



MINNESOTA CROP
IMPROVEMENT ASSOCIATION

Native Seed Certification Standards

(pre-variety germplasm)

Seed Certification Handbook Supplement

INTRODUCTION

This voluntary certification program is designed to ensure that the proper identity of native plant reproductive material is maintained through all phases of seed production.

In short, certification helps ensure that any particular set of reproductive material is correctly labeled. Certification does not guarantee the physiological quality of the material. Certification also does not guarantee the performance of any given set of reproductive material. Producers must match the appropriate species/seed source/germplasm to the intended planting site. Finally, the certification program itself does not mandate particular seed sources for particular uses—that remains the prerogative of the purchaser.

The various inspections and checks minimize the opportunity for carelessness and deception. However, the production and distribution of certified material depends on the integrity of those participating in the program.

1. RESPONSIBILITIES

It is the responsibility of every member of MCIA to abide by the rules, adhere to the standards, and report irregularities or violations.

1.1. The applicant shall:

- 1.1.1. Be a member in good standing of the Minnesota Crop Improvement Association and make payment of required fees.
- 1.1.2. Meet federal and state requirements relating to sales of seeds/products.
- 1.1.3. Submit information required for participation in the program.
- 1.1.4. Adhere to *Seed Certification Handbook* and *Native Seed Certification Standards* along with other Native Seed program requirements.
- 1.1.5. Ensure that all required inspections are completed prior to harvest.
- 1.1.6. Use certification markings properly to identify seed that has been determined to have met program requirements.
- 1.1.7. Permit access to production site(s) and records for inspection. Provide a current production site map.
- 1.1.8. Be available to accompany the inspector to the collection site if requested.

1.2. MCIA shall:

- 1.2.1. Evaluate each application submitted to:
 - Ensure program participation requirements have been met.
 - Ensure all required information has been provided.
 - Identify non-conforming applications prior to inspection.
 - Provide a current field confirmation list each year prior to required inspection.
- 1.2.2. Perform field inspection annually prior to harvest and report field inspection results.
- 1.2.3. Determine field's conformity to standards.
- 1.2.4. Issue and monitor use of certification markings for conformity to the requirements.
- 1.2.5. Perform surveillance audits and inspections.
- 1.2.6. Monitor program to validate the effectiveness of the system in achieving the program objectives.

1.3. The MCIA Board of Directors will act on any case in which rules established by MCIA are knowingly or intentionally violated. Action taken by the Board of Directors may result in the suspension of membership in MCIA. Any applicant whose reputation is unsatisfactory will be refused certification and the services of MCIA.

2. DEFINITIONS

- A. Collection of material:** The harvest of seeds, cuttings, and other types of material that will be used to grow new plants.
- B. Isolation:** To ensure the validity of source claim, seed production areas of native plant species must be isolated from plants of the same species from a different or unknown genetic origin. For example, two seed lots to be certified as representing distinct sources, "Houston County" and "Winona County," must be grown the minimum distance apart as outlined within Section 7, Isolation Requirements. However, if both seed lots were to be certified as "Minnesota" genetic origin, they would not have to be separated because the source claim would allow blending of the two sources.
- C. Genetic origin:** The definable geographic region from which germplasm was first collected. The source may be relatively broad, resulting from a blend of more than one collection across a region, or it may be narrow, from a single collection location. The precision of the source claimed is the choice of the producer. However, the source must be accurately described, and cannot be any more precise than the actual area of collection. For example, seed collected from several counties across southeastern Minnesota and then bulked into a single seed lot could be identified listing the counties of origin but could not be identified only as Houston County source.
- D. Germplasm:** A collection of genetic resources of one or more organisms for the sake of preservation.
- E. Germplasm owner:** The person, institution, or designee thereof, responsible for the collection of native material.
- F. Native plant/seed:** A species that occurs naturally with respect to a particular ecosystem, rather than as a result of an accidental or deliberate introduction into that ecosystem by humans.
- G. Native stand:** Plant population on land that has never been cultivated, improved, or otherwise severely altered.
- H. Pure Live Seed (PLS):** As defined in the *AOSA Rules for Testing Seed*, the percentage of pure seed in a lot that is viable. Formula: % pure seed x % total viable/100=% PLS (rounded to the nearest whole number).
- I. Reproductive material:** All forms of reproductive material, including seed, seedlings, cuttings, rooted cuttings, transplants, or other forms.
- J. Seed conditioning:** The mechanical handling of seed from harvest until final sale.
- K. Total viable:** As defined in the *AOSA Rules for Testing Seed*, "the sum of percentage germination plus dormant plus hard seeds." Hard seed and dormant seed are to be determined at the conclusion of the germination test.

3. GERMLASM TYPES

Depending on how much intentional selection has been done, three different levels of certification are possible: Source Identified, Selected, and Tested.

3.1. Source Identified Material (Yellow Tag)

Source-identified is a type of propagating material collected from natural stands, seed production areas, seed fields, or orchards where no selection or testing of the parent population has been conducted, and which can be traced to an identified, documented geographic location.

3.2. Selected Material (Green Tag)

Selected is a type of propagating material that shall be the progeny of phenotypically selected plants of untested parentage that have promise but no proof of genetic superiority or distinctive traits. Seed production should be conducted in such a way as to ensure genetic purity and identity.

3.3. Tested Material (Blue Tag)

Tested is a type of propagating material that shall be the progeny of plants whose parentage has been tested and has proven genetic superiority or possesses distinctive traits for which the heritability is stable, as defined by the certifying agency, but for which a variety has not been named or released. This seed must be produced to assure genetic purity and identity.

4. LIMITATIONS OF GENERATIONS

- 4.1. Unless specified by the germplasm owner, there is no limitation on the number of generations that may be produced.

5. ELIGIBLE SPECIES

- 5.1. MCIA will accept applications for certification of species in compliance with all applicable federal and state laws.
- 5.2. Species designated as Minnesota or Federal Noxious are not eligible for certification.
- 5.3. Species designated as “Endangered” or “Threatened” are not eligible unless a copy of a permit for collection/production is submitted for that species.

6. ESTABLISHING SOURCE OF SEED FOR ARTIFICIALLY ESTABLISHED SEED PRODUCTION SITES

- 6.1. **For Selected and Tested germplasm seed production fields:**
 - 6.1.1. A certification tag or an invoice showing the species, germplasm name, seed class, generation, and lot number must be furnished as proof of seed source.
 - 6.1.2. For germplasm where a limitation of generations has been designated by the releasing agency/owner, only eligible generations will be allowed for certified seed production.
- 6.2. **For Source-Identified germplasm seed production fields:**
 - 6.2.1. If seed collected from a native stand is used to establish the seed production field, the applicant must provide a Declaration of Genetic Origin form as documentation of the seed collection when the application for field inspection is submitted.
 - A copy of the collection permit, authorization of the landowner, etc. is recommended when available.
 - 6.2.2. Certified seed is eligible to be used to establish the seed production field, the applicant must provide proof of certification as documentation when the application for field inspection is submitted.
 - If certified seed is acquired from another applicant/producer, a copy of the Authorization to Produce Source Identified Seed must be provided.
 - 6.2.3. If the seed production field is established using a field that is enrolled in the MCIA Native Seed program, the applicant must provide an eligible field number.
 - If seed is acquired from another applicant/producer, a copy of the Authorization to Produce Source Identified Seed must be provided.

7. ISOLATION REQUIREMENTS

- 7.1. For production fields of different germplasm of the same species, an isolation of 165 feet will be maintained for sedges and grasses.
- 7.2. For production fields of different germplasm of the same species, an isolation of 1,320 feet will be maintained for forbs.
- 7.3. Contaminants consisting of less than 10% of the area of the seed production field will be disregarded.
- 7.4. Self-pollinated species must be separated from plants of the same species of different or unknown germplasm by a distance adequate to allow mechanical separation at harvest.

8. LAND REQUIREMENTS

- 8.1. To be eligible for the production of certified seed, a field must not have grown or been seeded to the same species during the previous three years, except to seed of the same germplasm that passed field inspection for certification. Fall seeding is permitted in the third year.

9. APPLICATION FOR FIELD INSPECTION

- 9.1. Applicants desiring to have their seed certified must apply to MCIA using their application form.
- 9.2. The applicant's signature on the application is affirmation that:
 - 9.2.1. The information submitted for verification of seed eligibility is representative of the seed used and was planted on the field(s) described on the application.
 - 9.2.2. All equipment involved with planting, harvesting and other handling was, or will be, adequately cleaned to maintain the genetic identity of the seed.
 - 9.2.3. The identity of the seed will be maintained at all times through the use of field, bin, and lot numbers or other identification system.
- 9.3. Seed production fields must be applied for **within 18 months of** the year the seeding is established. Applications should be submitted at least 6 weeks prior to flowering.
 - 9.3.1. Eligibility for certification is maintained if the field is continuously in production of certified seed, subject to limitation of length of stand when specified by germplasm originators.
 - 9.3.2. Fields that are not harvested each year must be placed on "hold" to maintain eligibility.
 - 9.3.3. Fields on "hold" may be observed by an MCIA inspector during the growing season.
 - 9.3.4. Applicants that wish to place their field on "hold" or cancel their field must notify MCIA prior to field inspection.
- 9.4. Late applications may result in the field inspection not being completed. If such inspections can be arranged, a late application fee may be assessed.

10. FIELD INSPECTION

- 10.1. All inspections will be conducted by MCIA.
- 10.2. Field inspection is a thorough examination of the seed production site to confirm compliance with field requirements. Inspection of seed production sites to ensure that certification requirements are met shall be made prior to seed maturity and/or harvest.
- 10.3. It is the applicant's responsibility to ensure that the required inspections are completed prior to harvest.

11. MAINTAINING IDENTITY OF SEED

- 11.1. Each field to be certified must be identified with a unique numbering system on the Application for Field Inspection and other pertinent documents.
- 11.2. Maps showing field identities and locations must be maintained and furnished to MCIA.
- 11.3. Field inspected seed must be positively identified at all times. Seed containers must be labeled, and bins must be identified.

12. APPROVED SEED CONDITIONING FACILITY

- 12.1. All certified seed must be conditioned within conformance of the *Seed Certification Handbook* either by the applicant-producer of the seed or by an MCIA approved seed conditioning facility. A list of approved seed conditioners is published in the *MCIA Directory* and is available from the MCIA website, www.mncia.org.
- 12.2. Seed conditioning facilities shall be approved by MCIA to condition certified seed by passing an annual inspection to determine conformance to the *Approved Seed Conditioner Requirements*. An approved seed conditioning facility may process seed of any germplasm type.

13. SEED SAMPLING AND TESTING

- 13.1. Each seed lot to be certified shall be tested to confirm conformance to seed standards.

- 13.2. Tests shall be performed on official samples drawn from conditioned seed lots.
- 13.3. Samples shall be drawn by MCIA personnel, the applicant-producer, or designated approved conditioning facility personnel of the seed utilizing sampling procedures as required by MCIA.
- 13.4. The laboratory tests shall include the determination of seed purity and germination performed in accordance with applicable Association of Official Seed Analysts (AOSA) rules.

14. SEED STANDARDS

- 14.1. MCIA shall evaluate test results to determine whether a seed lot conforms to certification standards. The following standards shall apply:
 - 14.1.1. **Source Identified Material:** no minimum standards will be required for germination or purity other than those as required by the *Minnesota Seed Law and Rules*.
 - 14.1.2. **Selected Material and Tested Material:** minimum standards for grasses and forbs will be in compliance to those established for similar crops by MCIA, AOSCA, and as required by the *Minnesota Seed Law and Rules*.

15. LABELING

- 15.1. All labeling of material must meet the requirements of the Minnesota State Seed Law as outlined in the *Minnesota Seed Law and Rules*.
- 15.2. To complete certification, producers must complete the Sampling Report—Native Species Pre-Variety Germplasm.
- 15.3. Certification tags or a Certification Certificate must accompany certified seed as proof of certification.
 - 15.3.1. MCIA will provide certification tags to applicant-producers and approved seed conditioners.
 - 15.3.2. Certification tags must be securely attached to each seed container.
 - 15.3.3. MCIA will print tags containing the MCIA logo and serial number. These tag colors will be used to indicate germplasm type:
 - **Source Identified Material:** yellow tag
 - **Selected Material:** green tag
 - **Tested Material:** blue tag
 - 15.3.4. Certification tags shall contain the following information:
 - Species (Latin and common name).
 - Germplasm name or genetic origin.
 - Lot number.
 - Generation, if applicable.
 - Certification number *or* the number of the MCIA-approved conditioner that printed the tags, written as follows: year of conditioning-AP-member number. Example: 20-AP-6000.
- 15.4. For seed sold in bulk, sold without certification tags attached, or as components of blends or mixtures a Certification Certificate must be provided to each buyer and accompany certified seed at the time of seed pickup or delivery as proof of certification.
 - 15.4.1. The seller must account for the Certification Certificates issued.
- 15.5. When seed certified seed is sold in packets, proof of certification must be securely attached to each packet.

16. TRANSFER OF SEED PRIOR TO COMPLETING CERTIFICATION

- 16.1. A statement of transfer on the Native Sampling Report stating the number of pounds and the class of uncleaned seed sold must be sent to MCIA. Such seed can be transferred only to an approved seed conditioning facility or to another native seed producer who is an MCIA member.

17. CERTIFICATION RECORDS

- 17.1. The applicant must keep accurate records of the amount of seed harvested from each field (not necessarily actual weights, but number of truck loads, bins, bags, etc.) and where the seed is stored or taken for conditioning.
- 17.2. Seed conditioners must keep the following records for each lot brought into their facility:
 - Name and address of owner of seed
 - Number or other identification of field(s)
 - Amount (weight if possible) of uncleaned seed
 - Date received
 - Assigned bin number
 - Condition of seed (if high moisture, excess weeds, etc.)
 - Weight and/or number of bags of cleaned seed
 - Date of conditioning
 - Record of Certification Certificate and certification tag use
 - If cleaned lots are blended, weight of each component blended
- 17.3. Records must be kept on file for three years after the lot has been completely sold.
- 17.4. A sample of each conditioned seed lot must be kept for at least one year after the lot has been completely sold.
- 17.5. MCIA reserves the right to examine all records pertaining to seed lots eligible for certification.

18. CERTIFICATION PROCEDURES FOR SEED GROWN AND HARVESTED IN MIXTURES (SOURCE-IDENTIFIED CLASS)

MCIA will certify components of native species seed mixtures that are grown and harvested are subject to the following procedures:

- 18.1. Applicant must complete both an Application for Field Inspection and a Species List for Field Inspection—Mixtures for each seed production site prior to field inspection. Inspection fees will be assessed based on an hourly rate as established by MCIA.
 - A copy of the collection permit, authorization of the landowner, etc. is recommended, when available.
- 18.2. MCIA will inspect the seed production site to verify that the species applied for are present at that site and will note the stage of development of the species applied for, weed infestations, and other field conditions that may affect the seed harvest.
- 18.3. At the time of harvest, the collection site manager must complete the Mixtures Site Collection Log.
- 18.4. MCIA may evaluate completed forms and related documents to determine certification eligibility of a seed lot. This may include verification of paperwork prior to and/or retroactive field inspection of collection sites to verify that stands are capable of producing the amount of seed collected as indicated. Evidence of falsified forms or documents may result in loss of certification privileges.
- 18.5. After conditioning, the applicant must submit a representative sample to an approved MCIA lab for seed testing to determine the species, germination rate, and purity as required by the *Minnesota Seed Law and Rules*. Fees will be assessed for seed testing and final certification fees will be assessed on each certified component.