

# CDC LIMA (CL®)

Large Green Lentil



**YEAR RELEASE TO  
SELECT SEED GROWERS**  
2018

**SUB-LICENSED OUTSIDE OF SK**  
SeCan

**INTERNATIONAL DISTRIBUTION  
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Not assigned

**BREEDER**  
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Applied

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## Description

CDC Lima (IBC-937) is a high-yielding, large green Clearfield® lentil variety. In six years of testing in the co-op and regional trials, it yielded 113% of the Clearfield® large green lentil variety CDC Impower in the Brown and Dark Brown soil zones, and 137% in the Black and Dark Gray zones (Table 1). CDC Lima has similar disease resistance characteristics (Table 2) as CDC Impower. It has a larger seed compared to CDC Impower, which is also thicker making CDC Lima more suitable for lentil dehulling (Table 3). Application for PBR'91 protection for CDC Lima has been submitted.

## Strengths

- Seed thickness greater than that of CDC Impower
- High yield compared to CDC Impower
- Improved lodging resistance over CDC Impower
- Imidazolinone tolerance

## Neutral

- Similar agronomic and maturity characteristics compared to CDC Improve and CDC Impower
- Similar disease resistance as CDC Improve and CDC Impower

## Weaknesses

- Slightly shorter than CDC Impower and CDC Improve, more similar to CDC Maxim

**Table 1: Large Green Lentil Performance Data from Co-op and Regional Trials in Saskatchewan Compared to CDC Maxim**

VARIETY	MARKET CLASS	CL	YEARS TESTED	YIELD (% MAXIM)		YIELD (% IMPOWER)		RESISTANCE TO:		DAYS TO FLOWER	HEIGHT (CM)	MATURITY RATING	SEED WEIGHT (G/1000)
				AREA 1-2*	AREA 3-4*	AREA 1-2*	AREA 3-4*	ASCOCHYTA BLIGHT	ANTHRACNOSE RACE 1				
CDC MAXIM	SMALL RED	YES	12	100	100			GOOD	GOOD	51	34	EARLY-MID	40
CDC GREENLAND	LARGE GREEN	NO	19	89	70			GOOD	VERY POOR	52	38	MID-LATE	64
CDC GREENSTAR	LARGE GREEN	NO	10	97	81			GOOD	FAIR	52	40	MID-LATE	73
CDC IMPOWER	LARGE GREEN	YES	12	79	63			GOOD	VERY POOR	52	41	MID-LATE	63
CDC SOVEREIGN	LARGE GREEN	NO	12	83	77			GOOD	VERY POOR	52	40	LATE	66
<b>CDC LIMA</b>	<b>LARGE GREEN</b>	<b>YES</b>	<b>6</b>	<b>89</b>	<b>86</b>	<b>113</b>	<b>137</b>	<b>GOOD</b>	<b>POOR</b>	<b>51</b>	<b>35</b>	<b>MID-LATE</b>	<b>74</b>

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 Indoor Disease Summary for CDC Lima in the 2014-2015 Lentil Registration Recommendation Trial (RRT) in Western Canada**

VARIETY	MARKET CLASS	2014		2015			
		ASCOCHYTA (%)	ANTHRACNOSE RACE 1*	ASCOCHYTA (%)		ANTHRACNOSE RACE 1*	
				TEST 1	TEST 2	TEST 1	TEST 2
CDC MAXIM	SMALL RED	13	5.0	7.5	6.3	4.8	5.0
CDC IMPOWER	LARGE GREEN	34	4.9	27.5	22.5	4.8	4.8
<b>CDC LIMA</b>	<b>LARGE GREEN</b>	<b>35</b>	<b>5.0</b>	<b>27.7</b>	<b>16.3</b>	<b>4.7</b>	<b>5.0</b>

Source: CDC Pulse breeding group, U of S

\*Anthracnose rating: 0 - 5, where 0 = no disease

**Table 3: Seed Thickness Distribution of CDC Lima in the 2014-2015 Lentil RRT in Western Canada (4 sites)**

VARIETY	MARKET CLASS	SEED THICKNESS DISTRIBUTION (% SEED OVER):										
		ROUND HOLE SCREEN (MM)										SLOTTED SCREEN (MM) 2.6 > 6.5/64
		6.7 > 15/64	6.4 > 14/64	6.0 > 13/64	5.6 > 12/64	5.2 > 11/64	4.8 > 10/64	4.4 > 10/64	4.0 > 9/64	3.6 > 9/64		
CDC MAXIM	SMALL RED	0	0	0	3.5	23	50.5	17.5	4	1	51	
CDC IMPOWER	LARGE GREEN	16	43	24	11	4	1	1	1	1	74	
<b>CDC LIMA</b>	<b>LARGE GREEN</b>	<b>14</b>	<b>40</b>	<b>29</b>	<b>11</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>88</b>	

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