



CDC 1142 Variety Description

August, 2024

Market Class: Faba Bean

Year sublicensed: 2022

Sub-licensed Outside of SK: KGB Meier Farms

International Distribution Rights: Not assigned

Commercialization: nonexclusive sublicense in SK

Breeder: Dr. Bert Vandenberg, Crop Development Centre, University of Saskatchewan, Saskatoon, SK

Plant Breeders Rights: Applied

Description

CDC 1142 is a white-flowered, low tannin, Low Vicine/Convicine (LVC) faba bean variety. The LVC trait represents an opportunity for using faba bean protein in food ingredients, creating new markets for faba beans. The faba bean industry is transitioning to LVC varieties and all new varieties must have this trait. Due to the outcrossing nature of faba beans, isolation of LVC faba beans from high vicine types and testing for the integrity of the LVC status of harvested seed is required. For these reasons, this variety has been sub-licensed in a nonexclusive, closed-loop production basis for the purpose of trait stewardship. Current sub-licensees include KGB Meier Farms, Dutton Farms Partnership and Faba Canada.

In 5 years of testing in the Co-op and Regional trials in Saskatchewan, CDC 1142 yielded 98% of the current market class check CDC Navi (Table 1). In 4 years of head-to-head testing, CDC 1142 yielded 4% higher vs. Snowbird. CDC 1142 matures 4 days earlier than Navi and 2 days later than Snowbird. CDC 1142 has a small seed that is 76% of Snowbird (358 vs. 471 g/1000) and 85% vs. Navi. Application for PBR'91 protection for CDC 1142 has been submitted.

Strengths

- Low Vicine/Convicine (LVC)
- Higher yielding than Snowbird; similar to Navi
- Matures 4 days earlier than Navi
- Small seed size

Neutral

- Similar height and lodging compared to Snowbird or Navi

Table 1: Performance data of faba bean varieties from the Co-op and Regional Trials in Saskatchewan

Variety	Market class	Low Vicine/Convicine (LVC)	Check Variety	Years Tested	Yield ¹ (%)	Height (cm)	Lodging ²	Maturity (days)	Seed Weight (g/1000)
Fabelle	Coloured Flower (normal tannin)	Yes		11	100	104	2.4	105	533
Allison	Coloured Flower (normal tannin)	Yes	Fabelle	4	103	104	—	106	507
Victus	Coloured Flower (normal tannin)	Yes	Fabelle	7	96	101	2.8	105	444
Dosis	Coloured Flower (normal tannin)	Yes	Fabelle	3	101	106	3.1	103	521
Futura	Coloured Flower (normal tannin)	Yes	Fabelle	3	109	107	2.4	106	530
Navi	White Flower (low tannin)	Yes		6	100	94	3.2	111	401
DL Nevado	White Flower (low tannin)	Yes	Navi	5	94	98	1	109	425

CDC 1310	White Flower (low tannin)	Yes	Navi	4	98	99	4.2	106	341
CDC 1089	White Flower (low tannin)	Yes	Navi	5	104	96	3.9	106	375
CDC 1142	White Flower (low tannin)	Yes	Navi	5	98	90	3.7	107	341

Source: Varieties of Grain Crops ([SaskSeed Guide](#)) and Crop Development Centre, U of S

¹ Long term average yield of check varieties: Fabelle: 4609 kg/ha or 69 bu./ac., Navi: 3930 kg/ha or 58 bu./ac.

² Lodging score (1-9) where 1 = completely upright, 9 = completely lodged.

Faba beans are classified into Tannin and Low (Zero) Tannin (ZT) types. For this table comparisons for Tannin types are made to Fabelle and low tannin types to Navi.



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