

SMALL RED LENTIL: CDC IBC-1235 (CL[®])

Breeder:

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Year released to Select Seed Growers: 2019

Plant Breeders Rights: Applied

CL (Clearfield) is a Trademark of BASF Inc.

CDC IBC-1235 is a high-yielding small red Clearfield[®] lentil variety. This line yielded 110% of CDC Maxim in the 2015-2017 Lentil Co-op trials (Table 1) and 120% in the 2017-18 Lentil Regional Variety trials (Table 2). Seed coat colour, cotyledon colour, flowering time, maturity, plant height and disease resistance characteristics (Table 3) are similar to CDC Maxim. Seed size and thickness is slightly less than CDC Maxim (Table 4).

Strengths:

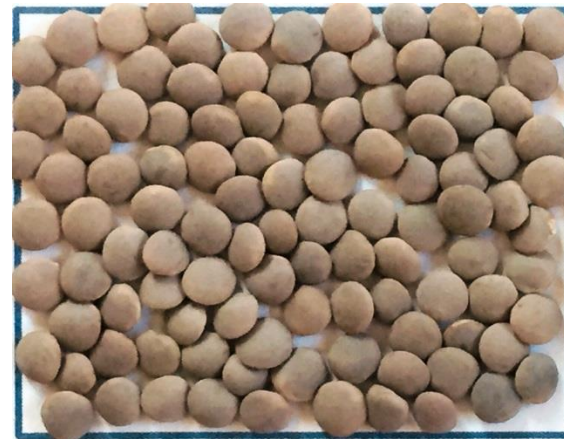
- High yield compared to CDC Maxim
- Imidazolinone tolerance

Neutral:

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

Weaknesses:

- Seed thickness less than CDC Maxim



IBC-1235

Table 1: Three year summary of agronomic performance for IBC-1235 vs. CDC Maxim from the 2015-2017 Lentil Co-op Trials in western Canada

Line	Herbicide tolerance	Year of release	Yield (% Maxim)	Days to flower	Days to mature	Height (cm)	Lodging (1-5)	Seed Weight (g/1000)
CDC Maxim	CL	2007	100	55	95	37	1.5	40
IBC-1235	CL	2019	110	57	95	37	1.2	39

Number of sites: 21 15 14 13 11 16

Source: CDC Pulse breeding group, U of S

Table 2: Two year summary of agronomic performance for IBC-1235 vs. CDC Maxim from the 2017-2018 Lentil Regional Variety Trial in western Canada

Line	Herbicide tolerance	Year of release	Yield (% Maxim)	Days to flower	Days to mature	Height (cm)	Lodging (1-5)	Seed Weight (g/1000)
CDC Maxim	CL	2007	100	51	94	37	1.4	42
IBC-1235	CL	2019	120	53	95	36	1.0	38

Number of sites: 18 7 6 7 3 6

Source: CDC Pulse breeding group, U of S

Table 3: Three year indoor disease summary for IBC-1235 in the 2015-2017 Lentil Registration Recommendation Trial in western Canada

Variety	Ascochyta Blight (%)				Anthracnose (0 – 5 rating)*							
	2015		2016	2017	2015 (Race 1)		2015 (Race 0)		2016		2017 (%)	
	Test 1	Test 2			Test 1	Test 2	Test 1	Test 2	Race 1	Race 0	Race 1	Race 0
CDC Maxim	7.5	6.3	7.5	16.3	4.8	5.0	4.9	4.8	4.5	4.7	86.5	95.0
IBC-1235	15.6	9.4	6.8	23.4	4.6	4.8	5.0	4.9	4.3	4.6	87.5	93.0

Source: CDC Pulse breeding group, U of S

* Anthracnose rating: 0 – 5 where 0 = no disease

Table 4: Seed thickness distribution of IBC-1235 in the 2015-2017 Lentil RRT in western Canada (6 sites)

Variety	% Seed over:						
	Round Hole (mm)						Slotted
	5.6 >14/64	5.2 >13/64	4.8 >12/64	4.4 >11/64	4.0 >10/64	3.6 >9/64	
CDC Maxim	3	19	42	27	7	2	39
IBC-1235	3	20	50	21	5	1	21

Source: CDC Pulse breeding group, U of S