

Hemp – Certified Production of Hybrid Hemp [Provisional Standards]

The requirements shown here are specifically for Certified seed production of Dioecious and Monoecious type varieties of Hybrid Industrial Hemp which are the first generation of a cross between two specified parent lines with different genotypes. ***These provisional standards are being implemented on an interim basis on June 1, 2026, and will be reviewed by December 31, 2028, at which time they may be extended, amended or withdrawn pending the availability of additional data, operational experience, or regulatory direction.***

Traditional production of Dioecious and Monoecious type varieties of **Open-pollinated Industrial Hemp** is not included and can be found under separate headings.

Feminized Hemp Seed varieties (which produce only female plants) is not included and can be found under its own heading.

General Requirements for All Pedigreed Seed Crops

The basic standards for all crops are set out in [General Requirements for All Pedigreed Seed Crops](#). In addition, the following standards apply to hybrid hemp production.

Classes and Generations

The following classes and generations are utilized in the certification of hybrid hemp and parent lines:

Breeder:

- Produced in plots by or under the supervision of a CSGA-Recognized Plant Breeder

Foundation:

- Produced in plots by or under the supervision of a CSGA-Recognized Plant Breeder or by a CSGA-Accredited Plot Grower

Certified class hybrid seed:

- Produced from Breeder or Foundation parent material
- One generation sold to commercial producers and not eligible for further certification

Parent Material Requirements

Breeder or Foundation status parent material must be used to produce Certified hybrid seed. Parental germplasm, propagating methods and protocols for Certified seed production must be described by a CSGA-Recognized Plant Breeder in the application for variety certification eligibility (Form 300) and remain the same throughout the life of the variety.

Types of Hybrid Varieties

There are different types of hybrid varieties depending on the parental germplasm and the propagation methods that are used. They can be derived from clones, seed or a combination of both. Seed production protocols include maintenance of the parent material, and the procedures used to generate Certified seed of the hybrid variety.

Land & Growth Facility Requirements

All types of hybrid varieties can be produced in a contained growth facility (growth chamber or room, greenhouse, polyhouse) or in a field.

Field Production

Seed crops of hybrid varieties must not be planted on land which in the previous two years grew a crop of *Cannabis sativa*.

Growth Facility

Each room or chamber in a growth facility must only contain plants used in the production of Certified seed of the variety. Indoor seed crops of hybrid varieties must be protected from all potential sources of contaminating *Cannabis sativa* pollen from previous production within the same room or chamber. This may be achieved through an adequate time interval between successive crops, or by implementing alternative measures that effectively prevent residual pollen contamination. All protocols used must be thoroughly documented and available to CSGA or an authorized inspector upon request.

Crop Inspection

Seed parent and pollen parent plants need to be clearly identified.

It is the seed grower's responsibility to ensure that the seed crop is inspected twice by an authorized inspector, once just prior to any pollen release, and once when the pollination period is complete (all male flowers have shed their pollen).

Crop Standards

Isolation*

All types of hybrid varieties, whether produced inside a growth facility or in a field, must maintain a minimum isolation distance from any sources of contaminating pollen as described below.

Growth Facility

Indoor seed crops of hybrid varieties must be protected from all potential sources of contaminating *Cannabis sativa* pollen, including adjacent chambers, rooms, other growth facilities, and outdoor production. This may be achieved through adequate isolation or by implementing alternative measures that effectively prevent pollen contamination. All protocols used must be thoroughly documented and available to CSGA or an authorized inspector upon request.

Field Production

Minimum Isolation Distances Required from an Inspected Crop to Other Crops:

1. Varietal Purity	Distance
a. Crop planted with Foundation or Registered** seed of the same pollen bearing (male) parent	3 meter (10 feet)
b. Crop planted with different pollen (male) parent or non-pedigreed <i>Cannabis sativa</i>	1600 meters (5249 feet)

* There must not be any *Cannabis sativa* plants within 100 m of the crop and not more than 10 plants/ha beyond 100 m.

** Provided the pedigree of the Foundation or Registered seed used can be established and the adjacent field meets Certified standards for varietal purity.

Weeds

1. The presence of Broomrape (*Orobanche* spp.) in Industrial Hemp crops is cause for declining pedigreed status.

Maximum Impurity Standards*

1. **Varietal Purity** (on average in 10,000 plants)

Seed Parent Rows

- a. Off-types/other varieties shedding pollen – 10
- b. Non pollen shedding off-types/other varieties – 25

Pollen Parent Rows

- a. Off-types/other varieties shedding pollen – 15

2. **Hybridity**

- a. Percent hybrid seed shall be determined by a method approved by the CFIA.
- b. Percent hybrid seed shall not be less than 80% for Hybrid Hemp. The balance of the seed should be parent line derivatives, resulting from incomplete hybridization in the seed field.
- c. A declaration (CSGA Form 187) stating the actual percent hybrid seed of a representative sample of the Hybrid Hemp, and the method of determining the percent hybrid seed, must be submitted to the CSGA prior to a crop certificate being issued.

* There is insufficient information currently available to determine with any certainty the appropriate levels of varietal purity for hybrid hemp varieties. Until adequate experience with this crop type is obtained, a crop certificate may be issued on the condition that the hybridity requirement is satisfied and that the number of off-types does not exceed 1.5 times the established maximum impurity standard (e.g., not more than 15 off-types/other varieties shedding pollen in the seed parent rows).

Specific Requirements

1. Applicants must declare that the parent material for the hybrid variety was produced within a CSGA-Recognized Plant Breeder's documented Quality Management System (QMS). The QMS protocols must address all elements related to maintaining the varietal purity of the parent material for hybrid production and be available to CSGA upon request.