

CSGA's Breeder Seed Program

Canada's seed certification system is based on a sector-government partnership between the Canadian Seed Growers' Association (CSGA) and the Canadian Food Inspection Agency (CFIA). Mandated by the *Seeds Act* and *Seeds Regulations*, CSGA is the regulatory authority for seed crop certification and establishes varietal purity standards for all crop kinds except potatoes.

The CFIA is responsible for administering and enforcing the *Seeds Act* and the *Seed Regulations* and is the regulatory authority for seed certification in Canada. CSGA is solely responsible for certifying Breeder and Select seed crops and approving Breeder and Select seed as eligible parent seed for further pedigreed seed crop production. CSGA issues Breeder and Select seed tags which can be used on seed harvested from crops certified by the CSGA. When produced in Canada, "seed" can only be finally certified by the CFIA and sold as Foundation, Registered, or Certified status seed if it was harvested from a "crop" that was certified by the CSGA.

The Canadian seed certification process is designed to deliver specific plant breeding innovation from the plant breeder to the farmer and food industry. The seed is true-to-type. It ensures that the varietal identity and purity and all benefits developed by the plant breeder are retained as the seed is multiplied over a number of specific generations (to the Certified seed stage) from the original amount of seed developed by the plant breeder. Breeder seed is the highest-status seed used as the original parent seed to produce all other classes of pedigreed seed.

Benefits of CSGA's Breeder Seed Program

For decades, plant breeders have been developing and testing new varieties to ensure they thrive across Canada's diverse agricultural regions. CSGA's Breeder Seed Program is crucial to ensuring seed of those new varieties is genetically pure and of high quality, meaning relatively free from other kinds, weeds, and disease and good germination.

Breeders develop varieties with desirable traits, such as high yield, disease resistance, and drought tolerance, that meet market needs and benefit Canadian agriculture. Only the best-performing varieties advance through successive generations of seed production. CSGA's Breeder Seed Program supports the maintenance of those varieties' traits – that the seed is of the variety – bringing the new superior varieties to market. By ensuring the credentials of plant breeders and the quality of Breeder seed, variety registration is facilitated, and Canadian seed growers are able to produce large quantities of seed featuring plant breeding innovations for commercial production by Canadian farmers.



seedgrowers.ca

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The Canadian Breeder Seed Requirements

Through the *Canadian Breeder Seed Requirements*, CSGA outlines the requirements for plant breeders, Breeder seed crop production and Breeder seed. The document describes the requirements that a plant breeder and a Breeder seed crop must meet for the CSGA to issue a Breeder seed crop certificate and to approve Breeder seed as eligible parent seed for pedigreed seed crop production. A very important component of the Breeder seed requirements, which is unique to Canada, is CSGA's peer-review program for plant breeders to become CSGA Recognized Plant Breeders. This recognition allows individuals to produce Breeder status seed crops, label seed as Breeder seed, and have their new varieties registered with CFIA or recognized as eligible for certification by the CSGA.

Starting July 1, 2023, new applicants seeking recognition can take advantage of the Plant Breeder Program within *CSGA Learn*, the Association's online professional development program. The program includes course material designed to help applicants understand the recognition process and learn the requirements for producing Breeder seed in Canada.

Breeder seed "crops" must meet the same land use requirements and individual crop standards (e.g., maximum impurity standards, isolation from contaminating pollen) as the highest pedigreed class of the relevant crop kind, as described in Circular 6. For Section 2 and 3 crops, that means the plot requirements for the Select class. For canola, mustard, carinata, and hemp, that means the plot requirements for the Foundation class. For forage and turf grasses and legumes, that means the field requirements for the Foundation class.

The Breeder seed requirements also describe the requirements for Breeder "seed" with respect to prohibited noxious weeds, seed-borne disease, mechanical purity, and germination.

Additionally, Breeder seed must be produced within a third-party audited quality management system. More information on Breeder Seed Crops can be found on the <u>CSGA website</u>.

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