

LARGE RED LENTIL: CDC NIMBLE (CL[®])

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Year released to Select Seed Growers: 2019
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International Distribution Rights: Pulse USA

Plant Breeders Rights: Applied

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CDC Nimble (IBC-975) is a high-yielding, small red Clearfield[®] lentil variety. In five years of testing in the co-op and regional trials, it yielded 108% of the check variety CDC Maxim in both the north and south geographies (Table 1). Seed coat colour, cotyledon colour, flowering time, maturity, plant height, and disease resistance characteristics are similar to CDC Maxim (Table 2). Seed diameter is slightly less compared to CDC Maxim but seed thickness is higher, making CDC Nimble more suitable for lentil dehulling (Table 3). Application for PBR'91 protection for CDC Nimble has been submitted.

Strengths:

- Seed thickness greater than that of CDC Maxim
- High yield compared to CDC Maxim
- Imidazolinone tolerance

Neutral:

- Similar agronomic and maturity characteristics compared to CDC Maxim
- Similar disease resistance as CDC Maxim

Weaknesses:

- None detected

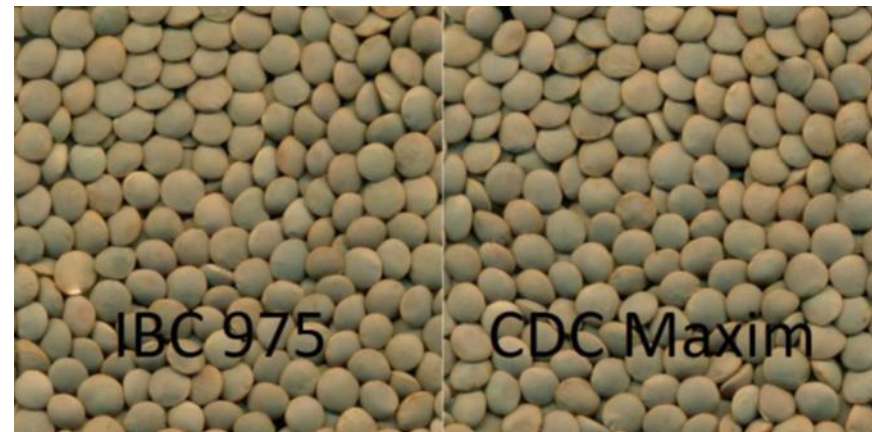


Table 1: Performance Data from the Co-op and Regional Trials in Saskatchewan

Variety	Herbicide Tolerance	Year of Release	Years Tested	Yield (% Maxim)		Height (cm)	Days to Flower	Maturity Rating	Resistance to:		Seed Weight (g/1000)
				Area 1 & 2*	Area 3 & 4*				Ascochyta Blight	Anthracnose Race 1	
CDC Maxim	CL	2007	12	100	100	34	51	E/M	G	G	40
CDC Impulse	CL	2014	9	108	95	37	52	E/M	G	G	44
CDC Proclaim	CL	2014	8	105	102	34	51	E/M	G	G	40
CDC Redmoon		2015	8	114	106	33	52	E/M	G	G	41
CDC Carmine		2016	8	111	106	34	54	E/M	G	G	40
CDC Coral		2016	5	110	106	33	55	E/M	G	G	37
CDC Nimble	CL	2019	5	108	108	35	52	E/M	G	G	38

Source: Varieties of Grain Crops 2019 (SaskSeed Guide) *Area 1&2: Brown & Dark Brown soil zones; Area 3&4: Black and Dark Gray soil zones

Table 2: Two Year Indoor Disease Summary for CDC Nimble in the 2014-2015 Lentil Registration Recommendation Trial (RRT) in Western Canada

Variety	Market Class	Ascochyta Blight (%)			Anthracnose Race 1*		
		2014	2015 Indoor Testing		2014	2015 Indoor Testing	
		Indoor Test	Test 1	Test 2	Indoor Test	Test 1	Test 2
CDC Maxim	Small red	13.0	7.5	6.3	5.0	4.8	5.0
CDC Nimble	Small red	12.0	6.9	6.9	4.9	4.9	4.8

Source: CDC Pulse breeding group, U of S * Anthracnose rating: 0 – 5 where 0 = no disease

Table 3: Seed Thickness Distribution of CDC Nimble in the 2014-2015 Lentil RRT in Western Canada (4 sites)

Variety	Market Class	Seed Thickness Distribution (% Seed over):										
		Round Hole (mm)										Slotted
		6.7 >17/64	6.4 >16/64	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	2.6 mm >6.5/64	
CDC Maxim	Small red	0	0	0	4	23	51	18	4	1	51	
CDC Nimble	Small red	0	0	0	3	19	42	28	8	2	58	

Source: CDC Pulse breeding group, U of S