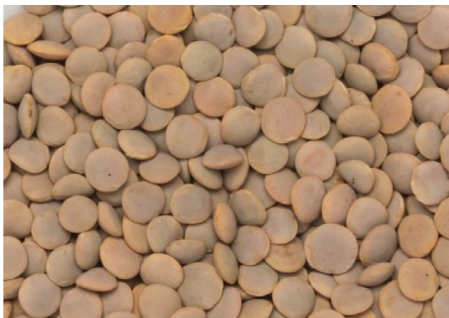


# CDC IMPULSE CL<sup>®</sup>

Small Red Lentil



#### YEAR RELEASE TO SELECT SEED GROWERS

2014

#### SUB-LICENSED OUTSIDE OF SK

SeCan

#### INTERNATIONAL DISTRIBUTION RIGHTS

Pulse USA

#### BREEDER

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

#### PLANT BREEDERS RIGHTS



CL (Clearfield<sup>®</sup>) is a Trademark of BASF Inc.

## Description

CDC Impulse (IBC-479) is a high yielding Clearfield<sup>®</sup> small red lentil that is well-adapted to the Brown and Dark Brown soil zones. In nine years of testing in the co-op and regional trials in Saskatchewan, CDC Impulse yielded 108% of CDC Maxim in the Brown and Dark Brown soil zones, and 95% in the Black and Dark Grey soil zones (Table 1). Maturity is slightly later than CDC Maxim, positive for the southern regions of the lentil production zone. Seed type is larger in diameter and seed weight, acceptable for specific segments of the dehulled red lentil market (Table 2). CDC Impulse has PBR'91 protection.

## Strengths

- Seed type suitable for segments of the small red cotyledon lentil market
- High yield compared to CDC Maxim
- Imidazolinone tolerance
- Seed weight and diameter is greater than CDC Maxim.
- Later maturing than CDC Maxim
- Taller than CDC Maxim

## Neutral

- Similar in disease ratings and lodging resistance compared to CDC Maxim

**Table 1: Agronomic Performance for Small Red Lentils from Co-op 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 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 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
<b>CDC IMPULSE</b>	<b>CL</b>	<b>2014</b>	<b>9</b>	<b>108</b>	<b>95</b>	<b>GOOD</b>	<b>GOOD</b>	<b>52</b>	<b>37</b>	<b>EARLY-MID</b>	<b>44</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: Seed Thickness Distribution of CDC Impulse CL in the 2010-2012 Lentil Registration Recommendation Trials in Western Canada (data from 6 sites)**

VARIETY	SEED THICKNESS DISTRIBUTION (% SEED OVER):							
	ROUND HOLE SCREEN (MM)							SLOTTED SCREEN (MM) 2.6 > 6.5/64
	6.0 > 15/64	5.6 > 14/64	5.2 > 13/64	4.8 > 12/64	4.4 > 11/64	4.0 > 10/64	3.6 > 9/64	
CDC MAXIM	0	1	19	44	27	7	2	24
<b>CDC IMPULSE</b>	<b>3</b>	<b>18</b>	<b>33</b>	<b>31</b>	<b>11</b>	<b>3</b>	<b>1</b>	<b>27</b>

Source: CDC Pulse Breeding Group, U of S

**Table 3: Three Year Disease Summary for CDC Impulse vs. CDC Maxim**

VARIETY	ASCOCHYTA BLIGHT (%)		ANTHRACNOSE*				
	2010 INDOOR TEST	2011 INDOOR TEST	2010 INDOOR TEST (0 - 5 RATING)	2011 INDOOR TEST (0 - 5 RATING)	2012 INDOOR TESTING (0 - 10 RATING)		2012 FIELD TEST (0 - 5 RATING)
					TEST 1	TEST 2	
CDC MAXIM	12.9	9.4	2.8	3.4	4.9	4.7	3.3
<b>CDC IMPULSE</b>	<b>19.1</b>	<b>11.9</b>	<b>2.3</b>	<b>3.4</b>	<b>4.9</b>	<b>4.8</b>	<b>3.0</b>

Source: CDC Pulse breeding group, U of S

\*Anthracnose rating: where 0 = no disease

For more information, visit [saskpulse.com](http://saskpulse.com)