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INTRODUCTION TO THE NEBRASKA CROP IMPROVEMENT ASSOCIATION

VISION STATEMENT

The Nebraska Crop Improvement Association is dedicated to enhancing the economic viability and well-being of the People in Nebraska and the world through value-added products and processes.

We will achieve this goal through an organizational structure which attracts the finest people, fully develops, and challenges individual talents, encourages industry-wide collaboration to advance agriculture, and maintains the Association's historic principles of integrity.

The Nebraska Crop Improvement Association (NCIA) is a non-profit educational and service organization which was founded in 1902. It is the designated agency of the University of Nebraska that is authorized as the seed certifying agency for Nebraska. The Association policies are administered by a ten-member Board of Directors. Seven Directors are elected from the active membership. The remaining three Directors are Ex-Officio representing the Nebraska Seed Trade Association, Department of Agronomy and Horticulture, and the Institute of Agriculture and Natural Resources. The officers are elected annually by the Board. The Association headquarters are located at the University of Nebraska-Lincoln.

Certified seed was first produced in Nebraska during 1920. However, it was not until 1931 that seed approved for certification by Nebraska Crop Growers Association was given official status by state seed law. That year, the Nebraska House of Representatives passed H.R. 67 which provided for certification of seeds and plant parts intended for propagation or sale in Nebraska and specified that the certification program would be on a self-supporting basis. The Nebraska Crop Growers Association was designated as the official agency for certification of seed crops with the exception of seed potatoes. The NCGC's name was changed to the Nebraska Crop Improvement Association in 1942.

Certification of seed quality in Nebraska is based on both genetic and mechanical standards. All Nebraska certified seed must meet minimum standards for genetic purity, germination, and mechanical purity. A full-service seed laboratory was established within the Association in 1943. Currently, the Association is the only Association of Official Seed Certifying Agencies member whose seed laboratory component is recognized by the Association of Official Seed Analysts as an official member.

The Nebraska Crop Improvement and its members have a strong tradition of service. However, the Association is also receptive to change to meet the needs of its members - which enables response to meet customer needs while continuing to improve the quality and diversity of seed planted and services provided.

For further information about the Nebraska Seed Certification program or other NCIA programs and activities, contact:

Nebraska Crop Improvement Association P.O. Box 830911
Lincoln, NE 68583-0911

Telephone Number: 402-472-1444 or 888-346-6242
FAX Number: 402-472-8652

GENERAL SEED CERTIFICATION STANDARDS

1. The Certifying Organization

A. The Nebraska Crop Improvement Association (NCIA) is a non-profit corporation designated as the official agency for certifying quality of seeds and/or vegetative plant materials of all crops except potatoes. It is designated by the Vice Chancellor, Institute of Agriculture and Natural Resources (IANR), University of Nebraska-Lincoln as enabled under the State of Nebraska revised statutes §§81-2,149 to 81-2,154. It is not a marketing agency and makes no representations or warranties of any kind, expressed or implied, which extends beyond the certification that the seeds or vegetative material inspected met the regulations of this agency.

B. Scope of Certification – Certification is limited to seeds or vegetative plant materials of officially recognized varieties, grown, and inspected to assure the varietal identity and genetic purity. "Certification" of any seed lot by the NCIA means only that the certified seed lot has been visually inspected and random samples have been tested and found to be in compliance with applicable standards set forth by IANR. Certification of any lot is not a guarantee or warranty that the certified lot is free from defects such as seed borne diseases or noxious weeds.

* The term “varietal identity”, as used in this publication, is defined as, and limited to, the verification of the identity of a variety, cultivar, or germplasm entity through 1) documentation of the pedigree, i.e., tracing the particular cycle of reproduction back to its origins with the developer, and 2) the application of the developer’s variety/germplasm description for certain visible, phenotypic traits in field inspections and seed laboratory analysis.

** The term “genetic purity”, as used in this publication, is defined as, and limited to, the application of these standards for certain phenotypic traits relative to the developer’s description of the variety/germplasm. In the context of this publication, “genetic purity” should not be interpreted to imply verification of genotype or verification of all described traits.

*** As a member of the Association of Official Seed Certifying Agencies (AOSCA), the standards in the latest publication of the AOSCA Seed Certification Handbook will be used for crops which Nebraska has not adopted standards.

2. The Purposes and Activities of the NCIA

A. To enhance the production and utilization of certified quality seed or vegetative plant materials of adapted cultivars grown in Nebraska by providing services to members through uniform standards, policies, and procedures.

B. To provide educational activities to increase public awareness and encourage the use of quality seed and vegetative plant materials.

C. To cooperate in the development of seed quality programs which add value to products for NCIA members, producers, and consumers.

1) Genetic Certification through traditional certification, Identity Preserved, and Source Identified or Quality Assurance seed and grain programs.

2) Quality Assurance for branded products

3) Phytosanitary Inspections

4) Process Verification Auditing

D. To work to improve the agronomic practices and furthering agricultural interests in the state.

E. To maintain a cooperative working relationship with plant breeders, seed industry, seed regulatory agencies, governmental agencies, Cooperative Extension, AOSCA member agencies, and other groups and individuals that can help fulfill these purposes.

3. Definitions

Applicant – the individual, partnership, or corporation in whose name application is made for field inspection. This identification shall be retained throughout the certification process with the field and seed lots.

Blend – a seed lot consisting of more than one variety of the same kind, each in excess of five percent by weight of the whole.

Interagency certified seed blend – a blend of varieties that has been co-mingled according to regulations of the NCIA. Each blend component shall be certified initially in its state of origin. The individual components of the blend must be listed on the certification label, along with original lot number, germination, and state of origin.

Brand – word, name, symbol, number, or design to identify the seed of one NCIA member to distinguish it from seed of another member.

Certified turfgrass – vegetatively propagated turfgrass plants (sod, plugs, or sprigs) which have been produced, inspected, handled, and labeled in accordance with the approved procedures/regulations and meets the premium landscape quality standards. Only the Certified class is recognized in vegetative sod, plugs, and sprigs production and marketing.

Classes of seed

Breeder – Is a class of certified seed directly controlled by the originating or sponsoring plant breeding institution or person or designee thereof and is the source for the production of seed of the other classes of certified seed.

Foundation – Is a class of certified seed which is the progeny of Breeder or Foundation seed and is produced and handled under procedures established by the certifying agency in accordance with the Federal Seed Act for producing the Foundation class of seed for the purpose of maintaining genetic purity and identity.

Registered – Is a class of certified seed which is the progeny of Breeder or Foundation seed and is produced and handled under procedures established by the certifying agency in accordance with Federal Seed Act regulations for producing the Registered class of seed for the purpose of maintaining genetic purity and identity. Varieties with a non-saleable Registered class specified in the variety release statement cannot be sold or transferred unless downgraded to, and labeled as, the certified class. No registered tags or labels will be issued for these varieties to ensure compliance with the variety release statement. Only the producer of the seed, or their contract growers, may plant the harvested seed as the Registered class.

Certified – Is a class of certified seed which is the progeny of Breeder, Foundation, or Registered seed and is produced and handled under procedures established by the certifying agency in accordance with Federal Seed Act regulations for producing the Certified class of seed for the purpose of maintaining genetic purity and identity.

Tested – Is a class of propagating materials that shall be the progeny of plants whose parentage has been tested and has proven genetic superiority or possesses distinctive traits for which the heritability is stable, as defined by the certifying agency, but for which a variety has not been named or released.

Selected – Is a class of propagating materials that shall be the progeny of phenotypically selected plants of untested parentage that have promise but no proof of genetic superiority or distinctive traits.

Source-Identified – Is a class of propagating materials collected from natural stands, seed production areas, seed fields, or orchards where no selection or testing of the parent population has been conducted.

Conditioning – drying, cleaning, sizing, scarifying, or any other operations performed on seed between harvest and marketing which could change the purity or germination of seed.

Dormant seed – viable seeds other than hard seeds, which fail to germinate when provided the specified germination conditions for the kind of seed in question. Viability of ungerminated seeds shall be determined by appropriate methods or combinations of methods.

Field – A field is an area of land occupied by one variety of a seed crop, covered by one inspection report, and not divided by public roads, other crops, fallow land, or other barriers that affect the difficulty of inspection. Each variety and class of seed is considered a separate field. If a field is to be divided in order to make a portion eligible for inspection, such division must be made before inspection and conform to the established isolation standards.

Germination – the percentage of seeds capable of producing normal seedlings under ordinarily favorable conditions (not including seeds which produce weak, malformed, or obviously abnormal sprouts), determined by methods prescribed by either the AOSA, Federal, Canadian, or ISTA seed testing protocols.

Hard seed – The percentage of seeds which, because of hardness or impermeability do not absorb moisture or germinate under prescribed tests but remain hard during the period prescribed for germination of the seed concerned.

Hybrid – the first-generation seed of a cross produced by controlling the pollination and combining (1) two or more inbred lines (2) one inbred or a single cross with an open pollinated variety or (3) two selected clones, seed line varieties, or species and including the following. Hybrid designations shall be treated as variety names.

A. **Commercial hybrid** – one to be planted for any use except seed production. It may be any of the following:

   1) **Single cross** – The first-generation hybrid between two inbred lines.

   2) **Double cross** – The first-generation hybrid between two single crosses.

   3) **Top cross** – The first generation of a cross between an inbred line and an open pollinated variety or the first-generation hybrid between a single cross and an open-pollinated variety.

   4) **Three-way cross** – The first-generation hybrid between a single cross and an inbred line.

B. **Foundation single** cross is a single cross used in the production of a double cross, three-way cross, or a top cross.

C. **Foundation backcross**

   1) A first-generation Foundation backcross must be the first generation cross between a Foundation single cross of related inbred lines and an inbred line which shall be the same as one of the inbreds in the Foundation single cross.

   2) A second-generation Foundation backcross must be the cross of a first-generation backcross (seed parent) with its recurrent inbred parent (pollen parent).

      Inbred line –A relatively true-breeding strain resulting from controlled self-fertilization or of backcrossing to a recurrent parent with selection or its equivalent.

      Inert matter – all matter, not seed, which shall include broken seeds, sterile florets, chaff, fungal bodies, and stones as established by AOSA rules and regulations.

      Kind – one or more related species or sub-species which singly or collectively is known by one common name such as corn, oats, alfalfa, smooth brome, etc.

      Label – the display(s) of written, printed, stamped, or graphic matter on or attached to the container of seed.

Labeling – all labels or other written, printed, stamped, or other graphic representations in any form whatsoever, accompanying and pertaining to any seed, whether in bulk or in container and shall include representations on invoices.

Lot – a definite quantity of seed (in containers or bulk) identified by a lot number or other mark, every portion of which is uniform, within recognized tolerances, for the factors that appear in the labeling.

Mixture – a seed lot consisting of more than one kind, each present in excess of five percent by weight of the whole.

Interagency certified seed mixture – a mixture of kinds that has been co-mingled according to the regulations of the NCIA. Each mixture component shall be certified initially in its state of origin. The individual components of the mixture must be listed on the certification label, along with original lot number, germination, and state of origin.

None – zero seeds or zero occurrence of the undesirable quality factor can be found during inspection or in the sample submitted. None is not a guarantee that the lot or sample is free of the factor.

Noxious weed seeds – seeds or bulbs of plants recognized as noxious either by the Nebraska Seed law, Federal Seed Act or by the regulations of the certifying agency.

Objectionable Weeds – the seeds of which are indistinguishable or cannot be thoroughly removed by the usual methods of conditioning from seed of the crop being inspected.

Off-types – any seed or plant not a part of the variety in that it deviates in one or more characteristics from the variety as described and may include: seeds or plants of other varieties, seeds or plants not necessarily any variety, seeds or plants resulting from cross-pollination by other kinds or varieties, seeds or plants resulting from uncontrolled self-pollination during production of hybrid seed, or segregates from any of the above plants.

Open-pollinated seed – seed produced as a result of natural pollination as opposed to hybrid seed produced as a result of controlled pollination.

Other crop seed – seeds of plants grown as crops other than the kind or variety included in the pure seed.

Plant breeder – a person or organization actively engaged in the breeding, maintenance, and seed increases of varieties of plants.

Protected Variety – a variety for which an application has been made or accepted and a certificate of plant variety protection is issued under the U.S. Plant Variety Protection Act or protected under a utility patent.

Pure Live Seed (PLS) – the product of the percent of germination plus percent of hard or dormant seed multiplied by the percent of pure seed divided by one hundred.

Pure seed – seed exclusive of inert matter and all other seeds not of the seed being considered.

Record – (1) information which relates to the origin, treatment, germination, purity, kind, and variety of each lot of seed handled, transported, or delivered for transportation in intrastate or interstate commerce. Such information includes seed samples and records of declarations, labels, purchases, sales, cleaning, bulking, treatment, handling, storage, analysis, tests, and examinations. (2) The complete record kept by each member for each treatment substance or lot of seed, consists of the information pertaining to his own transactions and the information received from others pertaining to their transactions with respect to each treatment substance or lot.

Representative sample – a sample drawn from a conditioned quantity or lot of seed (either in bulk or containers) in accordance with recognized sampling procedures.

Sale (in any of its variant forms) – to sell, barter, exchange, offer for sale, expose for sale, move, or transport in any of their variant forms.

Sod – turfgrass sod, turfgrass plugs, or turfgrass sprigs consisting of a single kind and variety or a blend of varieties or a mixture of kinds and varieties.

Treated – that seed has been given an application of a substance or subjected to a process or coating designed to reduce, control, or repel disease organisms, insects, or other pests which attack seeds or seedlings.

Turf – a live population of one or more kinds of grasses, legumes, or other plant species used for lawns, recreational areas, soil erosion control, or other similar purposes and that is sold as vegetative sod, plugs, or sprigs.

Turfgrass Sod – a strip or section of live turfgrasses which, when severed, contains sufficient plant material to remain intact.

Turfgrass Plug – a small section cut from live turf of those turfgrasses normally vegetatively propagated, such as buffalograss, which when severed contains sufficient plant material to remain intact.

Turfgrass Sprig – a live plant, stolon, crown, or section cut from a perennial plant used as a turfgrass.

Unit of certification – a clearly defined field or fields which may be subdivided subject to special regulations for specific crops.

Variants – seeds or plants which are (a) distinct within the variety but occur naturally in the variety, (b) are stable and predictable with a degree of reliability comparable to other varieties of the same kind, within recognized tolerances, when the variety is reproduced or reconstituted, and (c) which are originally a part of the variety as released. Variants are not to be considered off-types. The breeder or sponsoring institution or organization shall identify variants as a part of the variety description.

Variety (cultivar) – an assemblage of cultivated individuals which are distinguished by any characters (morphological, physiological, cytological, chemical, or others) significant for the purpose of agriculture, forestry, or horticulture and which, when reproduced (sexually or asexually) or reconstituted, retain their distinguishing features.

Weed seed – the seeds of any plant commonly known as a weed within this state. Weed seeds will be classified either as primary noxious, prohibited noxious, restricted noxious, objectionable, or common.

4. Membership in the Association

Any person, partnership, or corporation who intends to produce and/or condition certifiable seed or vegetative plant materials within the state must become a member. All members pay applicable fees and subscribe to the provisions of the Articles of Incorporation and By-Laws. All other parties who support the production and/or marketing of seed may become non-voting members.

A. Each member must comply with all applicable certification procedures and standards, Nebraska revised statutes §§81-2,149 to 81-2,154, Nebraska Seed Law (§§81-2,147 to 81-2,147.12), and Federal Seed Act (7 U.S.C. 1551-1611) requirements.

B. Probation: A member may be placed on probationary status for:

   1) Failing to abide by applicable rules and regulations specified in these standards.

   2) A violation of the Plant Variety Protection Act or other seed law documented by seed regulatory officials.

   3) Violation of ethical or professional business conduct as determined by the NCIA Board of Directors.

4) Repeated failure of a seed conditioner to achieve suggested quality goals and/or other requirements specified in these standards.

The normal probation period will be one year. Terms of probation will reflect the nature and severity of the violation.

C. The NCIA further reserves the right to suspend all services and eligibility for participation to a member as enabled under the State of Nebraska revised statute §81-2,153 for violation of probation, demonstrated disregard for standards and procedures, or for other reasons stated in these Standards.

5. Membership Categories

An Application for Membership is available from the NCIA office. Each member must have a current application on file. Identification of members by a classification system enables the NCIA staff and directors to focus on priority needs of each group and offer services necessary for accomplishing members' goals. The annual membership fee is due in January. Membership fees are determined to be the amount which is adequate to cover the cost of promotion, member education, administration, printing, and other special services for each category. Only membership categories (A), (B), (C), (D) can vote in association business and be elected to hold offices. All others are considered non-voting, non-office holding memberships.

A. **Grower** – A member who applies for field inspection services and uses the services of either Custom or Approved Conditioners to prepare seed for marketing channels.

B. **Grower-Conditioner** – A member who applies for field inspection services and has adequate facilities for conditioning their own seed produced from inspected acres in preparation for marketing channels. A grower-conditioner cannot serve as a custom cleaner for other members.

C. **Custom Certified Conditioner** – A member who does or does not apply for field inspection services and who has adequate facilities for conditioning seed produced from inspected acres (by themselves or other members) in preparation for sale in marketing channels.

D. **Approved Seed Conditioner** – A member who may or may not apply for field inspection services, has adequate facilities for conditioning seed, and may purchase bulk uncleaned seed from inspected acres of a crop grown by another member for conditioning, tagging, and sale in marketing channels as a class of certified seed.

E. **Retail Facility** – A member who purchases certified seed from another member for the purpose of retailing the seed. If the seed is sold in bulk the facility must have adequate facilities to maintain the genetic purity of the seed.

F. **Contract** – A member who only produces seed under the direction of either a Grower, Grower-Conditioner, Certified Custom Conditioner, or Approved Seed Conditioner.

G. **Associate** – Any other person, partnership, corporation, or other business entity who markets seed but does not produce or condition seed within the state or one who provides support services for the production, conditioning, or marketing of seed and/or is interested in furthering the goals of the NCIA may become a non-voting member.

6. Interpretation and Amendment of Rules

The NCIA Board of Directors has the authority to interpret as necessary any provision of the rules, regulations, and procedures for certification of varietal identity and seed quality factors. Amendments shall be made by IANR in consultation with the NCIA Board of Directors.

7. Requirements for Determining Cultivar Eligibility and Merit

A. The term "variety" means a subdivision of a kind which is distinct, uniform, and stable. "Distinct" in the sense that the variety can be differentiated by one or more identifiable morphological, physiological, or other characteristics from all other varieties of public knowledge. "Uniform" in the sense that variations in

essential and distinctive characteristics are describable. "Stable" in the sense that the variety will remain unchanged to a reasonable degree of reliability in its essential and distinctive characteristics and uniformity when reproduced or reconstituted as required by the different categories of varieties.

B. The NCIA requires the originator, developer, or owner of a crop cultivar, or designated agent, to make the following information available.

   1) Name of the cultivar (variety or hybrid).

   2) A statement concerning the cultivar's origin and the breeding procedure used in its development.

   3) A detailed description of the morphological, physiological, and other characteristics of the plants and seed that distinguish it from other cultivars and of any known variants.

   4) Evidence supporting the identity of the cultivar such as comparative yield data, insect and disease resistance, or others.

   5) A statement specifying the geographic area of adaptation of the cultivar.

   6) A statement of the plans and procedures for the maintenance of seed classes, including the number of generations through which the cultivar may be multiplied.

   7) A description of the manner in which the cultivar is constituted when a particular cycle of reproduction or multiplication is specified.

   8) Any additional restrictions on the cultivar specified by the breeder, with respect to geographic area of seed production, age of stand, or factors affecting genetic purity.

      a) 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.

      b) Additional certification requirements: Seed may require additional certification requirements that are clearly referenced in the variety description, provided that the following is completed:

         (1) Additional certification requirements have been communicated by the sponsoring breeder or originator to all parties involved with regulation and production of the variety.

         (2) 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.

C. For certain cultivars whose originator, developer, or owner requires a licensing fee and/or Research and Development fee (or royalty) as a condition to rights of seed production, the releasing organization should provide pertinent information in regard to fees, assessment, and collection procedures to the NCIA prior to initial allocation of Foundation seed.

8. Steps for Cultivar Approval

The NCIA will recognize a crop cultivar as eligible for the seed certification program after approval of the documentation required in Section 7 by one or more of the following:

A. National Variety Review Board

B. Plant Variety Protection Office

C. A member agency of the Association of Official Seed Certifying Agencies

D. OECD Seed Schemes List of Eligible Cultivars

E. Varietal release committee of the Nebraska Agricultural Research Division, IANR-UNL

F. Private breeders release statement

The NCIA Board of Directors is the final authority if there are questions in regard to eligibility of a variety.

9. Certified Seed Classes

A. Four classes of certified seed are recognized: Breeder, Foundation, Registered, and Certified. These seed classes must meet the standards of the Association of Official Seed Certifying Agencies (AOSCA) for the respective crops. The four classes are defined in Section 3.

B. The number of generations through which seed of a variety may be multiplied will be limited to that specified by the originating breeder or owner of the variety but will not exceed two generations beyond the Foundation seed class, with the following exceptions:

1) With written approval from the NCIA, a grower may be permitted to produce Certified seed from Registered seed that was fully inspected but not accepted because of factors other than genetic identity and purity of germplasm.

2) The production of an additional generation of the Certified class may only be permitted on a one-year basis when all conditions below are met:

a) An emergency is declared by the certifying agency stating that Foundation and Registered seed supplies are not adequate to plant the needed certified acreage of the variety.

b) Foundation or Registered class seed must not be available in any other state to establish the needed certified acreage.

c) Emergency declaration will not be made because of the failure of Foundation class seed to meet mechanical purity or germination standards.

d) Written permission of the originating or sponsoring plant breeder, institution, firm, or owner of the variety is obtained (if applicable).

e) The additional generation of Certified seed produced to meet the emergency need is declared to be ineligible for Re-certification.

3) Varieties no longer maintained by the breeder or Foundation Seed Division may be maintained by a designated member in good standing with the association, for the purpose of producing certified seed under the following guidelines:

a) Permission must be obtained from the originating plant breeder or institution.

b) NCIA must approve the maintenance of the variety.

c) The field(s) must be inspected for certification in each subsequent year of establishment and production.

d) Complete production and sales reports are reported to the NCIA each year.

10. Land Requirements for Certification of Identity and Quality

When a field or portion of a field is to be inspected for certification of identity and quality, the area to be inspected must be clearly defined by a boundary. See specific crop kind standards for further details or modifying statements.

11. Applying for Field Inspection

A. Application must be submitted for all fields eligible for certified seed production by the published due date for each crop. The NCIA will verify the information submitted. Incomplete or otherwise incorrect information submitted after the published due date may incur additional charges.

The NCIA office will supply instructions for making application for field inspection of all eligible fields to current members, Foundation seed purchasers, and all others who request them.

B. **Applicant's Responsibilities**

1) The applicant's submission of fields for certification is a guarantee of the accuracy of all required information. By submitting fields for inspection, the applicant also accepts responsibility for:

   a) Seeing that all equipment involved with planting, harvesting, or other seed handling is adequately cleaned to maintain genetic purity of the seed.

   b) Making certain that the seed verified as the eligible seed source on the application was the seed planted on the field described on the application.

   c) Maintaining the genetic purity and identity of the seed from harvest to the time it leaves the applicant's possession. Also, maintaining a complete record identifying all lots of seed from seeding through harvest until disposition is completed (see Section 14).

   d) Submitting a complete report of seed production and disposition on each seedlot and paying the applicable assessment on seed produced.

C. **Establishing Seed Source**

The NCIA is required to have complete verification of the source, class, and quantity (pounds or bushels) of Foundation or Registered seed used in establishing each field for the production of certifiable seed. In the case of protected or proprietary varieties, this includes a statement from the owner of the variety authorizing the applicant to reproduce seed for planting purposes.

1) Establish source and class of seed by submitting a Foundation or Registered label or bulk seed certificate from the containers of the seed that was planted.

2) A grower planting his own Registered seed should list appropriate lot numbers. Seed from a field which has passed field inspection but from which a seed sample has not been submitted for an official quality analysis will not be eligible for re-certification when planted the following year.

3) When a lot of seed is downgraded from the Registered class to the Certified class for any reason other than genetic factors, the lot may be recognized as the Registered class when used as planting stock by the original applicant.

D. **Due Dates**

Application for field inspection(s) are due by the following dates or within one week of planting:

May 1: Grasses (cool, warm, turf), peas and all small grains (wheat, barley, oats, rye, triticale)

June 1: Corn

July 1: Dry edible beans, millet, sorghum

August 1: Soybeans

Late Applications: The NCIA reserves the right to refuse a late Application for Field Inspection. If inspection can be arranged, appropriate late fees will be assessed.

Incomplete Applications: An application which lacks necessary information or documentary evidence of eligibility of the seed planted cannot be completely processed preventing the field(s) from being inspected.

E. **Field Inspection Fees**

1) Field inspection fees are set at levels adequate to cover the cost of administering the program and providing needed field and record keeping services. The appropriate field inspection fees must be sent to the Nebraska Crop Improvement Association office by the date due on the corresponding invoice. Care should be given to placement, layout, and management of fields entered into certification. Fields

inaccessible from a passable road and/or requiring the navigation of barriers such as fences, waterways, steep inclines, adjacent fields/pastures, etc. to start or finish an inspection may incur additional charges. Fields requiring additional time to inspect (beyond what is typical for the crop) due to slope, crop lodging, row spacing, cultivation method, timing of pesticide application, irrigation scheduling, seed crop height, weed management, or overall field layout may incur additional charges at the discretion of NCIA.

2) Refunds and Cancellations

   a) The inspection fee, except for an administrative fee, will be refunded for applications withdrawn before any of the fields applied for have been inspected. When only an individual field is withdrawn before inspection, the applicable fees will be refunded subject to the minimum application fee.

   b) No refund will be made for fields withdrawn because either the field or seed is rejected during or after inspection.

   c) The entire inspection fee will be refunded for fields declared ineligible by the NCIA before the field is inspected. An applicant may withdraw an application, field, or any portion of a field by notifying the NCIA before inspection. Changes or cancellations must then be completed by the applicant prior to the field inspection or the field inspector traveling to complete the inspection.

3) Return Inspection

   Any additional inspections, seed sampling, or travel required because the field did not meet minimum standards and reinspection requested by the applicant will be made at the expense of the applicant. In no case will the amount be less than the minimum field inspection fee.

12. Field Inspection – Varietal Purity

A. An NCIA representative will make one or more inspections per field depending upon when the genetic purity and identity can best be determined. Genetic purity will be determined by use of an appropriate sequential sampling procedure.

B. The applicant must rogue for off-type plants before inspection. Off-type plants must be removed completely to prevent contamination.

C. The applicant must communicate with NCIA or their assigned inspector when fields are mature enough to be inspected. Fields may be inspected any time after this communication.

D. All fields must meet the isolation and land requirements for the crop being certified. Each field must be in suitable condition to permit an adequate inspection to determine genetic purity and identity.

E. A field inspection report will be sent to the applicant after inspection.

13. Field Inspection – Roguing and Weed Control

A. Every field for which inspection is requested must demonstrate proper seed production management. This includes evidence that reasonable precautions have been taken to eliminate contaminating crops and varieties and objectionable weeds. Fields which contain inseparable seed bearing noxious, objectionable, or troublesome weeds may be rejected at the discretion of NCIA.

B. Nebraska Seed Law (2016) classifies noxious weed seeds as follows:

1) **Primary Noxious** – Nebraska law prohibits the sale of agricultural seed consisting of or containing primary noxious weed seeds, with no tolerance allowed.

   Knapweed, diffuse (Centaurea diffusa)

   Knapweed, spotted (Centaurea maculosa)

   Knotweed, giant (Fallopia sachalinensis)

Knotweed, Japanese (Fallopia japonica)
Loosestrife, purple (Lythrum salicaria)
Phragmites (Phragmites australis spp. australis)
Saltcedar (Tamarix ramosissima)
Spurge, leafy (Euphorbia esula)
Thistle, Canada (Cirsium arvense)
Thistle, musk (Carduus nutans)
Thistle, plumeless (Carduus acanthoides)

2) **Prohibited Noxious** – Nebraska law prohibits the sale of agricultural seed consisting of or containing prohibited noxious weed seeds, subject to recognized tolerances.

Bindweed, field (Convolvulus arvensis)
Bursage, skeletonleaf (Ambrosia tomentosa)
Bursage, woollyleaf (Ambrosia tomentosa)
Boarycress (Cardaria draba)
Johnsongrass (Sorghum halepense)
Knapweed, Russian (Centaurea repens)
Morning glory (Ipomoea purpurea)
Puncturevine (Tribulus terrestris)
Thistle, Scotch (Onopordum acanthium) Tussock, serrated (Nassella trichotoma)

3) **Restricted Noxious** – Nebraska law prohibits the sale of agricultural seed containing more than 0.5% by weight of restricted noxious weed seed. NCIA restrictions are included in the standards for each crop.

Charlock (Brassica arvensis)
Dock (Rumex spp.)
Dock, curled (Rumex crispus)
Dock, smoothleaf (Rumex altissimus)
Dock, winged (Rumex venosus)
Dodder (Cuscua spp.)
Horsenettle (Solanum carolinense)
Mustard, black (Brassica nigra)
Mustard, Indian (Brassica juncea)
Mustard, wild (Brassica spp.)
Pennycress (Thlaspi arvense)
Quackgrass (Elytrigia repens)
Rape, bird (Brassica campestris)
Sorrel, red (Rumex acetosella)

14. Maintaining Identity of Seed

Applicants and seed conditioners must have and maintain a complete set of field identification and storage bin labeling records. These records must accurately identify all fields and lots of seed throughout production, conditioning, and marketing until disposition is completed.

A. These records must be made available to the NCIA office on request.

B. All bins containing bulk lots of certifiable seed must be clearly identified by the variety of seed and a bin number or lot number.

C. As part of the complete record, it is the responsibility of the seller to obtain and keep a representative sample of each lot of seed as it will be offered for sale. Samples should be taken from certifiable seedlots as well as seedlots which have met all certification requirements.

15. Transfers of Certifiable Seed

Field Corn:

A transfer of seed occurs when seed that has not completed certification is moved from one location to another location. This seed is eligible for certification, but the applicant (grower) has not completed the steps necessary to have final certification approved. This seed would be transferred to the new location by means of completing a **Certificate of Transfer of Seed Pending Certification.** Certification would be completed at the new location.

Other Crops:

Bulk seed which has not completed certification but is being sold to an Approved Conditioner for completing certification must be sold using an approved **Certificate of Transfer of Seed Pending Certification.**

The purchaser is responsible for all fees due from the sale of the seed.

Varieties released with a non-sellable Registered class are ineligible to be transferred from the original applicant to an Approved Seed Conditioner unless downgraded to the Certified class.

A. Prior to the delivery of seed, the conditioner must complete a **Certificate of Transfer of Seed Pending Certification.**

B. Upon delivery of seed, it is strongly recommended, at this time, the conditioner take a representative sample of the seed.

C. The conditioner must receive and store the uncleaned seed, condition it, and submit a representative sample of the seed lot to the NCIA for lab analysis.

D. The conditioner is responsible for the proper labeling of the certified seed lot.

16. Interagency Certification

Interagency certification is the participation of two or more official certifying agencies in performing the services required to certify quality of the same lot or lots of seed. The methods and standards employed in each step of the interagency certification process are those used when certification of identity and quality isn't completed by a single agency.

A. The certifying agency issuing the interagency tags will require the seed on which the tags are used to meet standards at least equal to the minimum genetic standards for the seed in question, as specified in the Federal Seed Act Rules and Regulations, and at least equal to the minimum quality standards given in the AOSCA Certification Handbook.

B. Seed to be recognized for interagency certification must be received in containers carrying official certification labels. If for further conditioning and final certification, evidence of its eligibility from the official certifying agency in the state of origin, together with the following information, must be supplied.

   1) Variety and kind.

   2) Quantity of seed, pounds, or bushels.

   3) Class of certified seed.

4) Inspection or lot number traceable to the original applicant and to the records of the agency making the field inspection.

C. A lot of seed which has passed field inspection or is completely certified by another official certification agency may be sold and/or moved into Nebraska in bulk for further conditioning and/or completion of certification provided:

1) Prior arrangements for moving the seed are made with and approved by the cooperating certification agencies.

2) An official Bulk Sales Certificate or Transfer is filed by the original applicant to the NCIA.

D. In addition to compliance with the regulations specified in these Standards, each label used in interagency certification must be serially numbered and clearly identify the certifying agencies involved, the variety, kind, and class of seed. Each bag of seed must have an official label attached in a manner that prevents removal and re-attachment without tampering being obvious.

E. All expenses incurred for interagency certification will be paid by the applicant.

17. Conditioning of all Classes of Certified Seed

A. All classes of certified seed must be conditioned by an approved facility. In the event no approved facility is available within 50 miles of the applicant's location, a request for a one-time waiver to use unapproved facilities must be made to the NCIA office before any certifiable seed is conditioned.

B. The equipment and facilities of each Grower-Conditioner, Custom Certified Conditioner, and Approved Seed Conditioner will be subject to inspection and approval.

C. The following requirements must be met by all conditioners of any class of certified seed.

1) Facilities must be available to perform conditioning without introducing mixtures.

2) Rye or Triticale cannot be conditioned through the same conditioning line as wheat.

3) Identity of the seed must be maintained at all times.

4) Records of all operations relating to certification must be complete and adequate to account for all incoming seed and final disposition of seed.

5) Conditioners will permit inspection by the certifying agency of all records pertaining to certified seed.

6) Seed lots of the same variety and class may be blended, and the class retained. If lots of different classes are blended, the lower class will be applied to the blend.

18. Blends

The term blend or blending refers to the process of commingling two or more lots of different varieties of the same kind to form one seedlot of uniform quality.

A. Different varieties of certified seed of the same crop kind produced by one or more growers may be blended provided:

1) A blend data sheet must be supplied to the NCIA identifying the lots to be used, the analysis of each lot, and the pounds to be used from each lot. After blending, any changes must be reported to the NCIA.

2) Only Approved Seed Conditioners may blend varieties to be sold as Certified.

3) Permission to use a protected variety or private variety in a blend must be obtained from the breeder or owner of that variety. This evidence must be submitted by the blender to the certifying agency.

4) Each component of a blend is a class of certified seed.

5) The Certified Seed tag carries:

a) Name of the blend and crop kind.

b) Lot number

c) Variety and kind of each component.

d) Percentage by weight of each component.

e) Percentage of germ of each component.

f) A representative sample of the blend is submitted to the NCIA laboratory for analysis.

19. Mixtures

The term mixture or mixing refers to the commingling of two or more lots of seed of different crop kinds.

A. Different lots of certified seed of the different kinds produced by one or more growers may be mixed provided:

1) A mix data sheet must be supplied to the NCIA identifying the lots to be used, the analysis of each lot, and the pounds to be used from each lot. After mixing, any changes must be reported to the NCIA.

2) Only Approved Seed Conditioners may mix crops to be sold as Certified.

3) Permission to use a protected variety or private variety in a mix must be obtained from the breeder or owner of that variety. This evidence must be submitted by the mixer to the certifying agency.

4) Each component of a mixture is a class of certified seed.

5) The Certified Seed tag carries:

a) Name of the mix.

b) Lot number

c) Variety and kind of each component.

d) Percentage by weight of each component.

e) Percentage of germ of each component.

f) A representative sample of the mixture is submitted to the NCIA laboratory for analysis.

20. Seed Sampling and Testing

A. Before the seed is sold, a conditioned representative sample of each seed lot must be submitted to the NCIA Lab to determine purity and germination. The submitted sample must represent the condition and quality of the seed lot as it will be offered for sale. The required minimum sample size for the species being tested is available from the NCIA office. The Sampler must complete AASCO Seed Sampler Training or its equivalent.

B. Sampling Frequency Table

# bags in lot	7	10	23	50	100	200	300	400
# bags to sample	6	6	7	10	15	25	30	30

For lots of more than six (6) bags, sample five (5) bags plus at least 10% of the number of bags in the lot. Round numbers with decimals to the nearest whole number. Regardless of the size of the lot, it is not necessary to sample more than 30 bags. For purposes of determining sampling frequency, utilize 50 pounds as the bag size in all cases. If the seed is in bulk, take at least as many cores or handfuls as if the

same quantity of seed were in 50 lb. bags. Take the cores or handfuls from well distributed points throughout the bulk.

C. Sampling during conditioning

1) Automatic mechanical devices may be used to continually or intermittently draw a representative sample as the seed lot is conditioned, or

2) Portions of the conditioned seed may be drawn intermittently by hand as seed is conditioned to form a composite sample that is representative of the seed lot.

D. When submitting seed samples for lab analysis, the sample containers must be completely identified including variety, seed class, applicant's name, tests to be performed, and other information as requested by the NCIA.

E. All seed will be tested in accordance with the procedures prescribed by the most recent edition of "Rules for Testing Seeds" issued by the Association of Official Seed Analysts or other applicable testing methods as requested.

F. Lot numbers – The NCIA will assign a lot number for identification purposes to each seed lot which meets certification standards.

1) The NCIA reserves the right to establish the maximum size of a seed lot. For lots greater than 10,000 bushels, in addition to a representative sample for the entire lot, a representative sub-sample for every 10,000 bushels, or fraction thereof, must be submitted to NCIA for complete analysis before certification can be completed for the total lot. Each sub-sample must test within AOSA tolerances of the overall lot sample and conform to the minimum sample size for the crop being tested. It is recommended that seed of the same variety harvested from different fields be maintained as separate lots.

2) Registered seed may be downgraded to the Certified class at the discretion of the applicant. A different lot number should be assigned to distinguish between seed classes.

21. Bagged Seed Sales

A. All classes of certified seed sold in bags must be sold in new bags that are sealed (in a manner that prevents reopening and reclosing without tampering being obvious) and have an official certification label properly affixed to each bag. All classes of certified seed sold in bulk bags must be sealed with a NCIA bulk tie. This will assure the purchaser the seed has not been compromised.

B. Reusable bulk boxes that can be sealed may be utilized for Certified class seed. Adequate cleaning procedures must be used to prevent contamination. The containers must be sealed with a NCIA bulk tie or NCIA lid lock on the slide gate and on opposite sides of the lid. The containers must be labeled in the same manner as bagged certified seed.

C. Bags or other containers may be plain or imprinted with the NCIA logo. A member may use his own trademark or logo on the bag or container. Bags or other containers imprinted with the NCIA logo may be used only with Foundation, Registered, or Certified seed. Reuse of bags is not permitted.

22. Labeling Bagged Certified Seed

A seed lot will **not** be recognized as certified seed if it is received by the seed consumer without official certification labels as follows:

Certification Labels

A. All classes of certified seed offered for sale in bags, or other containers that can be sealed must have an official certification label properly affixed (attached in a manner that prevents removal and re-attachment without tampering being obvious) to **each** bag or container.

B. All official seed certification labels must conform to the color, size, and other specifications published in the current certification handbook of the Association of Official Seed Certifying Agencies.

C. The official certification label must clearly identify the certifying agency, variety, kind, seed class, and lot number. Nebraska Certified Seed labels may only be generated or printed by the NCIA office or from www.nciacert.org. Labels cannot be printed until a representative sample of the lot to be labeled has met or exceeded seed certification standards for that particular crop.

D. Official seed certification labels must be positioned on the face side of the bag or container.

E. Unused labels must be destroyed. Un-attached certification labels **cannot** be mailed or handed from the seed seller to the seed consumer.

F. Nebraska Seed Law prohibits sale of seed with expired germination tests. See current Nebraska State Seed Law for specifics for each crop. The State Seed Laws are available from the Nebraska Department of Agriculture.

23. Handling Certified Seed in Bulk

Bulk seed refers to seed when loose either in shipping vehicles or in storage, and not to seed in bags or other containers. An applicant may sell Certified class seed in the bulk to the consumer or another certification member, except Associate members, for purposes of resale. A maximum of two physical movements of the certified seed in the bulk is permitted.

Crop varieties with a sellable Registered class may be sold in the bulk as Registered class seed only to other certified seed producers only for the purpose of re-certification. If Registered class seed is sold for any other purpose, it must be downgraded to the certified class.

All varieties released with a non-saleable Registered class are ineligible to be sold in bulk unless downgraded to the certified class. All seed downgraded to the certified class either by the original applicant or for genetic contamination as determined by field or laboratory inspection is **ineligible** for re-certification.

Foundation class seed cannot be sold as bulk seed and must only be sold in new sealed bags.

The procedures for handling bulk seed will apply when seed is sold in a container (regardless of size) which cannot be sealed.

All field and seed standards applying to bagged seed shall also apply to classes of bulk certified seed with the exception of bag labeling. In addition, the following requirements must be complied with:

A. A Nebraska Bulk Sales Certificate must accompany each sale. Certificates are generated and printed from www.nciacert.org.

   1) At the time of purchase each buyer must be given a copy of the official Nebraska Bulk Sales Certificate.

   2) A record of units sold and the buyer's name, city, and state for each corresponding Bulk Sales Certificate must be maintained and submitted for sales and disposition reporting.

   3) The delivery of bulk seed must be made from the seller's place of business.

B. Registered seed may be downgraded for sale as bulk Certified class at the discretion of the applicant.

C. Due to the typically unprotected state of bulk seed, the buyer of bulk seed will be fully responsible for maintaining the purity of that seed at all times after it has been loaded into his vehicle. Bulk seed may not be returned to the seller for resale as certified seed.

24. Sub-Standard Seed in Emergency Situations

Under certain circumstances, seed which has failed to meet the minimum standards for certification, other than genetic purity, may be approved in accordance with Section 9. The factor(s) causing the sub-standard classification must be clearly stated on the certification labels attached to such seed.

25. Complying with Federal and State Laws

Responsibility for compliance with seed law labeling requirements and for any obligations arising from the sale or shipment of seed which has been certified rests with the seller or subsequent handler making the sale or shipment.

26. Seed Production and Disposition Reporting

A. An applicant must submit a complete report on the production and final distribution of seed harvested from inspected fields. Reporting will occur at www.nciacert.org.

B. Assessment of Seed Production

1) An applicant (with the exception of hybrid corn) will remit to the NCIA at the end of the sales season, a predetermined assessment on each unit of seed sold and replanted.

2) This fee must be paid on ALL SEED SOLD (certified or non-certified) AND REPLANTED from inspected fields.

3) The seller is responsible for full payment of applicable sales fees, research and development fees, royalty fees, and any other fees associated with the sale or transfer of the seed.

4) Production reports and the resulting assessments are due per a published schedule approved by the NCIA Board of Directors and made available from the NCIA office.

C. Late Reports – The NCIA will assess a late fee and reserves the right to suspend an applicant's eligibility for participation in the seed certification program and use of any NCIA services if production reports and applicable assessments have not been received within 15 days of the established due dates.

27. Carryover Seed

The production reporting must include the amount of seed being carried over to the next season from each seed lot. An updated report on each carryover seedlot will be required each subsequent year until disposition of the lot is complete.

A. Certifiable seed carried over in bulk or in unlabeled bags must be conditioned, tested, and labeled in accordance with certification procedures before being sold as a class of certified seed.

B. All certified seed carried over in bulk or in bags labeled with certification tags must be resampled and tested to determine eligibility for sale under state and federal seed laws.

28. OECD Seed Certification Schemes

A. Information regarding procedures for participating in OECD seed schemes is available from NCIA, which is the designed authority for OECD certification in Nebraska.

B. The objective of the OECD Seed Schemes is to encourage the exchange of improved varieties among cooperating nations. Certain rules and principles are involved to maintain varietal identity and genetic purity.

29. NCIA Accreditation Program

A. Information regarding the procedure and participation in the partial accreditation program for Hybrid Corn production is available from the NCIA office.