Technical Bulletin

Genes that fit *your* farm.

SeCan
Canada's Seed Partner

CDC Impulse CL®

Small Red Lentil

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Progress Through Research
Le progrès grâce à la recherche

Description:
CDC Impulse CL® is an Imidazolinone tolerant small red cotyledon lentil with larger seed size and seed weight than the check CDC Maxim

Parentage:
2262-14///2262-14//2262-14/CDCMaxim

Strengths:
- Imidazolinone tolerance
- Seed weight and diameter is greater than CDC Maxim
- Taller than CDC Maxim

Neutral Traits:
- Yield similar CDC Maxim
- Lodging similar CDC Maxim
- Disease ratings similar CDC Maxim

Weaknesses
- Anthracnose resistance rating is below that of CDC Imvincible

Breeder:

UNIVERSITY OF SASKATCHEWAN
Crop Development Centre
COLLEGE OF AGRICULTURE AND BIORESOURCES
AGBIO.USASK.CA

Funded by:

SASKATCHEWAN pulse Growers

Clearfield
Production System for Lentils

CL (Clearfield) is a Trademark of BASF Inc.

Table 1: Three year summary of agronomic performance for CDC Impulse CL® in the 2010-2012 Lentil Registration Recommendation Trial "C" in Western Canada

Market class	Line	[21] Yield kg/ha	[21] Yield % of Maxim	[21] Yield % of Imvincible	[12] Days to flower	[13] Days to mature	[11] Lodging (1-5)	[12] Plant height (cm)	[16] Seed weight g/1000
SR	CDC Maxim	2248	100	115	53	96	1.7	44	40
SG	CDC Imvincible	1952	87	100	56	96	2.5	45	-
MR	**CDC Impulse CL®**	**2217**	**99**	**114**	**56**	**97**	**1.7**	**47**	**44**

Market Class: SR-small red; SG - small green; MR - medium red
[ ] indicates number of sites

Table 2: Seed thickness distribution of CDC Impulse CL® in the 2010-2012 Lentil Registration Recommendation Trial "C" in Western Canada (data collected from 6 sites)

Market class	Line	Seed thickness distribution (% Seed over): Round Hole 6.0 mm >15/64	5.6 mm >14/64	5.2 mm >13/64	4.8 mm >12/64	4.4 mm >11/64	4.0 mm >10/64	3.6 mm >9/64		Slotted 2.6 mm >6.5/64
SR	CDC Maxim	0	1	19	44	27	7	2		24
SG	CDC Imvincible	0	0	2	27	49	16	5		5
MR	**CDC Impulse CL®**	**3**	**18**	**33**	**31**	**11**	**3**	**1**		**27**

For more information, call 1-800-665-7333 or visit www.secan.com

2026 SaskSeed Guide

Variety	Class	Herbicide Tolerance[1]	Years Tested[2]	Yield % Area 1 & 2 Relative to CDC Nimble CL®	Yield % Area 3 & 4 Relative to CDC Nimble CL®	Height (cm)	Days to Flower	Maturity Rating[3]	Resistance to: Ascochyta Blight	Resistance to: Anthracnose Race 1	Seed Coat colour	Cotyledon colour	Seed Weight (g/1000)
CDC Nimble	Small Red	CL	12	100	100	36	52	E/M	MR	MR	Gray	Red	38
CDC Jimini	Small Green	CL	10	99	93	36	50	E/M	MR	MR	Green	Yellow	38
CDC Lima	Large Green	CL	13	87	82	35	51	M/L	MR	S	Green	Yellow	74
CDC Maxim	Small Red	CL	20	92	89	34	51	E/M	MR	MR	Gray	Red	40
CDC Impulse	**Small Red**	**CL**	**16**	**101**	**94**	**37**	**52**	**E/M**	**MR**	**MR**	**Gray**	**Red**	**44**

1. CL indicates Clearfield tolerant variety
2. Co-op and Regional Trials in SK since 2006. Comparisons to the check variety, small red lentil CDC Maxim.
3. Maturity ratings: normal maturity range in days based on May 1 seeding E=100, VL=110 but maturity can be much earlier in dry years, much later in cool wet years.

2026 Alberta Seed Guide

Market Class	Variety	Most Recent Year of RVT Testing	Overall Yield	Overall Station Years of Testing	Brown Soil Zone Yield (%)	Brown Soil Zone Site Years	Black Soil Zone Yield (%)	Black Soil Zone Site Years	Agronomic Characteristics TSW[2] (g)	Plant Height	Maturity Rating[3]	Cotyledon Colour[4]	Seed Coat Colour[5]	Disease Tolerance[6] Ascochyta	Disease Tolerance[6] Anthracnose Race 1
	CDC Maxim CL® (bu/ac)		37		34		44								
Small Red	CDC Maxim CL®[1]	2025	100	49	100	38	100	11	40	34	E/M	R	GR	MR	MR
Small Green	CDC Jimini CL®	2022	106	17	107	15	XX	2	38	36	E/M	Y	G	MR	MR
Large Green	CDC Lima CL®	2022	94	34	98	26	82	8	74	35	M/L	Y	G	MR	S
Small Red	**CDC Impulse CL®**	**2022**	**113**	**16**	**118**	**8**	**108**	**8**	**44**	**37**	**M/L**	**R**	**GR**	**MR**	**MR**

1. CL® = Clearfield ® variety
2. TKW = Thousand Seed Weight
3. Maturity: E = Early, M = Medium, L = Late.
4. Cotyledon Color: R = Red, Y = Yellow;
5. Seed Coat Color/Patterns: G=Green, GR=Grey
6. Disease tolerance to Ascochyta and Anthracnose - Race 1 (note: there is no genetic resistance to Race 0): S = Susceptible, MR = Moderately Resistant

Stewardship Guidelines for Clearfield Lentils. BASF is committed to the long-term sustainability of the Clearfield® Production System for lentils. The stewardship initiatives co-developed by BASF and university researchers are designed as guidelines for Clearfield lentil producers in an effort to maximize the value realized by producers as well as preserve this herbicide-tolerance technology for years to come. These management practices were designed to prevent and/or delay herbicide resistance development in weed populations in Canada.
Full details of the guidelines can be found at: https://agriculture.basf.ca/content/dam/cxm/agriculture/canada/english/agriculture/west/seeds-and-systems/documents/Clearfield_Lentil_Stewardship_Guidelines.pdf

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