

# CDC CORAL

Small Red Lentil



**YEAR RELEASE TO  
SELECT SEED GROWERS**  
2016

**SUB-LICENSED OUTSIDE OF SK**  
SeCan

**INTERNATIONAL DISTRIBUTION  
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FP Genetics

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

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Applied

## Description

CDC Coral was tested for two years in the Lentil Registration Recommendation Trial "A" in 2012-2013. In these trials, CDC Coral yielded 110% of CDC Maxim (Table 1). In five years of testing in the co-op and regional trials in Saskatchewan (Table 4), CDC Coral yielded 110% of CDC Maxim in the Brown and Dark Brown soil zones and 106% in the Black and Dark Gray soil zones. Seed coat colour and cotyledon colour of CDC Coral are similar to that of CDC Maxim. The disease resistance profile is similar to that of CDC Maxim. Lodging scores for CDC Coral are improved compared to CDC Maxim (Table 2), and flowering is delayed by two days compared to CDC Maxim. Seed diameter and seed thickness were slightly less than that of CDC Maxim, but still acceptable for the small red lentil market class (Table 3). Application for PBR'91 protection for CDC Coral has been submitted.

## Strengths

- High yield compared CDC Maxim
- Improved lodging score compared to CDC Maxim

## Neutral

- Similar maturity and disease resistance characteristics compared to CDC Maxim
- Later flowering than CDC Maxim
- Seed appearance similar to CDC Maxim
- Seed diameter and thickness slightly less than CDC Maxim

## Weaknesses

- Not tolerant to imidazolinone herbicides

**Table 1: Two Year Summary of Agronomic Performance for CDC Coral in the 2012-2013 Lentil Registration Recommendation Trial "A" in Western Canada**

VARIETY	YIELD		DAYS TO FLOWER	DAYS TO MATURE	LODGING (1 - 5)	PLANT HEIGHT (CM)	SEED WEIGHT (G/1000)
	KG/HA	% OF MAXIM					
CDC MAXIM	2291	100	58	95	2.6	46	41
<b>CDC CORAL</b>	<b>2520</b>	<b>110</b>	<b>62</b>	<b>95</b>	<b>2.3</b>	<b>45</b>	<b>38</b>
<b>Number of Sites</b>	<b>19</b>		<b>11</b>	<b>7</b>	<b>4</b>	<b>9</b>	<b>12</b>

Source: CDC Pulse Breeding Group, U of S

**Table 2: Two Year Seed Size Summary for CDC Redmoon in the 2011-2012 Lentil Registration Recommendation Trial in Western Canada (4 sites)**

MARKET CLASS	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
SMALL RED	CDC MAXIM	1	22	52	21	3	0	1	5	25	49	18	2
EXTRA SMALL RED	CDC ROSETOWN	0	0	10	54	30	5	0	0	1	18	60	21
<b>SMALL RED</b>	<b>CDC CORAL</b>	<b>0</b>	<b>6</b>	<b>38</b>	<b>42</b>	<b>13</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>19</b>	<b>50</b>	<b>26</b>	<b>2</b>

Source: CDC Pulse breeding group, U of S

**Table 3: Two Year Disease Summary for CDC Coral vs. CDC Maxim and CDC Rosetown**

VARIETY	ASCOCHYTA BLIGHT (%)			ANTHRACNOSE RACE 1*			
	2012 INDOOR TEST	2013 INDOOR TESTING		2012 FIELD TEST (0 - 10 RATING)	2013 INDOOR TESTING (0 - 10 RATING)		2013 FIELD TEST (0 - 5 RATING)
		TEST 1	TEST 2		TEST 1	TEST 2	
CDC MAXIM	40.0	27.5	33.8	3.0	4.1	3.0	2.3
CDC ROSETOWN	42.5	36.9	38.8	2.5	0.5	0.7	1.5
<b>CDC CORAL</b>	<b>37.5</b>	<b>24.4</b>	<b>36.9</b>	<b>2.3</b>	<b>3.6</b>	<b>3.0</b>	<b>2.3</b>

Source: CDC Pulse breeding group, U of S

\*Anthracnose rating: where 0 = no disease

## Table 4: Agronomic Performance for Small Red Lentils from Coop and Regional Trials in Saskatchewan

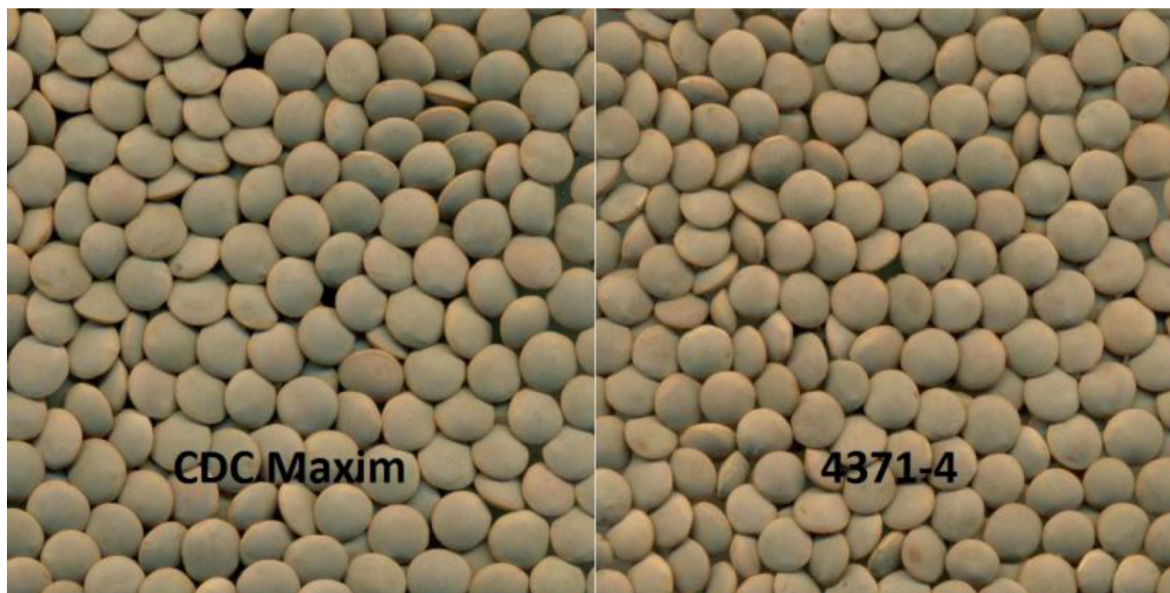
Adapted from Varieties of Grain Crops 2019

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

Source: Varieties of Grain Crops 2019 (SaskSeed Guide)

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

Figure 1. Direct comparison of seeds of CDC Maxim and CDC Coral



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