

Technical Bulletin

Genes that fit *your* farm.



CDC Impulse CL[®] Small Red Lentil



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

Weaknesses

- Anthracnose resistance rating is below that of CDC Invincible

Parentage:

2262-14///2262-14//2262-14/CDCMaxim

Breeder:

Funded by:

Strengths:

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



UNIVERSITY OF SASKATCHEWAN

Crop Development Centre
COLLEGE OF AGRICULTURE AND BIORESOURCES
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Neutral Traits:

- Yield similar CDC Maxim
- Lodging similar CDC Maxim
- Disease ratings similar CDC Maxim



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			[12]	[13]	[11]	[12]	[16]
		kg/ha	% of Maxim	% of Invincible	Days to flower	Days to mature	Lodging (1-5)	Plant height (cm)	Seed weight g/1000
SR	CDC Maxim	2248	100	115	53	96	1.7	44	40
SG	CDC Invincible	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							Slotted
		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	2.6 mm >6.5/64
SR	CDC Maxim	0	1	19	44	27	7	2	24
SG	CDC Invincible	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

2025 SaskSeed Guide

Variety	Class	Herbicide Tolerance ¹	Years Tested ²	Yield %	Yield %	Height (cm)	Days to Flower	Maturity Rating ³	Resistance to:		Seed Coat colour	Cotyledon colour	Seed Weight (g/1000)	
				Area 1 & 2	Area 3 & 4				Ascochyta Blight	Anthracnose Race 1				
				Relative to CDC Nimble CL [®]										
CDC Nimble	Small Red	CL	15	100	100	35	52	E/M	MR	MR	Gray	Red	38	
CDC Jimini	Small Green	CL	9	99	94	36	50	E/M	---	---	Green	Yellow	38	
CDC Lima	Large Green	CL	12	87	84	35	51	M/L	MR	S	Green	Yellow	74	
CDC Maxim	Small Red	CL	19	92	90	34	51	E/M	MR	MR	Gray	Red	40	
CDC Impulse	Small Red	CL	15	100	95	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.

2025 Alberta Seed Guide

Market Class	Variety	Most Recent Year of RVT Testing	Overall Yield	Overall Station Years of Testing	Brown Soil Zone		Black Soil Zone		Agronomic Characteristics					Disease Tolerance	
					Yield (%)	Site Years	Yield (%)	Site Years	TSW ² (g)	Plant Height	Maturity Rating ³	Cotyledon Colour ⁴	Seed Coat Colour ⁵	Ascochyta	Anthracnose Race 1
	CDC Maxim CL ^{®1} (bu/ac)		36		34		43								
Small Red	CDC Maxim CL [®]	2024	100	55	100	10	100	8	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	NA	NA
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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