

CDC Inca Variety Description

May, 2023

Market Class: Yellow Pea

Year Released to Select Seed Growers: 2015

Sub-licensed Outside of SK: SeedNet

International Distribution Rights: Canterra Seeds Ltd./Meridian Seeds

Breeder: Dr. Tom Warkentin, Crop Development Centre, University of Saskatchewan, Saskatoon, SK

Plant Breeders Rights:



Description

In 9 years of testing in the Co-op and Regional trials in Saskatchewan (Table 1), CDC Inca yielded 104% compared to CDC Amarillo in the southern regions and 99% in the north. CDC Inca has PBR'91 protection.

Strengths

- High yield, particularly in the south
- Good resistance to seed coat breakage
- Medium vine length
- Powdery mildew resistance

Neutral

- Medium seed size
- Round seed shape
- Medium maturity
- Moderate cooking time
- Fair resistance to Mycosphaerella blight and Fusarium wilt

Weaknesses

- Lower protein (-0.6%) compared to CDC Amarillo

Table 1: Agronomic Performance for Yellow Peas from Co-op and Regional Trials in Saskatchewan

VARIETY	YEAR REGISTERED	YEARS TESTED	YIELD % AMARILLO		MATURITY	LODGING (1-9)**	VINE LENGTH (CM)	RESISTANCE TO:					
			1, 2, & SOUTH	NORTH3 & 4*				MYCOSPHAERELLA BLIGHT***	POWDERLY MILDEW	FUSARIUM WILT	SEED COAT BREAKAGE	SEED COAT DIMPLING****	GREEN

			3*										
CDC AMARILLO (CHECK)	2012	12	100	100	MEDIUM	3.5	85	4.5	R	MR	FAIR	FAIR	GO
ABARTH	2012	7	93	90	EARLY	3.5	75	5.0	R	I	FAIR	GOOD	GO
AAC ARDILL	2013	10	102	99	MEDIUM	3.5	85	4.5	R	MR	GOOD	GOOD	GO
CDC ATHABASCA	2016	7	93	97	MEDIUM	3.0	85	4.5	R	I	FAIR	FAIR	GO
CDC CANARY	2017	8	98	98	EARLY	3.5	85	4.5	R	I	GOOD	FAIR	FA
AAC CARVER	2014	7	102	100	EARLY	4.0	85	5.0	R	I	GOOD	FAIR	GO
AAC CHROME	2017	6	105	101	MEDIUM	4.5	75	4.5	R	I	GOOD	GOOD	GO
CDC INCA	2015	9	104	99	MEDIUM	4.0	85	4.5	R	I	GOOD	GOOD	FA
AAC LACOMBE	2013	8	96	100	MEDIUM	3.5	85	5.0	R	I	FAIR	FAIR	FA
CDC LEWOCHKO	2018	7	102	103	MEDIUM	3.5	90	4.5	R	I	GOOD	GOOD	GO
CDC MEADOW	2006	12	93	90	EARLY	4.0	85	5.0	R	I	GOOD	GOOD	GO
CDC GOLDEN	2003	10	92	83	MEDIUM	4.5	75	5.0	R	I	GOOD	GOOD	GO
CDC SAFFRON	2011	12	98	92	EARLY	4.0	80	4.5	R	I	GOOD	FAIR	GO
CDC SPECTRUM	2016	9	104	101	MEDIUM	3.5	85	4.5	R	I	GOOD	GOOD	FA

Source: Varieties of Grain Crops ([SaskSeed Guide](#))

*Area 1: Brown soil zone; Area 2: Dark brown; Area 3: Black; Area 4: Dark grey

**Lodging score: 1 = Upright; 9 = Completely lodged

***Mycosphaerella blight score: 1 = No disease, 9 = Completely blighted

****Seed coat dimpling: Very Good = 0-5%; Good = 6-20%; Fair = 21-50%

*****Greenness: Good = 0-15%; Fair = 16-40%

Statistical analysis of 10 years of long-term RVT data (86 site-years for CDC Inca) ranked CDC Inca second from the top for yield among 18 historical and new yellow pea varieties. Top spot went to the emerging variety CDC Chrome. CDC Inca consistently yielded significantly higher than CDC Meadow and would be a good replacement for this older variety. Statistical analysis by site showed CDC Inca ranking in the top 5 varieties at most locations except for Melfort, Scott and Kamsack. Ranking in the Saskatoon area (3 locations) varied with Inca taking top spot overall at Sutherland (first in 3 of the 7 years tested and in the top 3 in 2 years). At nearby Floral location, AAC Chrome yielded significantly higher than CDC Inca. The best sites for CDC Inca included Outlook, Sutherland, Limerick, Lucky Lake, Meath Park and Rosthern which represents a very broad geographical range.

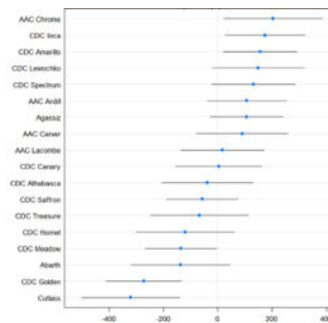


Figure 1. Long term yield (left) and relative yield ranking (right) of yellow pea varieties from 10 years of RVT data in SK



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