

SAFFLOWER 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 safflower (*Carthamus tinctorius*).

I. Land Requirements

- A. Safflower is not eligible when planted on land where safflower has been grown during the last two crop years. Additionally, safflower is not eligible when planted on land where sunflowers or beans have been grown during the previous crop year. Safflower will be eligible for certification when planted on summer-fallow land, or on land immediately following a row crop such as corn, sugar beets or field peas. One year of summer fallow or a cultivated row crop must follow a cereal grain crop prior to the planting of a safflower crop for certification, unless an appropriate chemical herbicide is used to eliminate volunteer small grains (if this is the case make note on *Application for Certification*).
- B. Because of high mechanical seed quality standards, limiting the presence of seeds of similar size in safflower seed, every attempt must be made to eliminate volunteer cereal grain plants.

II. Isolation

Fields of safflower planted to produce foundation, registered or certified classes of seed must be at least 400 meters (1320 feet or 1/4 mile) from any other variety or non-certified field of safflower. When certified classes of seed of the same variety are planted in close proximity, no isolation requirement applies except to maintain field borders.

III. Field Standards - General

- A. The field will be considered the unit of certification. A portion of a field may be accepted for certification provided that the rejected portion in no way impairs the genetic purity of the portion accepted.
- B. Off-type plants or identifiable variety mixtures must be removed prior to bloom or before pollination occurs.
- C. A lot of seed may be rejected if it appears to be of low quality other than as shown by the mechanical analysis.

IV. Field Standards - Specific

Factor	Ratio of Plants - Maximum Permitted		
	Fdn	Reg	Cert
Other Varieties ¹	None	1: 2,000	1:1,000
Inseparable Other Crops ²	None	1:10,000	1:3,000
Noxious Weeds ³	None	None	None

¹ Other varieties shall include off-type plants that can be differentiated from the variety being inspected.

² Inseparable crops may include wheat, barley or oats and any other crops of similar size which are difficult to remove in the usual cleaning process.

³ If noxious weeds are present (including wild oats) seed formation should be prevented or noxious weed plants removed from field.

V. Field Inspection

A field inspection must be made after the crop reaches the bloom stage (at least 50% of the plants showing one or more blossoms). Fields may be refused certification due to weedy conditions (appearance), poor growth, poor stand, disease, insect damage, and any other condition which prevents accurate inspection or creates doubt as to identity of variety.

VI. Eligibility

Breeder, Foundation, Registered and Certified classes of seed are recognized for this crop.

VII. 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, three (3) pound seed sample bearing positive identification 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. Label orders should be noted on the "Conditioner's Report". Labels will be issued upon receipt of production fees or at the discretion of MSGA.

VIII. Seed Standards

Factor	Fdn %	Reg %	Cert %
Pure Seed	98.00	98.00	98.00
Inert Matter	2.00	2.00	2.00
Other Crops or Varieties	.01	.05	.10
Weed Seeds	.01	.02	.02
Noxious Weed Seeds	None ¹	None ¹	None ¹
Germination	--	80.00	80.00
Sclerotia ²	1/lb	1/lb	1/lb

¹ None means none found during the normal inspection procedures.

None is not a guarantee that the lot inspected is free of the factor.

² One sclerotium per pound is all that is allowed in Montana Certified seed to prevent the dissemination to areas not previously infected with Sclerotia (*Sclerotinia sclerotiorum*).