

# Technical Bulletin

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**SeCan**

Canada's Seed Partner

## CDC Canary Yellow Field Pea



Progress Through Research  
Le progrès grâce à la recherche

### Description:

CDC Canary is a high yielding yellow cotyledon, semi-leafless field pea with medium vine length, good lodging tolerance and powdery mildew resistance.

**Parentage:** Ceb4152/1658-7

### Strengths:

- 10% higher yield compared to the mean of the yellow pea checks CDC Golden and Agassiz
- Good lodging resistance, similar to Agassiz and better than CDC Golden
- Medium vine length, longer than the checks
- Powdery mildew resistant

### Neutral Traits:

- Medium maturity, same as CDC Golden and 1 day earlier than Agassiz
- Medium seed size, slightly larger than CDC Golden and Agassiz

- Round seed shape, slightly blockier than the checks
- Low seed coat breakage percent, similar to the checks
- Moderate protein concentration, same as Agassiz and less than CDC Golden
- Moderate cooking time, similar to the checks
- Fair mycosphaerella blight resistance; similar to the checks
- Fair Fusarium wilt resistance; similar to the checks

**Breeder:**

**Funded by:**



UNIVERSITY OF SASKATCHEWAN

Crop Development Centre

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**Table 1: Performance of CDC Canary compared to the checks (Pea Co-op Test B, 2013-2014)**

Variety	Yield (kg/ha)	Yield (% mean of checks)	Days to maturity	Vine length (cm)	Lodging (pre-harvest)	Seed wt (mg)	Shape	Seed coat breakage (%)	Crude protein (%)	Cooking time (min)
CDC Golden (check)	4472	97	97	87	4.7	210	2.5	1.5	23.7	10.4
Agassiz (check)	4797	104	98	90	4.2	223	2.6	4.6	22.7	10.4
<b>CDC Canary</b>	<b>5103</b>	<b>110</b>	<b>97</b>	<b>95</b>	<b>3.9</b>	<b>232</b>	<b>3.0</b>	<b>2.3</b>	<b>22.7</b>	<b>16.7</b>
CV	8.3									
LSD 05	293		.8	3.8	.5	7.7	.2	2.6	.7	7.0
# locations	22		20	16	23	19	20	4	9	2

Lodging score: 1=upright; 9=completely lodged

Shape: 1=round; 5=cubic

Cooking=Mattson cooking time (min);

**Table 2: Disease resistance data of CDC Canary compared to the checks (Pea Co-op Test B, 2013-2014)**

Variety	Myco (MB)	Myco (SK)	AUDPC-SK	Fusarium wilt (%)	Powdery mildew
CDC Golden (check)	4.8	4.2	17.3	25	0
Agassiz (check)	5.0	4.4	16.2	21	0
<b>CDC Canary</b>	<b>4.9</b>	<b>4.4</b>	<b>17.5</b>	<b>27</b>	<b>0</b>
LSD 05	1.2	1.1	1.7	18.4	0
# locations	2	2	2	2	2

Myco (MB)= Mycosphaerella blight assessed at Morden, MB (1=no disease, 9=completely blighted)

Myco (SK)= Mycosphaerella blight assessed at Saskatoon, SK.

AUDPC= Mycosphaerella blight area under the disease progress curve

Powdery mildew (0=no disease, 9=completely mildewed)

For more information, call 1-800-665-7333 or visit [www.secan.com](http://www.secan.com)

**2019 Seed Manitoba**

Variety	Yield (% of CDC Meadow)	Site Years Tested	Relative Maturity	Relative Vine Length	Seed Size (TKW)	Resistance to:						
						Lodging	Powdery Mildew	MB <sup>1</sup>	Fusarium Wilt <sup>2</sup>	Green Seed Coat <sup>3</sup>	Seed Coat Breakage	Seed Coat Dimpling <sup>4</sup>
CDC Meadow (Check)	100	72	E	M	220	G	VG	F	F	G	G	G
CDC Athabasca	97	6	M	L	300	VG	VG	F	G	G	F	F
CDC Lewochko	107	6	M	L	230	VG	VG	F	F	G	G	G
CDC Spectrum	97	6	M	L	240	VG	G	F	F	G	G	G
<b>CDC Canary</b>	<b>96</b>	<b>6</b>	<b>E</b>	<b>L</b>	<b>230</b>	<b>VG</b>	<b>VG</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>G</b>	<b>F</b>

1. Mycosphaerella Blight
2. Varieties which show good disease tolerance to one strain of Fusarium wilt may be susceptible to other strains
3. Green seed coats: G= 0-10%, F= 11-25%
4. Seed coat dimpling rating: VG= 0-5%, G= 6-20%, F= 21-50%

**2019 SaskSeed Guide**

Variety	Years Tested	Yield (% of CDC Amarillo)			Protein	Relative Maturity	Lodging <sup>1</sup>	Vine Length (cm)	Resistance to:					Seed Weight (g/1000)	
		1, 2 & South 3	North 3 & 4	Irrigation					MB <sup>2</sup>	Powdery Mildew	Fusarium Wilt	Seed Coat Breakage	Seed Coat Dimpling <sup>3</sup>		Greenness <sup>4</sup>
CDC Amarillo (Check)	10	100	100	100	23.0	M	3.5	85	4.5	R	MR	F	F	G	230
CDC Athabasca	7	93	97	---	+0.5	M	3.0	85	4.5	R	I	F	F	G	300
CDC Meadow	10	92	89	90	-0.6	E	4.0	85	5.0	R	I	G	G	G	220
CDC Lewochko	5	104	103	---	+0.7	M	3.5	90	4.5	R	I	G	G	G	230
CDC Spectrum	7	104	102	---	+0.5	M	3.5	85	4.5	R	I	G	G	F	240
<b>CDC Canary</b>	<b>6</b>	<b>97</b>	<b>98</b>	<b>---</b>	<b>-0.1</b>	<b>E</b>	<b>3.5</b>	<b>85</b>	<b>4.5</b>	<b>R</b>	<b>I</b>	<b>G</b>	<b>F</b>	<b>F</b>	<b>230</b>

1. Lodging: 1= completely upright, 9= completely lodged
2. Mycosphaerella Blight score (1-9) 1= no disease, 9= completely blighted
3. Seed coat dimpling: VG= 0-5%, G= 6-20%, F= 21-50%
4. Green seed coats: G= 0-15%, F= 16-40%

**2019 Alberta Seed Guide**

Variety	Overall Yield	Overall Station Years of Testing	Area 1		Area 2		Area 3		Area 4		Area 5		Maturity Rating	Vine Length (cm)	Seed Size (TKW)	Lodging <sup>1</sup>	Resistance to:					
			Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years					MB <sup>2</sup>	Fusarium Wilt	Powdery Mildew	Seed Coat Breakage	Seed Coat Dimpling <sup>3</sup>	Green Seed Coat <sup>4</sup>
CDC Amarillo (Check)	100	106	100	18	100	30	100	17	100	25	16	M	81	227	2.4	F	G	R	F	F	G	
CDC Athabasca	95-	29	92	5	94	8	99	5	95	6	91-	5	M	82	284	2	F	F	R	F	F	G
CDC Meadow	97-	92	98	15	100	26	90-	13	96-	25	94-	13	M	81	205	3.6	F	F	R	G	G	G
CDC Lewochko	106	15	102	2	98	4	104	3	100	3	105	3	M	89	233	1.6	F	F	R	G	G	G
CDC Spectrum	106+	29	103	5	99	8	106+	5	100	6	109+	5	M	78	242	2.1	F	F	R	G	G	F
<b>CDC Canary</b>	<b>104</b>	<b>29</b>	<b>106</b>	<b>5</b>	<b>104</b>	<b>8</b>	<b>98</b>	<b>5</b>	<b>101</b>	<b>6</b>	<b>101</b>	<b>5</b>	<b>E</b>	<b>80</b>	<b>241</b>	<b>2.6</b>	<b>F</b>	<b>F</b>	<b>R</b>	<b>G</b>	<b>F</b>	<b>G</b>

1. Lodging: 1= completely upright 9= completely lodging
2. Mycosphaerella Blight
3. Seed Coat Dimpling: VG= 0-5%, G= 6-20%, F= 21-50%
4. Green Seed Coat: G= 0-10%, F= 11-25%

**Resistance:** P= Poor, F= Fair, G= good, VG= Very Good R= Resistant

**Maturity:** E= Early, M= Medium, L= Late

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