

Saskatchewan Pulse Growers Coloured and White Fababean Variety Evaluations

Project duration: May 2021 – September 2021

Objectives: To evaluate coloured and white fababean entries for the Saskatchewan Pulse Growers (SPG)

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Background

(Adapted from the [SPG website](#)): The SPG works to boost yield of established pulse crops, develop new crops, connect with growers, expand the utilization of pulse crops, and decrease barriers to market access. The projects further on-farm yield gains through the identification and enhancement of genetic yield potential.

Results

The average yield for coloured fababean entries is shown in Figure 1. The average yield for white fababean entries is shown in Figure 2. Numbered, non-registered varieties are provided for tracking purposes only. The results are for one site-year only, and should be interpreted with caution. Consult a seed guide for multi-site-year data for available varieties.

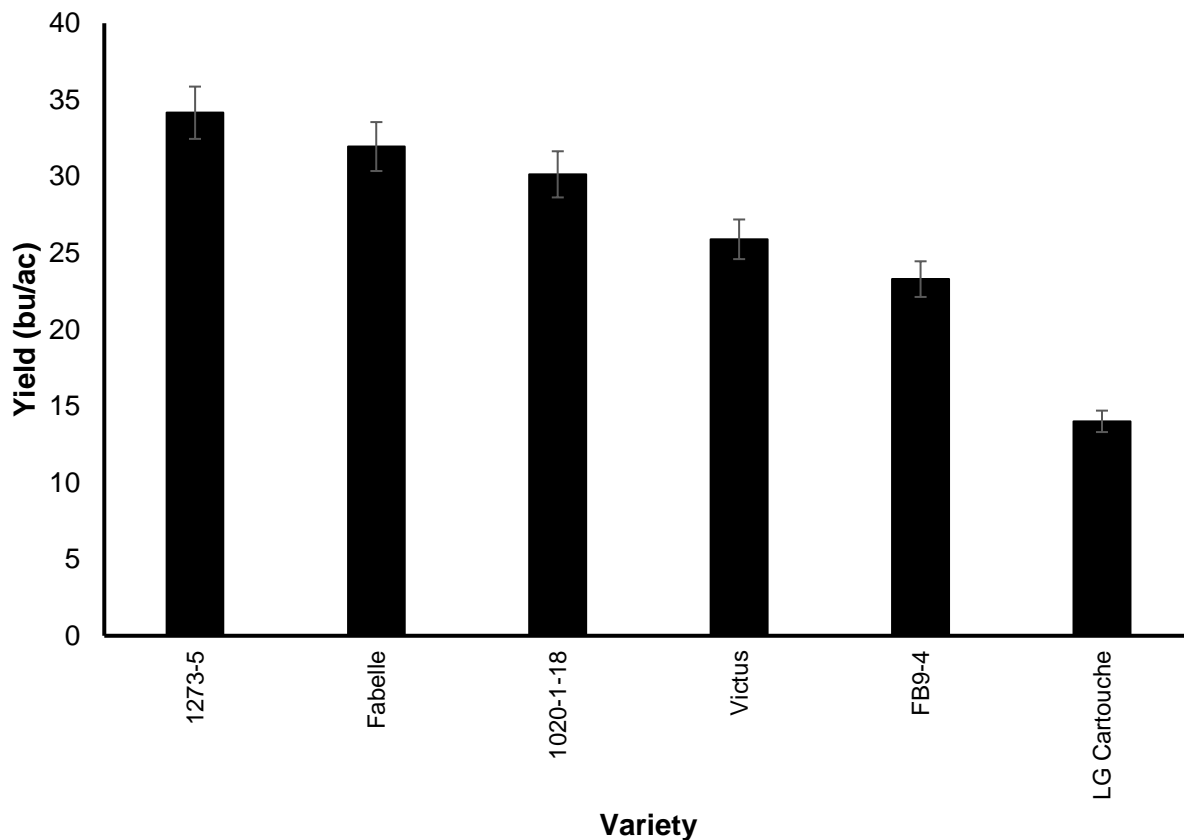


Figure 1: Average yield for coloured fababean entries

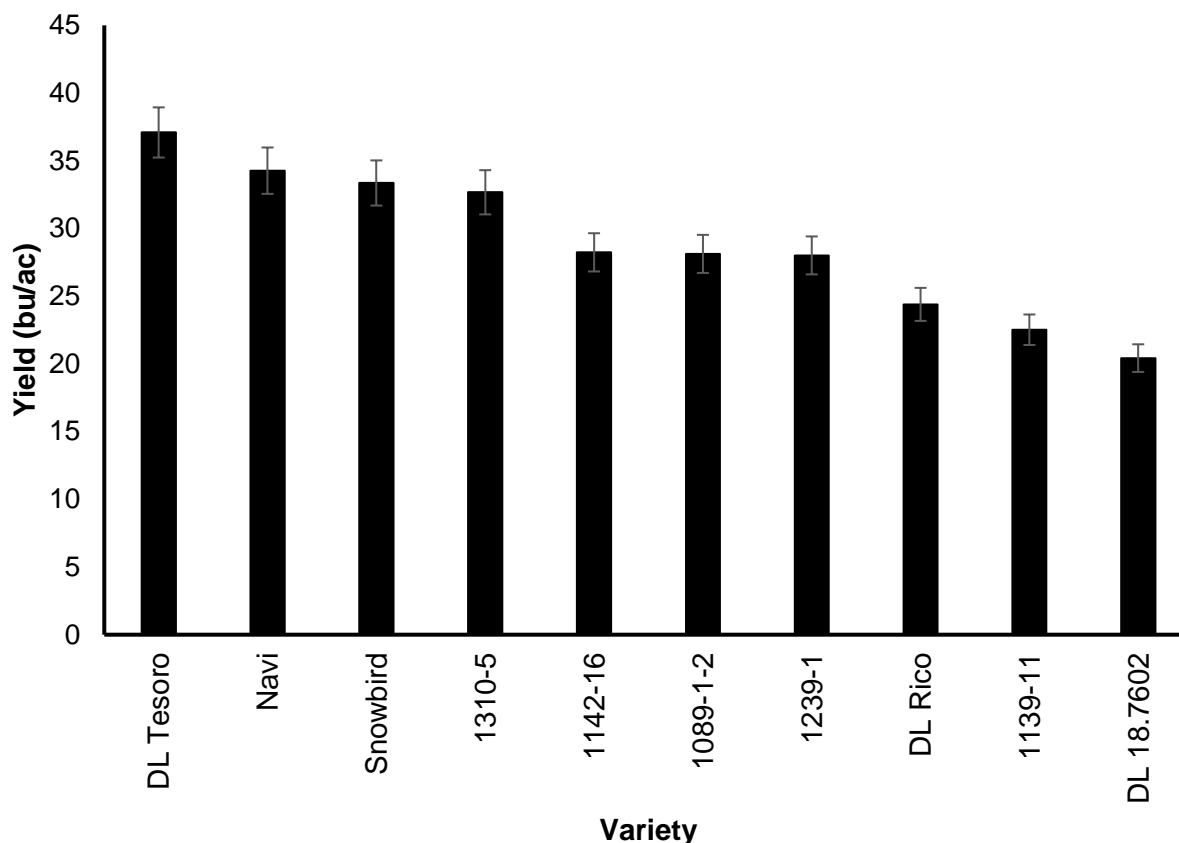


Figure 2: Average yield for white fababean entries

Table 1: Comparison of yield means and statistical difference for coloured fababean entries (varieties connected by the same letter are statistically significant)

Variety	Statistical significance for yield			Yield (bu/ac)
1273-5	A			34.15
Fabelle	A	B		31.95
1020-1-18	A	B		30.13
Victus	A	B		25.89
FB9-4		B	C	23.29
LG Cartouche			C	14.00
LSD	10.00			
% CV	31.41			

Table 2: Comparison of yield means and statistical difference for white fababean entries (varieties connected by the same letter are statistically significant)

Variety	Statistical Significance for Yield			Mean
DL Tesoro	A			37.09
Navi	A	B		34.26
Snowbird	A	B		33.36
1310-5	A	B	C	32.67
1142-16	A	B	C	28.24
1089-1-2	A	B	C	28.12
1239-1	A	B	C	28.01

DL Rico	A	B	C	24.39
1139-11		B	C	22.52
DL 18.7602			C	20.43
LSD	12.81			
% CV	28.18			

Plant heights for coloured fababeen entries are shown in Figure 3, and for white fababeen entries in Figure 4.

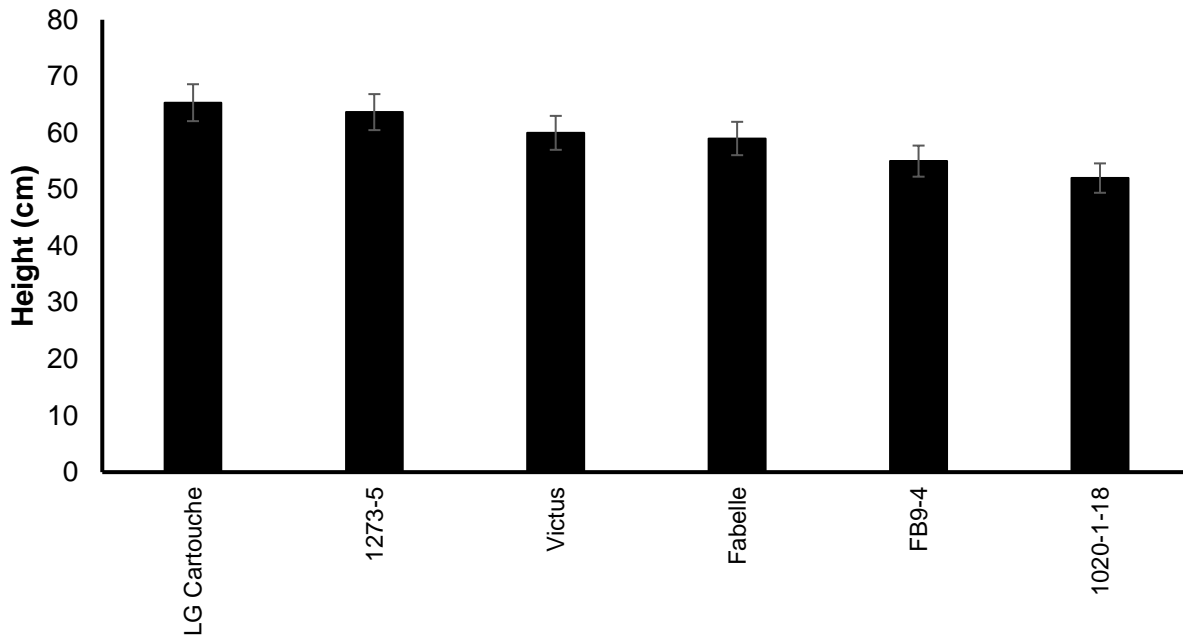


Figure 3: Plant heights for coloured fababeen entries

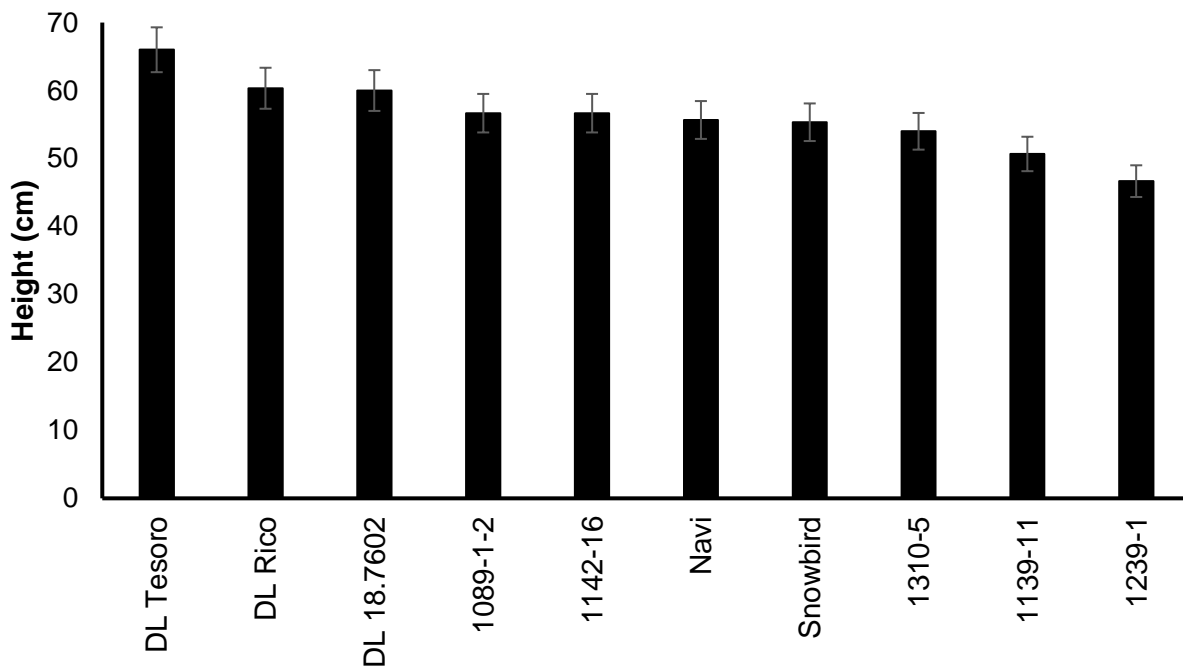


Figure 4: Plant heights for spring wheat entries in Evaluation 2 (High Yielding)

Table 3: Comparison of height means and statistical difference for coloured fababean entries (varieties connected by the same letter are statistically significant)

Variety	Statistical significance for yield		Height (cm)
LG Cartouche	A		65.33
1273-5	A	B	63.67
Victus	A	B	60.00
Fabelle	A	B	59.00
FB9-4	A	B	55.00
1020-1-18		B	52.00
LSD	13.09		
% CV	13.17		

Table 4: Comparison of height means and statistical difference for white fababean entries (varieties connected by the same letter are statistically significant)

Variety	Statistical Significance for Height			Height (cm)
DL Tesoro	A			66.00
DL Rico	A	B		60.33
DL 18.7602	A	B		60.00
1089-1-2	A	B	C	56.67
1142-16	A	B	C	56.67
Navi	A	B	C	55.67
Snowbird	A	B	C	55.33
1310-5		B	C	54.00
1139-11		B	C	50.67
1239-1			C	46.67
LSD	11.84			
% CV	13.75			

Materials and methods

Experimental Design: Random Complete Block
 Entries: 10 white entries; 6 coloured entries; 3 replications
 Seeding: May 4
 Harvest: Sep 22

Data collected: Date collected
 % Plant Stand: May 19
 Maturity: Sep 24
 Yield: Sep 25
 Moisture: Sep 25

Agronomic info

Previous year's crop: Oat Silage
 Soil Type: Erickson Clay Loam
 Landscape: Rolling with trees to the east
 Seedbed preparation: Vertical tilled

Table 3: Spring 2021 Soil Test

	Available	Added	Type
N	151 lb/ac	-	-
P	47 ppm	10 lb/ac	11-52-0-0

Inoculant added with seed; P banded with seed

Table 4: Pesticide Application

Crop stage	Date	Product	Rate
Pre-emerge	May 10	Authority	188 ml/ac
In-crop	Jun 14	Bentazon	910 ml/ac
		Quizalafop	200 ml/ac
		Merge	700 ml/ac
Desiccant	Sep 9	Reglone	650 ml/ac
		LI700	250 ml/ac