

Technical Bulletin

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Canada's Seed Partner

CDC Roxy Extra Small Red Lentil



Progress Through Research
Le progrès grâce à la recherche

Description:

CDC Roxy is an extra small red cotyledon lentil with higher grain yield than the check CDC Maxim. CDC Roxy also has a thicker seed than CDC Rosetown.

Parentage: CDC Rosetown/CDC Redbow

Strengths:

- Seed type suitable for the extra small red lentil market
- 104% of the yield of CDC Maxim
- Thicker seed than CDC Rosetown

Neutral Traits:

- Similar disease ratings compared to the checks
- Maturity, flowering and lodging resistance similar to the checks

- Disease ratings similar CDC Maxim

Weaknesses

- Not tolerant to imidazolinone herbicides

Breeder:



UNIVERSITY OF SASKATCHEWAN

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Table 1: Two year summary of agronomic performance for CDC Roxy in the 2011-2012 Lentil Registration Recommendation Trial. "A" in Western Canada

Market class	Line	[19] Yield			[11] Days to flower	[12] Days to mature	[5] Lodging (1-5)	[10] Plant height (cm)	[13] Seed weight g/1000	[4] % seed over >12/64
		kg/ha	% of MC check	% of Maxim						
SR	CDC Maxim	2107	100	100	53	97	2.3	46	39	68
ESR	CDC Rosetown	2027	100	96	55	97	2.5	47	31	12
ESR	CDC Roxy	2194	108	104	55	96	2.5	46	31	8

Market Class- ESR-Extra Small Red; SR-small red;

[] indicates number of sites

Table 2: Two year disease summary

Line	Indoor Disease Score					Field Disease 2012 AN (0 - 5)
	2011 AN (0 - 5)	2011 Asc. (%)	2012 AN		2012 Asc. (%)	
			Repeat 1 (0 - 10)	Repeat 2 (0 - 10)		
CDC Maxim	4.7	6.4	3.9	4.1	40.0	3.0
CDC Rosetown	1.4	17.2	0.9	1.1	42.5	2.5
CDC Roxy	1.4	9.8	1.1	1.9	40.0	2.3

Asc. = Ascochyta, AN = Anthracnose

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

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Table 3: Seed thickness distribution (% on slotted screens) of CDC Roxy compared to CDC Rosetown in 2011 and 2012 Lentil Registration Recommendation Trials

	2.6 mm >6.5/64	2.4 mm >6/64	2.2 mm >5.5/64	2.0 mm >5/64
2012 (2 sites)				
CDC Rosetown	1	13	60	26
CDC Roxy	5	31	43	22
2011 (2 sites)				
CDC Rosetown	2	35	49	14
CDC Roxy	12	61	24	3



2021 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 (C)	CL	14	100	100	34	51	E/M	MR	MR	Gray	Red	40
CDC Impulse	CL	11	107	100	37	52	E/M	MR	MR	Gray	Red	44
CDC Redmoon		10	114	104	33	52	E/M	MR	MR	Gray	Red	41
CDC Carmine		10	111	106	34	54	E/M	MR	MR	Gray	Red	40
CDC Coral		7	110	103	33	55	E/M	MR	MR	Gray	Red	37
CDC Imp	CL	7	95	93	35	52	E/M	MR	MR	Gray	Red	30
CDC Roxy		10	103	97	34	53	E/M	MR	MR	Gray	Red	32

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.

2021 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 ¹	Seed Coat Colour ²	Ascochyta	Anthracnose
CDC Maxim (CL)	100	48	100	35	100	7	100	6	40	34	E/M	R	GR	G	G
CDC Impulse (CL)	101	28	101	15	100	7	101	6	47	36	E/M	R	GR	G	G
CDC Roxy	99	17	97	11	104	4	XX	2	28	33	E/M	R	GR	G	G

1. Cotyledon Colour. R=Red Y=Yellow

2. Seed Coat Colour. G= Green GR=Grey

Resistance: VP=Very Poor, P=Poor, F= Fair, G= Good **Maturity:** E= Early, M= Medium, L= Late

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