

Technical Bulletin

Genes that fit your farm.

SeCan

Canada's Seed Partner

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:



UNIVERSITY OF SASKATCHEWAN
Crop Development Centre
COLLEGE OF AGRICULTURE AND BIORESOURCES
AGBIO.USASK.CA

Funded by:



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
CDC 4061-4	3728	116	97	78	3.0	231	2.5	21.0
# 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
CDC 4061-4	3.5	2.5	10.3	18	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

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 ¹	Fusarium Wilt ²	Green Seed Coat ³	Seed Coat Breakage	Seed Coat Dimpling ⁴
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
CDC Lewochko	103	28	Mid	L	230	VG	VG	F	F	G	G	G

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	Yield (% of CDC Amarillo)				Vine Length (cm)	Resistance to:									
	1, 2 & North 3		Irrigation	Protein		Relative Maturity	Lodging ¹	Powdery Mildew	Fusarium Wilt	Seed Coat Breakage	Seed Coat Dimpling ³	Greenness ⁴	Seed Weight (g/1000)		
	South 3	4													
CDC Amarillo (C)	13	100	100	100	23.0	M	3.5	85	MR	R	4.5	F	F	G	230
CDC Athabasca	7	93	97	---	+0.5	M	3.0	85	I	R	4.5	F	F	G	300
CDC Canary	9	99	101	---	+0.1	E	3.5	85	I	R	4.5	F	F	F	230
CDC Spectrum	10	104	102	---	+0.7	M	3.5	85	I	R	4.5	G	G	F	240
CDC Lewochko	8	102	103	---	+0.9	M	3.5	90	I	R	4.5	G	G	G	230

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 Station Years of Yield Testing	Area 1			Area 2			Area 3			Area 4			Area 5			Resistance to:					
		Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Maturity Rating	Vine Length (cm)	Seed Size (TKW)	Lodging ¹	MB ²	Fusarium Wilt	Seed Coat Breakage	Seed Coat Dimpling ³	Green Seed Coat ⁴
CDC Amarillo (C)	100	134	100	21	100	40	100	21	100	6	100	21	100	22	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	
CDC Lewochko	102	52	104	8	100	16	103	9	103	8	105	11	M	89	233	1.6	I	I	G	G	G	

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