

YELLOW PEA: CDC Spectrum

CDC Spectrum is a yellow cotyledon, semi-leafless field pea variety. It was registered and released to Select Seed Growers in Saskatchewan and Manitoba in 2016.

CDC Spectrum was tested for two years in the Field Pea Co-op Registration Test “B” in 2012 - 2013. In these trials, the yield was 111% of the mean of the yellow pea check varieties CDC Golden and Agassiz. In 5 years of testing in the Co-op and Regional trials in Saskatchewan (Table 1), CDC Spectrum yielded 4% higher than the check variety CDC Amarillo in the southern regions and 3% higher in the north. CDC Spectrum has PBR’91 protection.

Strengths:

- Improved yield compared to the check varieties
- Good lodging resistance; better than the checks CDC Golden, Agassiz, similar to CDC Amarillo
- Powdery mildew resistance

Neutral:

- Medium maturity (2 days later than Agassiz, 4 days later than CDC Golden)
- Medium vine length (similar to the checks)
- Medium seed size (larger than the checks)
- Round seed shape (similar to the checks)
- Low seed coat breakage percent
- Moderate protein concentration (higher than CDC Amarillo)
- Moderate cooking time (slightly slower than the checks)
- Fair mycosphaerella blight resistance; similar to the checks
- Fair Fusarium wilt resistance; similar to the checks CDC Golden and Agassiz



Table 1: Agronomic performance for CDC Spectrum from 2016 Co-op and Regional trials in Saskatchewan – adapted from Varieties of Grain Crops 2017

Variety	Year of release	Years Tested	Yield % Amarillo			Maturity	Lodging (1-9)	Vine Length (cm)	Resistance to:					Seed Weight (g/1000)	
			1, 2 & South 3*	North 3 & 4*	Irrigation				Mycosphaerella Blight	Powdery Mildew	Fusarium Wilt	Seed Coat Breakage	Seed Coat Dimpling		Greenness
CDC Amarillo (check)	2012	8	100	100	100	Medium	3.5	85	4.5	R	MR	Fair	Fair	Good	230
CDC Meadow	2006	8	90	87	90	Early	4	85	5	R	I	Good	Good	Good	220
CDC Prosper	2008	8	84	79	73	Early	4.5	80	5	R	MR	Good	Fair	Good	150
CDC Treasure	2009	8	88	87	93	Early	4	80	5	R	I	Fair	Fair	Good	210
CDC Hornet	2010	8	91	84	91	Medium	4	85	4.5	R	I	Fair	Good	Good	220
CDC Saffron	2011	8	97	91	91	Early	4	80	4.5	R	I	Good	Fair	Good	250
CDC Inca	2015	5	106	100	ID	Medium	4	85	4.5	R	I	Good	Good	Fair	230
CDC Spectrum	2016	5	104	103	ID	Medium	3.5	85	4.5	R	I	Good	Good	Fair	240
CDC Athabasca	2016	5	94	102	ID	Medium	3	85	4.5	R	I	Fair	Fair	Good	300
CDC Canary	2017	4	98	98	ID	Early	4	90	4.5	R	I	Good	Good	ID	240

*Area 1: Brown soil zone; Area 2: Dark brown; Area 3: Black; Area 4: Dark gray

Lodging score: 1=upright; 9=completely lodged

Mycosphaerella blight score (1-9) where 1=no disease, 9=completely blighted

Seed coat dimpling: VG = 0-5%; G = 6-20%; F = 21-50%

Greenness: Good = 0-15%; Fair = 16-40%