

Technical Bulletin

Genes that fit *your* farm.

SeCan

Canada's Seed Partner

CDC Hickie Yellow Field Pea



Progress Through Research
Le progrès grâce à la recherche

Description:

CDC Hickie is a high yielding yellow cotyledon field pea with high protein, medium vine length, good standability and good resistance to seed coat breakage, dimpling and less green coloration.

Parentage: CDC 2283-17/P0410-16

Strengths:

- 104% yield of CDC Amarillo
- +0.2% protein compared to CDC Amarillo
- Good lodging resistance; similar to CDC Amarillo and AAC Lacombe
- Medium-long vine length; similar to CDC Amarillo
- Powdery mildew resistance
- Moderately resistance rating to Fusarium wilt

- Improved seed characteristic package- rated good for:
 - Resistance to seed coat breakage
 - Resistance to dimpling
 - Greenness (less green coloration) better than CDC Inca or CDC Spectrum

Neutral Traits:

- Medium maturity, 1 day later than CDC Amarillo
- Medium seed size similar to CDC Amarillo
- Fair Mycosphaerella blight resistance (similar to CDC Amarillo or CDC Lewochko)

Breeder:

Funded by:



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



Table 1: Performance of CDC Hickie compared to the checks (Pea Co-op Test B, 2017-2018)

Variety	Yield (kg/ha)	Yield (% mean of checks)	Days to maturity	Vine length (cm)	Lodging (pre-harvest)	Seed wt (mg)	Shape	Crude protein (%)
CDC Amarillo (check)	3900	100	93	83	2.6	229	2.5	24.2
AAC Lacombe (check)	3930	100	92	80	2.5	256	2.5	22.7
CDC Hickie	4040	103	94	83	2.6	232	2.7	24.4
# of locations	27		25	21	25	26	18	16

Lodging score: 1=upright; 9=completely lodged
Shape: 1=round; 5=cubic

Table 2: Performance of CDC Hickie compared to the checks (Pea Co-op Test B, 2017-2018)

Variety	Myc (AB)	Myc (SK)	Fusarium wilt (%)	Powdery mildew
CDC Amarillo (check)	3.2	4.7	29	0
AAC Lacombe (check)	2.1	4.9	19	0
CDC Hickie	1.8	5.1	18	0
# locations	2	2	2	2

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

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

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 Lewochko	103	41	Mid	L	230	VG	VG	F	F	G	G	G
CDC Spectrum	97	41	Long	L	240	VG	VG	F	F	G	G	G
CDC Hickie	103	6	Mid	M	230	VG	VG	F	G	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 Lewochko	9	103	104	---	+0.9	M	3.5	90	4.5	R	I	G	G	G	230
CDC Spectrum	11	105	103	---	+0.7	M	3.5	85	4.5	R	I	G	G	F	240
CDC Hickie	6	108	107	---	+0.5	M	3.5	85	4.5	R	MR	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	Seed Coat Dimpling ⁴
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 Lewochko	101	72	102	9	93	9	104	15	103	25	101	14	M	89	233	1.6	F	F	G	G	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 Hickie	Insufficient data																					

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%

For more information, call 1-800-665-7333 or visit www.secan.com