



# AGRI-FACTS

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## Varieties of Pulse Crops for Alberta

This factsheet provides information on pulse variety performance within Alberta and northeastern British Columbia. Important agronomic characteristics and disease resistance information is provided for varieties of field pea, chickpea, lentil, fababean, dry bean and soybean.

The Alberta Regional Variety Testing program for pulse crops is co-ordinated by the Alberta Pulse Growers Commission (APGC) and Alberta Agriculture and Forestry (AF). Funding for the program is provided by AF, APGC and entry fees (private companies) for the varieties being tested.

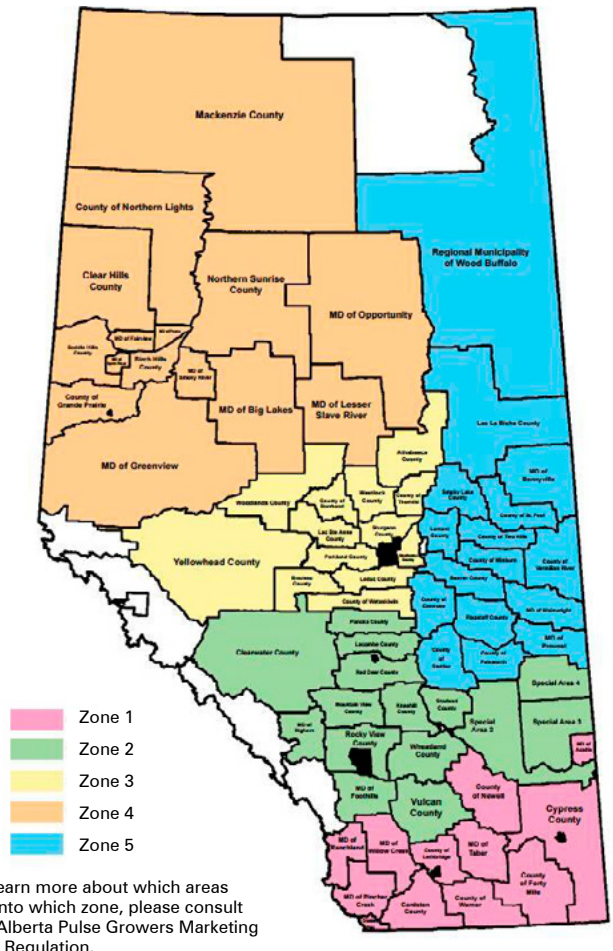
Data for this publication are contributed by numerous applied research associations, the Prairie Grain Development Committee and AF.

### Varieties

Variety choice is one of the important decisions any crop producer makes, and the choice should never be based solely on the genetic yield potential of a variety. Producers are encouraged to select varieties based on local growing conditions and planned end use.

As well, growers should consider other factors such as plant height, standability (lodging) at physiological maturity and disease/pest resistance when selecting which variety to grow. Using long-term, multi-site data will lead to the selection of the best, yield-stable varieties.

APG Zone Map



The yield comparison tables have several features:

- Overall actual yield of the standard check (kg/ha) based on all data available to the testing program is provided along with the number of station years of testing.
- Actual yield of the standard check in each growing area for field pea is reported.
- Overage yield of each variety is expressed relative to the standard check.
- Significant statistical differences relative to the standard check are indicated.

Yields that are statistically higher (+) or lower (-) than the check are indicated. No symbol after the yield figure indicates that there is no statistical difference from the check.

Producers should pay particular attention to data on new varieties that have not been fully tested. If a large difference from the check is reported but is not significant, it could mean that yields have varied widely and/or there are not enough data to prove a statistical difference. With additional years of testing, the reported yield differences will become more accurate.

The following regional trials were grown in 2018:

- 19 green and yellow pea trials in Alberta and 2 sites in British Columbia
- 12 fababean trials
- 9 lentil trials
- 3 wide row dry bean trials at Bow Island, Lethbridge and Vauxhall
- 1 narrow row dry bean trial in Lethbridge
- 8 soybean trials

## More information

For additional information, including varieties not listed in this factsheet, call Alberta Agriculture and Forestry's Ag-Info Centre toll free at 310-FARM (3276). For other cropping information, refer to the website at [agriculture.alberta.ca](http://agriculture.alberta.ca)

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# FIELD PEA – YELLOW

Variety	Overall Yield	Overall Station Years of Testing	Area:										Agronomic Characteristics:				Disease Tolerance: <sup>4</sup>				
			1		2		3		4		5		Maturity Rating <sup>1</sup>	Vine Length (cm)	TSW <sup>2</sup> (g)	Standability <sup>3</sup> (1 - 9)	Mycosphae-rella Blight	Fusarium Wilt	Seed Coat Breakage	Seed Coat Dimpling <sup>5</sup>	Green Seed Coat <sup>6</sup>
			Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years									
<b>Varieties tested in the 2018 trials (Yield and agronomic data only directly comparable to CDC Amarillo)</b>																					
<b>CDC Amarillo (kg/ha)</b>	<b>5277</b>		<b>3842</b>		<b>4674</b>		<b>6866</b>		<b>5394</b>		<b>6471</b>										
<b>CDC Amarillo</b>	<b>100</b>	<b>106</b>	<b>100</b>	<b>18</b>	<b>100</b>	<b>30</b>	<b>100</b>	<b>17</b>	<b>100</b>	<b>25</b>	<b>100</b>	<b>16</b>	<b>M</b>	<b>81</b>	<b>227</b>	<b>2.4</b>	<b>F</b>	<b>G</b>	<b>F</b>	<b>F</b>	<b>G</b>
AAC Barrhead ☞	99	43	96	7	96	10	98	8	103	11	98	7	E	82	233	2.5	F	F	G	G	XX
AAC Carver ☉	105+	43	105	7	103	10	104	8	108+	11	103	7	E	84	243	2.9	F	F	G	G	G
AAC Chrome ▲	110+	29	116+	5	110+	8	108	5	108	6	105	5	M - L	72	240	2.9	F	P	G	F	G
AAC Lacombe ☞	104+	76	106+	13	101	23	106+	10	105+	20	102	10	M	76	258	2.2	F	P	G	F	G
CDC Athabasca ☉	95-	29	92	5	94	8	99	5	95	6	91-	5	M	80	284	2	F	F	F	F	G
CDC Canary ☉	104	29	106	5	104	8	98	5	101	6	101	5	E	80	241	2.6	F	F	G	F	G
CDC Inca ☉	104	43	101	7	97	10	110+	8	103	12	101	6	M	79	231	2.1	F	F	G	G	F
CDC Lewochko (A) ▲	106	15	102	2	98	4	104	3	100	3	105	3	M	89	233	1.6	F	F	G	G	G
CDC Meadow	97-	92	98	15	100	26	90-	13	96-	25	94-	13	M	81	205	3.6	F	F	G	G	G
CDC Spectrum ☉	106+	29	103	5	99	8	106+	5	100	6	109+	5	M	78	242	2.1	F	F	G	G	F
<b>Previously tested varieties</b>																					
AAC Peace River	92-	49	89-	8	94	15	90	5	97	16	82	5	VE	68	217	3.8	F	F	F	G	G
Abarth ☉	98-	49	101	8	104	16	83-	5	94	14	102	6	M	77	249	3.6	F	F	F	G	G
LN4228 ☉	93-	45	90-	8	94	11	89	7	95	14	97	5	M	69	254	2.1	F	F	F	F	G
<b>Varieties tested in 2012 - 2014 (Yield and agronomic data only directly compared to CDC Meadow)</b>																					
<b>CDC Meadow (kg/ha)</b>	<b>4982</b>		<b>3793</b>		<b>4567</b>		<b>6266</b>		<b>5189</b>		<b>5175</b>										
<b>CDC Meadow</b>	<b>100</b>		<b>100</b>		<b>100</b>		<b>100</b>		<b>100</b>		<b>100</b>		<b>M</b>	<b>81</b>	<b>207</b>	<b>3.6</b>	<b>F</b>	<b>F</b>	<b>G</b>	<b>G</b>	<b>G</b>
CDC Saffron	103	47	110	8	104	15	99	5	101	13	99	6	M	84	236	4.3	F	F	G	F	G
Hugo ☞	93-	47	104	7	92	13	92	6	96	14	75-	7	M	73	210	5.2	F	F	G	F	F
Stella ☞ NR F	80-	45	75-	7	81-	13	83-	6	80-	12	80-	7	M	95	213	3.9	F	F	G	G	F
<b>Varieties tested in 2003 - 2011 (Yield and agronomic data only directly comparable to Cutlass)</b>																					
<b>Cutlass (kg/ha)</b>	<b>4485</b>		<b>3388</b>		<b>4267</b>		<b>5111</b>		<b>4816</b>		<b>3718</b>										
<b>Cutlass †</b>	<b>100</b>		<b>100</b>		<b>100</b>		<b>100</b>		<b>100</b>		<b>100</b>		<b>M</b>	<b>71</b>	<b>228</b>	<b>4.1</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>G</b>
Agassiz☞	103	43	99	5	102	8	100	6	104	19	106	5	M	77	237	2.9	F	F	G	VG	G
CDC Hornet	107+	43	99	6	111+	11	106+	6	102	13	119	7	M	89	215	3.7	F	F	F	F	G
CDC Prosper	97-	44	90	4	98	9	93-	6	99	18	97	7	E	73	150	3.9	F	G	G	F	G
CDC Treasure	100	44	96	4	104	9	96	6	100	18	105	7	E	80	217	3.4	F	F	G	F	F
Thunderbird	97	37	88	5	99	8	98	6	98	13	102	5	M	76	229	2.1	F	F	G	VG	XX
<b>Varieties tested in 2000 - 2005 (Yield and agronomic data only directly comparable to Carrera)</b>																					
<b>Carrera (kg/ha)</b>	<b>4126</b>		<b>2913</b>		<b>2779</b>		<b>5248</b>		<b>4681</b>		<b>4016</b>										
<b>Carrera</b>	<b>100</b>		<b>100</b>		<b>100</b>		<b>100</b>		<b>100</b>		<b>100</b>		<b>E</b>	<b>54</b>	<b>257</b>	<b>4.7</b>	<b>P</b>	<b>F</b>	<b>F</b>	<b>G</b>	<b>XX</b>
CDC Golden	105	36	99	5	109	12	99	7	105	11	XX	XX	M	70	223	3.5	F	F	G	G	G

**Remarks:** Stella is a silage type pea. All the yellow pea varieties listed in the table are Powdery Mildew resistant except Carrera that is susceptible. ▲ = Applied for Plant Breeder's Rights protection (PBR). ☞ = Protected by PBR (UPOV 78). ☉ = Protected by PBR (UPOV 91), A = First year entries (2018). NR = Variety not registered with CFIA. F = Forage type. XX = Insufficient data to describe. LGPN 4903 removed from the table.

<sup>1</sup>Maturity: E = early, M = medium, L = Late; <sup>2</sup>Thousand Seed Weight: g; <sup>3</sup>Standability: 1 = erect, 9 = flat; <sup>4</sup>Tolerance to: P = poor, F = fair, G = good, VG = very good; <sup>5</sup>Seed Coat Dimpling: VG = very good (0 - 5%), G = good (6 - 20%), F = fair (21 - 50%); <sup>6</sup>Green Seed Coat: G = good (0 - 10%), F = fair (11 - 25%).

**FIELD PEA – GREEN**

Variety	Overall Station	Area:										Agronomic Characteristics:				Disease Tolerance: <sup>4</sup>					
		1		2		3		4		5		Vine				Mycosphae- rella Blight	Fusarium Wilt	Bleaching	Seed Coat Breakage	Seed Coat Dimpling <sup>5</sup>	
		Overall Yield	Years of Testing	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Maturity Rating <sup>1</sup>	Length (cm)						TSW <sup>2</sup> (g)
<b>Varieties tested in the 2018 trials (Yield and agronomic data only directly comparable to CDC Limerick)</b>																					
<b>CDC Limerick (kg/ha)</b>	<b>4852</b>		<b>3571</b>		<b>4567</b>		<b>6160</b>		<b>4807</b>		<b>6061</b>										
<b>CDC Limerick</b>	<b>100</b>	<b>106</b>	<b>100</b>	<b>18</b>	<b>100</b>	<b>33</b>	<b>100</b>	<b>17</b>	<b>100</b>	<b>30</b>	<b>100</b>	<b>8</b>	<b>M</b>	<b>78</b>	<b>211</b>	<b>3</b>	<b>F</b>	<b>F</b>	<b>G</b>	<b>VG</b>	<b>G</b>
AAC Comfort (▲)	100	30	104	6	98	9	104	5	98	7	98	3	M - L	78	253	3.3	F	F	G	XX	F
CDC Forest (▲)	109+	30	121+	6	109+	9	108	5	102	7	108+	3	M	81	236	2.2	F	F	G	G	G
CDC Spruce (▲)	105+	30	104	6	107+	9	108+	5	99	7	108	3	M	81	254	2.3	F	F	G	G	F
LRP1424 NR	103	30	112	6	103	9	102	5	99	7	101	3	M	81	214	2.6	F	F	G	G	G
<b>Previously tested varieties</b>																					
AAC Radius	92-	44	94	8	90-	10	88-	6	94-	16	88	4	M	76	217	3.6	F	F	G	G	G
AAC Royce	96-	40	106	8	92	8	92	6	98	14	87	4	M	67	247	4.1	F	F	G	F	F
CDC Greenwater	106+	42	106	8	109	10	105	6	106+	14	97	4	L	74	230	2.8	F	G	G	F	F
<b>Varieties tested in 2013 - 2014 (Yield and agronomic data only directly comparable to CDC Patrick)</b>																					
<b>CDC Patrick (kg/ha)</b>	<b>4732</b>		<b>5083</b>		<b>4543</b>		<b>5591</b>		<b>4305</b>		<b>5060</b>										
<b>CDC Patrick</b>	<b>100</b>	<b>109</b>	<b>100</b>	<b>16</b>	<b>100</b>	<b>34</b>	<b>100</b>	<b>12</b>	<b>100</b>	<b>32</b>	<b>100</b>	<b>14</b>	<b>M</b>	<b>79</b>	<b>186</b>	<b>4.4</b>	<b>F</b>	<b>G</b>	<b>G</b>	<b>G</b>	<b>G</b>
CDC Pluto	96-	52	101	8	98	17	81-	5	100	16	87-	6	M	82	170	6	F	F	G	G	G
CDC Raezer	105	52	91	8	107	17	94	5	107	16	118	6	M	89	227	4.2	F	G	G	G	G
CDC Tetris	106	52	102	8	105	17	93	5	110+	16	116+	6	L	91	215	4.4	F	G	G	G	G
<b>Varieties tested in 2004 - 2012 (Yield and agronomic data only directly comparable to Cooper)</b>																					
<b>Cooper (kg/ha)</b>	<b>4724</b>		<b>4947</b>		<b>4316</b>		<b>5435</b>		<b>4835</b>		<b>4244</b>										
<b>Cooper (◌)</b>	<b>100</b>	<b>121</b>	<b>100</b>	<b>18</b>	<b>100</b>	<b>34</b>	<b>100</b>	<b>14</b>	<b>100</b>	<b>36</b>	<b>100</b>	<b>19</b>	<b>L</b>	<b>76</b>	<b>270</b>	<b>3.6</b>	<b>F</b>	<b>F</b>	<b>G</b>	<b>F</b>	<b>G</b>
CDC Sage	82-	31	79	3	80-	6	84-	6	84-	13	78	3	M	75	197	3.3	F	G	G	VG	G
CDC Striker	96-	39	92	3	115	7	107	4	89-	21	92	4	M	72	255	3	F	G	G	G	G
Mendel	91-	38	75-	3	97	11	87-	4	91-	15	89	5	M	78	205	3.9	F	F	G	F	G

**Remarks:** CDC Tetris is an Espace type with blocky seed shape. All the green pea varieties listed in the table are Powdery Mildew resistant except CDC Striker that is susceptible. ▲ = Applied for Plant Breeder's Rights protection (PBR).

◌ = Protected by PBR (UPOV 78). ● = Protected by PBR (UPOV 91). NR = Variety not registered with CFIA. XX = Insufficient data to describe.

<sup>1</sup>Maturity: E = Early, M = Medium, L = Late; <sup>2</sup>Thousand Seed Weight: g; <sup>3</sup>Standability: 1 = Erect, 9 = Flat; <sup>4</sup>Tolerance to: P = Poor, F = Fair, G = Good, VG = Very Good; <sup>5</sup>Seed Coat Dimpling: VG = Very Good (0 - 5%), G = Good (6 - 20%), F = Fair (21 - 50%).

**DRY BEAN – NARROW ROW**

Variety	Type	Site Years 1997 - 2018	Overall Yield	Days to Bloom <sup>1</sup>	Days to Maturity	TSW <sup>2</sup> (g)	Plant Height (cm)	Lodging <sup>3</sup> (1 - 5)	Growth Habit <sup>4</sup>
<b>Varieties tested in the 2018 trials (Yield and agronomic data only directly comparable to the checks)</b>									
<b>AC Black Diamond (kg/ha)</b>			<b>3226</b>						
<b>AC Black Diamond</b>	<b>Black Shiny</b>	<b>22</b>	<b>100</b>	<b>57</b>	<b>102</b>	<b>257</b>	<b>36</b>	<b>2.3</b>	<b>II</b>
AAC Black Diamond 2	Black Shiny	6	101	60	0	266	33	1.8	II
CDC Blackstrap (A) Ⓜ	Black Matte	2	101	52	-11	244	31	2.5	II
<b>Island (kg/ha)</b>			<b>4377</b>						
<b>Island</b>	<b>Pinto</b>	<b>12</b>	<b>100</b>	<b>56</b>	<b>100</b>	<b>349</b>	<b>42</b>	<b>2.7</b>	<b>II</b>
AAC Explorer	Pinto	3	75	50	-8	384	36	2.6	II
AAC Expedition (A)	Pinto	1	100	54	-7	414	29	3.3	II
<b>AAC Tundra (kg/ha)</b>			<b>4359</b>						
<b>AAC Tundra</b>	<b>Great Northern</b>	<b>8</b>	<b>100</b>	<b>54</b>	<b>96</b>	<b>369</b>	<b>42</b>	<b>2.4</b>	<b>II</b>
AAC Whitehorse	Great Northern	7	108	53	-2	391	42	2.4	II
AAC Whitestar	Great Northern	4	105	48	-6	387	45	2	II
<b>AACY012 (kg/ha)</b>			<b>2714</b>						
AAC Y012 (A)	Yellow	1	100	49	90	380	32	1.5	I
AAC Y015 (A)	Yellow	1	112	51	2	365	31	1	I
<b>AAC Cranford (kg/ha)</b>			<b>3183</b>						
<b>AAC Cranford (A)</b>	<b>Cranberry</b>	<b>1</b>	<b>100</b>	<b>51</b>	<b>95</b>	<b>516</b>	<b>32</b>	<b>1.3</b>	<b>I</b>
<b>Previously tested varieties</b>									
<b>AC Black Diamond (kg/ha)</b>			<b>3174</b>						
<b>AC Black Diamond</b>	<b>Black Shiny</b>	<b>20</b>	<b>100</b>	<b>57</b>	<b>103</b>	<b>253</b>	<b>36</b>	<b>2.3</b>	<b>II</b>
CDC Blackcomb	Black Matte	6	78	64	1	186	36	1.3	II
<b>Island (kg/ha)</b>			<b>4155</b>						
<b>Island</b>	<b>Pinto</b>	<b>10</b>	<b>100</b>	<b>56</b>	<b>102</b>	<b>344</b>	<b>42</b>	<b>2.7</b>	<b>II</b>
AAC Burdett	Pinto	6	92	58	-4	381	42	1.3	II
CDC Marmot	Pinto	5	89	55	-6	419	34	2.2	II
CDC WM 2 Ⓞ	Pinto	8	80	56	3	350	41	2.4	II
Medicine Hat Ⓞ	Pinto	8	99	62	4	342	44	2	II
Winchester	Pinto	5	80	58	7	302	45	2.1	II
<b>AAC Tundra (kg/ha)</b>			<b>4559</b>						
<b>AAC Tundra</b>	<b>Great Northern</b>	<b>6</b>	<b>100</b>	<b>54</b>	<b>98</b>	<b>365</b>	<b>44</b>	<b>2.4</b>	<b>II</b>
AC Polaris	Great Northern	14	76	58	5	329	35	3.4	II
AC Resolute	Great Northern	17	68	51	-2	353	40	2.2	II
<b>AC Redbond (kg/ha)</b>			<b>2658</b>						
<b>AC Redbond</b>	<b>Small Red</b>	<b>16</b>	<b>100</b>	<b>51</b>	<b>101</b>	<b>296</b>	<b>38</b>	<b>2.5</b>	<b>II</b>
<b>CDC Sol (kg/ha)</b>			<b>1887</b>						
<b>CDC Sol</b> Ⓞ	<b>Yellow</b>	<b>6</b>	<b>100</b>	<b>59</b>	<b>111</b>	<b>385</b>	<b>33</b>	<b>1.6</b>	<b>I</b>
<b>Viva (kg/ha)</b>			<b>2380</b>						
<b>Viva</b>	<b>Pink</b>	<b>13</b>	<b>100</b>	<b>52</b>	<b>100</b>	<b>252</b>	<b>30</b>	<b>3.5</b>	<b>III</b>

**Remarks:** ▲ = Applied for Plant Breeder's Rights protection (PBR). Ⓞ = Protected by PBR (UPOV 78) Ⓜ = Protected by PBR (UPOV 91).

A = First year entries (2018). XX = Insufficient data to describe. <sup>1</sup>Days to bloom from seeding; <sup>2</sup>Thousand Seed Weight; <sup>3</sup>Lodging: 1 = erect, 5 = flat.

<sup>4</sup>Growth Habit: I = determinate bush, II = indeterminate bush, III = indeterminate prostrate.

**DRY BEAN – WIDE ROW**

Variety	Type	Site Years 1997 - 2018	Overall Yield	Days to Bloom <sup>1</sup>	Days to Maturity	TSW <sup>2</sup> (g)	Plant Height (cm)	Lodging <sup>3</sup> (1 - 5)	Growth Habit <sup>4</sup>
<b>Varieties tested in the 2018 trials (Yield and agronomic data only directly comparable to the checks)</b>									
<b>AC Black Diamond (kg/ha)</b>			<b>3198</b>						
AC Black Diamond	Black Shiny	44	100	57	102	265	37	2.2	II
AAC Black Diamond 2	Black Shiny	11	101	58	1	257	36	2.3	II
<b>Island (kg/ha)</b>			<b>3849</b>						
Island	Pinto	25	100	56	99	368	40	3	II
AAC Explorer	Pinto	6	92	52	-3	369	34	2.8	II
AAC Expedition (A)	Pinto	2	83	56	-1	387	31	3.7	II
<b>AAC Tundra (kg/ha)</b>			<b>3714</b>						
AAC Tundra	Great Northern	17	100	52	96	350	42	2.9	II
AAC Whitehorse	Great Northern	14	98	51	-1	373	42	2.8	II
AAC Whitestar	Great Northern	8	97	54	-1	368	44	2.9	II
AC Resolute	Great Northern	14	97	51	1	351	42	2.5	II
<b>AAC Y012 (kg/ha)</b>			<b>3671</b>						
AAC Y012	Yellow	6	100	52	99	398	34	1.5	I
AAC Y015	Yellow	6	87	54	1	399	33	2.3	I
<b>AAC Cranford (kg/ha)</b>			<b>3068</b>						
AAC Cranford	Cranberry	4	100	55	98	592	32	1.9	I
<b>Previously tested varieties</b>									
<b>AC Black Diamond (kg/ha)</b>			<b>3017</b>						
AC Black Diamond	Black Shiny	40	100	57	103	265	38	2.2	II
CDC Blackcomb	Black Matte	11	79	62	0	178	35	1.8	II
<b>Island (kg/ha)</b>			<b>3758</b>						
Island	Pinto	20	100	56	100	369	41	3	II
AAC Burdett	Pinto	9	101	55	-6	354	44	2.2	II
CDC WM-2 ☉	Pinto	14	76	56	1	369	40	2.5	II
Medicine Hat ☉	Pinto	12	93	61	4	354	42	2.4	II
Winchester	Pinto	13	85	56	4	337	40	2.5	II
<b>AAC Tundra (kg/ha)</b>			<b>3570</b>						
AAC Tundra	Great Northern	13	100	52	97	349	42	2.9	II
AC Polaris	Great Northern	6	107	62	7	300	37	4.1	II
<b>AC Redbond (kg/ha)</b>			<b>3149</b>						
AC Redbond	Small Red	29	100	52	100	319	40	2.4	II
<b>CDC Sol (kg/ha)</b>			<b>2350</b>						
CDC Sol ☉	Yellow	14	100	55	104	409	33	1.5	I
Myasi	Yellow	9	89	63	6	350	34	2.1	I
<b>Viva (kg/ha)</b>			<b>3137</b>						
Viva	Pink	29	100	54	102	258	34	3.8	III

Remarks: ▲ = Applied for Plant Breeder's Rights protection (PBR). ☉ = Protected by PBR (UPOV 78). ☼ = Protected by PBR (UPOV 91).

A = First year entries (2018). XX = Insufficient data to describe. <sup>1</sup>Days to bloom from seeding; <sup>2</sup>Thousand Seed Weight; <sup>3</sup>Lodging: 1 = erect, 5 = flat.

<sup>4</sup>Growth Habit: I = determinate bush, II = indeterminate bush, III = indeterminate prostrate.

**LENTIL**

Market Class	Variety	Area:								Agronomic Characteristics:				Disease Tolerance: <sup>6</sup>		
		Overall Station		1		2		5		TSW <sup>2</sup> (g)	Plant Height (cm)	Maturity Rating <sup>3</sup>	Cotyledon Colour <sup>4</sup>	Seed Coat Colour <sup>5</sup>	Ascochyta	Anthracnose
		Overall Yield	Years of Testing	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years							
<b>Varieties tested in the 2018 trials (Yield and agronomic data only directly comparable to CDC Maxim)</b>																
	<b>CDC Maxim (kg ha<sup>-1</sup>)</b>	<b>2938</b>		<b>2859</b>		<b>2878</b>		<b>3933</b>								
Small Red	CDC Maxim (CL) <sup>1</sup>	100	37	100	31	100	4	100	2	40	34	E/M	R	GR	G	G
Extra Small Red	CDC Roxy ▲	99	17	97	11	104	4	103	2	28	33	E/M	R	GR	G	G
Small Red	IBC-978 (CL) (A) ▲ NR	96	8	89	4	115	2	92	2	31	32	E/M	R	GR	G	G
	CDC Impulse (CL) ●	104	17	100	11	107	4	119	2	47	36	E/M	R	GR	G	G
	CDC Proclaim (CL) ●	103	14	102	8	109	4	99	2	40	35	E/M	R	GR	G	G
Small Green	CDC Kermit ●	103	8	92	4	127	2	103	2	31	32	E/M	Y	G	G	G
Large Green	CDC IBC-937 (CL) (A) ▲ NR	93	8	84	4	113	2	93	2	67	34	M/L	Y	G	G	VP
<b>Previously tested varieties</b>																
Extra Small Red	CDC Impala (CL)	93-	20	93-	20	XX	XX	XX	XX	31	35	E	R	GR	G	G
	CDC Imperial (CL)	82-	17	82-	17	XX	XX	XX	XX	30	35	E	R	GR	G	G
	CDC Rosie	97	19	102	17	76	2	XX	XX	30	35	E/M	R	GR	G	G
Small Red	CDC Dazil (CL)	94	25	93	23	98	2	XX	XX	34	35	E/M	R	GR	G	F
	CDC Imax (CL)	100	19	100	19	XX	XX	XX	XX	46	37	E/M	R	GR	G	F
	CDC Redberry	96	17	96	17	XX	XX	XX	XX	44	37	E	R	GR	G	G
	CDC Redcliff	110+	14	110+	14	XX	XX	XX	XX	39	36	E/M	R	GR	G	F
	CDC Scarlet	102	19	105	17	86	2	XX	XX	38	35	E/M	R	GR	G	F
Large Red	CDC KR-1	104	23	104	21	103	2	XX	XX	52	39	M	R	GR	G	G
Small Green	CDC Invincible (CL)	96	28	96	26	90	2	XX	XX	33	35	E	Y	G	G	G
Medium Green	CDC Imigreen (CL)	79-	14	79-	14	XX	XX	XX	XX	61	43	M	Y	G	G	VP
	CDC Impress (CL)	85-	14	85-	14	XX	XX	XX	XX	52	38	M	Y	G	G	P
Large Green	CDC Greenland	88-	14	88-	14	XX	XX	XX	XX	67	39	M/L	Y	G	G	VP
	CDC Greenstar	92	9	XX	XX	XX	XX	XX	XX	63	37	M/L	Y	G	G	F
	CDC Impower (CL)	81	23	81	21	83	2	XX	XX	67	41	M/L	Y	G	G	VP
	CDC Improve (CL)	84	23	84	21	83	2	XX	XX	71	38	M	Y	G	F	VP

**Remarks:** Weight, diameter and thickness of lentil seeds were dependent upon environmental conditions and agronomic factors. Four trials were grown in Zone 1: Bow Island, Brooks, Lethbridge, Medicine Hat; two trials in Zone 2: Oyen and Strathmore; and three trials in Zone 5: Stettler, Vegreville and Vermillion. ▲ = Applied for Plant Breeder's Rights protection (PBR). ● = Protected by PBR (UPOV 91). CL= Clearfield variety. NR = not registered with CFIA. A = First year entries (2018). XX = Insufficient data to describe.

<sup>1</sup>Yields are reported relative to CDC Maxim (CL). CDC Maxim belongs to Small Red Market Class. <sup>2</sup>Thousand Seed Weight. <sup>3</sup>Maturity: E = Early, M = Medium, L = Late, VL = Very Late. <sup>4</sup>Cotyledon Color: R = Red, Y = Yellow, G = Green; <sup>5</sup>Seed Coat Color/Patterns: G = Green, GR = Grey, BR = Brown, FG = French Green, T = Tan, MRB = Marbled. <sup>6</sup>Disease tolerance: VP = Very Poor, P = Poor, F = Fair, G = Good.

# SOYBEAN

Variety	Overall Yield	Overall Station years of Testing	Irrigation:		Area 5		Agronomic Characteristics:					
			Yield (%)	Site Years	Yield (%)	Site Years	Days to Flowering	Pod Clearance <sup>2</sup> (cm)	Plant Height (cm)	Relative Days to Maturity <sup>3</sup>	TSW <sup>4</sup> (g)	Seeds per Pound
<b>Varieties tested in the 2018 trials (Yield and agronomic data only directly comparable to McLeod)</b>												
McLeod (kg ha <sup>-1</sup> )	3305		3602		2432							
McLeod	100	28	100	23	100	2	55	6	63	123	159	2855
22-60	100	17	100	16	101	1	53	4	52	0	147	3088
Akras	109	28	112+	23	89	2	57	9	63	2	147	3088
CBZ916A2 (A)	92	5	93	4	86	1	56	4	57	-3	153	2967
CFS18.01 (A)	90	5	93	4	75	1	56	4	58	0	147	3088
CFS18.02 (A)	98	5	100	4	91	1	56	3	57	-3	154	2948
CFS18.06 (A)	89	5	93	4	74	1	56	4	70	4	149	3047
CFS18.07 (A)	94	5	92	4	100	1	54	3	57	-5	141	3220
Dario	88-	9	89	8	79	1	53	4	53	-4	138	3290
Dayo (A)	74-	5	76-	4	68	1	57	2	41	-6	140	3243
DKB0005-44 (A)	90	5	91	4	87	1	57	4	54	-4	145	3131
DKB009-89 (A)	97	5	96	4	99	1	56	3	58	-2	164	2768
Nocoma	90-	9	90-	8	85	1	54	6	55	-6	162	2802
NSC Leroy	83-	9	84-	8	79	1	54	4	53	-11	150	3027
NSC Melfort (A)	93	5	94	4	88	1	53	3	57	-5	120	3783
NSC Newton	88-	9	90-	8	67	1	55	5	61	1	158	2873
NSC Redvers (A)	89-	5	93	4	72	1	56	3	57	0	133	3414
NSC Watson	91-	13	90-	12	103	1	53	4	51	-11	156	2910
S0007-B7X (A)	82-	5	81-	4	86	1	55	2	52	-9	138	3290
S0009 - D6	87-	9	87-	8	88	1	53	4	51	-9	132	3439
S0009 - M2	97	17	98	16	82	1	52	5	56	-10	151	3007
S003	103	13	103	12	105	1	53	5	55	-7	174	2609
S006-M4X (A)	98	5	99	4	93	1	55	3	57	0	123	3691
S006-W5	108+	13	109+	12	95	1	52	4	54	-5	133	3414
S007	108+	17	108+	16	116	1	52	5	58	-1	150	3027
S008	107+	9	108+	8	98	1	53	5	59	1	166	2735
TH33003	102	24	101	19	113	2	52	6	68	-1	140	3243
TH87000 (A)	85-	5	84-	4	90	1	53	3	54	-6	122	3721
TH890005 (A)	87-	5	89-	4	82	1	57	3	51	-6	143	3175
Torro	91-	13	90-	12	97	1	52	5	64	-4	149	3047
<b>Previously tested varieties</b>												
900Y61 ☞	XX	XX	90-	11	XX	XX	54	7	56	1	150	3024
NSC Moosomin	XX	XX	78-	11	XX	XX	53	6	49	-4	138	3287
NSC Reston	XX	XX	103	11	XX	XX	54	8	61	-2	128	3544
NSC Vito	XX	XX	89-	11	XX	XX	53	7	71	0	132	3436
P001T34 ☞	XX	XX	65-	11	XX	XX	53	5	46	-9	136	3335
Pekko	XX	XX	102	11	XX	XX	57	9	65	0	130	3489

**Remarks:** Straight combining is commonly used method of harvest. Swathing soybean can result in excessive field losses (up to 25%) due to shattering. Approximately four beans or one to two pods per square foot represent a yield loss of one bushel per acre. New names: Mani (CFS17.1.04); NSC Newton (NSC Belmont); Nocoma (CFS17.1.03). Varieties removed from the table: Dylan; DKB0008-39; DKB003-29; Lono; Marduk; NSC Star City; S001; TH37004; TH87003 and TH88005.

Four trials: Bow Island, Brooks Lethbridge and Medicine Hat were grown under irrigation. And one dry land site in Stettler, Area 5. A - first year entries (2018).

<sup>1</sup>Yields are reported relative to McLeod, yields that are statistically higher (+) or lower (-) than the check are indicated. <sup>2</sup>Distance from the ground level to lowest pod tip. <sup>3</sup>Maturity is reported as +/- days relative to McLeod - averaged across the Brooks, Bow Island and Medicine Hat trials. <sup>4</sup>TSW: Thousand Seed Weight.



Variety	Type	Overall Yield	Overall Station Years of Testing	Relative Maturity <sup>1</sup>	Plant Height (cm)	Thousand Seed Weight (g)	Flower Color <sup>2</sup>
<b>Varieties tested in the 2018 trials (Yield and agronomic data only directly comparable to Snowbird)</b>							
<b>CDC Snowbird (kg/ha)</b>		<b>5722</b>					
<b>CDC Snowbird</b> ☞	<b>Zero Tannin</b>	<b>100</b>	<b>54</b>	<b>E</b>	<b>89</b>	<b>478</b>	<b>W</b>
CDC 219-16 ☞ NR	Zero Tannin	101	10	E	83	358	W
DL Tesoro NR	Zero Tannin	107	10	M	89	571	W
Fabelle ▲	Tannin	115+	20	M	94	534	C
Malik NR * NR	Tannin	96-	42	M	83	632	C
<b>Previously tested varieties: 2013 - 2015</b>							
Snowdrop	Zero Tannin	88-	23	E	87	351	W
Tabasco ☞	Zero Tannin	85-	15	M	86	374	W

**Remarks:** All colored flower types have seed coats that contain tannins and may be suitable for export food markets if seed size and quality match customer demand. Varieties tested for a minimum three years are considered fully tested.

▲ = Applied for Plant Breeder's Rights protection (PBR). ☞ = Protected by PBR (UPOV 78). ☞ = Protected by PBR (UPOV 91). NR = Variety not registered with CFIA. \* Contract Varieties. Varieties removed from the table: Athena, Rodeo and Vertigo.

<sup>1</sup>Maturity: E = early, M = medium, ML = medium late, L = late; <sup>2</sup>Flower Colour: W = white flower, zero tannin; C = colored flower, tannin.