



# Bi-weekly Bulletin

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## CANARY SEED / BUCKWHEAT

### CANARY SEED: SITUATION AND OUTLOOK

Canada, the main producer and exporter of canary seed in the world, accounts for about 75% of world production and exports. The value of Canadian canary seed exports has averaged about \$60 million during the past 4 years. Canadian canary seed production in 2001-2002 is forecast to decrease by about 20%, because of lower seeded area and yields. Total supply is forecast to decrease sharply and carry-out stocks are expected to decrease to a very low level. The average price is forecast to increase by about 30%. This section of the *Bi-weekly Bulletin* examines the situation and outlook for canary seed.

#### BACKGROUND

##### Agronomics

Canary seed is a cool season crop which prefers long warm days and cool nights. It is well suited to the Canadian prairies and matures in approximately 100 days. Production of canary seed in Canada began in the late 1970s. Canary seed is shallow rooted and is more sensitive to heat and less drought tolerant and salt tolerant than wheat. It does best on heavy clay or clay loam, moisture retentive soils. It can tiller profusely and may lodge when soil fertility and moisture are plentiful. Canary seed should be planted as early in May as possible. Late seeding can lead to delayed maturation of the straw during harvest. Canary seed is shatter resistant, which allows it to be straight combined. If the crop is swathed, it should not be cut until it has reached full maturity and should be combined soon after swathing. Combining should be done at a seed moisture level of 13%. Caution should be taken to keep dehulling to a minimum, since dehulled seed is classified as dockage and must be cleaned out. Canary seed with the hull intact is shiny and golden yellow. Dehulled canary seed is dark brown in colour. Canary seed can be

stored for long periods of time without losing quality, provided it is put into storage in good condition.

##### Uses

Canary seed has only one market at the present time, as a major component in seed mixtures for pet and wild birds. Typically it is mixed with seeds such as millet, sunflower seed, safflower seed, buckwheat, cereal grains, flaxseed, and canola.

##### Canario

Canario is a glabrous or hairless type of canary seed developed in Canada, with first commercial production starting in 1997. Canary seed has tiny hairs at the base of the seed that break off and cause severe itching to producers, processors, and packagers. Canario eliminates that problem. Canario also helps the industry through reduced shipping costs due to 12% greater seed packing per container and the elimination of the oiling and polishing steps in processing.



The Canadian Special Crops Association (CSCA) has applied for the trademark Canario in the United States (U.S.), the European Union (EU), Canada, Mexico, and Brazil for canary seed that is 97% glabrous. The Canadian Grain Commission has developed a Canario Seed Analysis Certificate to be used for shipments of canary seed which meet the Canario standard.

#### WORLD

##### Production

Since 1991-1992, world canary seed production has ranged from a low of 167,000 tonnes (t) in 1997-1998 to a high of 300,000 t in 1994-1995. Annual production is extremely variable, but the variability is mainly in Canada which accounts for about 75% of world production. Hungary and Argentina are the only other significant canary seed producers, each accounting for about 10% of world production.

##### Consumption and Trade

Most of the world's canary seed production is exported. Canary seed exports increased rapidly during the early 1990s, but subsequently the growth in exports has

**WORLD: CANARY SEED PRODUCTION**

	1997 -1998	1998 -1999	1999 -2000	2000 -2001	2001 -2002f
.....thousand tonnes.....					
<b>Canada*</b>	<b>115</b>	<b>235</b>	<b>166</b>	<b>171</b>	<b>135</b>
Hungary	18	33	30	22	30
Argentina	25	25	24	21	30
Other	<u>9</u>	<u>8</u>	<u>11</u>	<u>11</u>	<u>10</u>
<b>World</b>	<b>167</b>	<b>301</b>	<b>231</b>	<b>225</b>	<b>205</b>

f: forecast, AAFC, July 2001

Source: FAO, except \*Statistics Canada, July 2001

been slower. The upward trend in exports indicates that there is normally little substitution of other birdseed for canary seed. In 1999, the latest year for which statistics are available, world exports were 233,000 t and imports 231,000 t. However, about 15% of the exports were re-exported to third countries. Canada dominated world exports with about 75% of the exports in 1999, if re-exports are excluded. Hungary and Argentina are the only other significant exporters of canary seed. Imports are much more widely distributed than exports, with the top seven importing countries (Mexico, Brazil, Belgium, the U.S., Spain, Italy, and the Netherlands) accounting for about 75% of imports.

peak in production was in 1996-1997 with 285,000 t. In 2000-2001, production increased slightly, compared to 1999-2000, to 171,000 t. Saskatchewan accounted for 87% of the production, followed by Manitoba at 10% and Alberta at 4%.

**Marketing**

All of the canary seed produced in Canada is sold on the open market to dealers. There are about 30 dealers, with more than 60 plants located across the Prairie provinces, who buy and clean canary seed. They range from large corporations and co-operatives to small family-owned businesses. Canary seed going to customers in Canada and the U.S. is

**CANADA****Production**

Canadian canary seed production increased during the early 1990s, but had been in a cyclical pattern from 1994-1995 to 1999-2000, with one year of high production followed by a year of low production. The

shipped bulk in trucks or in containers which are carried by trucks or trains. Canary seed going to northern Europe is usually shipped bulk, whereas canary seed going to customers in southern Europe and other parts of the world is usually shipped in containers. Some canary seed is grown under production contracts, which guarantee a price for part of the production, but most is sold on the spot market. Market development activities are carried out with the CSCA, an industry organization representing traders, exporters, and processors.

Canary seed does not fall under the Canada Grain Act, therefore the Canadian Grain Commission has not established grades for the crop. However, the Commission does perform dockage analysis on samples submitted. Export specifications for canary seed are usually minimum 99% pure seed, with a maximum of 4% dehulled seed.

**Domestic Use**

Canadian domestic use, which includes feed, seed and dockage, has ranged from about 29,000 t to 52,000 t during the past 4 years. Canary seed is mixed with other seed for bird feed by processors located in western and central Canada, and sold under their own brands or under customized store brands. No standards exist for mixes or packaging. A company in Saskatchewan has started using organic canary seed in organic bird seed mixtures.

**Exports**

Canadian exports of canary seed are mainly in the bulk, unprocessed form, although packaged seed mixtures are also exported. Exports increased sharply in 1999-2000 to 157,000 t and are estimated at 165,000 t for 2000-2001. The western hemisphere and Europe are the main destinations for Canadian canary seed, although it is exported throughout the world. The main importing countries, in order of importance, are Mexico, Belgium, the U.S., Brazil, Spain, Venezuela, Italy, Chile, Colombia, and Portugal.

**Prices**

Canadian prices are determined on an export basis because Canada exports about 75% of its canary seed production. They are, therefore, highly sensitive to the value of the Canadian dollar in foreign markets. Average prices rose steadily

**WORLD: CANARY SEED EXPORTS**

<i>calendar year</i>	1995	1996	1997	1998	1999
.....thousand tonnes.....					
<b>Canada *</b>	<b>161</b>	<b>109</b>	<b>136</b>	<b>127</b>	<b>145</b>
Hungary	19	42	21	33	27
Argentina	17	9	15	21	21
Other	<u>38</u>	<u>39</u>	<u>40</u>	<u>42</u>	<u>40</u>
<b>Total</b>	<b>235</b>	<b>199</b>	<b>212</b>	<b>223</b>	<b>233</b>

Source: FAO, \*Statistics Canada, July 2001

**WORLD: CANARY SEED IMPORTS**

<i>calendar year</i>	1995	1996	1997	1998	1999
.....thousand tonnes.....					
Mexico	37	46	42	51	49
Brazil	43	36	39	42	39
Belgium	21	25	31	27	30
United States	16	18	15	19	17
Spain	14	15	17	17	16
Italy	15	15	11	13	15
Netherlands	8	22	9	9	10
Other	<u>53</u>	<u>47</u>	<u>60</u>	<u>51</u>	<u>55</u>
<b>Total</b>	<b>207</b>	<b>224</b>	<b>224</b>	<b>229</b>	<b>231</b>

Note: The difference between imports and exports is attributed to the timing of delivery.

Source: FAO, July 2001

<b>CANADA: CANARY SEED EXPORTS</b>					
<i>August-July crop year</i>	<b>1997 -1998</b>	<b>1998 -1999</b>	<b>1999 -2000</b>	<b>2000 -2001f</b>	<b>2001 -2002f</b>
	.....thousand tonnes.....				
Europe	58	51	66	45	45
Central America and Carribean	25	36	42	55	55
South America	27	26	28	40	35
United States	19	18	15	18	18
Middle East	1	2	2	3	3
Asia and Oceania	3	2	2	2	2
Africa	<u>1</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
<b>Total</b>	<b>134</b>	<b>137</b>	<b>157</b>	<b>165</b>	<b>160</b>

f: forecast, AAFC, July 2001  
Source: Statistics Canada

during the early 1990s before peaking in 1995-1996. Since then, the average price has been more volatile, depending on the total supply, and reached a low of \$240 per tonne (/t) in 1999-2000. The average price increased to \$265/t in 2000-2001 because of a crop year-end surge in prices resulting from expectations of lower supply for 2001-2002. Since there are no futures markets for canary seed, prices are negotiated between the producer, dealer and customer based on supply and demand factors. The prices negotiated could be for immediate or

future delivery.

### OUTLOOK

#### World: 2001-2002

Production is forecast to decrease by 9% to 205,000 t, because of lower production in Canada. Total supply is forecast to decrease by about 18% to 270,000 t, due to lower production and carry-in stocks. Canada's share of total world supply is expected to decrease from 79% to 74% in 2000-2001.

#### Canada: 2001-2002

Canary seed production is forecast to decrease by 21%, due to an 11% reduction in seeded area and lower yields. Lower than average yields are expected because of below normal precipitation in most of the producing areas. Crop development is further advanced than normal. The decrease in production is expected to be in Saskatchewan and Alberta, while production in Manitoba increases. Therefore, Saskatchewan and Alberta's share of Canadian production is expected to decrease to 78% and 1% respectively, while Manitoba's share increases to 21%. Total supply is forecast to decrease by 23%. Exports are forecast to decrease because of the tighter supply. Carry-out stocks are expected to decrease to a very low level, with a stocks-to-use ratio of 5%. The average price is forecast to increase by about 30% because of the lower supply. However, prices in 2001-2002 could be very volatile and higher than expected. Firstly, the start of the Canadian harvest is still several weeks away and production estimates based on surveys will not be available until later in the year. Secondly, producers might be more reluctant to sell seed as quickly as they did during the past few years because of the smaller supply and speculation that prices might increase further, later in the crop year.

#### Canada: Longer Term

Although canary seed is used as bird feed at the present time, Canadian researchers are exploring the markets for human consumption and industrial use. Researchers have established that canary seed has a protein content of about 19%, which is higher than for wheat and other cereal grains, and an oil content of about 9%. Canary seed protein is high in cystine, tryptophan and phenylalaline, but low in lysine and threonine. Its starch content is similar to wheat, at about 61%. Canary seed could be used in multi grain bread and in condiments. It also has the potential as a fat substitute because the oil is high in unsaturated fat. In addition, canary seed's high starch content makes it suitable for some industrial uses, such as in the cosmetics sector. Penetration into human consumption and industrial use markets would increase demand for Canadian canary seed significantly.

<b>CANADA: CANARY SEED SUPPLY AND DISPOSITION</b>					
<i>August-July crop year</i>	<b>1997 -1998</b>	<b>1998 -1999</b>	<b>1999 -2000</b>	<b>2000 -2001f</b>	<b>2001 -2002f</b>
Harvested Area (thousand ha)	113	208	146	164	145
Yield (t/ha)	1.01	1.13	1.14	1.04	0.93
	.....thousand tonnes.....				
Carry-in Stocks	130	64	110	90	65
Production	115	235	166	171	135
Imports	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Total Supply</b>	<b>245</b>	<b>299</b>	<b>276</b>	<b>261</b>	<b>200</b>
Exports	134	137	157	165	160
Total Domestic Use	<u>47</u>	<u>52</u>	<u>29</u>	<u>31</u>	<u>30</u>
<b>Total Use</b>	<b>181</b>	<b>189</b>	<b>186</b>	<b>196</b>	<b>190</b>
<b>Carry-out stocks</b>	<b>64</b>	<b>110</b>	<b>90</b>	<b>65</b>	<b>10</b>
Stocks-to-Use Ratio (%)	35	58	48	33	5
Average producer price (\$/t)	322	248	240	265	330-360
Harvested Area (thousand ac.)	279	514	361	405	358
Yield (lb/ac.)	901	1,008	1,017	928	830
Production (Mlb)	254	518	366	377	298
Average producer price (\$/lb)	0.146	0.112	0.109	0.120	0.150 -0.163

f: forecast, AAFC, July 2001  
Source: Statistics Canada and Agriculture and Agri-Food Canada

# BUCKWHEAT: SITUATION AND OUTLOOK

**Buckwheat has many uses and is rated as one of the best sources of high biological value protein in the plant kingdom. In spite of its name, buckwheat is technically a fruit or a nut rather than a cereal grain. It is a crop that requires fewer inputs than most other crops. Current agronomic research activities are exploring the development of new varieties which are more frost tolerant and higher yielding. Although Canada produces less than 1% of the world's buckwheat, it accounts for about 5% of world exports and is expected to become a more significant producer and exporter over the longer term with the development of new varieties. This section of the *Bi-weekly Bulletin* examines the situation and outlook for buckwheat.**

## BACKGROUND

### Agronomics

Buckwheat is a broadleaf plant which grows best in well drained light to medium textured soils. Seeding normally takes place in the early part of June, after the risk of frost is gone. It matures in 80-90 days and makes an excellent rotation with cereal grains. It requires less nitrogen than cereal crops and is very efficient at removing phosphorus from the soil for its own needs. It also increases the phosphorous available for subsequent crops through its decomposing residue. Buckwheat is more susceptible to stress during dry periods because the stomata stays open causing the plant to wilt faster. Weed control in buckwheat is a challenge since there are few herbicides available for grassy weed and none for broadleaf weed control. Since it is sown late, weeds are generally controlled with cultivation before seeding. However, it is best to use clean fields. Buckwheat benefits from pollination by honey or leaf-cutter bees, especially during the early stages of flowering, to improve yields. Swathing should be done when 75-80% of the seeds turn brown or black. Combining takes place when the seeds have reached 16% moisture.

Some of the buckwheat is grown organically, especially in eastern Canada. In addition to the buckwheat which is combined for its seed, there is some buckwheat grown in eastern Canada as a green manure crop.

The older buckwheat varieties, such as Manor and Mancan, have been supplemented with newer, larger-seed varieties, AC Manisoba, AC Springfield, Koban, and Koto, during the past decade. Koban and Koto are large-seed varieties with increased seed density, which has resulted in increased starch content. Koto has a black hull. Kade Research Ltd., an

industry sponsored buckwheat research organization based in Morden, Manitoba, works in collaboration with Agriculture and Agri-Food Canada in developing new varieties.

### Uses

Buckwheat is very nutritious and is used to make a wide range of products. The protein of buckwheat is comparable to animal-based proteins and is easily digestible. Buckwheat is high in iron, potassium, magnesium, sulfur and phosphorous, as well as vitamins B and P. An important by-product of buckwheat production is buckwheat honey, produced from nectar collected from buckwheat flowers by bees.

Buckwheat is milled into light or dark flour or processed into groats, the meat of the seed, and grits which are essentially cracked groats. Buckwheat flour is mixed with wheat flour to make noodles called Soba in Japan. Soba is eaten cold dipped in soya sauce or hot in soya sauce flavoured soup. Large seeded varieties, such as Koban and Koto, have a starch content about 7-8% higher than other varieties. In addition, the starch is softer, which makes the noodles chewy. This is a desirable trait. It also enables Japanese buckwheat millers to use up to 80% buckwheat in their noodle mixes compared to the usual blend of 50% buckwheat and 50% wheat flour. Buckwheat flour is also used for pancake mixtures or mixed with wheat flour for baking bread and rolls. As

well, it is mixed with semolina to make pasta. Since buckwheat does not contain gluten, it can be used to produce flour rich in high quality proteins valuable for people with gluten sensitive enteropathy (celiac disease).

The groats and grits can be eaten plain, roasted or flavoured. Roasted groats and grits are called "kasha" in central and Eastern Europe. The groats are also used to decorate bread and other baked goods. It is also used in breakfast cereals, as a meat substitute or extender, for stuffing meats and vegetables, for mixing with soups and stews and as a side dish. Some light weight buckwheat seed is used for bird seed mixtures. The hull can be used to make pillows and heating pads.

## WORLD

### Production

World buckwheat production has been variable during the past 10 years, ranging from 2.38 million tonnes (Mt) in 1999-2000 to 3.87 Mt in 1992-1993. In 2000-2001, production increased by 28%, compared to 1999-2000, to 3.06 Mt. China produced

### WORLD: BUCKWHEAT PRODUCTION

	1997 -1998	1998 -1999	1999 -2000	2000 -2001	2001 -2002f
	.....thousand tonnes.....				
China	1,600	1,400	1,300	1,600	1,500
Russia	630	466	579	650	600
Ukraine	405	341	222	479	400
United States	80	80	63	65	70
Poland	49	58	60	73	70
Brazil	50	50	50	50	50
Canada*	16	15	13	14	14
Other	94	94	96	131	106
<b>World</b>	<b>2,924</b>	<b>2,504</b>	<b>2,383</b>	<b>3,062</b>	<b>2,810</b>

f: forecast, AAFC, July 2001

Source: FAO, except \*Statistics Canada, July 2001

<b>WORLD: BUCKWHEAT EXPORTS</b>					
<i>calendar year</i>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
	.....thousand tonnes.....				
China	106	102	107	106	106
Ukraine	3	29	23	49	49
United States	18	15	7	9	10
<b>Canada*</b>	<b>9</b>	<b>9</b>	<b>14</b>	<b>6</b>	<b>7</b>
Other	<u>31</u>	<u>26</u>	<u>17</u>	<u>20</u>	<u>25</u>
<b>Total</b>	<b>167</b>	<b>181</b>	<b>168</b>	<b>190</b>	<b>197</b>
Source: FAO, *Statistics Canada, July 2001					
<b>WORLD: BUCKWHEAT IMPORTS</b>					
<i>calendar year</i>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
	.....thousand tonnes.....				
Japan	104	89	105	99	103
Netherlands	12	10	12	15	17
France	12	12	8	13	11
Russia	1	16	10	19	1
Belarus	1	1	24	12	3
Other	<u>63</u>	<u>71</u>	<u>55</u>	<u>39</u>	<u>32</u>
<b>Total</b>	<b>193</b>	<b>199</b>	<b>214</b>	<b>197</b>	<b>167</b>
Note: The difference between imports and exports is attributed to the timing of delivery.					
Source: FAO, July 2001					

about 55% of the world's buckwheat during the past 5 years, Russia about 20% and Ukraine about 15%.

### Consumption and Trade

Most of the world's buckwheat production is consumed in the country where it is produced. World buckwheat exports averaged about 180,000 tonnes per year (t/yr) during the past 5 years and totalled 197,000 t in 1999, the latest year for which world trade statistics are available. China normally accounts for about 60% of the exports, with Ukraine, the U.S., and Canada accounting for most of the balance. Japan accounts for about 55% of the imports, with the balance going mostly to the EU.

## CANADA

### Production

Buckwheat production in Canada has declined significantly from nearly 39,000 t in the mid 1980s, to an average of about 15,000 t during the past 10 years. For 2000-2001, production increased by 7%, compared to 1999-2000, to 14,000 t. Although buckwheat is produced from the Maritimes to Alberta, Manitoba accounted for 71% of Canadian buckwheat

production in 2000-2001, with Ontario producing 20% and Quebec 7%.

### Marketing

All of the buckwheat produced in Canada is sold on the open market to dealers. There are about 10 dealers who buy, clean and ship buckwheat to domestic and export markets. Buckwheat is mostly shipped by truck to domestic and U.S. markets, but it is shipped in containers for overseas markets. Buckwheat is normally sold throughout the year after harvest as it tends to lose its value when new crop starts to come into the market.

The Manitoba Buckwheat Growers Association was formed in 1995 to advance the production of buckwheat and promote the industry. Market development activities are carried out with the CSCA, an industry organization representing traders, exporters and processors. The Canadian and U.S. buckwheat industry is working to increase the supply of buckwheat products available to consumers and is engaged in market development to increase the use of buckwheat in Canada and the U.S. Representatives of the Canadian buckwheat industry are attending the International Symposium on Buckwheat in

Chunchon, South Korea, which will be held from August 30 to September 2, 2001.

Following the symposium, the participants will attend industry meetings in South Korea and Japan.

The Canadian Grain Commission administers quality control standards for buckwheat. There are three grades and buckwheat can also be graded sample if specifications for the grades are not met.

### Domestic Use

Canadian domestic use, which includes food, seed, dockage, and waste has ranged from 7,000 to 9,000 t/yr during the past 5 years and is estimated at 7,000 t for 2000-2001. There are several processors of buckwheat in Canada, concentrating on milling buckwheat for flour, groats and grits. Some of the processors mill buckwheat for the organic food market.

### Exports

Canadian buckwheat exports have ranged from 8,000 to 9,000 t/yr during the past 5 years and are estimated at 9,000 t for 2000-2001. Japan is normally the main market for Canadian buckwheat, followed by the U.S. and the EU.

### Prices

Average Canadian prices, over all grades and markets, have been relatively stable during the past 5 years at \$300-315/t. For 2000-2001, prices averaged \$305/t. Most of the buckwheat is typically grown under contract which guarantees the price for part or all of the production before seeding.

## OUTLOOK

### World: 2001-2002

World buckwheat production is forecast to decrease by 8% to about 2.8 Mt, but the total supply is expected to remain stable at about 3.1 Mt because of higher carry-in stocks.

### Canada: 2001-2002

Production is forecast to remain stable, as a 16% decrease in seeded area is offset by higher yields. Crop conditions are average in terms of both expected yields and development. Total supply is forecast to decrease by 6% because of negligible carry-in stocks. Exports are expected to decrease in line with the lower supply. The average price, over all grades and

<b>CANADA: BUCKWHEAT EXPORTS</b>					
<i>August-July crop year</i>	<b>1997 -1998</b>	<b>1998 -1999</b>	<b>1999 -2000</b>	<b>2000 -2001f</b>	<b>2001 -2002f</b>
.....thousand tonnes.....					
Asia	6	6	5	3	4
United States	1	1	2	5	3
Europe	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
<b>Total</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>9</b>	<b>8</b>

f: forecast, AAFC, July 2001  
Source: Statistics Canada

markets, is forecast to be the same as for 2000-2001.

#### Canada: Longer Term

Over the long-term, there are three main challenges which affect buckwheat production. First, there is a low rate of seed development. In buckwheat, only about 12% of the flowers develop into seed. Research is underway to develop self-pollinating varieties. These varieties could potentially double buckwheat yields.

Second, there is a lack of frost tolerance. Research is also ongoing on frost-resistant varieties.

Third, no herbicide for broadleaf weed control has been developed and very little research work is being done in this area.

Therefore, farmers must continue to rely on cultural practices for the foreseeable future. This could become more difficult when the frost resistant varieties become available, since producers will want to seed earlier. Plant breeders are selecting large-leaved varieties, which develop thick canopies more quickly to overshadow and smother weeds. Development of higher yielding and frost resistant varieties would make buckwheat more economically viable and increase the seeded area and production.

Buckwheat has the potential to be used in pharmaceutical and nutraceutical products. For example, it is high in lysine, an amino acid used in nutraceuticals. It contains vitamin P which contains a compound called rutin used to reduce

cholesterol levels and to help prevent high blood pressure. Fagopyritol, a compound derived from buckwheat, helps to manage diabetes. Research institutions in Canada and other countries are working on developing pharmaceutical and nutraceutical products from buckwheat.

**For periodic updates on the situation and outlook for canary seed and buckwheat, visit the Market Analysis Division Website for**

**“Canada: Special Crops Situation and Outlook.”**

**For more information:  
Stan Skrypetz,  
Special Crops Analyst  
Phone: (204) 983-8972  
Fax: (204) 983-5524  
E-mail: skrypetzs@em.agr.ca**

<b>CANADA: BUCKWHEAT SUPPLY AND DISPOSITION</b>					
<i>August-July crop year</i>	<b>1997 -1998</b>	<b>1998 -1999</b>	<b>1999 -2000</b>	<b>2000 -2001f</b>	<b>2001 -2002f</b>
Harvested Area (thousand ha)	14	14	13	15	13
Yield (t/ha)	1.14	1.07	1.00	0.93	1.08
.....thousand tonnes.....					
Carry-in Stocks	2	1	2	1	0
Production	16	15	13	14	14
Imports	<u>1</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>
<b>Total Supply</b>	<b>19</b>	<b>19</b>	<b>16</b>	<b>16</b>	<b>15</b>
Exports	9	8	8	9	8
Total Domestic Use	<u>9</u>	<u>9</u>	<u>7</u>	<u>7</u>	<u>7</u>
<b>Total Use</b>	<b>18</b>	<b>17</b>	<b>15</b>	<b>16</b>	<b>15</b>
<b>Carry-out stocks</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>
Stocks-to-Use Ratio (%)	6	12	7	0	0
Average producer price (\$/t)	305	315	305	305	290-320
Harvested Area (thousand ac.)	35	35	32	37	32
Yield (bu/ac.)	21	20	19	17	20
Production (thousand bu)	735	689	597	643	643
Average producer price (\$/bu)	6.64	6.86	6.64	6.64	6.31-6.97

f: forecast, AAFC, July 2001  
Source: Statistics Canada and Agriculture and Agri-Food Canada

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Winnipeg, Manitoba, Canada R3C 3G7  
Telephone: (204) 983-8473  
Fax: (204) 983-5524**

Director: Maggie Liu  
Chief: Fred Oleson

Editor: Gordon MacMichael

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