

**CHAPTER 74-03-01**  
**GENERAL SEED CERTIFICATION REQUIREMENTS**

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**74-03-01-01. Seed Certification in North Dakota.** The certification of seed in North Dakota is a function of the state seed department as outlined in North Dakota Century Code chapter 4.1-53. This chapter applies to all crops, except seed potatoes, which are regulated pursuant to North Dakota Century Code chapter 4-10 and Administrative Code article 74-04, grown for the production of all classes of North Dakota certified seed. If a North Dakota crop is accepted for field inspection and certification for which there are no North Dakota field or seed standards, the latest standards published by the association of official seed certifying agencies for that crop will apply.

**History:** Amended effective January 2, 2006; July 1, 2007.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-02, 4.1-53-42

**74-03-01-02. Purpose of seed certification.** The purpose of seed certification is to maintain and make available to the public high quality seed of crop varieties so produced, handled, and distributed as to ensure proper identity and genetic purity. This rule is exhortatory and does not create a cause of action on account of any failure by the department to correctly identify or certify seed variety or selection.

**History:** Amended effective July 1, 2007.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-42, 4.1-53-45

#### **74-03-01-03. Eligibility requirement for certification of crop varieties.**

As used in this chapter, "variety" includes hybrids and breeding lines, and selections, clones, or strains of true varieties.

1. Only those varieties that are accepted by the North Dakota state seed department as meriting certification in accordance with the criteria established by the association of official seed certifying agencies shall be eligible for certification. A variety will normally be considered eligible for certification if it has received favorable action by one or more of the following:
  - a. A national variety review board.
  - b. The plant variety protection office, including additional information itemized in subdivisions e through i of subsection 2 of section 74-03-01-03, which is required.
  - c. An official seed certifying agency.
  - d. The organization for economic cooperation and development (OECD).

In the absence of a national review board, a state or regional variety review committee may determine the eligibility for certification, if operating under similar criteria and approved by the seed commissioner. Contact the state seed commissioner for varieties not covered by one of the above categories on questions regarding eligibility.

2. The following must be made available by the originator, developer, owner, or agent when eligibility for certification is requested by the applicant. After a variety has been released there is no limitation as to when it may be accepted into certification by AOSCA or its vested member agencies providing that all other provisions of this section are met.
  - a. The name of the variety. This name must be the established name if the variety has previously been marketed.
  - b. A statement concerning the variety's origin and the breeding procedure used in its development.
  - c. A detailed description of the morphological, physiological, and other characteristics of the plants and seed that distinguish it from other varieties.
  - d. Evidence of performance of the variety, such as comparative yield data, insect and disease resistance, or other factors supporting the identity of the variety.
  - e. A statement delineating the geographic area of adaptation of the variety.

- f. A statement on the plans and procedures for the maintenance of stock seed classes, including the number of generations through which the variety may be multiplied.
- g. A description of the manner in which the variety is constituted when a particular cycle of reproduction or multiplication is specified.
- h. Any additional restrictions on the variety, specified by the breeder, with respect to geographic area of seed production, age of stand, or other factors affecting genetic purity.
  - 1. Should testing be required to verify the presence of a particular trait by the developer, sponsoring breeder or originator before final certification, the exact protocols, approved facilities, tolerances, and all other relevant information will be provided to the seed certifying agency that may retain the results of any test for its records.
  - 2. Additional certification requirements: Seed may require additional certification requirements that are clearly referenced in the variety description, provided that the following is completed:
    - i. Additional certification requirements have been communicated by the sponsoring breeder or originator to all parties involved with regulation and production of the variety;
    - ii. The sponsoring breeder or originator shall authorize the seed certifying agency to verify specific characteristics that are referenced in the variety description. Verification of such characteristics will be completed before a certificate (tag) of final certification is issued by the seed certifying agency.
- i. A sample of seed representative of the variety that will be planted for certified seed production.
- 3. This rule does not create a mandatory duty or a cause of action on account of the department's recognizing or refusing to recognize a variety as meriting certification.

**History:** Amended effective May 1, 1986; September 1, 2002; January 2, 2006; July 1, 2007; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-43

**74-03-01-04. Classes (generation) and sources of certified seed.**

1. Four classes (generations) of seed shall be recognized in seed certification: breeder, foundation, registered, and certified.
  - a. Breeder seed is directly controlled by the originating plant breeder, sponsoring institution or firm, which supplies the source for the initial and recurring increase of foundation seed.
  - b. Foundation seed is the progeny of breeder or foundation seed produced under control of the originator or sponsoring plant breeding institution, or person, or designee thereof. As applied to certified seed, foundation seed is a class of certified seed produced under procedures established by the certifying agency for the purpose of maintaining genetic purity and identity.
  - c. Registered seed is the progeny of foundation or other approved seed stocks that is so handled as to maintain satisfactory genetic identity and purity and that has been approved and certified by the certifying agency. This class of seed shall be of a quality suitable for the production of certified seed.
  - d. Certified seed is the progeny of foundation, registered, or other approved seed stocks that is so handled as to maintain satisfactory genetic identity and purity and that has been approved by the state seed department.



2. The number of generations through which a variety may be multiplied shall be limited to that specified by the originating breeder or owner of a variety, but shall not exceed two generations beyond foundation seed. The following exceptions to the limitation of generations are allowed with permission from the variety owner and authorization from the state seed department:

- a. Unlimited recertification of the certified class may be permitted for crop varieties when foundation seed is not being maintained.
  - b. The production of an additional generation of the certified class may be permitted on a one-year basis when:
    - (1) ~~An emergency is declared prior to the planting season by the certifying agency stating that f~~ Foundation and registered seed supplies are not adequate to plant the needed certified acreage of the variety; and
    - (2) The additional generation of certified seed produced to meet the emergency is declared ineligible for recertification.
3. Seed that fails to meet the certification standards for reasons other than those affecting genetic purity may be certified ~~in emergency situations~~ and will be labeled with as "substandard grade" label.

**History:** Amended effective May 1, 1986; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-42, 4.1-53-44, 4.1-53-45

**74-03-01-05. Eligibility of growers.** Any person shall be eligible to produce registered or certified seed providing such seed is produced, handled, and distributed in accordance with article 74-02, applicable certification rules, and all applicable North Dakota seed laws and rules. The state seed commissioner reserves the right to reject any application for certification or refuse certification on any lot of seed if essential evidence is incomplete, if information given is incorrect, or if circumstances indicate that it would be advisable for the good of the certified seed industry.

**History:** Amended effective May 1, 1986.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-42, 4.1-53-47

**74-03-01-06. Seed eligibility.**

1. The seed department shall be supplied with satisfactory evidence of the source and class of seed used to plant each crop considered for certification.

2. Eligible seed stocks include breeder's, foundation, registered or, in special cases, approved lots of the certified class. Eligible seed obtained from another person must be accompanied by the official tag or bulk certificate from an approved certifying agency, which will be the documentation of acceptance required for field inspection.
3. Certified seed growers may plant seed from their own fields if the field passed inspection and if the class of seed is eligible to be certified. The grower must provide sufficient evidence to the department to verify eligibility.
4. Certified seed growers may only plant seed from their own fields that failed field inspection previously only if the field did not fail due to genetic purity, and the grower is the applicant for field inspection. If the field fails inspection a second time for any reason, that seed shall no longer be eligible for the production of certified.
5. Contract growers may not replant any of the seed produced unless final certification has been completed.
6. Growers should check with the state seed department regarding approved lots of the certified class eligible for recertification.

**History:** Amended effective May 1, 1986; September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-42, 4.1-53-44, 4.1-53-45

#### **74-03-01-07. Field eligibility and requirements.**

1. A crop will not be eligible for the production of foundation, registered, or certified class seed if planted on land on which the same kind was grown previously for the number of years as stated in the specific crop standards. Exceptions may be made if the previous crop was the same variety and was inspected for certification.
2. A grower may establish field eligibility history for the next production year by planting certified seed on the field in the current year, applying for field inspection, and having the field declared eligible for production of seed of the same variety the next year.

**History:** Amended effective May 1, 1986; September 1, 2002; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-42

**74-03-01-08. Field management and isolation.** The production unit for certification shall be a field. No field or part of a field will be accepted unless field boundaries are clearly defined and properly isolated according to the specific crop standards. Isolation distances may be extended at the request of the seed

commissioner or ~~the commissioner's~~ agents for reasons including the production of transgenic crops or other kinds in proximity to fields being grown for the purpose of seed certification.

When it is necessary to remove a strip to obtain proper isolation, the part of the strip to be removed must be cut into the field to be inspected.

If two classes of the same variety are planted adjacent to one another in the same field, and field inspection has been applied for both, isolation may be accomplished by placing a flag at each end of the field ten feet [3.05 meters] into the higher class of seed, prior to inspection. The flags must be plainly visible at the time of inspection. The grower may harvest that isolated ten-foot [3.05-meter] section of crop with the lower class of seed.

**History:** Amended effective September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-42

#### **74-03-01-09. Field inspection.**

1. Applications. Applications for field inspection, accompanied by the correct fees, payment of past-due accounts, and proof of seed eligibility, must be received at the state seed department office in Fargo not later than June fifteenth. The penalty fee will apply after that date. Applications for grass seed must be received by May first to avoid late penalty. Applications for millet and buckwheat must will be received ~~accepted~~ until ~~by~~ July fifteenth to avoid ~~without~~ late penalty. Applications for soybeans requiring only a single inspection (preharvest) must will be received ~~by~~ ~~accepted~~ ~~until~~ August first to avoid ~~without~~ late penalty. In case of an emergency or unusual circumstances due to weather or crop conditions, the deadline may be extended at the discretion of the seed commissioner. In such an event, late application penalties may be waived.
2. Information required on application. The application shall be completed by the applicant and returned to the seed department. All questions must be answered completely and correctly. The location of the farm and field, including the legal description, shall be given clearly so that the inspector will be able to find the farm and field readily without waste of time and extra travel. Farm service agency field maps must be provided by the applicant. If the seed is the grower's own seed, sufficient evidence must be provided to the department to verify eligibility. If the seed is purchased, an official certified seed tag or bulk certificates must accompany the application.
3. Roguing and spraying fields. Roguing is essential to maintain the purity of varieties and high standards of certified seed. Roguing fields prior to inspection is recommended to remove undesirable plants from fields.

Plants that should be removed include off-type plants, other crop plants,



prohibited and restricted noxious weeds, and other impurities which may be growing in the field.

Roguing is usually done by pulling off-types or other crop plants or weeds and removing them from the field. In the case of small grain, roguing should be done after heading as foreign plants are seen most easily at this time. In hybrid seed production, fertile off-types and undesirable plants should be removed before pollen is shed. Sterile off-types may be removed any time prior to the final inspection.

Whenever practical and advisable, seed fields should be sprayed with pesticides according to the manufacturer's label to control pests. Growers must follow posting requirements as specified by state and federal agencies responsible for the regulation and use of pesticides.

#### 4. Weeds and diseases.

- a. Prohibited noxious weeds under North Dakota seed laws and rules are leafy spurge, field bindweed (creeping jenny), Canada thistle, perennial sow thistle, Russian knapweed, hoary cress (perennial peppergrass), absinth wormwood, ~~hemp having more than three-tenths of one percent tetrahydrocannabinol~~, musk thistle, spotted knapweed, and yellow starthistle.
  - b. Restricted noxious weeds under North Dakota seed laws and rules are dodder species, hedge bindweed (wild morning glory), wild oats, and quackgrass.
  - c. A field may be rejected if it is the field inspector's opinion that the amount and kind of weeds present make it difficult to conduct the inspection, or the field condition is such that the quality of the cleaned seed may be questionable.
  - d. Objectionable weed seeds are restricted noxious weeds under North Dakota seed laws and rules and may include some common weeds which cause a specific problem in the conditioning of some individual crops.
  - e. Diseases not governed by specific crop standards may be cause for rejection if it is the field inspector's opinion that the quality of the cleaned seed may be affected or if results of tests made on the seed indicate a disease condition which will affect the crop produced from such seed.
5. Cancellation of field inspection. An application may be canceled by the applicant before the field inspection is completed. The application fee minus an administrative fee will be refunded to the applicant. The request for cancellation, however, must reach the state seed department before the inspector arrives in the general locality of the

field or before inspection has occurred. Refunds will not be made after the field is inspected or because the field has been rejected.

6. Appeal. Reinspection of rejected fields may be considered, provided the application for appeal allows a reasonable amount of time for reinspection prior to harvest. A fee for reinspection may be assessed.
7. The variety name stated on the application will be standard for inspection when entering the field. Absent compelling visual evidence to the contrary, the variety or selection declared by the applicant grower will be presumed correct if the documentation provided is valid.
- ~~8. Inspections, tests, certifications, and other acts are not intended to induce reliance on the seed department's inspections, Certifications, or any other action or inaction for any purpose relating to quantity or quality of the seed or crop produced, fitness for purpose, merchantability, absence of disease, or variety or selection identification. Certification means only that the seed was randomly inspected and at the time of the inspection the field or seed lot met the rules of the department.~~

**History:** Amended effective May 1, 1986; May 1, 1988; December 18, 1989; September 1, 2002; January 2, 2006; July 1, 2007; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-37, 4.1-53-42, 4.1-53-59

**74-03-01-10. Fees.** Charges for fees and services are subject to change. For current fees contact the state seed department.

**History:** Amended effective May 1, 1986; May 1, 1987; May 1, 1988; December 18, 1989; May 1, 2001; September 1, 2002.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11

**74-03-01-11. Seed conditioning, sampling, ~~conditioning~~, and laboratory inspection.**

1. **Identification in storage.** Field-inspected seed must be identified at all times. Identification must be traceable to field inspection numbers from the crop year in which the seed was produced. Conditioned seed in storage must be identified by kind, variety, class, and lot number displayed on the bin or storage container.
2. **Preconditioned sample testing.** To hasten labeling tagging or and determine the quality of seed which has passed field inspection prior to conditioning, a representative sample of seed ~~from each field which has passed field inspection~~ may be submitted to the state seed department for the purpose of germination and disease testing. This sample should be cleaned on a small mill or hand sieve to approximate correspond as nearly as possible to the quality condition of the entire lot after ~~cleaning or~~ conditioning.



Results of germination and disease tests conducted on preconditioned samples may be used for final certification purposes. A labeler grower may request new tests for labeling purposes after the seed lot is conditioned~~ing to be used for labeling purposes~~. Fragile crops such as soybeans, field beans, lentils, chickpeas, and field peas must be tested for germination after the final conditioning of the seed lot to assure correctness of label claims. The labeler is responsible in all cases for information ~~provided or~~ stated on seed labels.

**3. Conditioning.** All field-inspected seed which is to be labeled must be conditioned and must meet the minimum seed standards for the crop and class. Field-inspected seed may be conditioned either by the grower or by an approved seed conditioner.

a. Conditioning by seed grower.

- (1) A seed grower does not need an approved conditioning facility permit if the grower conditions the grower's own seed on the grower's premises with the grower's equipment.
- (2) The seed grower must complete a sampler's report in its entirety, attach the report to a two-pound [.907-kilogram] sample that is representative of the entire seed lot, and deliver to the state seed department for analysis.

b. Conditioning by an approved facility.

- (1) To be eligible for final certification, field-inspected seed shall be conditioned by a facility approved by the seed department. Seed conditioned at an unapproved facility will be ineligible for final certification.
- (2) If ownership of the seed lot is transferred to a different individual or entity, the grower must complete and sign a grower's declaration. Transfer of ownership of field-inspected seed is limited to an approved conditioner or bulk retailer unless the transfer has been approved by the commissioner.
- (3) While conditioning, the seed lot must be sampled at regular intervals by an authorized sampler. The sample and completed sampler's report must be submitted to the state seed department for analysis.

#### **43. Sampling procedures.**

a. All seed lots eligible for final certification shall be sampled during conditioning as follows: ~~by taking representative samples at periodic intervals throughout the process of conditioning the seed lot.~~

- (1) Portions of conditioned seed may be drawn by hand as seed is

conditioned to form a composite, representative sample for a seed lot; or,

(2) Automatic mechanical devices may be used to continually or intermittently draw representative samples as a seed lot is conditioned.

b. Specific instructions to samplers are found on the reverse side of the samplers report.

**54. Maximum lot size and numbering.**

a. The maximum lot size for bagged seed is five thousand bushels [17619.54 dekaliters] except for small seeded legumes and grasses which is twenty-two thousand five hundred pounds [10000 kilograms]. Bulk seed lots do not have a maximum size limit except bin capacity. Each bin is considered a separate seed lot. For all crops, one sample for each lot is required. The entire lot must be certified at the time final certification is completed.

b. The lot number shall be designated by the labeler. The lot number of the seed planted may not be used as the new lot number for the seed being certified during the current crop year.

**65. Commingling (mixing) of inspected seed fields.** Seed of the same kind and variety from different fields that pass field inspection may be commingled if the seed is of the same class and general quality. If seed of different classes is commingled, the seed becomes eligible for the lowest class only.

**76. Commingling carryover certified seed lots.** Carryover seed from certified lots may be commingled if the seed is of the same variety, class, and general quality. If seed of different classes is commingled, the seed becomes eligible for the lowest class only. A new germination test is required for labeling. Germination tests should be done on each lot prior to commingling to ensure none of the lots have gone out of condition.

**7. Conditioning.**

~~a. All field inspected seed which is to be labeled must be conditioned and must meet the minimum seed standards for the crop and class.~~

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- b. ~~Field-inspected seed may be conditioned either by the grower or by an approved seed conditioner.~~

#### ~~8. Conditioning by seed grower.~~

- 1. ~~A seed grower does not need an approved conditioning facility permit if the grower conditions the grower's own seed on the grower's premises with the grower's equipment.~~
- b. ~~The seed grower must complete a sampler's report in its entirety, attach the report to a two-pound [.907 kilogram] sample that is representative of the entire seed lot, and deliver to the state seed department in Fargo for analysis.~~

#### ~~9. Conditioning by an approved facility.~~

- (4) ~~To be eligible for final Certification, field-inspected seed shall be conditioned by a facility approved by the seed department. Seed conditioned at an unapproved facility will be ineligible for final Certification.~~
- (5) ~~If ownership of the seed lot is transferred to a different individual or entity, the grower must complete and sign a grower's declaration. Transfer of ownership of field-inspected seed is limited to an approved conditioner or bulk retailer unless the transfer has been approved by the commissioner or the commissioner's agent.~~
- (6) ~~While conditioning, the seed lot must be sampled at regular intervals by an authorized sampler. The sample and completed sampler's report must be submitted to the state seed department for analysis.~~

~~810. **Regulatory sampling.** The state seed department may resample any lot of seed before final Certification or after the seed is labeled.~~

~~9. **Official samples.** At the request of a customer, an official sample may be collected by a representative of the seed department, with expenses incurred by the customer. The seed department shall determine the appropriate collection method and sample size. Sampling bulk seed in bins requires that a minimal amount of seed is withdrawn from the bin. The amount shall be determined by the quantity of seed in the lot, but shall be no less than five percent of the total lot size. Test results from official samples shall supersede all previous test results and shall be final.~~

#### ~~104. Laboratory analysis.~~

- a. ~~All laboratory testing shall be done by qualified personnel of the state seed department. Analysis and tests of seed samples and definition of analysis terms shall be in accordance with the rules of the association of official seed analysts (AOSA). In certain cases when time constraints are critical to the efficient movement of certified seed, the commissioner may accept germination or other test results from an approved laboratory,~~



through the certification agency of the state of origin of the seed.

- b. If more than one sample of seed from the same lot is tested for purity without additional conditioning, an average shall be taken of

all purity tests conducted. Results from the most recent germination or disease test shall be used as the final result.

~~c. The test results from official samples drawn by state seed department personnel shall supersede all other test results from submitted samples.~~

cd. Seed from certain classes or kinds, or both, may be subject to variety identification analysis at the discretion of the department, with testing fees payable by the grower or labeler.

**History:** Amended effective May 1, 1986; May 1, 1988; December 18, 1989; August 1, 1991; September 1, 2002; January 2, 2006; July 1, 2007; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-46

**74-03-01-12. Labeling.** All classes of certified seed, when offered for sale, shall have an official certification label affixed to each container clearly identifying the certification agency, the lot number or other identification, variety name and kind and class of seed. The responsibility for properly labeling foundation, registered, or certified seed rests with the grower or first distributor.

1. Records. Each person whose name appears on the label and handles seed shall keep for a period of three years complete records of each lot of seed handled. All records pertaining to the lot involved must be accessible for inspection by the commissioner at any time during customary business hours. Records shall include:

a. Quantity of seed grown and conditioned or purchased for bulk sale.

b. Quantity of bulk certified seed sold by variety and lot number.

c. A current inventory of each variety of seed available for sale.

d. Consult Federal Seed Act Regulations Part 201 for record-keeping requirements for seed in interstate commerce.

2. Samples. It is the initial labeler's responsibility to maintain possession of a two-pound [.907-kilogram] sample identified by kind, variety, class, and lot number of each lot of certified seed sold, whether bagged or in bulk, for a period of one year after the final disposition of the seed lot.

3. No person may disclaim responsibility of the vendor of the seed for the data on the label required by law and any such disclaimer of vendor's express or implied warranty is invalid.

4. Bagged seed.

a. All bagged seed represented or sold as foundation, registered, or certified must be bagged in new bags and the official Certification tag properly affixed on the bag. Certification tags are void if improperly used or not attached to the bag. Containers or tote

bags larger than one hundred sixty pounds [72.77 kilograms] may be considered bulk seed.

~~b. The responsibility for properly labeling foundation, registered, or certified seed rests with the grower or first distributor.~~

~~b. The use of two tags, the official certification tag and a separate analysis tag, on foundation, registered, or certified seed is optional. When two tags are used, the Certification tag, will not carry the seed analysis. An additional seed analysis tag must be used or the analysis printed on the bag.~~

~~c. d. Certified seed will be considered mislabeled unless the seed analysis is on either the certification tag or on an additional tag or printed on the bag.~~

~~d. e. Certification tags are not valid when they are transferred in any manner other than attached to the eligible seed bag.~~

~~52. Bulk seed Certification. All rules and standards for production, conditioning, and testing of certified seed shall apply except that seed does not have to be in bags.~~

~~In the case of seed sold in bulk, the bulk certified seed certificate takes the place of the certified seed tag. The complete seed analysis will be printed on the certificate.~~



- a. Foundation and registered class seed may be sold in bulk only by the applicant producer, or by an approved conditioner ~~only~~.
- b. Certified class seed may be sold in bulk by the applicant producer, an approved conditioner, or an approved bulk retail facility.
- c. Approved bulk retail facilities may be allowed to handle bulk registered seed on a case-by-case basis only when authorized by the state seed department. If authorized by the seed department, the bulk retailer must designate which bins will be used for registered seed.

Bulk retail seed facilities must be approved annually before certified seed can be handled in bulk. Such facilities may be part of a seed conditioning facility or may be approved only for handling bulk certified seed. Before approval, all procedures for receiving, storing, dispensing, and recordkeeping must be inspected. The applicant must demonstrate acceptable procedures for maintaining purity and identity of bulk certified seed.

Offsite bins or satellite bin locations shall be managed in the same manner as those at an approved facility. Bins shall be listed on a separate bin list registered under the name of an approved facility. All satellite locations shall be inspected annually by the seed department.

f. Handling bulk certified seed:

(1) A separate storage bin must be available for each lot that will be sold in bulk. Each bin shall be considered a separate lot of seed and shall be labeled accordingly.

(2) All bins, augers, conveyors, and other equipment must be cleaned before storage or handling certified seed.

(3) All hopper bins must be equipped with bottom access ports, inside ladders, or some other means approved by the seed department to facilitate access for cleaning.

(4) All augers used to convey seed must be reversible.

(5) All bins must be clearly and prominently marked to show kind, variety, class, and lot number.

(6) All bin openings must be closed to prevent contamination, except when seed is being put in or removed from the bin, or to allow for aeration.

~~g-d.~~ A maximum of two physical transfers are permitted after final certification:

~~A~~ (1) ~~From the applicant labeler to an approved retailer or~~  
~~m~~ ~~consumer.~~

~~a~~ (2) ~~From an approved retailer to consumer.~~  
~~xi~~

~~m~~ h e. It is the seller's responsibility to:  
~~u~~

~~m~~ (1) Handle seed in a manner to prevent mixtures and  
~~e~~ contamination.  
~~f~~

~~t~~ (2) Supply seed that is representative of the seed tested and  
~~w~~ approved for certification.  
~~e~~

~~p~~ (3) Ensure all bins, augers, conveyors, and other equipment  
~~h~~ are adequately cleaned before handling certified seed.

~~y~~ (4) Determine that the vehicle receiving bulk certified seed has  
~~si~~ been cleaned prior to receiving the seed. If it is not clean,  
~~e~~ this is to be noted on the bill of sale or transfer certificate.  
~~at~~

~~tr~~ (5) Provide to the purchaser a bulk certificate for each load of  
~~a~~ bulk certified seed at the time of delivery.  
~~n~~

~~sf~~ (6) Ensure that the conditioned lot is not moved from the  
~~e~~ premises of the approved conditioning facility or labeler's  
~~rs~~ facility until the sample has been tested by the state seed  
~~a~~ department laboratory and shows that the lot is eligible for  
~~f~~ certification.  
~~e~~

~~p~~ i f. It is the buyer's responsibility to:  
~~e~~

~~r~~ (1) Obtain a bulk certificate from the seller for each load of bulk  
~~g~~ certified seed at the time of delivery.

- (2) Provide a clean vehicle or container in which to load seed.
- (3) Maintain purity of the seed after it has been loaded into the buyer's vehicle.

~~g. The bulk certified seed certificate takes the place of the certified seed tag. The complete seed analysis will be printed on the certificate.~~

~~h. Bulk retail seed facilities must be approved annually before certified seed can be handled in bulk. Such facilities may be part of a seed conditioning facility or may be approved only for handling bulk certified seed. Before approval, all procedures for receiving, storing, dispensing, and recordkeeping must be inspected. The applicant must demonstrate acceptable procedures for maintaining purity and identity of bulk certified seed.~~

~~i. For all bulk certified seed:~~

~~(7) A separate storage bin must be available for each lot that will be sold in bulk. Each bin shall be considered a separate lot of seed and shall be labeled accordingly.~~

~~(8) All bins, augers, conveyors, and other equipment must be cleaned before storage or handling certified seed.~~

~~(9) All hopper bins must be equipped with bottom access ports, inside ladders, or some other means approved by the seed department to facilitate access for cleaning.~~

~~(10) All augers used to convey seed must be reversible.~~

~~(11) All bins must be clearly and prominently marked to show kind, variety, class, and lot number.~~

~~(12) All bin openings must be closed to prevent contamination, except when seed is being put in or removed from the bin, or to allow for aeration.~~

~~(13) Offsite bins or satellite bin locations shall be managed in the same manner as those at an approved facility. Bins shall be listed on a separate bin list registered under the name of an approved facility. All satellite locations shall be inspected annually by the seed department.~~

~~j. Records. Each person whose name appears on the label and handles seed shall keep for a period of three years complete records of each lot of seed handled. All records pertaining to the lot involved must be accessible for inspection by the commissioner~~



~~at any time during customary business hours. Records shall include:~~

~~f. Amount of seed grown and conditioned or purchased for bulk sale.~~

~~g. Amount of bulk certified seed sold by variety and lot number.~~

~~h. A current inventory of each variety of seed available for sale.~~

~~i. It is the initial labeler's responsibility to maintain possession of a two-pound [.907 kilogram] sample identified by kind, variety, class, and lot number of each lot of certified seed sold, whether bagged or in bulk, for a period of two years after the final disposition of the seed lot.~~

~~3. No person may disclaim responsibility of the vendor of the seed for the data on the label required by law and any such disclaimer of vendor's express or implied warranty is invalid.~~

**History:** Amended effective May 1, 1986; September 1, 2002; January 2, 2006; July 1, 2007; July 1, 2010.

**General Authority:** NDCC 4.1-53-10

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-10, 4.1-53-12, 4.1-53-13, 4.1-53-39

**74-03-01-13. Preissued Certification tags.** Certified tags may be issued before conditioning only if prior approval has been granted by the state seed department. Tags will be preissued only under the following conditions:

~~1. Tags will be issued only to approved conditioning facilities.~~

~~12. A representative Final samples from the conditioned seed lot, along with the grower's declaration, if required, sampler's report, and printed analysis tag must be submitted immediately after the each lot is conditioned.~~

~~3. The conditioned lot shall not be moved from the labeler's premises of the approved conditioning facility or labeler's facility until the sample has been tested by the state seed department laboratory and final certification has been completed. If the seed lot does not meet label claims, the lot will be is rejected, the approved facility or and the labeler must assume responsibility for removing certification tags and returning them to the state seed department.~~

~~4. The use of a certification label preprinted on bags will be permitted if prior approval by the state seed department is granted. Analysis information may also be printed on the bag. The approved conditioning~~

facility must submit a preprinted analysis tag from the bags used with the sample for final certification.

**History:** Amended effective May 1, 1986; September 1, 2002; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-12, 4.1-53-13, 4.1-53-44

#### **74-03-01-14. Carryover seed.**

1. Unconditioned carryover. All unconditioned carryover seed eligible for certification must be reported to the state seed department by ~~October first of each year.~~  
~~Growers must report all field inspected seed that was not submitted for final certification.~~ Failure to report will disqualify the seed for certification.

#### 2. Certified carryover.

a. Carryover ~~b. Bagged seed.~~ All carryover seed must be retested for germination before new certified tags will be issued by the seed department. ~~New certification tags will be furnished for carryover bagged seed.~~

3. b. Carryover ~~b. Bulk seed.~~ All carryover bulk seed must be retested for germination before new bulk certificates will be issued. Carryover bulk seed cannot be recertified in bags unless a new samples is ~~are~~ submitted for purity and germination analysis.

**History:** Amended effective May 1, 1986; September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-12

**Law Implemented:** NDCC 4.1-53-42

**74-03-01-14.1. Applicant's responsibility.** It is the responsibility of the applicant to maintain genetic purity and identity at all stages of certification including seeding, harvesting, and storing. The applicant or grower, approved conditioner, and bulk retailer are responsible for maintaining genetic purity and identity during conditioning and handling. Evidence that any lot of seed has not been protected from contamination that might affect genetic purity or is not properly identified shall be cause for possible rejection of certification.

**History:** Effective May 1, 1986; amended effective January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-42

#### **74-03-01-15. Misuse of certification privileges.** Any seed



grower, conditioner, or retailer found guilty of misusing certification tags, misrepresenting seed, or violating any of the rules governing the growing, conditioning, and marketing of foundation, registered, or certified seed, or guilty of violations of the North Dakota seed laws and rules with respect to any seed which the grower, conditioner, or retailer sells, may at the discretion of the state seed commissioner or the commissioner's agents be denied the right to produce, condition, or market seed for ~~under~~ certification. Violators may be subject to fines by administrative action of the state seed department.

**History:** Amended effective May 1, 1986; May 1, 1988; September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-42, 4.1-53-45, 4.1-53-53, 4.1-53-57

**74-03-01-16. Approved conditioners.** Any seed conditioner may be designated as an "approved conditioner" to condition field-inspected seed for final certification if, after inspection, it is the state seed department inspector's opinion that the facility is properly managed and equipped to maintain genetic purity and varietal identity of each seed lot. A separate inspection and permit is required for each fixed facility or mobile conditioning unit. The managers and the designated samplers in these facilities are under agreement to handle all seed and seed records and to draw representative samples of all seed lots for certification according to the certification rules and regulations.

1. Approved conditioners of small grains are required to have the following operational equipment capable of: (1) length grading - either a disc separator or indent cylinder or combination machine which removes long and short fractions and (2) width grading - either an air screen machine or precision graders with aspiration in line.
- ~~2. Permission to operate as an approved conditioner is granted on an annual basis. All approved conditioners must condition and complete final certification on at least one lot of certified seed every two years before renewal of a permit will be granted. A fee will be charged for each reinspection. An approved conditioner is required to have a separate inspection and permit for each fixed facility or mobile conditioning unit.~~
23. The commissioner may approve specialized equipment and facilities utilized for the purpose or repackaging, treating, or inoculating certified seed.

**History:** Amended effective May 1, 1986; December 18, 1989; September 1, 2002; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-42, 4.1-53-46

**74-03-01-17. Interagency certification.**

Interagency certification is a procedure established to maintain certification eligibility of seed originating in another state.

**1. Field inspected in another state and transferred to North Dakota for final certification.**

- a. North Dakota labelers may purchase seed that passed field inspection in another state and complete final certification and labeling in North Dakota. A Certificate of Transfer from the state in which the seed originated must be submitted to the seed department to verify eligibility.
- b. The labeler is responsible for completing final certification. If conditioning is necessary, a representative sample must be submitted to the seed department along with a completed sampler's report and a copy of the Certificate of Transfer. The seed shall meet North Dakota seed standards for certification.
- c. Interagency certification labels will be issued by the North Dakota state seed department.

**2. Field inspected in North Dakota and transferred to another state for final certification.**

- a. A seed producer may transfer seed that passed field inspection in North Dakota to a purchaser in another state with approval from the seed department. The producer must submit a completed Certificate of Transfer to the seed department verifying eligibility of the seed. Once approved, the seed department will forward copies to the purchaser and the official certification agency of the state where the seed is destined.
- b. The purchaser is responsible for completing the requirements for certification with their certification agency.

**3. Certified in another state and transferred to North Dakota for relabeling.**

- a. Seed that has been previously certified and labeled

by an official certifying agency from another state may be reconditioned, rebagged and relabeled in North Dakota.

- b. When the seed is reconditioned or rebagged, a new sample must be submitted to the seed department for analysis. The North Dakota labeler must submit a certification label from the state of origin as proof of eligibility along with a completed sampler's report.
- c. New interagency certification labels will be issued by the seed department.

Interagency seed lots not meeting North Dakota certification standards may require resampling or retesting to ensure compliance with North Dakota certification standards.

~~1. Upon the request of an officially recognized certification agency of another state, the state seed department will act as agent in making inspections, drawing samples, or labeling of seed to be certified.~~

~~2. For certified seed carrying the Certification tag or label of an official certifying agency, no official request from a recognized agency of another state is required to recondition, relabel, or rebag certified seed under interagency certification. Application for interagency Certification shall be made directly to the state seed department and the following documentary evidence shall be supplied:~~

- ~~a. Variety and kind.~~
- ~~b. Class of certified seed.~~
- ~~c. Number of bags or bulk bushels.~~
- ~~d. Weight of each bag.~~
- ~~e. Complete original label with purity analysis, germination, and other required tests.~~
- ~~f. Name and address of grower or the inspection or lot number traceable to the records of the agency making the field inspections.~~



- ~~3. A lot of seed that passed field inspection, or is completely certified by another officially recognized certification agency, may be sold or moved into North Dakota for further conditioning or completion of certification provided:
  - ~~a. Prior arrangements for moving the seed is made with and approved by the cooperating certification agency and the state seed department.~~
  - ~~b. A grower's transfer certificate is led by the original applicant for certification of such seed.~~~~
- ~~4. Interagency certification tags shall show the certification agencies involved, the lot number, variety, kind, and class of seed.~~
- ~~5. Interagency seed lots not meeting North Dakota certification standards may require resampling or retesting to ensure compliance with North Dakota certification standards.~~

**History:** Amended effective May 1, 1986; September 1, 2002; January 2, 2006.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-13, 4.1-53-42

**74-03-01-18. Exclusion of warranty.** Field seeds certified in accordance with this chapter have been field inspected and laboratory tested as specified in this chapter. The state seed department and inspection services function and serve only in an official regulatory manner and do not relieve the grower or owner of the grower's or owner's responsibility. Neither the producer, the seller, the North Dakota seed commission, the seed commissioner, or the commissioner's employees make any warranty or representation of any kind, express or implied, as the quantity or quality of the crop produced from certified seed, including merchantability, fitness for a particular purpose, absence of disease, or varietal or selection identity. The only representation is that the seed was inspected under the seed certification rules and regulations of the North Dakota state seed department.

Inspections, tests, Certifications, and other acts are not intended to induce reliance on the seed department's inspections, Certifications, or any other action or inaction for any purpose relating to quantity or quality of the seed or crop produced, fitness for purpose, merchantability, absence of disease, or variety or selection identification. Certification means only that the seed was randomly inspected and at the time of the inspection the field or seed lot met the rules of the department.

**History:** Effective September 1, 2002; amended effective July 1, 2007.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-59

**CHAPTER 74-03-02**  
**SPECIFIC CROP REQUIREMENTS - SMALL GRAINS AND FLAX**

Section	
74-03-02-01	Land Requirements
74-03-02-02	Field Inspection
74-03-02-03	Field Standards
74-03-02-04	Seed Standards (Wheat - Oats - Barley - Rye - Triticale)
74-03-02-05	Seed Standards (Flax)

**74-03-02-01. Land requirements.** A crop of small grain or flax will not be eligible for certification if planted on land on which the same kind was grown the year previous unless the previous crop was the same variety and was inspected for certification. A crop of winter wheat may be planted on a field that previously produced spring wheat. Foundation or registered class fields of durum will not be eligible for certification if planted on land on which spring wheat was planted either of the two previous years.

**History:** Amended effective May 1, 1986; January 2, 2006; July 1, 2010.

**General Authority:** NDCC ~~4-09-03, 4-09-05, 4-09-16~~ 4.1-53-11

**Law Implemented:** NDCC ~~4-09-16, 4-09-17, 4-09-18~~ 4.1-53-11, 4.1-53-42

**74-03-02-02. Field inspection.** All field inspection of small grain and flax will be made after the crop is fully headed or in the case of flax in bloom or in the boll stage. A field harvested before inspection will not be eligible for certification.

**History:** Amended effective January 2, 2006.

**General Authority:** NDCC ~~4-09-03, 4-09-05, 4-09-16~~ 4.1-53-11

**Law Implemented:** NDCC ~~4-09-16, 4-09-17, 4-09-18~~ 4.1-53-11, 4.1-53-42

**74-03-02-03. Field standards.**

**1. Isolation.**

- a. Prior to inspection, the field must be isolated from inseparable crops by a fence row, natural boundary, or by a strip at least five feet [1.52 meters] wide which is either mowed, sprayed, or uncropped.
- b. All rye fields producing certified seed must be isolated by at least six hundred sixty feet [201.17 meters] from rye fields of any other variety or fields of the same variety that do not meet the varietal purity requirements for certification.

**~~2. Roguing.~~**

- ~~a. All roguing to remove undesirable plants must be done before field inspection is made. Rogued plants must be removed from the field to be harvested.~~

- ~~b. Patches of inseparable prohibited or objectionable weeds, or both, must be either removed by cutting or must be controlled by other means so that no seed is produced or harvested.~~

**23. Specific field standards(wheat - barley - oats - rye - triticale).**

Factor	Maximum Tolerance		
	Foundation	Registered	Certified
Other varieties *	1:10,000	1:5,000	1:2,000
Inseparable other crops	1:30,000	1:10,000	1:5,000
Prohibited noxious weeds **	none	none	none

\* Other varieties include plants that can be differentiated from the variety being inspected, but shall not include variants which are characteristic of the variety.

\*\* The tolerance for prohibited or objectionable weeds, or both, in the field will be determined by the inspector.

**34. Specific field standards (flax).**

Factor	Maximum Tolerance		
	Foundation	Registered	Certified
Other varieties *	1:10,000	1:5,000	1:2,000
Prohibited noxious weeds **	none	none	none

\* Other varieties include plants that can be differentiated from the variety being inspected, but shall not include variants characteristic of the variety.

\*\* The tolerance for prohibited or objectionable weeds, or both, in the field will be determined by the inspector.

**History:** Amended effective May 1, 1986; September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

#### 74-03-02-04. Seed standards (wheat - oats - barley - rye - triticale).

Seed count required on wheat, oats, barley, and durum.

Variety identification test required for hard red spring wheat and barley.

Factor	Standards for Each Class		
	Foundation	Registered	Certified
Pure seed (minimum) *	99.0 percent	99.0 percent	99.0 percent
Total weed seeds (maximum)	2 per pound	5 per pound	10 per pound
Other varieties **	1 per 2 pounds	1 per pound	3 per pound
Other crop seeds (maximum)	1 per 2 pounds	1 per pound	3 per pound
Inert matter (maximum) ***	1.0 percent	1.0 percent	1.0 percent
Prohibited noxious weed seeds +	none	none	none
Objectionable weed seeds (maximum) ++	1 per 2 pounds	1 per 2 pounds	1 per pound
Germination +++	85.0 percent	85.0 percent	85.0 percent

\* The standard for durum and rye shall be 98.0 percent minimum.

\*\* Other varieties shall not include variants characteristic of the variety. White wheat must be tested for red wheat contaminants.

\*\*\* For all crops foreign matter other than broken seed shall not exceed 0.2 percent. Durum, triticale, and rye may contain 2.0 percent maximum inert matter.

+ Including the seeds of quackgrass.

++ Objectionable weed seeds shall include the following: dodder, wild oats, hedge bindweed (wild morning glory), giant ragweed (kinghead), falseflax, and dragonhead.

+++ Winter wheat, durum, and rye minimum 80.0 percent.

Note: A barley labeler is responsible for having a loose smut test, by an official laboratory, on the harvested seed of each field of barley. If seed from more than one field is blended without having a test for each field, a loose smut test must be made on each seed lot or subplot. The percentage of loose smut will be printed on the certification certificate or label. The foundation class of barley has a zero tolerance for barley stripe mosaic virus.

**History:** Amended effective May 1, 1986; May 1, 1988; December 18, 1989; August 1, 1991; September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

## 74-03-02-05. Seed standards (flax).

Factor	Standards for Each Class		
	Foundation	Registered	Certified
Pure seed (minimum)	99.0 percent	99.0 percent	98.5 percent
Total weed seeds (maximum)	15 per pound	15 per pound	30 per pound
Other varieties (maximum) *	<del>2 per pound</del>	<del>8 per pound</del>	<del>16 per pound</del>
Brown	<u>2 per pound</u>	<u>8 per pound</u>	<u>16 per pound</u>
Yellow	<u>4 per pound</u>	<u>16 per pound</u>	<u>32 per pound</u>
Other crop seeds (maximum)	2 per pound	5 per pound	10 per pound
Inert matter (maximum) **	1.0 percent	1.0 percent	1.5 percent
Prohibited noxious weed seeds ***	none	none	none
Objectionable weed seeds (maximum) +	1 per 2 pounds	1 per 2 pounds	3 per pound
Germination (minimum)	85.0 percent	85.0 percent	85.0 percent

\* Other varieties shall not include variants characteristic of the variety. ~~For golden or yellow varieties the standards are 4, 16, and 32 per pound respectively.~~

\*\* ~~May not exceed two-tenths percent~~ Foreign matter, other than broken seed, may not exceed 0.2 percent.

\*\*\* Including seeds of quackgrass.

+ Objectionable weed seeds shall include the following: dodder species, wild oats, hedge bindweed (wild morning glory), giant ragweed (kinghead), small seeded falseflax, and American dragonhead.

**History:** Amended effective May 1, 1986; May 1, 1987; May 1, 1988; September 1, 2002; January 2, 2006.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42



**CHAPTER 74-03-03  
SPECIFIC CROP REQUIREMENTS – ALFALFA  
(NON-HYBRID)**

Section	
74-03-03-01	Land Requirements
74-03-03-02	Field Inspection
74-03-03-03	Field Standards
74-03-03-04	Seed Standards <del>(Alfalfa)</del>

**74-03-03-01. Land requirements.** A field to be eligible for the production of foundation, registered, or certified seed must not have been in alfalfa production in the previous ~~four~~three years, unless the field was planted to the same class or a higher class of the same variety and passed field inspection for certification in one of the three years.

**General Authority:** NDCC ~~4-09-03, 4-09-05, 4-09-16~~ 4.1-53-11

**Law Implemented:** NDCC ~~4-09-16, 4-09-17, 4-09-18~~ 4.1-53-11, 4.1-53-42

**74-03-03-02. Field inspection.** Field inspection prior to harvest will be required each year a seed crop is removed.

**General Authority:** NDCC ~~4-09-03, 4-09-05, 4-09-16~~ 4.1-53-11

**Law Implemented:** NDCC ~~4-09-16, 4-09-17, 4-09-18~~ 4.1-53-11, 4.1-53-42

**74-03-03-03. Field standards.**

1. **Age.** Production for seed certification shall be limited to fields not more than six years old, excluding the year seeded.
2. **Portion.** A portion of a field may be certified if the area to be certified is clearly defined. Portions of the field not meeting requirements for certification must not be allowed to reach the bud stage.
3. **Isolation.** A field producing foundation, registered, or certified seed must have the minimum isolation distance 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 Less Than Five Acres	Fields of Five Acres or More
Foundation	1,320 feet	1,320 feet
Registered	660 feet	330 feet
Certified	330 feet	165 feet
Between different classes of the same variety	165 feet	165 feet

#### 4. Specific field standards requirements.

Factor	Maximum Permitted in Each Class		
	Foundation	Registered	Certified
Other varieties *	<del>0.1 percent</del> (1:1,000)	<del>.25 percent</del> (1:400)	<del>1.0 percent</del> (1:100)
Sweetclover	none	5 plants per acre	25 plants per acre

\* Other varieties include plants that can be differentiated from the variety being inspected, but shall not include variants characteristic of the variety.

**History:** Amended effective May 1, 1986; January 2, 2006.

**General Authority:** NDCC ~~4-09-03, 4-09-05, 4-09-16~~ 4.1-53-11

**Law Implemented:** NDCC ~~4-09-16, 4-09-17, 4-09-18~~ 4.1-53-11, 4.1-53-42

#### **74-03-03-04. Seed standards (alfalfa) .**

Factor	Standards for Each Class		
	Foundation	Registered	Certified
Pure seed (minimum)	99.0 percent	99.0 percent	99.0 percent
Total weed seeds (maximum)	0.1 percent	0.2 percent	0.5 percent
Other varieties (maximum) *	0.1 percent	.25 percent	1.00 percent
Other crop seeds (maximum)	0.2 percent	.35 percent	1.00 percent
Sweetclover seed (maximum)	none	18 per pound	45 per pound
Inert matter (maximum)	1.0 percent	1.0 percent	1.0 percent
Prohibited noxious weed seeds **	none	none	none
Objectionable weed seeds ***	none	9 per pound	13 per pound
Germination and hard seeds (minimum)	85.0 percent	85.0 percent	85.0 percent

\*\* Including sweetclover.

\* Includes the seeds of quackgrass and dodder species.

\*\* Objectionable weed seeds shall include the following: wild oats, dragonhead, hedge bindweed (wild morning glory), giant ragweed (kinghead), nightflowering catchy, hoary alyssum, white cockle, buckhorn plantain, small seeded falseflax, and dragonhead.

**History:** Amended effective May 1, 1986; September 1, 2002.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**CHAPTER 74-03-07.1**  
**SPECIFIC CROP REQUIREMENTS - BUCKWHEAT**

Section

74-03-07.1-01	Land Requirements
74-03-07.1-02	Field Inspection
74-03-07.1-03	Field Standards
74-03-07.1-04	Seed Standards

**74-03-07.1-01. Land requirements.** A crop of buckwheat will not be eligible for certification if planted on land on which the same kind was grown the year previous unless the previous crop was ~~grown from certified seed~~ of the same variety and was inspected for certification.

**History:** Effective May 1, 1986; amended effective July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-07.1-02. Field inspection.** All field inspection of buckwheat will be made in the bloom stage. A field harvested before inspection will not be eligible for certification

~~1. All field inspection of buckwheat will be made in the bloom stage.~~

~~2. A field harvested before inspection will not be eligible for certification.~~

**History:** Effective May 1, 1986; amended effective January 2, 2006.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-07.1-03. Field standards.**

**1. Isolation.**

a. Prior to inspection, the field must be isolated from inseparable crops by a fence row, natural boundary, or by a strip at least five feet [1.52 meters] wide which is either mowed, sprayed, or uncropped.

b. All buckwheat fields producing certified seed must be isolated by at least six hundred sixty feet [201.17 meters] from buckwheat fields of any other variety or fields of the same variety that do not meet the varietal purity requirements for certification.

**2. Roguing.**

~~a. All roguing must be done before field inspection. Rogued plants must be removed from the field to be harvested.~~

~~b. Patches of prohibited weeds must be either removed by cutting or must be controlled by other means so that no seed is produced.~~

### 3. Specific field standards.

Factor	Maximum Tolerance		
	Foundation	Registered	Certified
Other varieties *	1:10,000	1:5,000	1:2,000
Inseparable other crops	1:10,000	1:10,000	1:5,000
Prohibited weed seeds **	none	none	none

\* Other varieties include plants that can be differentiated from the variety being inspected, but shall not include variants characteristic of the variety.

\*\* The tolerance for prohibited or objectionable weeds, or both, in the field will be determined by the inspector.

**History:** Effective May 1, 1986; amended effective May 1, 1988; September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

#### 74-03-07.1-04. Seed standards.

Factor	Standards for Each Class		
	Foundation	Registered	Certified
Pure seed (minimum)	99.0 percent	99.0 percent	99.0 percent
Total weed seeds (maximum)	2 per pound	5 per pound	10 per pound
Other varieties *	1 per 2 pounds	1 per pound	3 per pound
Other crop seeds (maximum)	1 per 2 pounds	1 per pound	3 per pound
Inert matter (maximum)**	1.0 percent	1.0 percent	1.0 percent
Prohibited weed seeds ***	none	none	none
Objectionable weed seeds (maximum) ****	1 per <del>2</del> pounds	1 per 2 pounds	2 per pound
Germination	85.0 percent	85.0 percent	85.0 percent

\* Other varieties shall not include variants characteristic of the variety.

\*\* ~~For all crops~~ Foreign matter other than broken seed may not exceed 0.2 percent.

\* Including the seeds of quackgrass.

\*\* Objectionable weed seeds shall include the following: dodder, wild oats, hedge bindweed (wild morning glory), giant ragweed (kinghead), falseflax, and dragonhead.

**History:** Effective May 1, 1986; amended effective September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**CHAPTER 74-03-08**  
**SPECIFIC CROP REQUIREMENTS - MILLET - SELF-POLLINATING**

Section	
74-03-08-01	Land Requirements
74-03-08-02	Field Inspection
74-03-08-03	Field Standards
74-03-08-04	Seed Standards

**74-03-08-01. Land requirements.** A millet crop shall be planted on land on which the last crop grown was of another kind or was planted with certified seed of the same variety and was inspected for certification.

**History:** Amended effective May 1, 1986; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-08-02. Field inspection.** Fields shall be inspected before harvest or when the seed begins to take on color.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-08-03. Field standards.**

1. **Isolation.** Prior to inspection, a field must be isolated from inseparable crops by a fence row, natural boundary, or by a strip at least five feet [1.52 meters] wide which is either mowed, sprayed, or uncropped.

2. **Specific field standards.**

Factor	Foundation	Registered	Certified
Other varieties (maximum) *	1:3,000	1:2,000	1:1,000
Inseparable other crops (maximum)	1:10,000	1:10,000	1:2,000
Prohibited weeds**	None	None	None

\* Other varieties include plants that can be differentiated from the variety being inspected, but shall not include variants characteristic of the variety.

\*\* The tolerance for prohibited or objectionable weeds, or both, in the field will be determined by the inspector.

**History:** Amended effective May 1, 1986; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

## 74-03-08-04. Seed standards.

Factor	Standards for Each Class		
	Foundation	Registered	Certified
Pure seed (minimum)	99.0 percent	99.0 percent	98.0 percent
Total weed seeds (maximum)	.01 percent	.01 percent	.04 percent
Total other crop seeds (maximum)	.01 percent	.01 percent	.04 percent
Other varieties (maximum)	.01 percent	.01 percent	.02 percent
Other kinds (maximum)	.01 percent	.01 percent	.02 percent
Inert matter	1.0 percent	1.0 percent	2.0 percent
Prohibited noxious weed seeds	none	none	none
Objectionable weed seeds *	none	1 per pound	3 per pound
Germination	70.0 percent	70.0 percent	70.0 percent

- \* Objectionable weed seeds are dodder, wild oats, quackgrass, hedge bindweed (wild morning glory), nightflowering catchfly, giant foxtail, hoary alyssum, wild radish, wild vetch species, buckhorn plantain, and horsenettle.

**History:** Amended effective May 1, 1986; September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42



**CHAPTER 74-03-09**  
**SPECIFIC CROP REQUIREMENTS - MUSTARD, CRAMBE, CANOLA, AND**  
**RAPE (NON-HYBRID)**

Section	
74-03-09-01	Land Requirements
74-03-09-02	Field Inspection
74-03-09-03	Field Standards
74-03-09-04	Seed Standards

**74-03-09-01. Land requirements.** Foundation seed of mustard, crambe, canola, and rape shall be on land which did not produce mustard, crambe, canola, or rape during the previous four five years. Certified seed of mustard, crambe, canola, and rape shall be on land which did not produce mustard, crambe, canola, or rape during the previous two three years. Registered and certified seed of crambe must be on land which did not produce crambe during the previous three years.

**History:** Amended effective December 18, 1989; September 1, 2002.

**General Authority:** NDCC 4-09-03, 4-09-05, 4-09-16

**Law Implemented:** NDCC 4-09-16, 4-09-17, 4-09-18

**74-03-09-02. Field inspection.** Field inspection shall be made after the crop reaches the bloom stage (at least fifty percent of the plants showing one or more blossoms).

**History:** Amended effective May 1, 1986.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-09-03. Field standards.**

**1. General.**

a. Isolation. A field producing any class of certified seed must have the minimum isolation distance from fields of any other variety of the same kind, or from a noncertified crop of the same variety as follows:

- \* Producing foundation seed - one thousand three hundred twenty feet [402.34 meters]. All foundation fields of mustard, canola, or rape must be isolated by three hundred thirty feet [100.58 meters] from fields of the other kind (rape from mustard or canola; mustard from rape or canola; or canola from rape or mustard).
- \* Producing registered crambe seed - six hundred sixty feet [201.17 meters].



\*\* Producing certified seed - six hundred sixty feet [201.17 meters].

Required isolation between classes of the same variety - ten feet [3.05 meters].

b. Unit of certification. The field is 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.

## 2. Specific field standards.

Factor	Maximum Permitted in Each Class Registered		
	Foundation	Crambe Only	Certified
Other varieties *	1:2,000	1:2,000	1:500
Inseparable other crops	1:2,000	1:2,000	1:500

\* Other varieties include plants that can be differentiated from the variety being inspected, but shall not include variants characteristic of the variety.

**History:** Amended effective May 1, 1986; December 18, 1989; September 1, 2002; January 2, 2006.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

## 74-03-09-04. Seed standards.

Factor	Foundation	Registered	
		Crambe Only	Certified
Pure seed (minimum)	99.00 percent	99.00 percent	99.00 percent
Inert matter (maximum)	1.00 percent	1.00 percent	1.00 percent
Prohibited noxious weed seeds +	none	none	none
Objectionable weed seeds *	1 per pound	3 per pound	5 per pound
Other weeds	5 per pound	10 per pound	15 per pound
Total other crop seeds (maximum)	0.05 percent	0.10 percent	0.25 percent
Other varieties (maximum)	0.05 percent	0.10 percent	0.25 percent
Other kinds (maximum) **	0.01 percent	0.01 percent	0.01 percent
Germination (minimum)	85.00 percent	85.00 percent	85.00 percent
Sclerotia (maximum)	7 per pound	7 per pound	7 per pound

+ Prohibited noxious weed seeds include the seeds of cleavers or bedstraw.

- \* Objectionable weed seeds are dodder, wild mustard, wild oats, quackgrass, and hedge bindweed (wild morning glory).
- \*\* Shall not exceed one per pound for foundation and six per pound for certified.

**History:** Amended effective May 1, 1986; May 1, 1988; December 18, 1989; September 1, 2002; January 2, 2006.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**CHAPTER 74-03-09.1**  
**SPECIFIC CROP REQUIREMENTS – HYBRID CANOLA AND RAPESEED**

Section

<u>74-03-09.1-01</u>	<u>Land Requirements</u>
<u>74-03-09.1-02</u>	<u>Seed Requirements</u>
<u>74-03-09.1-03</u>	<u>Field Inspection</u>
<u>74-03-09.1-04</u>	<u>Field Standards</u>
<u>74-03-09.1-05</u>	<u>Seed Standards</u>

**74-03-09.1-01. Land requirements.** Crops for production of Foundation seed must not be planted on land that has grown canola, rapeseed, mustard or oilseed radish during the preceding five years. Crops for production of Certified seed must not be planted on land that has grown canola, rapeseed, mustard or oilseed radish during the preceding three years.

**History:**

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-09.1-02. Seed Requirements.** Only the certified class is recognized in the production of commercial hybrid seed. Breeder or Foundation seed must be used to establish all fields of hybrid canola/rapeseed for certification.

**History:**

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-09.1-03. Field inspection.** Field inspection shall be made when the seed parent is in early bloom. Additional inspections may be required.

**History:**

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-09.1-04. Field standards.**

**1. General.**

a. Isolation. A field producing foundation or certified seed must be isolated by a minimum of 2,640 feet from any other canola/rapeseed.

b. Unit of certification. The entire field is the unit of certification. A portion of a field may be accepted for certification provided that the rejected portion does not affect the genetic purity of the portion accepted.

## 2. Specific field standards.

<u>Factor</u>	<u>Maximum Permitted in Each Class</u>	
	<u>Foundation</u>	<u>Certified</u>
<u>Other varieties *</u>	<u>1:2,000</u>	<u>1:500</u>
<u>Inseparable other crops</u>	<u>1:2,000</u>	<u>1:500</u>

\* Other varieties include plants that can be differentiated from the variety being inspected, but shall not include variants characteristic of the variety.

### History:

General Authority: NDCC 4.1-53-11

Law Implemented: NDCC 4.1-53-11, 4.1-53-42

## 74-03-09.1-05. Seed standards.

<u>Factor</u>	<u>Foundation</u>	<u>Registered</u>	
		<u>Crambe Only</u>	<u>Certified</u>
<u>Pure seed (minimum)+</u>	<u>99.00 percent</u>	<u>99.00 percent</u>	<u>99.00 percent</u>
<u>Inert matter (maximum)</u>	<u>1.00 percent</u>	<u>1.00 percent</u>	<u>1.00 percent</u>
<u>Prohibited noxious weed seeds *</u>	<u>none</u>	<u>none</u>	<u>none</u>
<u>Objectionable weed seeds **</u>	<u>1 per pound</u>	<u>3 per pound</u>	<u>5 per pound</u>
<u>Other weeds</u>	<u>5 per pound</u>	<u>10 per pound</u>	<u>15 per pound</u>
<u>Total other crop seeds (maximum)</u>	<u>0.05 percent</u>	<u>0.10 percent</u>	<u>0.25 percent</u>
<u>Other varieties (maximum)</u>	<u>0.05 percent</u>	<u>0.10 percent</u>	<u>0.25 percent</u>
<u>Other kinds (maximum) ***</u>	<u>0.01 percent</u>	<u>0.01 percent</u>	<u>0.01 percent</u>
<u>Germination (minimum)</u>	<u>85.00 percent</u>	<u>85.00 percent</u>	<u>85.00 percent</u>
<u>Sclerotia (maximum)</u>	<u>7 per pound</u>	<u>7 per pound</u>	<u>7 per pound</u>

+ Percent hybrid seed shall not be less than 80%. A certificate from an accredited laboratory indicating the percentage of hybridity must be submitted prior to final certification.

A certificate from an accredited laboratory indicating satisfactory erucic acid and glucosinolate content may be required prior to final certification.

\* Prohibited noxious weed seeds include the seeds of cleavers or bedstraw.

\*\* Objectionable weed seeds are dodder, wild mustard, wild oats, quackgrass, and hedge bindweed (wild morning glory).

\*\*\* Shall not exceed one per pound for foundation and six per pound for certified.

**History:**

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**CHAPTER 74-03-10**  
**SPECIFIC CROP REQUIREMENTS - SAFFLOWER**

Section	
74-03-10-01	Land Requirements
74-03-10-02	Field Inspection
74-03-10-03	Field Standards
74-03-10-04	Seed Standards ( <del>Safflower</del> )

**74-03-10-01. Land requirements.** Safflower will not be considered for certification if planted on land where safflower has been grown the past two years. It is recommended that the crop be planted on summerfallow or on land immediately following a separable crop.

**History:** Amended effective May 1, 1988.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-10-02. Field inspection.** Field inspection shall be made after the crop reaches the bloom stage (at least fifty percent of the plants showing one or more blossoms).

**History:** Amended effective May 1, 1986.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-10-03. Field standards.**

1. General Isolation.

~~a. Isolation. Fields of safflower planted to produce the registered or certified class of seed shall be at least one thousand three hundred twenty feet [402.34 meters] from any other variety or noncertified 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.~~

~~b. Unit of certification. The field is 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.~~

~~c. Roguing. Off type plants or identifiable mixtures shall be removed from the field before pollination occurs.~~



## 2. Specific field standards.

Factor	Maximum Permitted in Each Class		
	Foundation	Registered	Certified
Other varieties *	1:5,000	1:2,000	1:1,000
Inseparable other crops	1:30,000	1:10,000	1:3,000
Prohibited noxious weeds**	none	none	none

\* Other varieties shall include plants that can be differentiated from the variety being inspected, but shall not include variants characteristic of the variety.

\*\* The tolerance for prohibited or objectionable weeds, or both, in the field will be determined by the inspector.

**History:** Amended effective May 1, 1986; September 1, 2002; January 2, 2006.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

### 74-03-10-04. Seed standards (~~safflower~~).

Factor	Foundation	Registered	Certified
Pure seed (minimum)	98.0 percent	98.0 percent	98.0 percent
Inert matter (maximum)	2.0 percent	2.0 percent	2.0 percent
Other crops or varieties (maximum)	1 per 2 pounds	1 per pound	3 per pound
Weed seeds (maximum)	2 per pound	5 per pound	10 per pound
Prohibited noxious weed seed *	none	none	none
Objectionable weed seeds**	<del>1 per 2 pounds</del> none	1 per 2 pounds	2 per pound
Germination (minimum)		80 percent	80 percent
Sclerotia (maximum)	5 per pound	5 per pound	5 per pound

\* Including the seeds of quackgrass.

\*\* Objectionable weed seeds shall include the following: dodder, wild oats, hedge bindweed (wild morning glory), giant ragweed (kinghead), falseflax, and dragonhead.

**History:** Amended effective May 1, 1986; September 1, 2002; January 2, 2006.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**CHAPTER 74-03-11**  
**SPECIFIC CROP REQUIREMENTS - SUNFLOWER**

Section	
74-03-11-01	Land Requirements
74-03-11-02	Field Inspection
74-03-11-03	Field Standards
74-03-11-04	Seed Standards (Sunflower) [Repealed]
74-03-11-04.1	Precontrol Standards
74-03-11-05	Postcontrol Standards [Repealed]
74-03-11-05.1	Seed Standards <del>(Sunflower)</del>

**74-03-11-01. Land requirements.** A crop will not be eligible for certification if planted on land where sunflowers were grown during the previous year.

**History:** Amended effective May 1, 1986.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-11-02. Field inspection.** ~~Open-pollinated varieties, hybrids and inbreds.~~

**1. Open pollinated production inspections.**

- a. The first inspection shall be made prior to the bloom stage.
- b. The second inspection shall be made after the crop is at least fifty percent in bloom and before it is fully matured.

**2. Hybrid and inbred production.**

- a. At least three field inspections shall be made, one during the bud to early bloom stage and two during bloom.
- b. In a field producing hybrid sunflower seed, at least fifty percent of the male parent plants must be in bloom and producing pollen at the time the female parent is in full bloom. The heads of female plants shedding pollen must be removed and disposed of in a manner which will prevent their pollen from being disseminated. Off-type male plants shall be removed from the field before pollination.
- c. The field shall be considered the unit for certification. Fields shall be separated from other inseparable crops by a distance adequate to prevent mechanical mixture and from other sunflowers by five thousand two hundred eighty feet [1609.34 meters].
- d. In inbred lines and foundation single crosses only the foundation class shall be recognized. In hybrid varieties only the certified class shall be recognized.

3. **Diseases.** Standards for seed-borne diseases in sunflowers are not specified; however, the inspector may reject fields for disease if the quality of the seed will be affected.

**History:** Amended effective May 1, 1986; May 1, 1988; January 2, 2006.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-11-03. Field standards.**

Factor	Open Pollinated *	Seed Parent	Pollen Parent	
	Varieties		Foundation	Certified
Pollen shedding female plants (Maximum)	Foundation, Registered, Certified	1:1,000	4:1,000	
Off-types other than pollen shedding female plants (maximum)		1:5,000	1:5,000	1:5,000
Isolation allowances (maximum) per plants in the production field **	1:5,000	1:5,000	1:5,000	1:5,000
Total including above (maximum)	5:1,000	1:1,000	4:1,000	1:2,000
Isolation (minimum) **	5,280 feet	5,280 feet	5,280 feet	5,280 feet
Corn plants bearing seed	none	none	none	none

\* To include not more than one plant per 5,000 plants of the following types: wild type branching, purple, white seeded. Other varieties include plants that can be differentiated from the variety being inspected, but shall not include variants characteristic of the variety.

\*\* Must be isolated from other varieties, strains, hybrids, volunteer sunflower, noncertified crops of the same variety, and hybrid and wild *Helianthus annuus* species.

**History:** Amended effective May 1, 1986; May 1, 1988; January 2, 2006.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-11-04. Seed standards (sunflower).** Repealed effective May 1, 1988.

**74-03-11-04.1. Precontrol standards.** If field inspection shows one or more of the following, the applicant may request that seed certification be based on the results of a precertification grow-out test approved by the North Dakota state seed department.

1. Inadequate isolation.

2. Too few male parent plants shedding pollen when female plants are receptive.
3. Excess off-types not to include wild types.

In such cases at least two thousand plants must be observed and meet the following standards before hybrid and inbred seed can be certified from fields with problems listed above.

Factor	Maximum Permitted	
	Hybrid	Inbred
Sterile plants	5.0%	
Sterile or fertile plants		5.0%
Morphological off-types	0.5%	0.5%
Wild types	0.2%	0.2%
Total (including above types)	5.0%	5.0%

For nonoil types, hybrid seed which contains not more than fifteen percent sterile plants may be certified. If it contains eighty-five percent to ninety-five percent hybrid plants, the percentage of hybrid shall be shown on the certification label.

**History:** Effective May 1, 1988.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-11-05. Postcontrol standards.** Repealed effective May 1, 1988.

**74-03-11-05.1. Seed standards (sunflower).**

Factor	Standards for Each Class		
	Foundation	Registered	Certified
Pure seed (minimum)	98.0 percent	98.0 percent	98.0 percent
Total weed seeds (maximum)	none	none	3 per pound
Other varieties (maximum) *	1 per pound	1 per pound	5 per pound
Other crop seeds (maximum)	1 per pound	1 per pound	3 per pound
Inert matter (maximum)	2.0 percent	2.0 percent	2.0 percent
Objectionable weed seeds **	none	none	none
Prohibited noxious weed seeds	none	none	none
Germination (minimum)	85.0 percent	85.0 percent	85.0 percent
Sclerotia	5 per pound	5 per pound	5 per pound

\* To include not more than two purple seeds or two white seeds per pound. Other varieties shall not include variants characteristic of the variety.

\*\* Objectionable weed seeds shall include the following: buckhorn plantain, dodder, wild oats, nightflowering catchfly, giant foxtail, hoary alyssum, horsenettle, quackgrass, wild vetch species, wild radish, hedge bindweed (wild morning glory), and nightshade.

**History:** Effective May 1, 1988; amended effective September 1, 2002; January 2, 2006.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42



**CHAPTER 74-03-12**  
**SPECIFIC CROP REQUIREMENTS - SOYBEANS, CHICKPEAS, AND LENTILS**

Section	
74-03-12-01	Land Requirements
74-03-12-02	Field Inspection
74-03-12-03	Field Standards
74-03-12-04	Seed Standards

**74-03-12-01. Land requirements.** In soybeans, chickpeas, and lentils, a crop will not be considered for certification if planted on land which produced the same kind the previous year unless the previous crop was the same variety and was inspected for certification. In soybeans and chickpeas, a crop will not be considered eligible for certification if planted on land which produced any class of dry field bean, green bean, or field peas the preceding year. Soybeans may not follow chickpeas. Chickpeas may not follow soybeans.

**History:** Amended effective May 1, 1986; September 1, 2002; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-12-02. Field inspection.** Field inspection shall be made on soybeans prior to harvest when the crop is approaching maturity preferably after the leaves have dropped or at a time when varietal purity can be determined. Field inspection on chickpeas or lentils shall be made prior to harvest when the crop is in bloom or at such a time as the varietal purity of the crop can be determined.

**History:** Amended effective May 1, 1986; September 1, 2002; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-12-03. Field standards.**

1. **Isolation.** Prior to inspection, a field must be isolated from inseparable crops by a fence row, natural boundary, or by a strip at least five feet [1.52 meters] wide which is either mowed, sprayed, or uncropped.

2. **Specific field standards.**

Factor	Maximum Tolerance		
	Foundation	Registered	Certified
Other varieties *	0.1 percent	0.2 percent	0.2 percent
Corn and sunflower plants bearing seed	none	none	none
Prohibited noxious weeds **	none	none	none
Objectionable weeds ***	none	none	none



- \* Other varieties include plants that can be differentiated from the variety being inspected, but shall not include variants characteristic of the variety.
- \*\* The tolerance for prohibited or objectionable weeds, or both, in the field will be determined by the inspector.
- \* Objectionable weeds include nightshade species and cocklebur.

**History:** Amended effective May 1, 1986; August 1, 1991; September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-12-04. Seed standards.**

Seed count required on soybeans, chickpeas, and lentils.

Factor	Standard for Each Class		
	Foundation	Registered	Certified
Pure seed (minimum)	98.0 percent	98.0 percent	98.0 percent
Total weed seeds (maximum)	none	1 per pound	2 per pound
Other varieties (maximum) *	0.1 percent	0.2 percent	0.2 percent
Other crop seeds (maximum)			
Soybeans and chickpeas	none	1 per 2 pounds	1 per pound
Lentils	1 per 2 pounds	1 per pound	3 per pound
Inert matter	2.0 percent	2.0 percent	2.0 percent
Prohibited noxious weed seeds	none	none	none
Objectionable weed seeds **	none	none	none
Germination and hard seeds	85.0 percent	85.0 percent	85.0 percent

\*\* Other varieties shall not include variants characteristic of the variety.

\* Objectionable weed seeds are dodder, hedge bindweed (wild morning glory), wild oats, buckhorn, hoary alyssum, horsenettle, quackgrass, wild vetch species, giant foxtail, wild radish, nightshade species, and cocklebur.

Chickpea and lentil seed labelers shall have an aschochyta test performed on the harvested seed of each field or lot. The test results shall appear on the label for each seed lot.

**History:** Amended effective May 1, 1986; May 1, 1988; December 18, 1989; September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**CHAPTER 74-03-12.1**  
**SPECIFIC CROP REQUIREMENTS - FIELD PEAS**

Section	
74-03-12.1-01	Land Requirements
74-03-12.1-02	Field Inspection
74-03-12.1-03	Field Standards
74-03-12.1-04	Seed Standards

**74-03-12.1-01. Land requirements.** A crop of field peas will not be considered for certification if planted on land which produced the same kind the previous year unless the previous crop was the same variety and was inspected for certification. A crop will not be considered eligible for certification if planted on land which produced dry field bean, green bean, soybean, or chickpeas the preceding year.

**History:** Effective July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-12.1-02. Field inspection.** Field inspection shall be made prior to harvest when the crop is in bloom or at such a time as the varietal purity of the crop can be determined.

**History:** Effective July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-12.1-03. Field standards.**

- 1. Isolation.** Prior to inspection, a field must be isolated from inseparable crops by a fence row, natural boundary, or by a strip at least five feet [1.52 meters] wide which is either mowed, sprayed, or uncropped.
- 2. Specific field standards.**

Factor	Maximum Tolerance		
	Foundation	Registered	Certified
Other varieties *	0.01 percent	0.01 percent	0.01 percent
Other crops (inseparable)	none	none	none
Prohibited noxious weeds **	none	none	none

\* Other varieties include plants that can be differentiated from the variety being inspected, but shall not include variants characteristic of the variety inspected.

\*\* The tolerance for prohibited or objectionable weeds, or both, in the field will be determined by the inspector.

**History:** Effective July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-12.1-04. Seed standards.**

Seed count and variety identification tests required on field peas.

Factor	Standard for Each Class		
	Foundation	Registered	Certified
Pure seed (minimum)	98.0 percent	98.0 percent	98.0 percent
Total weed seeds (maximum)	none	1 per pound	2 per pound
Other varieties (maximum) *	0.1 percent	0.2 percent	0.2 percent
Other crop seeds (maximum)	none	1 per 2 pounds	1 per pound
Inert matter	2.0 percent	2.0 percent	2.0 percent
Prohibited noxious weed seeds	none	none	none
Objectionable weed seeds **	none	none	none
Germination and hard seeds	85.0 percent	85.0 percent	85.0 percent

\* Other varieties shall not include variants characteristic of the variety.

\*\* Objectionable weed seeds are dodder, hedge bindweed (wild morning glory), wild oats, buckhorn, hoary alyssum, horsenettle, quackgrass, wild vetch species, giant foxtail, wild radish, nightshade species, and cocklebur.

**History:** Effective July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**CHAPTER 74-03-13**  
**SPECIFIC CROP REQUIREMENTS - DRY FIELD BEANS**

Section	
74-03-13-01	Land Requirements
74-03-13-02	Field Inspection
74-03-13-03	Field Standards
74-03-13-04	Seed Standards

**74-03-13-01. Land requirements.** A crop will not be eligible for certification if planted on land that was in any class of dry field beans or green beans the preceding two years or soybeans the preceding year. ~~Poor stands, poor vigor, lack of uniformity, excess weeds, or conditions which are apt to make inspection inaccurate or bring certified seed into disfavor shall be cause for rejection.~~

**History:** Amended effective May 1, 1986; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-13-02. Field inspection.** Two field inspections shall be made. The first when approximately seventy-five percent of the plants are flowering. The second when approximately seventy-five percent of the pods are showing maturity.

**History:** Amended effective May 1, 1986.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

**74-03-13-03. Field standards.**

1. **Isolation.** Prior to inspection, a field must be isolated from inseparable crops by a fence row, natural boundary, or by a strip of at least five feet [1.52 meters] wide which is either mowed, sprayed, or uncropped.

2. **Specific field standards.**

Factor	Foundation	Maximum Tolerance	
		Registered	Certified
Other varieties or classes *	.01 percent	0.05 percent	0.1 percent
Inseparable other crops	none	none	none
Prohibited noxious weeds **	none	none	none
Objectionable weeds ***	none	none	none
Bacterial bean blights +	.01 percent	.05 percent	.1 percent
Anthracnose	none	none	none
Wilt	none	none	none
Common bean mosaic	none	0.5 percent	1.0 percent



Other varieties shall not include variants characteristic of the variety.

\*\* Prohibited noxious weeds include only field bindweed, leafy spurge, yellow starthistle, and Russian knapweed. The tolerance for prohibited or objectionable weeds, or both, will be determined by the inspector.

\*\*\* Objectionable weeds include nightshade species and cocklebur.

+ 1. The grower shall isolate and not ~~harvest~~~~thresh~~ within a one hundred-foot [30.5-meter] radius of all staked (flagged) plants. A grower must leave in place any stakes or flags by plants with blight-infected pods. The inspector may recheck the field to ensure that these blighted areas were not harvested. Failure to leave the rejected area will result in total field being rejected.

2. Areas to be isolated must be mapped out on field inspection report.

~~3. In any case, it is important that blighted areas be clearly defined by flags. These blighted areas must be left unthreshed while the rest of the field is threshed. The inspector may recheck the field to ensure that these blighted areas were indeed left. Failure to leave the rejected area will result in total field being rejected.~~

**History:** Amended effective May 1, 1986; May 1, 1988; December 18, 1989; August 1, 1991; September 1, 2002; January 1, 2005; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

#### 74-03-13-04. Seed standards.

Seed count required on dry field beans.

Factor	Standards for Each Class		
	Foundation	Registered	Certified
Pure seed (minimum)	98.5 percent	98.5 percent	98.5 percent
Inert matter (maximum)*	1.5 percent	1.5 percent	1.5 percent
Total weed seeds (maximum)	none	none	2 per pound
Other varieties or classes	0.01 percent	0.05 percent	0.1 percent
Other crops (maximum)	none	none	1 per 2 pounds
Prohibited noxious weed seeds	none	none	none
Objectionable weed seeds**	none	none	none
Germination (minimum)	no standard	85.0 percent	85.0 percent
Bacterial blight test***	pass	pass	pass
Anthraxnose***	none	none	none

\* Foreign matter other than broken seed may not exceed 0.50 percent.

- \*\* Objectionable weed seeds include those of buckhorn, dodder, hedge bindweed (wild morning glory), hoary alyssum, horsenettle, quackgrass, wild oats, wild vetch species, giant foxtail, wild radish, nightshade species, and cocklebur.
- \*\*\* The grower is responsible for having a bacterial blight test and anthracnose test, performed by a seed department-approved laboratory, on the harvested seed of each field ~~or seed lot~~ of dry field beans. If seed from more than one field is ~~blended or~~ commingled prior to testing, a bacterial blight test and anthracnose test must be performed on each separate seed lot ~~or sublot~~. Lot size is restricted to 2000 bushels.

A seed treatment to reduce surface bacterial contamination of the seed coat is recommended.

**History:** Amended effective May 1, 1986; December 18, 1989; August 1, 1991; September 1, 2002; January 2, 2006; July 1, 2010.

**General Authority:** NDCC 4.1-53-11

**Law Implemented:** NDCC 4.1-53-11, 4.1-53-42

## ARTICLE 74-04

### SEED POTATO CERTIFICATION STANDARDS

Chapter

74-04-01

Seed Potato Certification Standards

#### CHAPTER 74-04-01

### SEED POTATO CERTIFICATION STANDARDS

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Official North Dakota Seed Potato Grades

#### **74-04-01-01. Definitions.** As used in this chapter:

1. "Basic seed" means seed potatoes produced by means of meristem, stem cutting, or other techniques for increase by certified growers.
2. "Certification" is strictly limited to the act of endorsing that the potatoes have met the standards or requirements specified in this chapter for seed potatoes. Certification does not mean or constitute any warranty or representation that the potatoes are of the variety or selection identified on the label, merchantable, disease free, fit for a particular purpose or anything other than that the potato crop was inspected and that at the time of inspection did meet the standards set forth in this chapter.
3. "Damaged by soil" means that the individual potato has more than fifty percent of its surface affected by light caked soil, or more than fifteen percent of its surface badly caked with soil.
4. "Dry land type", as allowed for long varieties only, means not seriously misshapen.
5. "Except for shape", as allowed for long varieties only, means the potatoes may be seriously misshapen.
6. "Experimental cultivar" means a numbered cultivar or cultivar that has not yet been released from a breeding program or has been produced under experimental conditions.

7. "Field year" means the time which is required for the potato plant to complete the growing cycle from planting in the field until maturity.
8. "Foundation seed" means a primary source of a genetically identified variety from which increases are made.
9. "Grade" refers to the tuber quality, condition, and size factors as specified in this chapter.
10. "Inspection" means visual examination or observation of sample plants or tubers.
11. "Label" means an official tag or bulk certificate used to identify certified seed.
12. "Latent diseases" means diseases not detectable by visual inspection.
13. "Lightly caked with soil" means approximately one-eighth of an inch [3.18 millimeters] in depth.
14. "Micropropagation" means the aseptic production of potato plantlets, tubers, or sprouts utilizing meristem culture.
15. "Off type" means potato plants in a field that deviate in one or more characteristics from that which is usual in the variety being grown, or different from the cultivar, variety, strain, or selection stated on the grower application for certification.
16. "Plant Variety Protection Act" means a federal Act passed in 1970 which gives the owner of a novel variety the exclusive right to produce and market that variety.
17. "Prenuclear seed" means plantlet propagation source resulting from the use of aseptic propagation techniques either in the laboratory or controlled environment.
18. "Seed potatoes" means Irish potato tubers to be used for planting.
19. "Seed warehouse" means a building for seed potato storage that is separate in structure and foundation from a commercial potato storage unit.
20. "Selection" means a subgroup of a variety of potato. Commonly used terms include line selection, clonal selection, or strain selection.
21. "Seriously damaged by soil" means a potato having caked soil on more than one-half of the surface or an equivalent amount of soil in excessively thick chunks on a lesser area.



22. "Tolerance" means a permissible allowance for such factors as disease, grade defects, and varietal mixture.
23. "Variety" means a plant group within a single botanical taxon of the lowest-known rank which, without regard to whether the conditions for plant variety protection are met, can be defined by the expression of the characteristics resulting from a given genotype or combination of genotypes, distinguished from any other plant grouping by the expression of at least one characteristic, and considered as a unit with regard to the suitability of the plant grouping for being propagated unchanged. A variety may be represented by transplants, plants, tubers, tissue culture, plantlets, and other matter.
24. "Virus tested" means tested for latent viruses by methods established by the state seed department.
25. "Zero tolerance" means that no amount is permissible. It does not mean that the seed is absolutely free of a disease or disease-causing agent, grade defect, or varietal mixture, but that none was found during inspection.

**History:** Amended effective December 1, 1981; December 1, 1987; September 1, 1997; September 1, 2002; January 1, 2005; January 2, 2006; July 1, 2007.

**General Authority:** NDCC 4-10-03

**Law Implemented:** NDCC 4-10-04

#### **74-04-01-02. General requirements and responsibilities.**

1. Participation and responsibility.
  - a. Participation in this seed potato program is voluntary and may be withdrawn prior to the first inspection.
  - b. Responsibilities.
    - (1) Seed department responsibilities. The inspections, approvals, certification, and production of these rules and regulations will be done by the state seed department.
    - (2) Applicants' responsibilities. The farming, sanitation practices, storing, and packing will be the grower's responsibility. It is the responsibility of the applicant to maintain genetic purity and identity at all stages of certification, including planting, harvesting, storing, and handling. Evidence that any lot of seed has not been protected from contamination that might affect genetic purity or is not properly identified shall be cause for possible rejection of certification.

## 2. General requirements.

- a. Potatoes to be eligible for the program shall have been in a certification program and winter tested for eligibility.
- b. Fields will pass two or more inspections given by visual examination of a representative sample of the plants which method and size of sample will be determined by the state seed department.
- c. Fields passing inspection will be stored in a seed warehouse and sorted to grade at shipping time.
- d. Responsibility for the quality of work done in sorting the potatoes falls upon the grower or a thoroughly qualified agent authorized by the grower.
- e. Requirements for certification are not complete on any lot of eligible potatoes until properly labeled ~~tagged~~ as described in this chapter and an official seed grade inspection certificate has been issued. Official labels will be provided to the grower by the Seed Department in hard copy or electronic form. Official seed grade inspections are compulsory for seed shipped out of state interstate. Grade inspection ~~is~~ will be voluntary for intrastate shipments. For those shipments that are not inspected, or that fail to meet grade standards described in 74-04-01-11, the label must state "no grade".
- f. The responsibility for properly and accurately labeling foundation or certified seed rests with the grower of the seed. The ~~labels~~ official tags or bulk certificates will be issued to the purchaser only on order or authorization from the grower, who must provide to the purchaser a proper and accurate label for each container or load of seed at the time of delivery. These labels ~~tags or bulk certificates~~ are to accompany the potatoes at shipment. Labels must not be applied to stock other than that indicated on the label ~~tags or bulk certificates~~. Bulk shipments, by truck or railcar, when thoroughly disinfected, may be considered the container. ~~Excess labels must be returned to the seed department.~~
- g. Resorting or regrading. If a lot of potatoes fails to meet certified seed grade requirement upon inspection, they are to be reconditioned to meet the requirement or the official labels ~~tags~~ must be removed.
- h. Reconditioning while in transit. In the case of any circumstance making it essential to recondition seed in transit, permission must be obtained from the state seed department.

i. Latent virus testing. Serological testing for latent viruses shall be voluntary and a requirement for only virus-tested seed. Virus-tested seed meeting established tolerances may be indicated on the label tag.

j. Upon the discretion of the state seed department, potato seed lots originating from out of state may be subjected to a laboratory test, by a seed department-approved laboratory, for the detection of seedborne pathogens. Eligibility for recertification of any seed lot so tested must be based on that laboratory test. Additional documentation, including health certificates or summer or winter, or both, field readings, may be required by the seed department prior to acceptance for recertification in this state.

k. Failure to comply with any of the requirements of this chapter may be cause for rejection or cancellation of the lot or the certification of any seed as seed potatoes.

3. No person may disclaim responsibility of the vendor of the seed for the data or information on the label required by law and any such disclaimer of vendor's express or implied warranty is invalid.

4. Violations. The state law specifically states the use of the term "certified" or the term "registered" or any term or terms conveying a meaning substantially equivalent to the meaning of any said terms, either orally or in writing, printing, marking, or otherwise in reference to or in connection with or in advertising or characterizing or labeling seed potatoes or the containers thereof is prohibited, unless such potatoes shall have been duly inspected and certified pursuant to the provisions of the law. Any violation of this law and any person on conviction thereof, shall be fined not more than one hundred dollars and cost for first offense and not more than five hundred dollars and costs of prosecution for subsequent offenses.

**History:** Amended effective December 1, 1981; June 1, 1992; January 2, 2006; July 1, 2007.

**General Authority:** NDCC 4-10-03

**Law Implemented:** NDCC 4-10-04

**74-04-01-08. Field inspection standards.**

1. Each seed potato field will be visually inspected based on sample inspection. The method of inspection and sample size will be at the discretion of the state seed department but a minimum of one hundred plants per acre [.40 hectare] will be inspected. For varieties that do not express readily visible symptoms of a disease, laboratory testing may be done for the pathogen.
  
2. The field tolerance established will be based on visible symptoms in the samples inspected. Diseases which cannot be observed visually may be present.

	First Inspection Tolerances (%) Foundation Class Generation						Certified Class Generation
	0	1	2	3	4	5	0-6
Varietal mixture	0.1	0.2	0.3	0.5	0.5	0.5	0.5
Spindle tuber viroid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe mosaics (PVY)	0.2	0.3	0.4	0.5	0.5	0.5	1.0
Leaf roll (PLRV)	0.2	0.3	0.4	0.5	0.5	0.5	1.0
Total serious virus	0.2	0.3	0.4	0.5	0.5	0.5	1.0
*Bacterial ring rot	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	Second and All Subsequent Inspections Tolerances (%) Foundation Class Generation						Certified Class Generation
	0	1	2	3	4	5	0-6
Varietal mixture	0.1	0.1	0.2	0.3	0.3	0.3	0.3
Spindle tuber viroid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Severe mosaics (PVY)	0.0	0.1	0.2	0.3	0.3	0.3	1.0
Leaf roll (PLRV)	0.0	0.1	0.2	0.3	0.3	0.3	1.0
Total serious virus	0.0	0.1	0.2	0.3	0.3	0.3	1.0
*Bacterial ring rot	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Late blight found during field inspection must be confirmed by symptoms or laboratory diagnosis before being reported on the inspection report.

\* The zero tolerance means that no amount is permissible when inspected. It does not mean that the seed is absolutely free of disease or disease-causing agents, but that none was found during inspection.



Varieties that do not express visible disease symptoms. Potato varieties that do not express visible disease symptoms of a specific pathogen may be subjected to a laboratory test to determine the levels of the pathogen in a seed lot. This testing may occur during the growing season or during the winter test, or both, and may affect eligibility of the seed lot.

Ring rot. Seed fields will be subject to a third (final) field inspection focused primarily on inspection for symptoms related to ring rot. If the field has not received a third inspection, the grower will be required to submit a four hundred tuber sample (minimum) per field for laboratory testing.

Blackleg. Since the blackleg disease may be latent, the inspector will record only the percentage observed during the first and second inspection, and no tolerance will be established. However, any excessive amount can be cause for rejection. Blackleg observations shall be based upon sample plants exhibiting the characteristic black, inky, soft, slimy, decomposed tissue of the stem.

Wilt. Only the percentage noted will be recorded on the first and second inspection, and may include other factors such as maturity, drought, or alkali problems but any excessive amount may be cause for rejection.

There will be zero tolerance for potato wart, corky ring spot, gangrene, golden nematode, root knot nematode, tuber moths, or other such injurious pests that have never been found and confirmed in North Dakota seed potato fields.

Tolerances for potato virus x tested seed. All of the above tolerances will apply, including a requirement that bacterial ring rot must not have been found on the farm during the season. Seed lots with no more than two percent potato virus x infection may be identified as virus x tested on certification labels tags.

### 3. Field conditions.

- a. Insect control must be maintained early and until the vines are killed or matured. Fields suffering excessive insect injury may be disqualified for certification. A grower will notify the inspector of the date of spraying and spray material applied.
- b. Vine killing. If a field has not received final inspection, the grower must obtain approval from the inspector before killing the vines. Furthermore, if the inspector deems it appropriate, a laboratory test may be required or strips of unkilld vines must be left in the seed fields to facilitate final inspections, or both. When strips are left for inspection, the first twelve rows (if a six-row planter was used, eight rows if a four-row planter was used) must not be vine-killed. It will be the responsibility of the seed producer to identify where seed planting began. Approximately ten percent of the seed field acreage must be left in strips.



- c. Any condition such as excess weeds, hail injury, foreign plants, chemical damage, soil conditions, or insect damage that interferes with proper inspection may disqualify the seed for certification.
- d Roguing is permitted and recommended in many cases but must be done before the inspector arrives in the field.
- e Presence of disease or conditions not mentioned heretofore which may impair seed quality shall constitute cause for rejection or additional testing before final certification. Stocks which show an excessive percentage of total serious virus in official postharvest tests shall be considered ineligible for certification tags.

4. Appeal. Inspection of rejected fields will be considered, provided application is made within three days after rejection, the field is in good condition for inspection, and no additional roguing is done prior to reinspection.

5. Bacterial ring rot control.

- a. All seed produced by a farming operation in which bacterial ring rot has been found will be ineligible for recertification the following year.
- b. If the farming operation is found to be infected, all equipment and storages must be cleaned and disinfected.
- c. A farming operation found to be infected on three consecutive years shall be required to purchase all new seed, clean, and disinfect the operation under the supervision of the state seed department before entering any seed for certification.

6. The variety name stated on the application will be the standard for inspection when entering the field. Absent compelling visual evidence to the contrary, the variety or selection declared by the grower will be presumed correct if the documentation provided is valid and the variety description characteristics meet the requirements of the chapter.

7. Inspections, tests, certifications, and other acts are not intended to induce reliance on the seed department's inspections, certifications, or any other action or inaction for any purpose relating to quantity or quality of the seed or crop produced, fitness for purpose, merchantability, absence of disease, or variety or selection identification. Certification means only that the potatoes were randomly inspected, and at the time of the inspection the field or seed lot met the rules of the department.

**History:** Effective December 1, 1981; amended effective June 1, 1992; September 1, 1997; July 16, 2001; September 1, 2002; January 2, 2006; July 1, 2007; July 1, 2010.

**General Authority:** NDCC 4-10-03

**Law Implemented:** NDCC 4-10-04

**74-04-01-09. Postharvest testing program.**

1. All foundation and basic seed potato fields must be randomly sampled and tested if the grower intends to plant the same seed lot or sell to growers who intend to enter the lot for certification the following year. Only seed lots with three-tenths of one percent total serious virus or less during field inspections are eligible for postharvest testing.
2. The results will be based on visible inspection of the plants for virus or viruslike symptoms from the sample the grower submitted. However, laboratory testing may be used on varieties that have slight or latent symptoms.
3. Other factors such as vigor, other diseases, and any factor that might impair seed quality will be considered in the postharvest testing program.
4. Information concerning sample size and time to submit samples will be available from the state seed department.
5. Lots failing the postharvest test will be ineligible for planting in the certification program.
6. In the event of frost or other serious malfunctions of the postharvest grow-out test, eligibility of a seed lot will be based on the current field readings or a laboratory test at the discretion of the state seed department.
7. Seed lots showing excessive amounts of virus in the postharvest test may be disqualified for ~~tags~~ or final certification. The level at which to disqualify the lot will be established by the seed commissioner.

**History:** Effective December 1, 1981; amended effective December 1, 1987; June 1, 1992; September 1, 1997; January 2, 2006.

**General Authority:** NDCC 4-10-03

**Law Implemented:** NDCC 4-10-04

#### **74-04-01-10. Storage and packaging requirements.**

1. A storage to be eligible must have been cleaned and disinfected prior to harvest. Storages not previously used for certified seed must be inspected by the state seed department.
2. Seed potatoes to be eligible for final certification tags must be stored in a warehouse containing only seed potatoes which have been field-inspected. Such warehouses may contain field-inspected stocks rejected for seed certification for causes other than such diseases as ring rot.
3. Equipment for handling, sorting, or grading can be used only on certified stock, but also must be cleaned and disinfected.
4. Containers.
  - a. Graded stocks must be placed in new sacks, ~~or in~~ clean crates, totes or bulk containers which are labeled ~~tagged or marked~~ in an approved manner to indicate the lot contains certified seed potatoes.

- b. Brands or markings must feature "North Dakota" as the production area.
  - c. No used bags may be brought into the farming operation.
  - d. It is highly recommended that all containers be disinfected for the grower's own protection.
5. Out-of-state storage. Growers, upon special application, may be permitted final certification on eligible stocks in approved nearby storages outside the state.
  6. Bin inspection. Certified storages may be checked by an authorized inspector during the storage season.
  7. Yield and storage reports. Before labels tags will be issued for a lot of potatoes, a report will be given to the state seed department stating yield of each field entered for certification and the location of the storages.
  8. Transfers of seed potatoes to other parties. A lot of seed potatoes eligible for final certification may be transferred to another party along with labels tags provided authorization is given by the state seed department and the grower.
  9. Each bin containing certified seed potatoes must be plainly labeled for certification with the grower's name and address, hundredweight [45.36 kilograms] or bushels [35.24 liters], variety, and field identification.
  10. All basic and foundation seed lots and other seed lots intended for recertification must be stored in identifiable, clearly separated bins. Bins containing two or more seed lots of a variety without a divider or some other method of separation will be downgraded to the appropriate generation or disease tolerance level.

**History:** Effective December 1, 1981; amended effective December 1, 1987; June 1, 1992; September 1, 1997.

**General Authority:** NDCC 4-10-03

**Law Implemented:** NDCC 4-10-04

**74-04-01-11. Official North Dakota seed potato grades.** Final grade determination shall be made based on physical defects, size, shape, and cleanliness. The potatoes will be packed in new burlap sacks, totes or clean, disinfected containers identified by labels ~~official tags attached~~ as to variety, crop year, and grower and accompanied by an official state or federal grade certificate. United States department of agriculture revised standards, effective March 2012~~0~~, for seed potatoes shall be the official guide for applying and interpreting all definitions and terms used in North Dakota seed potato grades. Grade inspection will be made on a sample basis.

1. First grade blue tag seed potatoes shall consist of unwashed potatoes of one variety which must meet the following requirements:
  - a. Shape. Fairly well-shaped except for long varieties.
    - (1) Dryland type (see definitions section 74-04-01-01).
    - (2) Except for shape (see definitions section 74-04-01-01).
  - b. Free from:
    - (1) Freezing injury.
    - (2) Blackheart.
    - (3) Soft rot and wet breakdown.
    - (4) Late blight tuber rot.
    - (5) Bacterial ring rot.
    - (6) Nematode or tuber moth injury.
    - (7) Fresh cuts or fresh broken-off second growth.
  - c. Free from serious damage caused by:
    - (1) Hollow heart.
    - (2) Vascular ring discoloration.
    - (3) Wireworm.
    - (4) Growth cracks.
  - d. Free from damage by soil and other causes (see definitions section 74-04-01-01 and classification of defects, section 6, tables I and II of section 74-04-01-11).
  - e. Size:
    - (1) Minimum size, unless otherwise specified, must be one and one-half inches [38.1 millimeters] in diameter.
    - (2) Maximum size may not exceed twelve ounces [340.2 grams] for round-shaped or intermediate-shaped varieties and fourteen ounces [396.9 grams] for long varieties.



(3) For all varieties, size B must be from one and one-half inches [38.1 millimeters] to not more than two and one-quarter inches [57.1 millimeters] in diameter.

f. Tolerances. In order to allow for variations incident to proper grading and handling in the foregoing grade, the following tolerances, by weight, are provided as specified:

(1) For defects:

- (a) Ten percent for potatoes in any lot which are seriously damaged by hollow heart.
- (b) Ten percent for potatoes in any lot which are damaged by soil. (see definitions section 74-04-01-01).
- (c) Five percent for potatoes in any lot which are seriously damaged by vascular ring discoloration.
- (d) Potatoes affected by silver scurf are not grade factors.
- (e) Not more than ten percent of the potatoes seriously damaged by wireworm.
- (f) Eleven percent for potatoes which fail to meet the remaining requirements of grade, including therein not more than six percent for external defects and not more than five percent for internal defects; provided that included in these tolerances not more than the following percentages shall be allowed for the defects listed:

	Percent
Bacterial ring rot	0.00
Late blight tuber rot	1.00
Damage by dry-type or moist-type fusarium tuber rot	2.00
Nematode or tuber moth injury	0.00
Frozen, soft rot, or wet breakdown	0.50
Varietal mixture	0.50

(2) For off-size:

- (a) Undersize. Five percent for potatoes in any lot which fail to meet the required or specified minimum size.
- (b) Oversize. Ten percent for potatoes in any lot which fail to meet the required or specified maximum size.

2. Second grade yellow tag potatoes shall consist of unwashed potatoes that meet the requirements for blue tag grade except for defects caused by hollow heart, wireworm, internal discoloration, firmness, sprouts, and sunken, flattened, or depressed areas with or without underlying flesh discolored, and are not seriously damaged by soil and for increase in maximum size, and for increased tolerance for defects listed below:

Tolerances.

a.

For defects:

- (1) Twenty percent for potatoes seriously damaged by hollow heart.
- (2) Firmness, sprouts, wireworm, internal discoloration, sunken, flattened, or depressed areas with or without underlying flesh discolored and growth cracks are not grade factors.
- (3) Twenty percent for potatoes which fail to meet the remaining requirements of the grade; provided, that included in this amount not more than six percent shall be seriously damaged and included therein not more than one-half of one percent shall be allowed for potatoes which are frozen or affected by soft rot or wet breakdown.

b. Size. Maximum size, unless otherwise specified may not exceed fourteen ounces [396.90 grams] for round-shaped or intermediate-shaped varieties and sixteen ounces [453.60 grams] for long varieties.

3. White tag. The white tag North Dakota-certified seed potato grade shall consist of certified seed potatoes of one variety that are graded according to agreement between the seller and the purchaser as to size and defects, except that not more than one-half percent of soft rot, frozen, or wet breakdown and two percent dry rot, of which not more than one percent late blight tuber rot is allowed. Import requirements may be considered an agreement. The official label must be used and marked as white tag.

4. The blue tag, yellow tag or white tag grade designation may not be used on the official label unless the seed has been grade inspected. Non-inspected seed must be labeled "no grade".

5 4. Application of tolerances. Individual samples may not have more than double the tolerances specified, except that at least one defective and one off-size potato may be permitted in any sample; provided that en route or at destination, one-tenth of the samples may contain three times the tolerance permitted for potatoes which are frozen or affected by soft rot or wet breakdown; and provided, further, that the averages for the entire lot are within the tolerances specified for the grade.

6 5. Samples for grade and size determination. Individual samples shall consist of at least twenty pounds [9.06 kilograms]. The number of such individual samples drawn for grade and size determination will vary with the size of the lot.

7 6. Classification of defects.

a.

Brown discoloration following skinning, dried stems, flattened depressed areas (showing no underlying flesh discoloration), greening, skin checks, and sunburn do not affect seed quality and may not be scored against the grade.

b. Table I - External defects.

Defect	DAMAGE	
	When materially detracting from the appearance of the potato	When removal causes a loss of OR more than 5 percent of the total weight of the potato
Air cracks		x
Bruises		x
Cuts and broken-off second growth (healed)	x	x
Elephant hide (scaling)	x	
Enlarged, discolored, or sunken lenticels	x	
Folded ends	x	
Second growth	x	
Shriveling	When more than moderately shriveled, spongy, or flabby.	
Sprouts	When more than 20 percent of the potatoes in any lot have any sprout more than 1 inch [25.4 millimeters] in length.	
Surface cracking	x	x
Flea beetle injury	x	x
Grub damage	x	x
Rodent and/or bird damage	x	x
Wireworm or grass damage	Any hole more than 3/4 inch [19.1 millimeters] long or when the aggregate length of all holes is more than 1 1/4 inches [31.8 millimeters] <sup>1</sup> .	
Dry-type or moist-type fusarium rot		x
Rhizoctonia	x	
Scab, pitted	x	x
Scab, russet	When affecting more than 1/3 of the surface.	

Scab, all surface	When affecting more than 5 percent of the surface.	
Growth cracks	When seriously detracting from the appearance.	
Pressure bruises and sunken areas with underlying flesh discolored		When removal causes a loss of more than 10 percent of the total weight.

<sup>1</sup> Definitions of damage and serious damage are based on potatoes that are two and one-half inches [63.5 millimeters] in diameter or six ounces [170.10 grams] in weight. Correspondingly lesser or greater areas are permitted on smaller or larger potatoes.

C. Table II - Internal defects.

Defect	DAMAGE	
	When materially detracting from the appearance of the potato	OR When removal causes a loss of more than 5 percent of the total weight of the potato
Ingrown sprouts		x
Internal discoloration occurring interior to the vascular ring (such as, internal brown spot, mahogany browning, and heat necrosis).	When more than the equivalent of three scattered light brown spots 1/8 inch [3.2 millimeters] in diameter <sup>1</sup> .	
All other internal discoloration, excluding discoloration conned to the vascular ring.		x
Defect	SERIOUS DAMAGE	
	When seriously detracting from the appearance of the potato	OR When removal causes a loss of more than 10 percent of the total weight of the potato

Internal discoloration coned to the vascular ring.		x
Hollow heart or hollow heart with discoloration.	When affected area exceeds that of a circle 3/4 inch [19.1 millimeters] in diameter <sup>1</sup> .	

<sup>1</sup> Definitions of damage and serious damage are based on potatoes that are two and one-half inches [63.5 millimeters] in diameter or six ounces [170.10 grams] in weight. Correspondingly lesser or greater areas are permitted on smaller or larger potatoes.

§ 7. Classification and serologically tested stocks.

- a. Foundation seed classification may be indicated on the label tag provided the lot meets foundation standards.
- b. Serologically tested stocks for potato virus x, potato virus s, potato virus y, potato virus a, or potato virus m may be so indicated on the label tag if within the specified tolerance during the current growing season.

§ 8. Grade inspections are not intended to induce growers' or producers' reliance regarding the presence or absence of disease, the identity of the variety or selection, quantity, or quality of the seed or crop produced or the fitness of the seed.

Blue tag, and yellow tag, and white tag shipments must be inspected and meet respective grade requirements.

**History:** Effective December 1, 1981; amended effective June 1, 1985; December 1, 1987; June 1, 1992; September 1, 1997; July 16, 2001; September 1, 2002; January 2, 2006; July 1, 2007; July 1, 2010.

**General Authority:** NDCC 4-10-03

**Law Implemented:** NDCC 4-10-04