

CANOLA, CRAMBE, MUSTARD OR RAPESEED STANDARDS

(As of February 2017)

The General Seed Certification Standards, as adopted by the Montana Seed Growers Association, are basic and together with the following specific standards constitute standards for certification of canola (*Brassica napus annuus*), crambe (*Crambe Hispanic subsp. abyssinica*), mustard (*Brassica spp.*) or rapeseed (*Brassica napus*), industrial and edible types (*Brassica*), respectfully.

I. Land Requirements

- A. It is recommended that not more than one variety or crop of canola, crambe, mustard or rapeseed be produced by a certified producer in any given year. A crop of canola, crambe, mustard or rapeseed must not have been grown or planted on the land for five, four, and three years prior to stand establishment for producing the Foundation, Registered and Certified classes, respectively.
- B. Do not apply manure or other contaminating material to the land in preparation for planting of all certified classes or during the productive life of the stand.
- C. Reseeding of a field, due to failure or partial failure of the first seeding, may be done with the permission of the certifying agency.
- D. All roadways, ditchbanks and other areas adjacent to a certified field must be free of volunteer canola, crambe, mustard and rapeseed (wild or tame).

II. Isolation

Certified fields must maintain the following minimum isolation distances from fields of any other variety or fields of the same variety that do not meet the varietal purity requirements for certification as given in the following table.

| Class | Fields of Cross-Pollinated Varieties | Fields of Self-Pollinated Varieties | Certified Fields of Same Varieties |
|------------|--------------------------------------|-------------------------------------|------------------------------------|
| Foundation | 1,320 feet | 660 feet | 15 feet |
| Registered | 1,320 feet | 660 feet | 15 feet |
| Certified | 660 feet | 330 feet | 15 feet |

III. Field Standards - General

- A. A portion of a field may be certified if the area to be certified is clearly defined. Portions of a field not meeting isolation requirements for certification must not be harvested as any class of certified seed.
- B. Volunteer plants may be cause for field rejection or down grading to a lower certification class.

IV. Field Standards - Specific

| Factor | Ratio of Plants - Maximum Permitted | | |
|------------------|-------------------------------------|--------|-------|
| | Fdn | Reg | Cert |
| Other Varieties* | 1:2000 | 1:1000 | 1:500 |

* Other varieties will be considered to include off-type plants and plants that can be differentiated from the variety being inspected.

V. Field Inspection

- A. The field inspection will be made when the crop is in the early flowering stage.
- B. It is the grower's responsibility to ensure that crops have been inspected prior to harvest. Crops cut, swathed or harvested prior to being field inspected are not eligible for certification.

VI. Preparation of Seed for Final Certification

- A. Cleaning
 - 1. Clean all seed at an approved plant authorized by the MSGA. A list of authorized cleaning plants is available through the MSGA office or website www.mtseedgrowers.org.
 - 2. Seed delivered to the cleaning plant by grower must be identified by variety and certification number. A copy of the grower's Application for Certification or field inspection form will suffice.
- B. Seed Sample for Grade Determination
 - 1. Submit a cleaned, one pound seed sample labeled with grower name, cleaning plant name, certification number, and lot number to the Montana Seed Growers Association office for "Certified Grade Determination".
 - 2. Use official MSGA seed sample bags obtained by calling the MSGA office.
 - 3. If multiple lots from the same fields are harvested and cleaned separately, a sample for purity and germination must be submitted for each clean lot.
- C. Tag orders should be noted on the "Conditioner's Report". Tags will be issued upon receipt of production fees or at the discretion of MSGA.

VII. Seed Standards

| Factor | | Fdn % | Reg % | Cert % |
|---|------|--------------|--------------|---------------|
| Pure Seed | min. | 99.00 | 99.00 | 99.00 |
| Inert Matter | max. | 1.00 | 1.00 | 1.00 |
| Other Crop Seed | max. | 9/lb | 9/lb | 18/lb |
| Other varieties | max. | 0.05 | 0.10 | 0.25 |
| Total Weed Seed | max. | 90/lb | 90/lb | 180/lb |
| Noxious Weed Seed ^{1/} | | None | None | None |
| Objectionable Weeds ^{2/} | max. | 9/lb | 9/lb | 18/lb |
| Diseases: | | | | |
| Sclerotia (<i>Sclerotinia sclerotiorum</i>) | | 1/lb | 1/lb | 1/lb |
| <i>Phoma lingam</i> | | 0.01 | 0.01 | 0.01 |
| Seed Analysis ^{3/} | | -- | -- | -- |
| Total Germination | min. | 85.00 | 85.00 | 85.00 |

^{1/} None means none found during normal inspection procedures. None is not a guarantee that the lot is free of noxious weed seed.

^{2/} Objectionable weed seeds are defined as: Restricted plus, *Brassica nigra*, *Sinapis arvensis*, *Brassica juncea* (unless the crop is canola quality *Brassica juncea*), and *Raphanus raphanistrum*.

^{3/} Erucic acid and glucosinolate content must be within tolerance as described by the plant breeder for each variety.

