

Technical Bulletin

Genes that fit *your* farm.

SeCan

Canada's Seed Partner

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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Production System for Lentils

CL (Clearfield) is a Trademark of BASF Inc.

Neutral Traits:

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

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

2020 Seed Manitoba

Variety	Maturity Rating	Yield % of Check	Site Years Tested	Cotyledon Colour	Seed Wt (TKW) Grams	Resistance Level		2019 Yield: % of CDC Maxim	
						Ascochyta Blight	Anthracnose Race 1	Hamiota	Melita
						CDC Maxim (C)	E/M	100	22
CDC Proclaim (CL)	E/M	104	6	Red	40	G	G	97	112
CDC Redmoon	E/M	107	6	Red	41	G	G	101	109
CDC Roxy	E/M	93	4	Red	32	G	G	86	94
CDC Impulse (CL)	E/M	102	5	Red	44	G	G	88	104

2020 SaskSeed Guide

Variety	Herbicide Tolerance ¹	Years Tested ²	Yield (% of CDC Maxim)		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			
CDC Maxim (check)	CL	13	100	100	34	51	E/M	G	G	Gray	Red	40
CDC Proclaim	CL	9	105	100	34	51	E/M	G	G	Gray	Red	40
CDC Redmoon		9	114	104	33	52	E/M	G	G	Gray	Red	41
CDC Roxy		9	103	97	34	53	E/M	G	G	Gray	Red	32
CDC Carmine		9	111	106	34	54	E/M	G	G	Gray	Red	40
CDC Coral		6	110	103	33	55	E/M	G	G	Gray	Red	37
CDC Imp	CL	6	95	93	35	52	E/M	G	G	Gray	Red	30
CDC Impulse	CL	10	107	100	37	52	E/M	G	G	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.

2020 Alberta Seed Guide

Variety	Overall Yield	Overall Station Years of Testing	Area 1		Area 2		Area 5		Agronomic Characteristics					Disease Tolerance	
			Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	TSW (g)	Plant Height	Maturity Rating	Cotyledon Colour	Seed Coat Colour	Ascochyta	Anthracnose
CDC Maxim	100	37	100	31	100	4	100	2	40	34	E/M	R	GR	G	G
CDC Proclaim (CL)	103	14	102	8	109	4	99	2	40	35	E/M	R	GR	G	G
CDC Roxy	99	17	97	11	104	4	103	2	28	33	E/M	R	GR	G	G
CDC Impulse (CL)	104	17	100	11	107	4	119	2	47	36	E/M	R	GR	G	G

Resistance: P= Poor, F= Fair, G= good, VG= Very Good R= Resistant

Maturity: E= Early, M= Medium, L= Late

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