



CDC Blackstrap Variety Description

April, 2023

Market Class: Black Bean

Year Registered: 2015

Date of Broad Release (off-tender): April 1, 2018

Breeder: Dr. Kirstin Bett, Crop Development Centre, University of Saskatchewan

Plant Breeders' Rights '91



Description

CDC Blackstrap is a high yielding, indeterminate black bean with medium maturity that is well-adapted to Saskatchewan. This variety was registered in 2015 and marketed through an exclusive, closed-loop tender until April 1, 2018, at which time it became widely available.

In eight years of testing in the dry bean narrow-row trials in the co-op and regional trials in Saskatchewan, CDC Blackstrap yielded 122% of CDC Pintium under irrigation and 120% in dryland conditions. It was the highest yielding variety in the dryland trials compared to other black varieties, as well as pintos and navy beans. CDC Blackstrap is well-adapted for Saskatchewan and has shown promising performance in solid seeded, straight combined, dryland production. This variety is protected by PBR'91.

Strengths

- High yield
- Good performance in dryland production
- Earlier maturity than CDC Jet or CDC Superjet
- Good pod clearance – suitable for straight combining
- Fewer 'stone seeds' than CDC Jet

Neutral

- Good lodging scores, similar to the check CDC Pintium
- Appropriate seed size and nice shape

Weaknesses

- Susceptible to Anthracnose races 73 and 105

Table 1: Dry Bean Agronomic Performance From Narrow-Row Co-op and Regional Trials in Saskatchewan

VARIETY	YEARS TESTED*	PBR STATUS	MARKET CLASS	YIELD % CDC PINTIUM		DAYS TO FLOWER	MATURITY**	POD CLEARANCE (%)***	GROWTH HABIT****	SEED WEIGHT (G/1000)	MARKET COMMENTS
				IRRIGATION	DRYLAND						
CDC PINTIUM	17	-	PINTO	100	100	50	EARLY	85	I	350	REGULAR DARKENING

											TYPE
ISLAND	11	-	PINTO	122	111	55	MEDIUM	79	II	355	REGULAR DARKENING TYPE
CDC MARMOT	8	-	PINTO	108	108	50	EARLY	80	I	367	REGULAR DARKENING TYPE
CDC WM-2	12	PBR '91	PINTO	118	106	52	EARLY	79	II	365	SLOW DARKENING TYPE
CDC BLACKSTRAP (2921-14)	8	PBR '91	BLACK	122	120	53	MEDIUM	85	II	195	WELL-ADAPTED FOR SK & DRYLAND PRODUCTION
CDC JET	17	-	BLACK	110	98	58	LATE	85	II	170	LATE MATURING FOR SK
CDC SUPERJET	7	-	BLACK	125	108	58	LATE	85	II	170	LATE MATURING FOR SK
AC BLACK DIAMOND	7	-	SHINY BLACK	102	94	54	MEDIUM	70	II	250	

Source: Varieties of Grain Crops ([SaskSeed Guide](#)) and CDC Pulse Crop Breeding Group
 *Co-op and Regional trials grown in narrow rows in Saskatchewan. Direct comparison to CDC Pintium since 2002.
 ***% Maturity ratings based on E = 100 days; L = 110 days for planting to swathing maturity
 ***Pod Clearance: percentage of pods that completely clear the currenbar at the time of swathing (~4 cm)
 ****Growth habit: I = Determinate bush; II = Indeterminate bush; III = Indeterminate vine

Table 2: Hydration Data for CDC Blackstrap vs. Black Bean Check Varieties

VARIETY	LOCATION	DRY WEIGHT (50 SEEDS)	# OF HARD SEEDS	WEIGHT OF HARD SEEDS	# OF PARTIALLY SOAKED SEEDS	WEIGHT OF PARTIALLY SOAKED SEEDS	# OF FULLY SOAKED SEEDS	WEIGHT OF FULLY SOAKED SEEDS	H-C*
CDC BLACKCOMB	1	9.48	2	0.70	1	0.18	47	19.70	2.19
CDC JET	1	9.73	15	3.05	3	1.27	32	12.90	2.08
CDC BLACKSTRAP	1	11.27	0	-	5	2.06	45	21.54	2.14
CDC BLACKCOMB	2	8.11	1	0.15	3	1.15	46	16.98	2.28
CDC JET	2	8.08	32	5.54	4	1.08	14	4.87	2.11
CDC BLACKSTRAP	2	9.44	0	-	4	1.12	46	18.94	2.18

Source: Crop Development Centre, U of S
 *H-C = Hydration Coefficient = (fully soaked seed weight*50 seeds)/(dry weight*# of fully soaked seeds)
 Average of 3 reps at each location.



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