

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
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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
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

2023 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	57	Long	M	230	VG	VG	F	G	G	F	F
CDC Athabasca	97	41	Long	L	300	VG	VG	F	G	G	F	F
CDC Canary	98	41	Early	L	230	VG	VG	F	F	F	G	F
CDC Hickie	103	6	Mid	M	230	VG	VG	F	G	F	G	G
CDC Spectrum	97	41	Long	L	240	VG	VG	F	F	G	G	G
CDC Lewochko	103	41	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%

2023 Saskatchewan Seed Guide

Variety	Years Tested	Yield (% of CDC Amarillo)			Protein	Relative Maturity	Lodging ¹	Vine Length (cm)	Resistance to:						Seed Weight (g/1000)
		1, 2 & South 3	North 3 & 4	Irrigation					MB ²	Powdery Mildew	Fusarium Wilt	Seed Coat Breakage	Seed Coat Dimpling ³	Greenness ⁴	
CDC Amarillo (C)	14	100	100	100	23.0	M	3.5	85	4.5	R	MR	F	F	G	230
CDC Canary	10	99	100	---	+0.1	E	3.5	85	4.5	R	I	G	F	F	230
CDC Hickie	6	108	107	---	+0.5	M	3.5	85	4.5	R	MR	G	G	G	230
CDC Spectrum	11	105	103	---	+0.7	M	3.5	85	4.5	R	I	G	G	F	240
CDC Lewochko	9	103	104	---	+0.9	M	3.5	90	4.5	R	I	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%

2023 Alberta Seed Guide

Variety	Overall Yield	Overall Station Years of Testing	Brown - Irrigated		Brown		Black-short		Black-mid		Grey Wooded		Maturity Rating ¹	Vine Length (cm)	Seed Size (TKW)	Standability ²	Disease Tolerance ⁵		Resistance to:		
			Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years					Yield (%)	Site Years	MB ³	Fusarium Wilt	Seed Coat Breakage
CDC Amarillo (C)	100	135	100	10	100	10	100	15	100	25	100	14	M	81	227	2.4	F	G	F	F	G
CDC Athabasca	101	73	97	9	100	10	98	15	103	25	102	14	M	80	284	2	F	F	F	F	G
CDC Canary	104	58	97	7	99	8	109	12	103	20	107	11	E	80	241	2.6	F	F	G	F	G
CDC Spectrum	102	73	96	9	100	10	103	15	103	25	106	14	M	78	242	2.1	F	F	G	G	F
CDC Lewochko	101	72	102	9	93	9	104	15	103	25	101	14	M	89	233	1.6	F	F	G	G	G

1. Maturity: E= Early, M= Medium, L= Late
2. Standability: 1= completely upright 9= completely lodging
3. Mycosphaerella Blight, P= Poor, F= Fair, G= good, VG= Very Good R= Resistant
4. Seed Coat Dimpling: VG= 0-5%, G= 6-20%, F= 21-50%
5. Disease Tolerance: P = poor, F = Fair, G = Good and VG = Very Good
6. Green Seed Coat: G= 0-10%, F= 11-25%

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