# Technical Bulletin

Genes that fit your farm.



# CDC Tollefson Yellow Field Pea



# **Description:**

CDC Tollefson is a very high yielding yellow field pea with medium-long vine length, good standability, and good resistance to seed coat breakage, dimpling, and less green colouration. CDC Tollefson should be an excellent fit for all pea growing areas of Western Canada.

Parentage: CDC 2648-21//MP1899/2847-21

# Strengths:

- 107% yield of CDC Amarillo
- Good lodging resistance; similar to CDC Amarillo and AAC Lacombe
- Powdery mildew resistance
- Moderate resistance rating to Fusarium wilt
- Improved seed characteristic package- rated good for:
  - Resistance to seed coat breakage
  - Resistance to dimpling

 Greenness (less green colouration) better than CDC Inca or CDC Spectrum

## **Neutral Traits:**

- -0.6% lower protein than CDC Amarillo
- Medium-late maturity, 2 days later than CDC Amarillo
- Medium seed size, slightly larger than CDC Amarillo, but smaller than AAC Lacombe
- Fair Mycosphaerella blight resistance (similar to CDC Amarillo or CDC Lewochko)

# **PBR 91 Protected**

Breeder: Funded by:





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

Variety	Yield (kg/ha)	Yield (% mean of checks)	Days to maturity	Vine length (cm)	Lodging (pre- harvest)	Seed wt (mg)	Shape	Seed Coat Breakage (%)	Crude protein (%)	
CDC Amarillo (check)	3790	101	93	81	2.4	231	2.5	12	24.5	
AAC Lacombe (check)	3700	99	93	77	2.7	260	2.5	9	23.1	
CDC Tollefson	4060	108	95	86	2.5	244	2.5	4	23.9	
# of locations	24		22	20	23	24	18	11	13	

Lodging score: 1=upright; 9=completely lodged

Shape: 1=round; 5=cubic

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

Variety	Myco (AB)	Myco (SK)	Fusarium wilt (%)	Powdery mildew
CDC Amarillo (check)	3.3	5.1	5.6	0
AAC Lacombe (check)	2.3	5.2	5.5	0
CDC Tollefson	1.7	4.6	5.0	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)

#### 2025 Seed Manitoba

	Yield					Resistance to:										
	% of Check AAC Carver	Site Years Tested	Relative Maturity	Relative Vine Length	Seed Size (TKW)	Lodging	Powdery Mildew	MB¹	Fusarium Wilt <sup>2</sup>	Green Seed Coat <sup>3</sup>	Seed Coat Breakage	Seed Coat Dimpling <sup>4</sup>				
AAC Carver	100	61	Early	L	240	G	VG	F	I	G	G	G				
CDC Boundless	97	9	Mid	L	230	VG	VG	F	MR	G	G	G				
CDC Hickie	98	23	Mid	М	230	VG	VG	F	MR	G	G	G				
CDC Lewochko	100	42	Long	L	230	VG	VG	F	I	G	G	G				
CDC Tollefson	104	23	Long	L	240	VG	VG	F	MR	G	G	G				

- Mycosphaerella Blight
- Varieties which show good disease tolerance to one strain of Fusarium wilt may be susceptible to other strains
- Green seed coats: G= 0-10%, F= 11-25%
- Seed coat dimpling rating: VG= 0-5%, G= 6-20%, F= 21-50%

#### 2025 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)	15	100	100	100	23.8	М	2.9	85	3.9	R	MR	F	F	G	230	
CDC Boundless	5	109	105		+0.5	М	-0.1	90	-0.1	R	MR	G	G	G	230	
CDC Canary	10	99	100		-0.2	E	+0.2	85	+0.4	R	ı	G	F	F	230	
CDC Hickie	8	106	105		+0.6	М	-0.1	85	0.0	R	MR	G	G	G	230	
CDC Lewochko	11	103	103		+0.7	М	-0.1	90	-0.1	R	ı	G	G	G	230	
CDC Spectrum	13	104	103	93	+0.3	М	0.0	85	-0.2	R	ı	G	G	F	240	
CDC Tollefson	8	107	106		-0.1	M	-0.2	90	-0.1	R	MR	G	G	G	240	

- 1. Lodging: 1= completely upright, 9= completely lodged; values are +/- CDC Amarillo
- 2. Mycosphaerella Blight score (1-9): 1= no disease, 9= completely blighted, values are +/- CDC Amarillo
- 3. Seed coat dimpling: VG= 0-5%, G= 6-20%, F= 21-50%
- 4. Green seed coats: G= 0-15%, F= 16-40%

#### 2025 Alberta Seed Guide

	Most Recent		Overall	Overall Brown - Irrigat		igated Brown		Black-short		Black-mid		Grey Wooded		Agronomic Characteristics:					sease erance <sup>5</sup>	Tolerance to:			
Variety	year of RVT Ove		Station Years of Testing		Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years		Maturity Rating <sup>1</sup>	Vine Length (cm)	Seed Size (TKW)	Stand- ability <sup>2</sup>	MB <sup>3</sup>			Seed Coat	
CDC Amarillo (bu/ac)		74		92		64		80		69		76											
CDC Amarillo (C)	2024	100	87	100	4	100	10	100	22	100	38	100	13	23.8	М	85	230	2.9	3.9	MR	F	F	G
CDC Canary	2023	103	58	XX	3	95	7	104	14	105	23	103	13	-0.2	Е	58	230	3.1	4.3	1	G	F	F
CDC Hickie	2024	101	25	XX	2	XX	2	105	6	101	10	XX	3	+0.6	M	85	230	2.8	2.9	MR	G	G	G
CDC Lewochko	2023	103	58	XX	3	98	7	104	14	104	23	103	11	+0.7	M	90	230	2.8	3.8	I	G	G	G
CDC Spectrum	2023	103	58	XX	3	94	7	105	14	105	27	103	11	+0.3	M	85	240	2.9	3.7	I	G	G	F
CDC Tollefson	2024	105	25	XX	2	XX	2	108	6	106	10	XX	5	-0.1	M	90	240	2.7	3.8	MR	G	G	G

- Maturity: E= Early, M= Medium, L= Late
- Standability: 1= completely upright, 9= completely lodging Mycosphaerella Blight: 1= no disease, 9= completely blighted
- Seed Coat Dimpling: VG= 0-5%, G= 6-20%, F= 21-50%
- Disease Tolerance: I= intermediate, MR= moderately resistance, R= resistant
- Green Seed Coat: G= 0-10%, F= 11-25%