

# Technical Bulletin

Genes that fit *your* farm.



## CDC Lewochko Yellow Field Pea



Progress Through Research  
Le progrès grâce à la recherche

### Description:

CDC Lewochko is a mid-maturing yellow cotyledon, semi-leafless field pea with medium vine length, great lodging resistance and powdery mildew resistance.

### Parentage:

### Strengths:

- Good yield; similar to CDC Spectrum
- Good lodging resistance; similar to CDC Spectrum and CDC Amarillo, better than CDC Inca or CDC Meadow
- Medium-long vine length, taller than CDC Amarillo
- Powdery mildew resistance
- Improved seed characteristic package- rated good for:
  - Resistance to seed coat breakage
  - Resistance to dimpling (better than CDC Amarillo)

- Greenness (less green coloration; better than CDC Inca or CDC Spectrum)
- Shape (round)

### Neutral Traits:

- Medium maturity
- Medium seed size (similar to CDC Amarillo)
- Moderate protein concentration
- Fair Mycosphaerella blight resistance (similar to CDC Amarillo, CDC Inca or CDC Spectrum)
- Fair Fusarium wilt resistance (similar to Agassiz)

### Breeder:

### Funded by:



UNIVERSITY OF SASKATCHEWAN  
Crop Development Centre  
COLLEGE OF AGRICULTURE AND BIOSOURCES  
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**Table 1: Performance of CDC 4061-4 compared to the checks (Pea Co-op Test A, 2014-2015)**

Variety	Yield (kg/ha)	Yield (% mean of checks)	Days to maturity	Vine length (cm)	Lodging (pre-harvest)	Seed wt (mg)	Shape	Crude protein (%)
CDC Golden (check)	3144	98	93	68	4.1	213	2.5	21.2
Agassiz (check)	3282	102	94	72	3.9	229	2.9	20.8
<b>CDC 4061-4</b>	<b>3728</b>	<b>116</b>	<b>97</b>	<b>78</b>	<b>3.0</b>	<b>231</b>	<b>2.5</b>	<b>21.0</b>
# of locations	22		20	19	24	19	18	5

Lodging score: 1=upright; 9=completely lodged

Shape: 1=round; 5=cubic

**Table 2: Disease resistance data of CDC 4061-4 compared to the checks (Pea Co-op Test A, 2014-2015)**

Variety	Myco (MB)	Myco (SK)	AUDPC-SK	Fusarium wilt (%)	Powdery mildew
CDC Golden (check)	3.5	4.0	11.3	29	0
Agassiz (check)	3.2	3.3	10.3	19	0
<b>CDC 4061-4</b>	<b>3.5</b>	<b>2.5</b>	<b>10.3</b>	<b>18</b>	<b>0</b>
# 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)

## 2022 Seed Manitoba

Variety	Yield (% of CDC Amarillo)	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 Amarillo (C)	100	44	Long	M	230	VG	VG	F	G	G	F	F
CDC Athabasca	96	28	Long	L	300	VG	VG	F	G	G	F	F
CDC Canary	99	28	Early	L	230	VG	VG	F	F	F	G	F
CDC Spectrum	96	28	Long	L	240	VG	VG	F	F	G	G	G
<b>CDC Lewochko</b>	<b>103</b>	<b>28</b>	<b>Mid</b>	<b>L</b>	<b>230</b>	<b>VG</b>	<b>VG</b>	<b>F</b>	<b>F</b>	<b>G</b>	<b>G</b>	<b>G</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%

## 2022 Saskatchewan Seed 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 (C)	13	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 Canary	9	99	101	---	+0.1	E	3.5	85	4.5	R	I	G	F	F	230
CDC Spectrum	10	104	102	---	+0.7	M	3.5	85	4.5	R	I	G	G	F	240
<b>CDC Lewochko</b>	<b>8</b>	<b>102</b>	<b>103</b>	<b>---</b>	<b>+0.9</b>	<b>M</b>	<b>3.5</b>	<b>90</b>	<b>4.5</b>	<b>R</b>	<b>I</b>	<b>G</b>	<b>G</b>	<b>G</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%

## 2022 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	Seed Coat Breakage	Seed Coat Dimpling <sup>3</sup>	Green Seed Coat <sup>4</sup>
CDC Amarillo (C)	100	134	100	21	100	40	100	21	100	30	100	22	M	81	227	2.4	I	MR	F	F	G
CDC Athabasca	95	42	93	8	94	13	99	6	96	7	92	8	M	80	284	2	I	I	F	F	G
CDC Canary	103	66	102	11	105	20	100	11	102	11	105	13	E	80	241	2.6	I	I	G	F	G
CDC Spectrum	104	66	102	11	102	20	105	11	101	11	107	13	M	78	242	2.1	I	I	G	G	F
<b>CDC Lewochko</b>	<b>102</b>	<b>52</b>	<b>104</b>	<b>8</b>	<b>100</b>	<b>16</b>	<b>103</b>	<b>9</b>	<b>103</b>	<b>8</b>	<b>105</b>	<b>11</b>	<b>M</b>	<b>89</b>	<b>233</b>	<b>1.6</b>	<b>I</b>	<b>I</b>	<b>G</b>	<b>G</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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