

2025 Variety Verification Seed Sample Procedures

The Canadian Food Inspection Agency (CFIA) administers the Variety Verification Program, a quality check that supports the integrity of Canada's seed certification system. The program confirms that high-generation seed samples meet varietal purity and are true to type.

Each year, seed samples are collected nationwide and grown out at the CFIA Seed Science Unit in Nepean, ON. CFIA technicians compare the observable characteristics of the plants to the breeder's official variety description and to plants in adjacent plots grown from the official breeder seed reference sample to verify varietal identity.

Submitting Your Seed Sample

CSGA will **distribute seed sample bags in August and September** to growers with Probation plots, Select plots, or Foundation (open-pollinated) plots.

Sampling Requirements:

- Submit **one sample per variety** (Select or Foundation open-pollinated crops)
- Submit **one sample per Probation plot**

Labeling Instructions:

- Complete **all fields** on the seed sample label
- List **all sequence numbers** if the sample covers multiple sequences
- **Accurate sampling and labeling** are essential, errors may delay certification

Quality Guidelines:

- Provide **clean, untreated, and dry** samples
- Hand-screen or condition the seed to **remove weed seeds and debris**
- Moisture may lead to spoilage or sprouting—**dry thoroughly**

Minimum Sample Size:

- Large-seeded crops (e.g., cereals, corn, beans): **450 g (1 lb)**
- Small-seeded crops: **100 g (3.5 oz)**

Packaging Tips:

- **Seal bags tightly** to prevent spills
- **Tape envelopes** and fill empty space in shipping boxes
- **Damaged samples** may require resubmission

Deadlines:

- **Annual crops:** February 15
- **Winter cereals:** August 15



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*NOTE: Late samples may miss the season's testing window and delay certification decisions. Late samples should still be sent as soon as possible as they may still be included. **If samples are not tested, any varietal purity or identity issues may not be identified in time to prevent down stream problems.***

Where to Send Your Seed Samples:

CFIA Seed Science Unit
Canadian Food Inspection Agency
3851 Fallowfield Rd, Building 210
Nepean, ON, K2J 4S1

Thanks for helping keep Canada's seed system strong!

Need Help?

For any questions or assistance, please contact us at support@seedgrowers.ca or 613-236-0497, ext. 8803.

seedgrowers.ca

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About the CFIA's Variety Verification Program

The Variety Verification Program has been operating for decades as a quality check on Canada's seed certification system. Combined with CSGA's seed crop certification standards and processes, this program ensures that Certified seed meets its varietal claims, providing farmers with confidence they are purchasing high-quality, third party verified seed.

Each year, the CFIA Fallowfield Laboratory grows out over 1,500 seed samples across 20+ crop kinds. The samples are planted in variety verification plots alongside reference plots grown from breeder seed of the same variety. Throughout the growing season, CFIA Seed Science Unit field technicians assess the plants for visual differences, comparing them against the reference control plot and official variety descriptions.



Figure 1: Variety verification samples that have been received, planted and grown for analysis

What happens if issues are identified?

The Variety Verification Program is not an enforcement tool – its primary function is to assess the effectiveness of the seed certification system. However, if the CFIA identifies significant varietal purity or identity issues (for example, elevated levels of off-types, or a different variety) they may:

- contact the grower for more information
- request follow-up samples for an additional grow-out
- share findings with CSGA, which may impact crop certification decisions
- send a result notification letter to the grower and applicable parties

Important Note: In cases of critical varietal purity or identity concerns, results could be delayed up to two years depending on the crop type as it takes time to grow out follow up samples.

Why is this program important?

The Variety Verification Program acts as a health check on Canada's pedigree seed system, helping to:

- detect issues early in the seed multiplication process, when seed quantities are still small
- prevent downstream problems that could affect seed quality and certification
- support Canada's participation in the Organisation for Economic Co-operation and Development's (OECD) Seed Schemes, ensuring compliance with international seed export requirements

For more details, visit the CFIA Variety Verification Program Q&A webpage: <https://tinyurl.com/Q-A-Variety-Verification>