

## **SMALL RED LENTIL: CDC PROCLAIM CL<sup>®</sup>**

**Breeder:** Dr. Albert Vandenberg  
Crop Development Centre  
University of Saskatchewan  
Saskatoon, SK.

**Year released to Select Seed Growers:** 2014  
**Sub-licensed outside of SK:** SeedNet  
**International Distribution Rights:** Pulse USA

**Plant Breeders Rights:** UPOV'91

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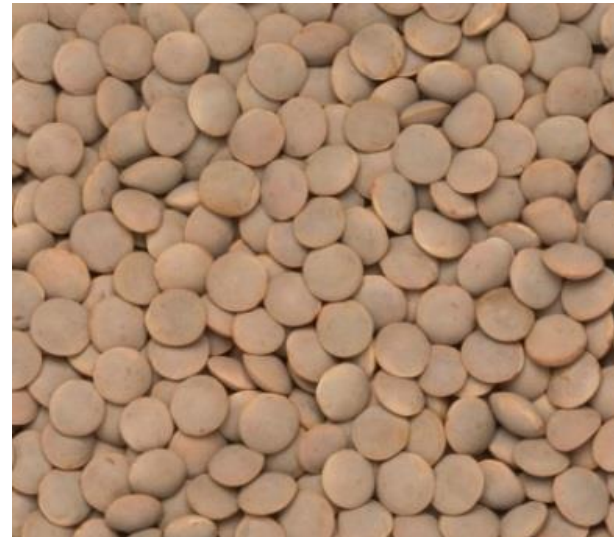
CDC Proclaim is a high yielding Clearfield<sup>®</sup> small red lentil that is well-adapted to Saskatchewan. In eight years of testing in the co-op and regional trials in Saskatchewan, CDC Proclaim yielded 105% of CDC Maxim in the south and 102% in the north (Table 1). Seed coat colour, cotyledon colour, flowering time, maturity, plant height, and seed weight are similar to CDC Maxim. Seed diameter is slightly less than that of CDC Maxim, but seed thickness is much higher (Table 2). Seeds of CDC Proclaim are plumper, therefore more suitable for lentil dehulling. CDC Proclaim is also tolerant to the imidazolinone herbicides imazethapyr and imazamox. CDC Proclaim has PBR'91 protection.

### **Strengths:**

- Imidazolinone tolerance
- Seed thickness is greater than CDC Maxim
- Higher yield compared to CDC Maxim
- Taller than CDC Maxim

### **Neutral:**

- Similar maturity and height as CDC Maxim
- Good resistance to Ascochyta and Anthracnose (same as CDC Maxim)



**Table 1: Agronomic Performance for Small Red Lentils from Co-op and Regional Trials in Saskatchewan**

Variety	Herbicide Tolerance	Year of Release	Years Tested*	Yield % of CDC Maxim		Disease Resistance		Days to Flower	Height (cm)	Maturity Rating	Seed Weight (g/1000)
				Area 1-2	Area 3-4	Ascochyta	Anthracnose (race 1)				
CDC Maxim	CL	2007	12	100	100	G	G	51	34	Early-mid	40
CDC Impulse	CL	2014	9	108	95	G	G	52	37	Early-mid	44
CDC Proclaim	CL	2014	8	105	102	G	G	51	34	Early-mid	40
CDC Nimble	CL	2019	5	108	108	G	G	52	35	Early-mid	38
CDC Redmoon	No	2015	8	114	106	G	G	52	33	Early-mid	41
CDC Coral	No	2016	5	110	106	G	G	55	33	Early-mid	37
CDC Carmine	No	2016	8	111	106	G	G	54	34	Early-mid	40

Source: Varieties of Grain Crops 2019 (2019 SaskSeed Guide)

\*Area 1: Brown soil zone; Area 2: Dark Brown; Area 3: Black; Area 4: Dark Gray

**Table 2: Three Year Seed Size Summary for CDC Proclaim in the 2011-2013 Lentil Registration Recommendation Trial in Western Canada (6 sites)**

Variety	Seed Thickness Distribution (% seed over)										
	Round Hole (mm)					Slotted Screen (mm)					
	5.2 >13/64	4.8 >12/64	4.4 >11/64	4.0 >10/64	3.6 >9/64	3.0 >7.5/64	2.8 >7.0/64	2.6 >6.5/64	2.4 >6.0/64	2.2 >5.5/65	2.0 >5.0/64
CDC Maxim	15	52	28	4	0	1	6	25	44	21	3
CDC Proclaim	12	53	31	4	0	3	13	33	41	9	0

**Table 3: Three Year Disease Summary for CDC Proclaim CL in the 2011-2013 Lentil Registration Recommendation Trial "C" in Western Canada**

Market class	Variety	Ascochyta Blight (%)	Anthracnose (0 - 5 rating) *		
		2011 Indoor Test	2011 Indoor Test	2012 Field Test	2013 Field Test
SR	CDC Maxim	9.4	4.7	3.3	3.0
LG	CDC Improve	29.7	4.9	4.5	2.3
SR	CDC Proclaim	13.4	4.7	3.3	2.8

Source: CDC Pulse breeding group, U of S

\* Anthracnose rating: where 0 = no disease

Market class: SR = small red; LG = large green