



CDC Limerick Variety Description

May, 2023

Market Class: Green Pea

Year Release to Select Seed Growers: 2012

Sub-licensed Outside of SK: No

International Distribution Rights: Canterra Seeds Ltd./Meridian Seeds

Breeder: Dr. Tom Warkentin, Crop Development Centre, University of Saskatchewan, Saskatoon, SK

Plant Breeders Rights: No

Description

CDC Limerick is a high protein, green cotyledon, semi-leafless field pea variety. Its intense green color and resistance to bleaching is a strong asset for this variety. CDC Limerick ranked as the highest protein pea versus both yellow and green pea varieties in the 2019 co-op and regional trials in Saskatchewan (Table 1). In two years of testing in the field pea co-op registration trial in 2009–2010, CDC Limerick yielded 99% of the mean of the green pea check varieties CDC Striker and Cooper (Table 2). In 10 years of testing in the Saskatchewan co-op and regional trials, CDC Limerick yielded 95% of CDC Amarillo in the south and 90% in the north (Table 1). CDC Limerick does not have PBR protection.

Strengths

- Good bleaching resistance
- Intense green cotyledon color
- Medium vine length
- High protein concentration
- Good lodging resistance, similar to CDC Amarillo
- Good resistance to seed coat breakage
- Powdery mildew resistance

Neutral

- Good yield
- Medium maturity
- · Round seed shape
- · Medium seed weight
- Moderate cooking time
- Fair resistance to Mycosphaerella blight and Fusarium wilt

•

Table 1: Agronomic Performance for CDC Limerick from Co-op and Regional Trials in Saskatchewan

VARIETY	YEAR REGISTERED	YEARS TESTED	YIELD % AMARILLO			LODOMO	VINE	RESISTANCE TO:						
			1, 2, & SOUTH 3*	NORTH3 & 4*	MATURITY	LODGING (1-9)**	LENGTH (CM)	MYCOSPHAERELLA BLIGHT***	POWDERLY MILDEW	FUSARIUM WILT	SEED COAT BREAKAGE	SEED COATDIMPLING****		
CDC AMARILLO (CHECK)	2012	10	100	100	MEDIUM	3.5	85	4.5	R	MR	FAIR	FAIR		
BLUEMAN	2018	3	91	88	MEDIUM	4.5	85	4.5	R	I	n/a	GOOD		
AAC COMFORT	2016	4	90	99	MEDIUM	4.5	85	4.5	R	I	GOOD	GOOD		
COOPER	2004	8	89	80	MEDIUM	4.0	80	5.0	R	1	FAIR	GOOD		



CDC FOREST	2017	6	100	101	MEDIUM	4.0	85	4.5	R	I	GOOD	GOOD
CDC GREENWATER	2014	9	99	92	MEDIUM	3.5	90	4.0	R	MR	FAIR	FAIR
CDC LIMERICK	2012	10	95	90	MEDIUM	3.5	85	4.0	R	I	GOOD	GOOD
CDC PATRICK	2008	10	87	86	MEDIUM	4.5	80	4.5	R	MR	GOOD	GOOD
CDC PLUTO	2010	8	92	84	MEDIUM	5.5	80	4.5	R	I	GOOD	GOOD
AAC RADIUS	2014	6	77	77	MEDIUM	5.0	85	4.5	R	I	VERY GOOD	GOOD
CDC RAEZER	2011	10	81	80	EARLY	3.5	85	5.0	R	MR	GOOD	GOOD
AAC ROYCE	2014	5	92	84	MEDIUM	5.0	70	5.0	R	I	FAIR	FAIR
CDC SAGE	2005	5	73	71	MEDIUM	4.0	80	5.0	R	MR	GOOD	FAIR
CDC SPRUCE	2016	7	94	99	MEDIUM	4.0	85	4.5	R	I	FAIR	FAIR
CDC STRIKER	2002	10	81	80	MEDIUM	3.5	80	4.5	S	MR	VERY GOOD	GOOD

Source: Varieties of Grain Crops 2019 (SaskSeed Guide)

Table 2: Agronomic Performance of CDC Limerick Compared to the Checks (Pea Co-op Test A, 2009 – 2010)

VARIETY	YIELD (KG/ HA)	YIELD (% MEAN OF CHECKS)	DAYS TO MATURITY	LODGING*	SEED WEIGHT (MG)	SEED SHAPE**	BLEACH***	GREEN COLOUR INTENSITY****	SEED COAT BREAKAGE (%)	CRUDE PROTEIN (%)	COOKING TIME (MIN)*****
CDC STRIKER (CHECK)	4966	97	104	3.5	244	1.9	3.0	3.5	5	24.9	33.9
COOPER (CHECK)	5265	103	106	3.9	269	3.2	3.3	3.9	16	23.8	36.6
CDC LIMERICK	5256	99	106	3.0	207	2.1	2.6	2.8	2	26.0	36.5
CV	9										
LSD 05	301		0.9	0.6	6.9	0.3	0.2	0.2	5.2	0.6	26.4
# Locations	20		20	20	20	20	20	20	8	12	2

Source: CDC Pulse Breeding Group, U of S

Table 3: Disease Resistance Data of CDC Limerick Compared to the Checks (Pea Co-op Test A, 2009 – 2010)

VARIETY	MYCO (MB)*	MYCO (SK)**	AUDPC - MB***	FUSARIUM WILT (%)	POWDERY MILDEW****
CDC STRIKER (CHECK)	5.7	5.7	16.2	4.8	5
COOPER (CHECK)	5.4	5.4	15.3	15.9	0
CDC LIMERICK	5.0	5.5	15.2	9.4	0

^{*}Area 1: Brown soil zone; Area 2: Dark brown; Area 3: Black; Area 4: Dark grey

^{**}Lodging score: 1 = Upright; 9 = Completely lodged

^{***}Mycosphaerella blight score: 1 = No disease, 9 = Completely blighted

^{****}Seed coat dimpling: Very Good = 0-5%; Good = 6-20%; Fair = 21-50%

^{*}Lodging score: 1 = Upright; 9 = Completely lodged

^{**}Seed shape: 1 = Round; 5 = Cubic

^{***}Bleaching score: 1 = No bleaching, 5 = Completely bleached

^{****}Green colour intensity: 1 = Very intense; 5 = Pale

^{*****}Cooking time = Mattson cooking time (min)



VARIETY	MYCO (MB)*	MYCO (SK)**	AUDPC - MB***	FUSARIUM WILT (%)	POWDERY MILDEW****
LSD 05	0.45	1.74	2.7	6.6	1.9
# Locations	2	2	2	2	2

Source: CDC Pulse Breeding Group, U of S

^{****}Powdery mildew: 0 = No disease, 9 = Completely mildewed



UNIVERSITY OF SASKATCHEWAN

Crop Development Centre

COLLEGE OF AGRICULTURE AND BIORESOURCES
AGRIO.USASK.CA

^{*}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 assessed at Morden