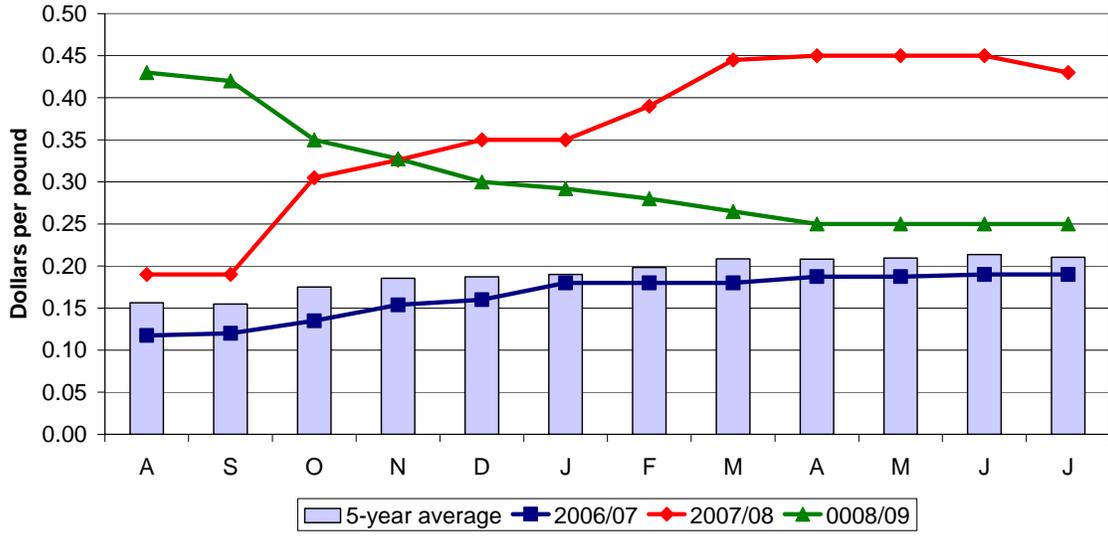
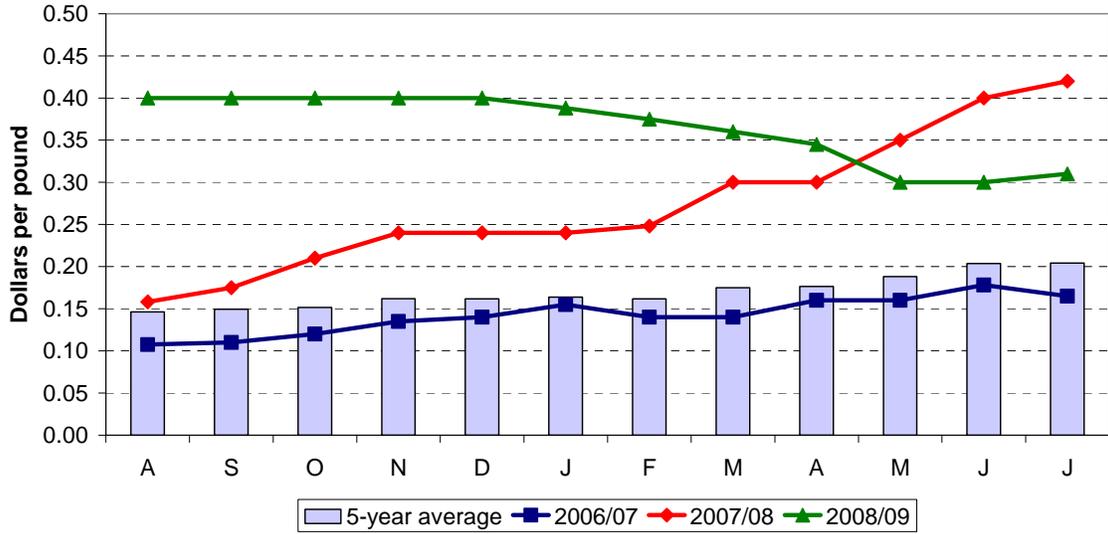


Figure 14 - Oriental Mustard Seed Prices (August to July)



Economics of Specialty Crop Production

Nabi Chaudhary

Costs and returns for crops, livestock, and several other enterprises have been monitored in the province in an extensive way since the 1960's. These studies have been viewed as an important tool for assisting producers in their cropping decisions and the federal and provincial governments in developing policies and programs for different farm enterprises. In addition, results from these studies have served to fill some data gaps for other provinces.

The Economics Branch (formerly known as Production Economics Branch), in the Economics and Competitiveness Division of Alberta Agriculture and Rural Development, has been conducting economic studies on various farm enterprises for the last several decades. Since the early 1990's, much greater emphasis has been placed on developing costs and returns data on specialty crops for farm diversification purposes.

Continued volatile markets for traditional cereals and oilseeds have forced producers to diversify their operations into new and emerging specialty crops. As mentioned above, results from these studies have been very helpful to primary producers when making cropping decisions. Furthermore, individual producers have also used the results from these studies to compare costs and returns and profitability margins of their farms with the group averages from the respective areas in order to develop better management practices. Agri-businesses and other stakeholders have used the results of the economic studies for feasibility studies.

During the last ten years, area under special crops has increased significantly in Alberta. The total seeded area of dry field peas was 385,000 acres in 1997, and jumped to 610,000 acres in 2001. In 2002, seeded area increased seven per cent, to 650,000 acres. However, seeded area declined to 600,000 acres in 2003. In 2004, seeded area was estimated at 640,000 acres, an increase of about seven per cent over 2003. The seeded area in 2005 decreased 13 per cent, to 555,000 acres. In 2006, seeded area for dry peas increased six per cent, to 587,263 acres. Seeded area to dry peas increased by about four per cent, to 610,000 acres in 2007. Seeded area increased by 100,000 acres from the previous year, to 710,000 acres in 2008. The provincial average yield for the 2008 dry peas was estimated at 38.4 bushels per acre.

Dry beans acreage in Alberta has fluctuated over the last decade. The total seeded area was 60,000 acres in 2001, and remained unchanged in 2002. It decreased about 13 per cent, to 52,000 acres in 2003. The acreage continued to decline, and totaled 35,000 acres in 2004. In 2005, the total seeded area was estimated at 57,000 acres, an increase of almost 63 per cent over 2004. The acreage in 2006 jumped to 62,039 acres, or nine per cent higher than in 2005. In 2007, area seeded to dry beans decreased significantly, to 53,000 acres. Area seeded to dry beans in 2008 further decreased by over 24 per cent, to 40,000 acres. The provincial average yield for the 2008 dry beans crop was estimated at 2,200 pounds per acre. Please note most of the dry beans are grown under contract on irrigated land in southern Alberta.

In the late 1990's, producers showed considerable interest in chick peas (known as the new Cinderella crop on the Prairies). Chick peas was a huge crop in Saskatchewan from 1999 to 2001, occupying almost one million acres. In Alberta, acreage under chick peas was 100,000 acres in 2001, double the acreage in 2000. However, the area under chick peas decreased drastically to 45,000 acre in 2002, primarily due to drought concerns and disease problems. In 2003, the acreage dropped to 25,000 acres. The decline in area continued in 2004, with a total of

15,000 acres, the lowest area on record. In 2005, the total seeded area doubled, to 30,000 acres. In 2006, it increased about 37 per cent to 40,749 acres. In 2007, area seeded to chick peas increased to 50,000 acres. In 2008, area planted to chick peas decreased considerably, to 13,000 acres. The provincial average yield for the 2008 chick peas was estimated at 1,355 pounds per acre. The changes in chick pea acreage over the last decade could be attributed to drought concerns, crop diseases, and production of major importing countries.

Additionally, producer interest in other specialty crops, including caraway, buckwheat, coriander, borage, herbs and spices, continues to grow.

Shown in Tables 6 are estimates of 2008 production costs and returns for dry peas. Costs and returns data for dry beans and chick peas (Desi and Kabuli) are presented in Tables 7 and 8, respectively.

**Table 6: Production Costs and Returns for Dry Peas
Dark Brown Soil Zone, 2008**

	\$ Per acre	\$ Per bushel
Revenue per Acre		
Yield per Acre (bushels)	38.40	...
Expected Market Price/Bushel (\$)	5.30	5.30
(a) Gross Revenue per Acre	203.52	...
Costs per Acre (\$)		
Seed and Seed Cleaning	28.95	0.75
Fertilizer Rates: 2N 16P 1K 3S	21.50	0.56
Chemicals	31.36	0.82
Hail/Crop Insurance Premiums	12.83	0.33
Trucking and Marketing	3.55	0.09
Fuel	13.70	0.36
Repairs - Machinery & Buildings	7.28	0.19
Utilities & Miscellaneous Expenses	12.79	0.33
Custom Work & Labour	7.88	0.21
Operating Interest Paid	3.85	0.10
Unpaid Labour	12.55	0.33
(b) Variable Costs	156.24	4.07
Taxes, License & Insurance	11.08	0.29
Equipment & Building - Depreciation	18.76	0.49
Paid Capital Interest	4.60	0.12
(c) Capital Costs	34.44	0.90
(d) Total Production Costs (b+c)	190.68	4.97
Gross Margin	19.05	0.50
Return to Investment (a-d+capital interest)	17.44	0.45
Return to Equity (a-d)	12.84	0.33

... Not applicable

Note: Returns per acre would vary with yields and price.

Source: Alberta Agriculture and Rural Development

**Table 7: Production Costs and Returns for Dry Beans
Dark Brown Soil Zone, 2008**

	\$ Per acre	\$ Per pound
Revenue per Acre		
Yield per Acre (lbs)	2,200.00	...
Expected Market Price/Pound (\$)	0.30	0.30
(a) Gross Revenue per Acre	660.00	...
 Costs per Acre (\$)		
Seed and Seed Cleaning	30.76	0.01
Fertilizer Rates: 2N 16P 1K 3S	94.50	0.04
Chemicals	93.90	0.04
Hail/Crop Insurance Premiums	31.50	0.01
Trucking and Marketing	11.78	0.01
Fuel	48.90	0.02
Repairs - Machinery & Buildings	51.85	0.02
Utilities & Miscellaneous Expenses	23.50	0.01
Custom Work & Labour	12.60	0.01
Operating Interest Paid	10.98	0.00
Unpaid Labour	93.60	0.04
(b) Variable Costs	503.87	0.23
 Taxes, License & Insurance	32.65	0.01
Equipment & Building - Depreciation	67.80	0.03
Paid Capital Interest	9.90	0.00
(c) Capital Costs	110.35	0.05
 (d) Total Production Costs (b+c)	614.22	18.81
 Gross Margin	149.28	0.07
Return to Investment (a-d+capital interest)	55.68	0.03
Return to Equity (a-d)	45.78	0.02

... Not applicable

Note: Returns per acre would vary with yields and price.

Source: Alberta Agriculture and Rural Development

**Table 8: Production Costs and Returns
Desi and Kabuli Chick Peas, 2008**

	Desi Chick peas	Kabuli Chick peas
Revenue Per Acre		
Estimated Yield per Acre (lbs)	1,250.00	1,375.00
Price per Pound (\$)	0.22	0.30
(a) Gross Revenue per Acre (\$)	275.00	412.50
Costs per Acre (\$)		
Variable Costs per Acre		
Seed	23.65	54.40
Fertilizer	14.53	15.79
Chemicals	16.10	20.44
Machinery Expenses (Fuel & Repair)	29.45	33.95
Custom Work & Hired Labour	7.12	8.60
Utilities & Miscellaneous	9.89	10.62
Interest on Variable Expenses	2.25	2.98
(b) Total Variable Costs	102.99	146.78
Other Costs per Acre		
Building Repair	3.05	3.05
Property Expenses, Insurance & License	7.80	7.80
Machinery & Building Depreciation	23.45	23.45
Machinery & Building Investment	13.10	13.10
Labour & Management	17.04	19.65
(c) Total Other Costs	64.44	67.05
(d) TOTAL PRODUCTION COSTS (b+c)	167.43	213.83
RETURNS PER ACRE (\$)		
Return Over Variable Expenses (a-b)	172.01	265.72
Return Over Total Production Costs (a-d)	107.57	198.67

Note: Returns per acre would vary with yields and price.
Source: Alberta Agriculture and Rural Development