

## **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 agricultasks.ca



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

Variety	Yield Yield ( (kg/ha) 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	Myco (AB)	Myco (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

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

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

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

#### 2024 Seed Manitoba

						Resistance to:										
Variety	Yield % of Check	Site Years Tested	Relative Maturity	Relative Vine Length	Seed Size (TKW)	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)	98	50	Long	М	230	VG	VG	F	G	G	F	F				
CDC Lewochko	100	42	Long	L	230	VG	VG	F	F	G	G	G				
CDC Spectrum	93	42	Long	L	240	VG	VG	F	F	G	G	G				
CDC Hickie	100	14	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%

#### 2024 Saskatchewan Seed Guide

		Yield (%	of CDC	Amarillo)					Resistance to:							
Variety	Years Tested	1, 2 & South 3	North 3 & 4	Irrigation	Protein	Relative Maturity	Lodging <sup>1</sup>	Vine Length (cm)	MB <sup>2</sup>	Powdery Mildew	Fusarium Wilt	Seed Coat Breakage	Seed Coat Dimpling <sup>3</sup>	Greeness <sup>4</sup>	Seed Weight (g/1000)	
CDC Amarillo (C)	14	100	100	100	23.0	М	3.5	85	4.5	R	MR	F	F	G	230	
CDC Boundless	4	109	100		+0.8	М	3.0	90	4.5	R	MR	G	G	G	230	
CDC Canary	10	99	100		+0.1	E	3.5	85	4.5	R	I	G	F	F	230	
CDC Lewochko	10	104	104		+0.9	М	3.5	90	4.5	R	I	G	G	G	230	
CDC Spectrum	12	105	103	94	+0.7	М	3.5	85	4.5	R	I	G	G	F	240	
CDC Hickie	7	107	106		+0.5	М	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%

## 2024 Alberta Seed Guide

			Brown - Irrigated Brown			Brown		Black-short		Black-mid		Grey Wooded		Agronomic Characteristics:					「olerance⁵	Tolerance to:		
Variety	Overall Yield	Overall Station Years of Testing	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Protein (%)	Maturity Rating <sup>1</sup>		Seed Size (TKW)	Stand- ability <sup>2</sup>	MB <sup>3</sup>			Seed Coat Dimpling⁴	Green Seed Coat <sup>6</sup>
CDC Amarillo (C)	100	58	100	3	100	7	100	14	100	23	100	11	23.0	М	85		2.4	4.5	MR	F	F	G
CDC Canary	103	58	XX	3	95	7	104	14	105	23	103	11	+0.1	E	58	230	2.6	4.5	I	G	F	F
CDC Lewochko	103	58	XX	3	98	7	104	14	104	23	103	11	+0.9	М	90	230	1.6	4.5	I	G	G	G
CDC Spectrum	103	58	XX	3	94	7	105	14	104	23	103	11	+0.7	М	85	240	2.1	4.5	I	G	G	F
CDC Hickie	104	16	XX	1	XX	1	ХХ	4	107	7	ХХ	3	+0.5	М	85	230	2.6	4.5	MR	G	G	G

1. Maturity: E= Early, M= Medium, L= Late

2. Standability: 1= completely upright 9= completely lodging

3. Mycosphaerella Blight, 1= no disease, 9= completely blighted

4. Seed Coat Dimpling: VG= 0-5%, G= 6-20%, F= 21-50%

5. Disease Tolerance: I = intermediate, MR = moderately resistance, R = resistant

6. Green Seed Coat: G= 0-10%, F= 11-25%