

CDC REDMOON

Small Red Lentil



**YEAR RELEASE TO
SELECT SEED GROWERS**
2015

SUB-LICENSED OUTSIDE OF SK
SeCan

**INTERNATIONAL DISTRIBUTION
RIGHTS**
FP Genetics

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PLANT BREEDERS RIGHTS



Description

CDC Redmoon is a high yielding, small red lentil variety with proven performance both in yield trial testing and in field production. In eight years of testing in the co-op and regional trials in Saskatchewan (Table 1), CDC Redmoon was the highest yielding lentil variety at 114% of CDC Maxim in the Brown and Dark Brown soil zones, and 106% in the Black and Dark Gray soil zones. Seed coat colour, cotyledon colour, flowering time, maturity, plant height, disease tolerance (Table 2), and seed weight are similar to CDC Maxim. Seed diameter is slightly less than that of CDC Maxim but seed thickness is higher making CDC Redmoon more suitable for lentil dehulling (Table 3). CDC Redmoon has PBR'91 protection.

Strengths

- Very high yield
- Proven field production performance
- Seed thickness is greater than CDC Maxim

Neutral

- Similar agronomic, maturity and disease resistance characteristics compared to CDC Maxim

Weaknesses

- Not tolerant to imidazolinone herbicides

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	GOOD	GOOD	51	34	EARLY-MID	40
CDC IMPULSE	CL	2014	9	108	95	GOOD	GOOD	52	37	EARLY-MID	44
CDC NIMBLE	CL	2019	5	108	108	GOOD	GOOD	52	35	EARLY-MID	38
CDC PROCLAIM	CL	2014	8	105	102	GOOD	GOOD	51	34	EARLY-MID	40
CDC CORAL	NO	2016	5	110	106	GOOD	GOOD	55	33	EARLY-MID	37
CDC CARMINE	NO	2016	8	111	106	GOOD	GOOD	54	34	EARLY-MID	40
CDC REDMOON	NO	2015	8	114	106	GOOD	GOOD	52	33	EARLY-MID	41

Source: Varieties of Grain Crops 2019 (SaskSeed Guide)

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

Table 2: Two Year Disease Summary for CDC Redmoon vs. CDC Maxim

VARIETY	ASCOCHYTA BLIGHT (%)			ANTHRACNOSE*		
	2011 INDOOR TEST	2012 INDOOR TEST	2011 INDOOR TEST (0 - 5 RATING)	2012 INDOOR TESTING (0 - 10 RATING)		2012 FIELD TEST (0 - 5 RATING)
				TEST 1	TEST 2	
CDC MAXIM	6.4	40.0	4.7	3.9	4.1	3.0
CDC REDMOON	12.3	43.8	4.6	4.0	3.9	2.3

Source: CDC Pulse breeding group, U of S

*Anthracnose rating: where 0 = no disease

Table 3: Two Year Seed Size Summary for CDC Redmoon in the 2011-2012 Lentil Registration Recommendation Trial in Western Canada (4 sites)

VARIETY	SEED THICKNESS DISTRIBUTION (% SEED OVER):											
	ROUND HOLE SCREEN (MM)						SLOTTED SCREEN (MM)					
	5.6 > 14/64	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	1	20	47	26	4	1	1	7	30	41	18	3
CDC ROSETOWN	0	1	11	57	25	6	0	0	1	24	54	20
CDC REDMOON	0	12	47	29	8	3	3	16	35	33	11	2

Source: CDC Pulse breeding group, U of S

Figure 1. Direct comparison of CDC Redmoon (exp. name: 3646-4) to CDC Maxim

