

**ARTICLE 74-01  
GENERAL ADMINISTRATION**

Chapter

74-01-01            Organization of Commission

**CHAPTER 74-01-01  
ORGANIZATION OF COMMISSION**

Section

74-01-01-01        Organization of Seed Commission

**74-01-01-01. Organization of seed commission.**

1. History. The state seed department was established by the 1931 legislative assembly. The main office was designated to be at North Dakota state university. Branch offices are maintained in Grafton to more efficiently serve the potato industry with official grade inspection services. The department is governed by the state seed commission.
2. Commission. The state seed commission consists of a representative of the North Dakota crop improvement and seed association, a representative of the North Dakota certified seed potato growers association, a representative of the North Dakota dry edible bean seed growers association, a representative of the North Dakota agricultural association, an elected member of the North Dakota potato council selected by the North Dakota potato council, a representative of the ~~northern plains~~ northland potato growers association who is a North Dakota resident, a representative of the North Dakota grain dealers association who also operates a state-approved seed conditioning plant, selected by the board of directors of the North Dakota grain dealers association, and the agriculture commissioner or the commissioner's designee, who shall serve as chairman. The director of the experiment station, or the director's designee, of the college of agriculture of the North Dakota state university of agriculture and applied science is a voting member of the commission.
3. Functions. The seed department is designated as the official seed certification agency of the state. The seed department enforces state seed laws, inspects and analyzes seed offered for sale, provides a public laboratory service for examining and analyzing seed and commercially produced crops for planting and consumption purposes, maintains a seed certification system for field seeds and potatoes, inspects and grades potatoes and other produce, regulates wholesale potato dealers, and establishes grade standards and grades commodities not in the federal grain standards. Lists of field-inspected seeds published by the seed department, specifically bulletin nos. 92 and 95, are produced for the express purpose of informing producers of the availability of certified seed grown in North Dakota, and are not intended to induce reliance on the part of producers on the department's inspection, certifications, or any other act or undertaking relating to quantity or quality of the seed or crop produced, fitness, presence or absence of disease, or identity of variety or selection.
4. For the purposes of this section, North Dakota Century Code chapter 4.1-53 and North Dakota Administrative Code article 74-03 generally apply to the certification and conditioning of field seeds; North Dakota Century Code chapter 4.1-53 and North Dakota Administrative Code article 74-02 to the regulation of field crops and seeds; North Dakota Century Code chapter ~~4-10~~ 4.1-55 and North Dakota Administrative Code article 74-04 to the certification and inspection of potatoes; North Dakota Century Code chapter 4.1-57 and North Dakota Administrative Code article 74-05 to the regulation of wholesale potato dealers; and North Dakota Century Code chapter 4.1-53 and North Dakota Administrative Code article 74-06 to the inspection and grading of crops not in federal grain standards.

5. Seed commissioner. The commission appoints the seed department manager, who is the state seed commissioner.
6. Inquiries. Inquiries regarding the seed department may be addressed to the commissioner:

State Seed Commissioner  
State Seed Department  
1313 18th Street North  
Fargo, ND 58105

**History:** Amended effective December 1, 1981; November 1, 1985; October 1, 1989; September 1, 2002; January 2, 2006; July 1, 2010; October 1, 2024.

**General Authority:** NDCC 4.1-52-10, 28-32-02.1

**Law Implemented:** NDCC 4.1-52-07, 4.1-53-42, 4.1-53-59

**ARTICLE 74-02  
SEED**

Chapter

74-02-01	Seed Representation and Labeling
74-02-02	Seed Sale [Repealed]

**CHAPTER 74-02-01  
SEED REPRESENTATION AND LABELING**

Section

74-02-01-01	Seed Testing Fees - Sample Size [Repealed]
74-02-01-02	Hermetically Sealed Containers
74-02-01-03	Flower Seed Labeling Requirements
74-02-01-04	Sale and Exchange of Seed
74-02-01-05	Labeling of Registered and Certified Seed Brought Into North Dakota [Repealed]
74-02-01-06	Clarification of Pure Live Seed and How It Pertains to Germination
74-02-01-07	Rules for Affidavit of Analysis for Bagged Agricultural Seed [Repealed]

**74-02-01-03. Flower seed labeling requirements.**

1. Labeling kind and variety or type and performance characteristics of flower seeds. The requirements of ~~subsection 2 of North Dakota Century Code section 4-09-11.1 chapter 4.1-53-29~~ specifying that flower seeds shall be labeled with the name of the kind and variety or a statement of type and performance characteristics as prescribed in the rules and regulations promulgated under North Dakota Century Code chapter ~~4-09 4.1-53-29~~ shall be met as follows:
  - a. For the seeds of plants grown primarily for their blooms:
    - (1) If the seeds are of a single named variety, the kind and variety shall be stated, for example, "marigold, butterball".
    - (2) If the seeds are of a single type and color for which there is no specific variety name, the type of plant (if significant), and the type and color of bloom shall be indicated, for example, "scabiosa, tall, large, flowered, double, pink".
    - (3) If the seeds consist of an assortment or mixture of colors or varieties of a single kind, the kind name, the type of plant (if significant), and the type or types of bloom shall be indicated. In addition, it shall be clearly indicated that the seed is mixed or assorted. An example of labeling such a mixture or assortment is "marigold, dwarf double French, mixed colors".
    - (4) If the seeds consist of an assortment or mixture of kinds, it shall be clearly indicated that the seed is assorted or mixed and the specific use of the assortment or mixture shall be indicated, for example, "cut flower mixture" or "rock garden mixture". Such statements as "wild flower mixture", "general purpose mixture", "wonder mixture", or any other statement which fails to indicate the specific use of the seed shall not be considered as meeting the requirements of this paragraph unless the specific use of the mixture is also stated.
  - b. For seeds of plants grown for ornamental purposes other than their blooms, the kind and variety shall be stated, or the kind shall be stated together with a descriptive statement concerning the ornamental part of the plant, for example, "ornamental gourds, small fruited, mixed".

2. Kinds of flower seeds subject to germination labeling requirements and germination standards for flower seeds. The kinds of flower seeds listed below are those for which standard testing procedures have been prescribed and which are therefore required to be labeled in accordance with the germination labeling provisions of ~~subsection 2 of North Dakota Century Code section 4-09-11.1~~ chapter 4.1-53-29. The percentage listed opposite each kind is the germination standard for that kind. For the kinds marked with an asterisk, this percentage is the total of percentage germination and percentage hard seed. For other kinds, it is the percentage germination.

**General Authority:** NDCC 4.1-52-10

**Law Implemented:** NDCC 4.1-53-28, 4.1 53-29, 4.1-53-30

#### **74-02-01-04. Sale and exchange of seed.**

~~The definition of terms used in this section and in North Dakota Century Code section 4-09-15 shall be defined in this section and in North Dakota Century Code section 4-09-01.~~

The exemptions found in North Dakota Century Code sections 4.1-53-61 and 4.1-53-57 do not apply to a farmer who sells only the farmer's own seed which has been publicly advertised for sale. For the purposes of this section, "publicly advertised for sale" includes advertising in newspapers, periodicals, pamphlets, or posters, by radio or television, or in any other media. For the purposes of this section and North Dakota Century Code sections 4.1-53-61 and 4.1-53-57, "sells only the farmer's own seed" includes any disposition of seed or transaction whereby the farmer sells, exchanges, or trades the farmer's own seed. The exemptions found in North Dakota Century Code sections 4.1-53-61 and 4.1-53-57 also do not apply to any farmer who is engaged in the seed business. For the purposes of this section, "engaged in the seed business" includes the sale of any seed by a person which seed was not grown on that person's own farm, publicly advertising for sale any seed, or making use of any third party as an agent or broker to bring a buyer and seller of seed together for purposes of sale, exchange, or trade.

The exemptions found in North Dakota Century Code sections 4.1-53-61 and 4.1-53-57 do not apply to seed for which a certificate of plant variety protection has been applied for or issued, except regarding the replanting of seed on the farmer's own farm. In the absence of contractual obligations between the variety owner and a first purchaser, a farmer may replant seed varieties protected by plant

variety protection for an indeterminate length of time provided the exemptions listed in North Dakota Century Code sections 4.1-53-61 and 4.1-53-57 are complied with in full.

**History:** Amended effective May 1, 1988; January 2, 2006; October 1, 2024.

**General Authority:** NDCC 4.1-52-10

**Law Implemented:** NDCC 4.1-53-57(4), 4.1-53-61

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

### Section

74-03-01-01	Seed Certification in North Dakota
74-03-01-02	Purpose of Seed Certification
74-03-01-03	Eligibility Requirement for Certification of Crop Varieties
74-03-01-04	Classes (Generation) and Sources of Certified Seed
74-03-01-05	Eligibility of Growers
74-03-01-06	Seed Eligibility
74-03-01-07	Field Eligibility and Requirements
74-03-01-08	Field Management and Isolation
74-03-01-09	Field Inspection
74-03-01-10	Fees
74-03-01-11	Seed Conditioning, Sampling, and Laboratory Inspection
74-03-01-12	Labeling
74-03-01-13	Preissued Certification Tags
74-03-01-14	Carryover Seed
74-03-01-14.1	Applicant's Responsibility
74-03-01-15	Misuse of Certification Privileges
74-03-01-16	Approved Conditioners
74-03-01-17	Interagency Certification
74-03-01-18	Exclusion of Warranty

### **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 hemp must be received by June first to avoid late penalty.~~ Applications for millet and buckwheat must be received by July fifteenth to avoid late penalty. Applications for soybeans requiring only a single inspection (preharvest) must be received by August first to avoid 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 or equivalent 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, musk thistle, spotted knapweed, yellow starthistle, and Palmer amaranth.
- 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 will be presumed correct if the documentation provided is valid.

**History:** Amended effective May 1, 1986; May 1, 1988; December 18, 1989; September 1, 2002; January 2, 2006; July 1, 2007; July 1, 2010; October 1, 2012; July 1, 2018; July 1, 2020; July 1, 2022; October 1, 2024.

**General Authority:** NDCC 4.1-52-10

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

**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 recordkeeping 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 use of two tags, the official certification tag and a separate analysis tag, on foundation, registered, or certified seed is optional.
  - c. 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. Certification tags are not valid when they are transferred in any manner other than attached to the eligible seed bag.
5. Bulk seed. 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.
  - 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.
  - d. 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.
  - e. 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. A maximum of two physical transfers are permitted after final certification.
- h. It is the seller's responsibility to:
  - (1) Handle seed in a manner to prevent mixtures and contamination.
  - (2) Supply seed that is representative of the seed tested and approved for certification.
  - (3) Ensure all bins, augers, conveyors, and other equipment are adequately cleaned before handling certified seed.
  - (4) Determine that the vehicle receiving bulk certified seed has been cleaned prior to receiving the seed. If it is not clean, this is to be noted on the bill of sale or transfer certificate.
  - (5) Provide to the purchaser a bulk certificate for each load of bulk certified seed at the time of delivery.
  - (6) Ensure that the conditioned lot is not moved from the premises of the approved conditioning facility or labeler's facility until the sample has been tested by the state seed department laboratory and shows that the lot is eligible for certification.
- i. It is the buyer's responsibility to:
  - (1) Obtain a bulk certificate from the seller for each load of bulk 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.

**History:** Amended effective May 1, 1986; September 1, 2002; January 2, 2006; July 1, 2007; July 1, 2010; October 1, 2012; July 1, 2020; October 1, 2024.

**General Authority:** NDCC 4.1-52-10

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



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

- 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, October 1, 2024.

**General Authority:** NDCC 4.1-52-10

**Law Implemented:** NDCC 4.1-52-10, 4.1-53-42

**ARTICLE 74-04**  
**SEED POTATO CERTIFICATION STANDARDS**

74-04-01 Seed Potato Certification Standards

**CHAPTER 74-04-01**  
**SEED POTATO CERTIFICATION STANDARDS**

Section

74-04-01-01	Definitions
74-04-01-02	General Requirements and Responsibilities
74-04-01-03	Exclusion of Warranty and Limitation of Remedy
74-04-01-04	Application Fees and Restrictions
74-04-01-05	Seed Potato Farm Requirements
74-04-01-06	Seed Eligibility
74-04-01-07	Seed Classification and Limited Generation
74-04-01-08	Field Inspection Standards
74-04-01-09	Postharvest Testing Program
74-04-01-10	Storage and Packaging Requirements
74-04-01-11	Official North Dakota Seed Potato Grades

**74-04-01-04. Application fees and restrictions.**

1. Application for field inspection must be received in the state seed department, 1313 18<sup>th</sup> St N, PO Box 5257, Fargo, North Dakota, not later than June fifteenth. There is a ~~three~~ five dollar per acre [.40 hectare] cash penalty for later applications.
2. At least one-half the fees and all due accounts must accompany the applications.
3. Applications are subject to cancellation in the case of crop failure or other valid reason and the application fee, minus a cancellation fee will be returned if the request reaches the state seed department before the inspector arrives in the general locality of the field. However, in such a case, the crop must be plowed under or destroyed so as not to create a disease hazard.
4. Separate application forms are required for latent virus testing.
5. Loss by drown outs, if over twenty-five percent of the field, will be allowed after the first inspection only. No adjustments will be made thereafter.
6. Fee schedules for field inspection, grade inspection, latent virus testing, cancellation fees, and late penalties are subject to change and available at the state seed department.
7. Prompt payment of all fees will be required at all times.
8. Additional testing costs such as laboratory tests will be assessed to the grower.

**History:** Amended effective December 1, 1981; December 1, 1987; June 1, 1992; September 1, 1997; September 1, 2002; July 1, 2018; April 1, 2020; October 1, 2024.

**General Authority:** NDCC 28-32 **Law Implemented:** NDCC 4.1-55-02

**74-04-01-05. Seed potato farm requirements.**

1. All potato fields on the farm or in the farming operation must be eligible and entered for certification. A farming operation means any combination of operators in a farm partnership, and all potato fields in the farming operation whether actually grown by the applicant or under growing agreements, with separate equipment and storages being the primary consideration to the seed department in determining the eligibility of applicants as seed farms. Separate legal entities, if determined by the seed commissioner to be associated or affiliated with a commercial potato farming operation, will not be deemed eligible for entry into the certification program.

2. All equipment and storages in the potato operation must be used only on the acreage [hectarage] entered for certification.
3. Parts of fields will not be accepted or certified without the prior approval of the commissioner.
4. Boundaries of certified seed potato fields must be clearly defined. Adequate separation from uncertified fields must be maintained and are the responsibility of the certified seed potato grower. The definition of adequate separation is at the discretion of the state seed department or its representative. Field separation of a certified field from an uncertified field must be established prior to the second inspection.
5. Seed potatoes will not be planted on ground that was cropped to potatoes the previous year, unless the ground is fumigated.
6. Strips or markers are required between seed lots and varieties.
7. Equipment and storages must be thoroughly cleaned and disinfected at least once annually.
8. All cull piles in the farming operation must be properly destroyed.
9. The adequacy of seed farms in meeting all criteria for eligibility is determined by onsite inspection by and at the discretion of seed department personnel.

**History:** Amended effective December 1, 1981; June 1, 1992; September 1, 1997; September 1, 2002; January 2, 2006; October 1, 2024.

**General Authority:** NDCC 28-32

**Law Implemented:** NDCC 4.1-55-02

#### **74-04-01-07. Seed classification and limited generation.**

1. All seed potatoes must be limited to seven years of reproduction in the field. Seed lots may be reproduced beyond this limit with prior approval of the state seed department providing the seed lot has been winter tested and eligible for recertification.
2. Prenuclear seed stocks must originate from tissue-culture derived plantlets, minitubers, microtubers, or pathogen-tested stem cuttings. Experimental breeding selections shall originate from pathogen-tested material. The first year of reproduction of these stocks will be regarded as nuclear seed stock. Nuclear seed is the progeny of prenuclear seed. Field year one (FY1) is the progeny of nuclear seed, field year two (FY2) is the progeny of FY1 seed, field year 3 (FY3) is the progeny of FY2 seed, field year 4 (FY4) is the progeny of FY3 seed, field year 5 (FY5) is the progeny of FY4 seed, field year 6 (FY6), is the progeny of FY5 seed, and the certified class is the progeny of FY6 seed. The certified designation will be granted to lots meeting the minimum standards outlined in section 74-04-01-08 and by approval of the commissioner.
3. Prenuclear seed stocks intended to be grown as nuclear seed potatoes must be laboratory-tested, be demonstrated to be free of the following pathogens, and meet the following standards:
  - a. *Clavibacter michiganensis* subsp. *sepedonicus* (ring rot).
  - b. *Erwinia carotovora* (blackleg and soft rot).
  - c. Potato virus A.
  - d. Potato virus M.
  - e. Potato virus X.
  - f. Potato virus Y.

- g. Potato leafroll virus.
  - h. Potato spindle tuber viroid.
  - i. Potato mop top virus.
  - j. All micropropagation production must be approved by a certification agency.
  - k. Good records must be maintained on all tests and submitted with the application for field inspection.
  - l. A minimum of one percent of the plantlets must have been tested for the above pathogens using the most reliable testing techniques.
4. Basic seed must originate from sources described above and developed in seed plots and have met specific field inspection and winter test standards established by the state seed department. Seed stocks will be grown a limited number of field years.

Experimental cultivars under evaluation by the state seed department in cooperation with universities or industry will meet program requirements of and will be maintained under guidelines and standards established by the state seed department. Seed stocks will be grown a limited number of field years.

- 5. Foundation class seed must be seed meeting standards for recertification.
  - a. Foundation seed will be produced on farms found to be free of bacterial ring rot for three years. All seed stocks must be replaced on a farm in which bacterial ring rot has been found.
  - b. Excessive blackleg symptoms will be cause for rejection as foundation stock.
- 6. The certified class must meet the minimum field tolerances described in section 74-04-01-08. The classification serves as a quality standard for commercial planting purposes only and must meet all the requirements and responsibilities of this chapter. The certified class designation may be applied to any field year under the criteria set forth in section 74-04-01-07.8.
- 7. Field year designations increase with years of field reproduction from the original seed source. Field year ~~six (FY6)~~ five (FY5) will be the final generation of seed eligible for recertification. The certified seed class is not eligible for recertification. If seed availability is low for a specific potato variety, seed lots with more advanced generation numbers may be eligible for recertification providing the seed lot has passed a winter test and prior approval of the state seed department has been obtained.
- 8. Except for varietal mixtures, may be placed in the certified class and sold by their field year designation as certified seed providing they meet the specifications for that class. Disease tolerances for each field year of seed are outlined in the section on field inspection standards.

**History:** Effective December 1, 1981; amended effective December 1, 1987; June 1, 1992; September 1, 1997; July 16, 2001; September 1, 2002; January 1, 2005; January 2, 2006; July 1, 2010; April 1, 2020; October 1, 2024.

**General Authority:** NDCC 28-32

**Law Implemented:** NDCC 4.1-55-02

#### **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 Field Year						Certified Class Field Year
	1	2	3	4	5	6	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	± 2.0
Leaf roll (PLRV)	0.2	0.3	0.4	0.5	0.5	0.5	± 2.0
Total serious virus	0.2	0.3	0.4	0.5	0.5	0.5	± 2.0
*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 Field Year						Certified Class Field year
	1	2	3	4	5	6	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	± 2.0
Leaf roll (PLRV)	0.0	0.1	0.2	0.3	0.3	0.3	± 2.0
Total serious virus	0.0	0.1	0.2	0.3	0.3	0.3	± 2.0
*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.

### 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.

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; October 1, 2012; April 1, 2020; October 1, 2024.

**General Authority:** NDCC 28-32

**Law Implemented:** NDCC 4.1-55-02

#### **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 visual 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 may 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

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; October 1, 2012; October 1, 2024.

**General Authority:** NDCC 28-32

**Law Implemented:** NDCC 4.1-55-02

#### **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 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, clean crates, totes, or bulk containers which are labeled 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 will be issued for a lot of potatoes, a~~ 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 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; October 1, 2012;

October 1, 2024. **General Authority:**

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