

CDC PROCLAIM SMALL RED LENTIL

CDC Proclaim is a small red lentil Clearfield variety bred by CDC in Saskatoon. In 6 years of testing in the Coop and Regional trials in Saskatchewan CDC Proclaim yielded 105% of CDC Maxim in the brown and dark brown soil zones.

Seed coat colour, cotyledon colour, flowering time, maturity, plant height and seed weight are similar to CDC Maxim. Seed diameter was slightly less than that of CDC Maxim but seed thickness as measured by percentage above 6.5/64" slotted screens was much higher (49%) than that of CDC Maxim at 32%. Seeds of CDC Proclaim are plumper, therefore more suitable for lentil dehulling. CDC Proclaim is also tolerant to the imidazolinone herbicides imazethapyr and imazamox.

Strengths:

- ✓ Imidazolinone tolerance
- ✓ Seed thickness is greater than check
- ✓ Higher yield compared to check
- ✓ Taller than check



Other Attributes:

✓ Similar agronomic characteristics as CDC Maxim

Table 1: From the Alberta Regional Variety Trials 2017

Variety	Overall Yield (% of check)	Station Years of Testing	TSW ²	Plant Height (cm)	Maturity Rating ³	Cotyledon Colour	Seed Coat Colour	Ascochyta Tolerance	Anthracnose Tolerance
CDC Maxim (CL) ¹ (Check)	100	29	40	34	E/M	Red	Green	Good	Good
CDC Dazil (CL)	94	25	34	35	E/M	Red	Green	Good	Fair
CDC Impulse (CL)	97	9	46	37	E/M	Red	Green	Good	Good
CDC Proclaim (CL)	106	6	39	37	E/M	Red	Green	Good	Good
CDC Scarlet	102	19	38	35	E/M	Red	Green	Good	Fair

¹Yields are reported relative to CDC Maxim (CL). ²Thousand Seed Weight. ³Maturity: E=Early, M=Medium.





Table 2: Three year summary of agronomic performance for CDC Proclaim CL in the 2011-2013 Lentil Registration Recommendation Trial "C" in Western Canada

			[22]		[18]	[13]	[12]	[7]	[12]	
			Yield		Days to	Days to	Lodging	Plant	Seed weight g/1000	
Market class	Line	kg/ha	% of Maxim	% of Improve	flower	mature	(1-5)	height (cm)		
SR	CDC Maxim	2459	100	125	54	95	1.8	42	41	
LG	CDC Improve	1972	80	100	54	94	3.0	45	73	
SR	CDC Proclaim	2485	101	126	54	93	2.1	42	41	

Market Class: SR-small red; LG - large green

[] indicates number of sites

Table 3: Three year disease summary for CDC Proclaim CL in the 2011-2013

Lentil Registration Recommendation Trial "C" in Western Canada

		2011			2012		2013
Market class	Line	Asc. Indoor (%)	AN Indoor (0-5)		AN Field (0-5)		AN Field (0-5)
SR	CDC Maxim	9.4	4.7	-	3.3	1	3.0
LG	CDC Improve	29.7	4.9		4.5		2.3
SR	CDC Proclaim	13.4	4.7		3.3		2.8

Asc. = Ascochyta, AN = Anthracnose

Table 4: Agronomic performance for CDC Proclaim from Coop and Regional trials in Saskatchewan – adapted from Varieties of Grain Crops 2017

Variety	Market class	Year of release	Years Tested*	Yield % of CDC Maxim		Disease Resistance		D.C. and a suite of	Days to	Height	Seed Weight
				Area 1-2**	Area 3-4**	Ascochyta	Anthracnose (race 1)	Maturity	Flower	(cm)	(g/1000)
CDC Maxim	Small red	2007	10	100	100	MR	MR	Earl <mark>y-mid</mark>	51	34	40
CDC Impulse	Small red	2014	7	108	95	MR	MR	Early-mid	52	37	44
CDC Proclaim	Small red	2014	6	105	101	MR	MR	Early-mid	51	34	40
CDC Redmoon	Small red	2015	6	115	102	MR	MR	Early-mid	52	33	41
4371-4	Small red	2016	4	111	108	MR	MR	Early-mid	53	33	38
3674-15	Small red	2016	5	111	113	MR	MR	Early-mid	52	34	42
CDC Roxy	Extra small red	2014	6	103	102	MR	MR	Early-mid	53	34	32

^{*} Coop and Regional trials in Saskatchewan

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

Source: Varieties of Grain Crops 2017