

Faba Bean Insecticide Trial

Trial ID: 2025-FI01 – R.M. of Glenboro – South Cypress

Objective: Quantify the agronomic and economic impacts of an insecticide application in faba beans.

Summary: One application of Carbine® insecticide significantly reduced perforated faba bean seeds compared to untreated seed. The insecticide application resulted in perforations <1.0 %, therefore, had there been no other down grading factors, the treated area of the trial would have resulted in a No 1. grade and the untreated area of the trial would have received a No. 2 grade. Note: to receive a No 1. grade in Canada, the maximum allowable perforated seeds (faba bean seeds with hull perforations from insects or disease) is 1.0 %.

Trial Information

Treatment	Untreated vs. Carbine®
Application Timing	R3
Application Date	08/07/2025
Application Rate	82 g/ac
Application Method	Broadcast
Soil Texture	Clay
Previous Crop	Canola
Variety	Fabelle
Seeding Rate	215 lbs/ac
Row Spacing	7 in.
Plant Stand @ R2	144,125 plants/ac
Harvest Date	30/09/25

Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	84.9	32.3	54.8	49.5	221.5
Normal	67.11	89.87	76.99	56.31	290.28
% Norm	127%	36%	71%	88%	76%

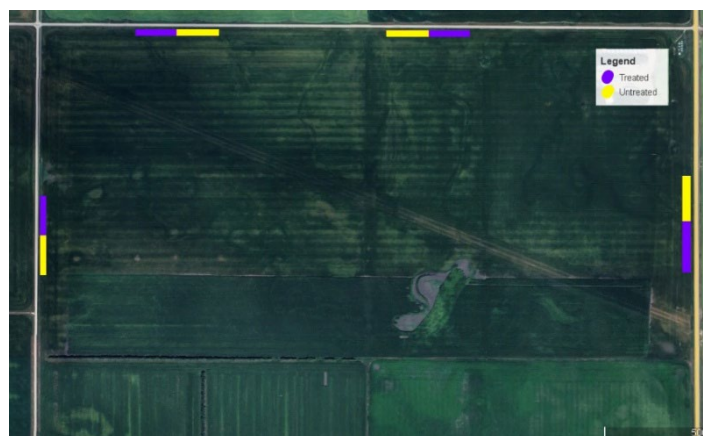
Lygus Bug Damage

	Perforated Seeds (%)†	Perforated Seeds Grade††
Untreated	2.3 A	No. 2
Treated	0.35 B	No. 1

† Seed was brought for a grading assessment to determine seed perforation and grade. Averages followed by different letters are significantly different at $\alpha = 0.05$

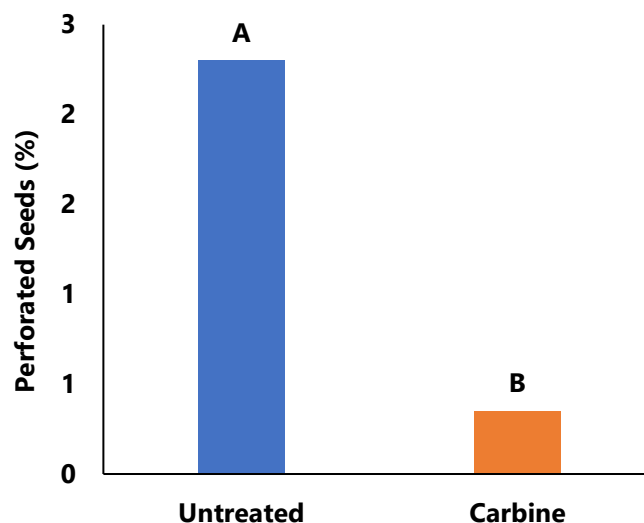
†† 1.0% perforations = Grade of No.1, 3.0% perforations = Grade of No. 2 to 3. Note that perforations were not the only downgrading factor at this site and other factors, such as seed discolouration and splits, resulted in a final grade of No. 3 with a sell price of \$8/bu. (Note: No. 1-2 grade is a sell price of \$9-10/bu).

Trial Layout†



† Carbine single application vs. untreated trial layout with four replications separated from each other and placed along field edges. Plot dimensions were 100m long x 20m wide.

Lygus Bug Damage by Treatment





Different seed grading fractions of Grade No. 1 (largest fraction, image left), discoloured (image right), split (image top) and perforated (image bottom) from a trial seed sample.