Two Years In Review: Canola Variety Evaluation Trials (CVET)

Jared Bento, Manitoba Canola Growers Association (MCGA)

Background:

- Independent third-party evaluation of commercial canola varieties allow for **transparency and cross-commodity comparisons of varieties** that are marketed to farmers
- From MCGA's **survey of 400+ farmers and agronomists:**

  86% *of respondents* ***believe access to independent third-party seed trial data is important***

  98% *of respondents* ***believe reporting variety performance in local conditions impacts variety purchase/recommendation***

  Key Finding: ***Third-party seed testing data is highly-valued for being unbiased and reliable***

- **All canola seed companies are approached annually** and encouraged to enter varieties into the program

Objective:

Provide farmers independent third-party field testing data for commercial canola hybrid performance across Manitoba.

Materials and Methods:

- **Protocols** are developed to **reflect most common production practices** in MB with oversight from CVET technical committee:
  - **CVET technical committee** composed of **members from public and private industry** and **academia**
- Separate trials for Liberty Link and Roundup/TruFlex at each field site:
  - ❑ **Randomized Complete Block Design (RCBD)** with **4 replicates of each variety per site**
  - ❑ MCGA staff performs two field audits per site
  - ❑ Medium-sized plots (30-60 m^2) utilized to better represent field performance of varieties

Figure 1. Plot 101 to 104 of 2025 Morden Roundup Ready and Truflex trial.

Results:

- In 2024 and 2025 growing seasons, MCGA successfully evaluated **13 and 15 commercial canola varieties** at **4 and 8 field locations**, respectively:
  - **7 varieties were tested in both growing seasons**
- Canola **yields ranged from 48 bu/ac to 64.1 bu/ac** during the 2024 and 2025 seasons, reflective of annual Manitoba provincial yield averages (Tables 1 and 2)
- Local field conditions for each field site were leveraged to compare varietal performance across:
  - **Long-** and **mid-season zones**
  - Differing **disease pressures**
  - **Soil types**
  - **Range of precipitation** and accumulated **growing degree days**

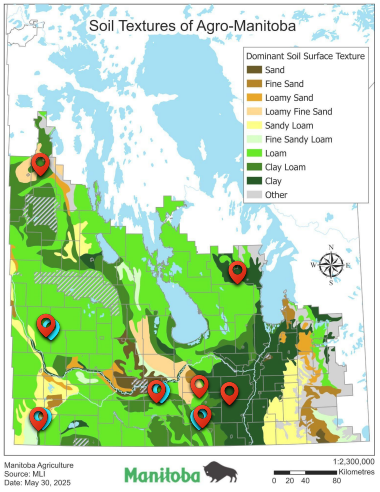

Figure 2. Map of 2024 and 2025 Canola Variety Evaluation Trial field sites.

Table 1. Average yield of Liberty Link canola varieties across all field testing sites in the 2024 and 2025 growing seasons.

Year	2024	2025
Variety (Company)	**Yield (bu/ac)**	
B3012 (Brevant seeds)	50.0	
BY 7204LL (BrettYoung)	52.0	59.0
BY 7206LL (BrettYoung)		61.1
CROPLAN CP21L3C (WinField United Canada)	48.0	
CROPLAN CP24L3C (WinField United Canada)	51.0	59.4
CROPLAN CP25L3C (WinField United Canada)		60.1
CS4000 LL (Canterra Seeds)	48.0	
CS4100 LL (Canterra Seeds)		58.7
InVigor L330PC (BASF)		63.0
InVigor L333PC (BASF)		62.0
InVigor L340PC (BASF)	**57.0** *(check)*	**62.0** *(check)*
InVigor L343P (BASF)	54.0	
InVigor L350PC (BASF)	53.0	64.1
InVigor L356PC (BASF)	55.0	62.0
MC 5126LL (Maizex Seeds)		54.5

Table 2. Average yield of Roundup Ready and Truflex canola varieties across all field testing sites in the 2024 and 2025 growing seasons.

Year	2024	2025
Variety (Company)	**Yield (bu/ac)**	
CROPLAN CP21T3P (WinField United Canada)	**51.0** *(check)*	
CROPLAN CP22T1C (WinField United Canada)	50.0	
CROPLAN CP25T2C (WinField United Canada)		57.8
CS3200 TF (Canterra Seeds)	55.0	55.9
CS3300 TF (Canterra Seeds)	57.0	**61.5** *(check)*
MC 5230TF (Maizex Seeds)		60.7

Discussion:

- **High readership indicates importance** of 3rd-party variety testing **to MB canola farmers:** CVET results were the most-viewed publication from MCGA in 2024
  - Seed companies are annually offered entry to **locally-relevant trials and high-readership results** at low cost
  - Program participation in both 2024 and 2025 from: BASF, BrettYoung, Canterra, Maizex, Winfield
- Farmers are encouraged to select varieties based on the most reliable and accessible information available
- Discussions underway to further promote inclusion of popular canola varieties in MB

Access full CVET reports at: canolagrowers.com/canola-variety-evaluation/