

TABLE OF CONTENTS

GENERAL SEED CERTIFICATION REQUIREMENTS AND STANDARDS

	<u>Page No.</u>
I. SEED CERTIFICATION IN UTAH.....	4
II. CERTIFIED SEED: DEFINITION, LIMITATION, AND WARRANTY.....	4
A. Definition.....	4
B. Certification Process.....	4
C. Withdrawal of Certification.....	5
D. Warranty.....	5
E. Tolerance.....	5
III. VARIETAL DEFINITION AND ELIGIBILITY REQUIREMENTS.....	5
A. Definitions.....	5
B. Approval.....	6
C. Information Required.....	6
D. Varieties Eligible.....	7
E. Plant Variety Protection.....	7
IV. ELIGIBILITY FOR GROWING CERTIFIED SEED AND MEMBERSHIP IN UCIA.....	8
A. Eligibility.....	8
B. Certification Philosophy.....	8
C. Membership in the Association.....	9
D. Responsibility of Membership.....	9
V. PRODUCTION OF CERTIFIED SEED.....	9
A. Application for Certification and Due Dates.....	9
B. Certification Acreage Fees.....	10
C. Seed Stocks, Eligibility, and Classes.....	11
D. Planting.....	12
E. Land and Isolation Requirements.....	12
F. Field Standards, Management, and Inspection.....	13
G. Harvesting Certified Fields.....	14

VI. REGULATED WEEDS.....	15
A. Utah Noxious, Restricted, and Objectionable Weeds.....	15
B. Chemical Control and Roguing.....	16
C. Tolerances for Weed Seeds.....	16
VII. CONDITIONING, SAMPLING, AND LABELING OF CERTIFIED SEED	16
A. Definition.....	16
B. "Certified Eligible" Seed Movement.....	16
C. Requirements for Conditioning Facilities	17
D. Seed Sampling Procedure.....	19
E. Labeling of Certified Seed	20
F. Sealing and Tagging and Bulk Certification Fees	22

INDIVIDUAL CROP REQUIREMENTS AND STANDARDS

I. GRAINS, GRASSES	(Gold) 23
II. ALFALFA, BEANS, MISCELLANEOUS LEGUMES	(Blue) 35
III. MINT, ONIONS	(Salmon) 46
IV. POTATOES	(Buff) 52
V. WOODY PLANTS AND FORBS	(Pink) 64
VI. PRE-VARIETY GERMPLASM.....	(Green) 67

**UTAH CROP IMPROVEMENT ASSOCIATION
GENERAL SEED CERTIFICATION REQUIREMENTS AND STANDARDS**

I. SEED CERTIFICATION IN UTAH

- A. The Utah Agricultural Experiment Station (UAES) at Utah State University is assigned responsibility for seed certification by Utah State Legislature (Utah Seed Act, Section 14-16-9). The UAES, in turn, has designated the Utah Crop Improvement Association (UCIA), a non-profit organization governed by a Board of Directors and composed primarily of Utah seed growers and conditioners, as the official seed certifying agency.
- B. The UCIA, in offering the service of seed certification, co-operates closely with personnel of the UAES, Utah State University Plant Science Department and Extension Service, and the Division of Plant Industry of the Utah State Department of Agriculture. The UCIA is housed on the Utah State University campus at Logan, in room 326 of the Agricultural Science Building.
- C. The UCIA is a member of the Association of Official Seed Certifying Agencies (AOSCA). The requirements and standards contained in this publication meet or exceed the minimum standards of AOSCA.
- D. The purpose of seed certification is to maintain and make available to the public high quality seeds and propagating materials of known genetic purity and identity.

II. CERTIFIED SEED: DEFINITION, LIMITATION, AND WARRANTY

- A. Certified seed is high-quality seed which has superior production potential as defined by the following factors:
 - 1. High varietal purity
 - 2. Known origin of seed
 - 3. High germination ability
 - 4. Little or no other crop seed, weed seed, and/or inert matter
 - 5. Strict tolerances for certain seed-borne diseases
 - 6. Free of noxious weed seeds
- B. The certification process is accomplished by accurate record keeping and a series of inspections and procedures conducted in the field and conditioning plant. Seed sample analysis is conducted at the Utah State Seed Laboratory in Salt Lake City. Only seed produced and labeled in accordance with the general and individual crop Requirements and Standards of the Utah Crop Improvement Association can be represented as Utah certified seed.
- C. Problems with a seed lot may become apparent through seed analysis or other

sources of information regarding diseases, insects, weeds, contamination, etc. not provided for in the UCIA Requirements and Standards, but which affect seed quality, genetic purity, or identity. Certification status of such a seed lot will be reassessed and may necessitate removal of certification tags.

- D. Warranty: Since the use of certified seed is beyond the control of the Utah Crop Improvement Association, no warranty of any kind is made regarding the quality or performance of the seed beyond the express representation that the seed was produced and conditioned in compliance with the Requirements and Standards of the Utah Crop Improvement Association and did qualify at the time of tagging to meet the tolerances established for seed of that particular crop. (See Section IV. D.).
- E. NONE OR ZERO (0): A tolerance of "none" for contaminating or diseased material in either field or clean seed standards means that none were found during the normal procedure of field inspecting or seed sample testing (or re-testing; see Section VII. D.3). It does not constitute a guarantee that the field or seed was or is entirely free of the contaminant or disease.
- F. The word "seed" or "seeds" as used in these standards shall in the broad sense be understood to include all propagating materials of agronomic crops.

III. VARIETAL DEFINITION AND ELIGIBILITY REQUIREMENTS

A. DEFINITIONS

1. **Variety**: An assemblage of cultivated individuals which are distinguished by any characters (morphological, physiological, cytological, chemical or others) significant for the purpose of agriculture, and which retain their distinguishing features when reproduced or reconstituted.
2. **Other Variety**: Plants or seed of the same kind that can be differentiated from the variety that is being inspected, but shall not include variations which are environmental or characteristic of the variety as defined by the breeder.
3. **Off-types**: Off types are plants or seed which do not conform to the description of the characteristics of the variety as supplied by the breeder or sponsoring institution or organization.
4. **Variant**: Seeds or plants which are:
 - a. Distinct within the variety but occur naturally in the variety.
 - b. 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.

- c. Recognized as a part of the variety when released. Variants are not to be considered as off-types. Plant breeders should identify variants in the variety description upon release.

B. APPROVAL

Only those varieties approved by the UCIA are eligible for certification. The Utah State University Variety Review Committee acts in an advisory role to UCIA, and any variety submitted for certification may be subject to review by the committee. However, a variety shall normally be eligible without review upon favorable action by one or more of the following:

Processes recognized by AOSCA in which varieties may be entered into seed certification include favorable action by one or more of the following which have considered the required varietal information, as listed in "C. INFORMATION REQUIRED" (items A. through I.)

- a) AOSCA Variety Review Board; or
- b) Plant Variety Protection office or Breeder Rights statements (with additional items A through I, under C. INFORMATION REQUIRED, as needed); or
- c) Any individual AOSCA vested member agency; or
- d) Acceptance for certification under the OEDC seed schemes (with additional items A through I, under C. INFORMATION REQUIRED).

UCIA and AOSCA recognizes all of these processes for admitting varieties into seed certification

C. INFORMATION REQUIRED

The following items (see U.S. Federal Seed Act 201.68) or their equivalent (from national/international programs) must be made available by the originator, developer, owner, or agent when eligibility for certification is requested:

- a) The name of the variety. This name must be the established name if the variety has previously been marketed.
- b) A statement concerning the variety's origin and the breeding procedure used in its development.
- c) A detailed description of the morphological, physiological, and other characteristics of the plants and seed that distinguish it from other varieties.
- d) Evidence of performance of the variety, such as comparative yield data,

insect and disease resistance, or other factors supporting the identity of the variety.

- e) A statement delineating the geographic area or areas of adaptation of the variety.
- f) A statement on the plans and procedures for the maintenance of stock seed classes including the number of generations through which the variety may be multiplied.
- g) A description of the manner in which the variety is constituted when a particular cycle of reproduction or multiplication is specified.
- h) Any additional restrictions on the variety, specified by the breeder, with respect to geographic area of seed production, age of stand or other factors affecting genetic purity.
- i) A sample of seed representative of the variety as marketed. The sample size shall be that required for a submitted sample in the current issue of the Rules of Testing Seeds for the Association of Official Seed Analysts.

After a variety has been released there is no limitation as to when it may be accepted into certification by AOSCA or its vested member agencies providing that all other provisions of this section are met.

D. VARIETIES ELIGIBLE

The AOSCA Certification Handbook lists minimum standards for all crops under the certification program. In the event certification is requested for a crop not listed in this Utah handbook, AOSCA standards will be used or Utah standards may be developed using the AOSCA standards as a base.

E. PLANT VARIETY PROTECTION

Under the Plant Variety Protection Act of 1970, an originator, developer, or owner of a variety or a crop that is reproduced sexually by seed, may obtain protection for that variety exercising one of two options:

1. The owner or authorized agent may sell either certified or non-certified seed of the variety, with a label stating "Unauthorized propagation prohibited -- U.S. Variety Protection applied for" (or ".....U.S. Protected Variety" if the certificate has been issued). Infringement of the patent is litigated by civil action.
2. The owner or authorized agent may elect to utilize the provisions of Title V of the Federal Seed Act, which stipulates that the variety may be sold by variety name only as a class of Certified seed. The labeling is similar to the non-certification option except for the added statement "To be sold by variety name only as a class of Certified Seed". Infringement of the Patent in this case is a violation of the Federal Seed Act and thus has

advantages for enforcement as compared with civil litigation.

NOTE 1: It is the responsibility of the seller to publicize that the variety is protected and have it labeled properly. Many of the varieties eligible for certification in Utah are protected, and are so designated. The following logo, when it appears on a seed bag, tag, or container, means the seed is protected by the PVP Act.



NOTE 2: An exception to the PVP Act permits a farmer to save and plant his own seed of a protected variety on his own farm. The 1970 PVP Act also allowed farmer-to-farmer sales with certain limitations, but the 1994 revision prohibits all such sales without the express permission of the variety owner or agent.

IV. ELIGIBILITY FOR GROWING CERTIFIED SEED AND MEMBERSHIP IN THE UCIA

- A. Anyone may apply to grow certified seed, but it is expected that such persons or firms should be genuinely interested in producing a high quality product and in promoting the use of better seed. NOTE: Most of the certified seed produced in Utah is grown by prior arrangement with a seed dealer or conditioner.
- B. The certified grower must develop the proper "certification philosophy", recognizing his role in maintaining the genetic purity of improved varieties developed only through tremendous effort by public and private plant scientists. He must realize that growing certified seed is not a get-rich-quick scheme, but that "profit through quality" must be his primary aim. He must be honest with his customers, neighbors, dealers, and himself, and the UCIA.
- C. MEMBERSHIP IN THE ASSOCIATION
 - 1. Membership is effective upon acceptance of the grower's application for certification (See Section V. A. below). More than one member of a Partnership or Corporation may be listed on the same application for potential membership in the Association.
 - 2. One representative from each conditioning facility may become a member of the Association upon acceptance of the facility as a certified conditioner (See Section VII. B), but will not be eligible to serve on the Board of Directors.

D. RESPONSIBILITY OF MEMBERSHIP

1. No practical system has yet been devised for certification of crop seeds that is perfect. The various inspections, sampling, and tests can only minimize the opportunity for carelessness and deception. For this reason, the seed producer and/or conditioner must accept ultimate responsibility for assurance that the UCIA Requirements and Standards have been met in every phase of seed production and conditioning.
2. The Board of Directors will act on any case where the grower or conditioner has knowingly violated any of the certification rules stated herein. By action of the Board, the grower or conditioner may be suspended from membership in the Association and be denied certification privileges as stated in the By-Laws of the Utah Crop Improvement Association.

V. PRODUCTION OF CERTIFIED SEED

A. APPLICATION FOR CERTIFICATION

1. Application forms may be obtained from the UCIA in Logan, the local UCIA supervisors, and District Agricultural Inspectors, and County Agents. An application is required for each variety, seed lot, and/or class of seed to be certified. ACREAGE FEES made payable to the Utah Crop Improvement Association and EVIDENCE OF SEED SOURCE (See Part C.2) must accompany the application, and may be collected by a UCIA representative or mailed to Utah Crop Improvement Association, Utah State University, Logan, UT 84322-4855
2. Due Date: Applications for alfalfa and other legumes, woody species, forbs, grasses, onions, and small grains are due May 15, but will be accepted with a \$100 late fee until May 31. Beans, mint, and potato applications are due June 15, but will be accepted with a \$100 late fee until June 30.
3. A listing of established acreage for perennial crops as recorded in the Logan UCIA Office will be sent out to each grower yearly for verification and notation of any changes.
4. Contact with a UCIA representative must be made prior to planting for all crops to (1) ensure eligibility of the field and the seed; (2) request drill inspection; and (3) obtain current information concerning the certification program.
5. The UCIA reserves the right to refuse applications for the following reasons: (a) the field is so isolated as to make inspection impractical, (b) the

grower is past due in any financial obligation to the Association, (c) land history, isolation, seed source or other requirements are not complied with.

B. CERTIFICATION ACREAGE FEES (Includes Membership in UCIA)

Certification Fees are updated each year and can be found in the current UCIA Certified Seed Directory or supplied on request.

C. SEED STOCKS AND SEED ELIGIBILITY

1. The UCIA will, within reason, make available sufficient stock seed to meet the demands of certified seed producers. Allocation forms for stock seed are available from UCIA representatives or the Logan office.
2. The grower must plant eligible varieties of the proper class or generation. All documentary evidence of the seed source (such as certification tags, bulk certificate, sales records, etc.) must be made available to the UCIA representative, and at least one piece of such evidence must accompany the application for certification.
3. Four seed generations classes meeting or exceeding the standards of the Association of Official Certifying Agencies are recognized in Utah for released cultivars: Breeder, Foundation, Registered, and Certified. Nomenclature and/or tag color for potatoes and mint and other vegetatively propagated crops may be different; see individual crop requirements. Also see Pre-variety Germplasm Standards for Source Identified, Selected, and Tested Germplasm.
 - a. Breeder Seed (White Tag) is directly controlled by the originating or sponsoring plant breeder or institution, and is the source for the production of seed of the other classes of Certified seed.
 - b. Foundation Seed (White Tag) is produced from fields planted with Breeder seed or designated lots of Foundation seed. Such fields are to be grown under the direct supervision of UCIA and a portion of the production may be reserved and designated as Foundation class seed (with approval of owner or agent of the variety) stock according to the needs of the Association.
 - c. Registered Seed (Purple Tag) is produced from fields planted with Foundation seed. In some varieties there is no Registered class (check the variety release notice or consult a UCIA representative).
 - d. Certified Seed (Blue Tag) is produced from fields planted with Foundation

or Registered seeds. This is the class of seed sold and utilized for commercial non-seed production and is not normally eligible for recertification (See 4a, b below).

4. Limitation of Generations -- The number of years and/or generations through which a variety may be multiplied shall be limited to that specified by the originating breeder or owner of the variety, but shall not exceed two generations beyond the Foundation seed class (with the following exceptions which may be made with the permission of the originating breeder or owner):
 - a. Recertification of the Certified class may be permitted for older varieties where Foundation seed is not being maintained by any official Foundation Seed Organization.
 - b. The production of an additional generation of the Certified class may be permitted on a one-year basis only, when an emergency is declared by an Official Seed Certifying Agency stating that the Foundation and Registered class seed supplies are not adequate to plant the needed Certified class acreage of the variety. The additional generation of Certified class seed to meet the emergency need is ineligible for recertification.
 - c. The Generation System for potatoes and mint and other vegetatively propagated crops and for Pre-Variety Germplasm plants has special nomenclature and procedures. (See individual crop requirements.)

D. PLANTING

Seed equipment (drills, planters, hoppers, etc.) must be thoroughly cleaned (brushes, air, water, vacuum, etc.) and an inspection may be required at the discretion of the UCIA representative (See Sec. V.A. 4). This ensures that contaminating seeds do not cause rejection or necessitate roguing of a field.

E. LAND AND ISOLATION REQUIREMENTS

1. The seed must be planted on clean land. The land history must be known and must not have been previously planted to or have grown another variety or class of seed that might volunteer and affect genetic purity. The duration between classes and varieties is based on longevity of viable crop seed or plant parts in the soil; specific requirements are listed in individual crop standards. The land must also be free of noxious, restricted, and objectionable weeds (See Section VI).
2. Exceptions to land history limitations may be approved if proven cultural practices such as deep plowing or fumigation or other means which eliminate volunteer plants are followed.

3. Adding manure or other contaminating amendments may remove a field from eligibility for certification.
4. Isolation: The unit of certification shall be a field, or a portion of a field separated from the remainder by a definite boundary (fence, road, non-planted strip, or strip planted to another crop, or other clearly discernable means).
5. Fields must meet the specific isolation distances from fields of any other variety of the same or closely related species (See individual crop regulations). Isolation zones must be clearly marked and harvested separately from the rest of the field.

F. FIELD STANDARDS, MANAGEMENT, AND INSPECTION

1. Field or seedling identity must be maintained throughout the life of the stand. Good cultural practices should be followed in order to maximize yield, quality, and maintenance of genetic purity.
2. Field inspections are made by an authorized representative (hired supervisors, or other authorized personnel such as Ag. field representatives, County Agents, Utah State University personnel, or UCIA Officers and Directors by special assignment) of the Utah Crop Improvement Association. A field inspection report listing acres passed or rejected for certification (based on standards for isolation, off types, varietal or crop mixture, weeds, disease, plant vigor, etc.) is made at this time, and a copy given to the grower. These inspections will be made at the time(s) during crop growth (see individual crop requirements) that the best judgment can be made as to compliance with field standards.

NOTE: The field inspection report is based on visual evaluation of the plant population in the field and thus field conformance with a ZERO or NONE tolerance is subject to the definition in Section II.E.

3. Pre-inspection and Re-inspection: UCIA representatives are available to superficially examine fields and give advice as to necessity for roguing of objectionable weeds, other crops, and off-types or diseased plants in order to meet the field standards of the particular crop. However, any necessary roguing must be done before the official pre-harvest inspection. If the field is rejected due to inadequate roguing, the grower may request re-inspection after further roguing to correct the problem. The grower will be charged additional fees to cover expenses for the additional inspection.
4. The UCIA representative may refuse to approve a field for certification or

recommend reclassification or special field or seed treatment if field conditions (such as excessive weediness, poor vigor, lack of uniformity, inadequate stand, disease, insect damage, etc.) present accurate inspection or reflect unfavorable upon the certification program. Such rejection may occur even though tolerances or regulations governing production of specific varieties have not been exceeded or violated.

5. Appeal Procedures -- A grower may appeal decisions regarding field, crop, or seed eligibility reached by the UCIA representative by stating the areas of disagreement in a letter to the UCIA Logan Office with a copy to the UCIA representative involved. Such appeals will be arbitrated by the UCIA Executive Committee.

G. HARVESTING CERTIFIED FIELDS

1. The harvesting machinery and all handling and storage facilities must be cleaned to remove all seeds which might contaminate the crop. It is very important for the grower to thoroughly clean his equipment and to handle the seed in a manner which will maintain the identity of the seed without contamination.

Harvesting machines may be cleaned utilizing (1) a detailed "wet method" for small fields or high value crops where it is not desired to discard any of the seed, or (2) an abbreviated "dry method" for harvesting larger fields where a portion of the seed can be discarded as commercial grain. A UCIA representative must inspect and approve the equipment or have a checklist signed by the grower before harvesting begins.

2. Fields or portions of fields of the same variety but of different classes must be harvested, transported, and stored separately. Fields or portions of fields planted with different seed lots of the same variety and class may be mixed upon prior approval of a UCIA representative. Any special harvesting instructions or markers placed by a UCIA representative as to isolation zones, avoidance of restricted weeds, etc. must be strictly adhered to.

VI. REGULATED WEEDS

- a. Crops planted for certification must be planted on land free of the following weeds:

1. Utah Noxious Weeds

Bermudagrass*

Bindweed (Wild Morning-glory)

Broad-leaved Peppergrass
(Tall Whitetop)

Canada Thistle

Dalmation Toadflax

Diffuse Knapweed

Cynodon dactylon

Convolvulus spp.

Lepidium latifolium

Cirsium arvense

Linaria dalmatica (L.) Miller

Centaurea diffusa Lam.

Dyers Woad	<u>Isatis tinctoria L.</u>
Hoary cress	<u>Cardadia spp.</u>
Houndstongue	<u>Cynoglossum officinale (L.)</u>
Leafy Spurge	<u>Euphorbia esula</u>
Medusahead	<u>Taeniatherum caput-medusae</u> <u>(L.) Nevski</u>
Musk Thistle	<u>Carduus nutans</u>
Oxeye daisy	<u>Chrysanthemum leucanthemum (L.)</u>
Perennial Sorghum spp., including but not limited to Johnson Grass (<i>Sorghum halepense (L.) Pers.</i>) and Sorghum Almum (<i>Sorghum alatum (L.) Moench</i>).	
Poison Hemlock	<u>Conium maculatum (L.)</u>
Purple Loosestrife	<u>Lythrum salicaria L.</u>
Quackgrass	<u>Agropyron repens</u>
Russian Knapweed	<u>Centaurea repens</u>
Salt Cedar (Tamarix)	<u>Tamarix ramosissima Ledeb.</u>
Scotch Thistle (Cotton Thistle)	<u>Onopordium acanthium</u>
Spotted Knapweed	<u>Centaurea maculosa Lam.</u>
Squarrose Knapweed	<u>Centaurea squarrosa Roth.</u>
St. Johnswort, common	<u>Hypericum perforatum (L.)</u>
Sulfur cinquefoil	<u>Potentilla recta (L.)</u>
Yellow Starthistle	<u>Centaurea solstitialis L.</u>
Yellow toadflax	<u>Linaria vulgaris (Mill.)</u>

*Bermudagrass (*Cynodon dactylon*) shall not be a noxious weed in Washington County and shall not be subject to provisions of the Utah Noxious Weed Law within the boundaries of that county.

2. Utah Restricted Weeds

Dodder	<u>Cuscuta spp.</u>
Poverty Weed	<u>Iva axillaris</u>
Wild Oats	<u>Avena fatua</u>
Halogeton	<u>Halogeton glomeratus</u>
Jointed Goatgrass	<u>Aegilops cylindrica</u>

3. Objectionable Weeds

Other weed seeds may be a problem in certain crops and are listed in the individual crop regulations. Other weed species may be declared objectionable by the UCIA Executive Committee on a case by case basis.

B. In the event that noxious, restricted, and/or objectionable weeds are found on the land after a crop has been planted for certification, the weeds must be under control at the time of inspection. This means weeds must show evidence of having been mechanically or chemically treated to prevent, restrict, or eliminate surface growth and to prevent seed development. If the weed cannot be chemically controlled in a given crop (i.e., jointed goatgrass in small grains), all plants must be rogued and removed from the field. A field or portions of a field may be rejected if it does not appear that chemical control or roguing of the weed will be successful.

- C. The Utah Seed Law prohibits the sale or distribution of and seed containing seed of Utah Prohibited Noxious weeds. Tolerances in certified seed for seeds of Restricted and Objectionable weed seeds are listed in individual crop standards.

VIII. CONDITIONING, SAMPLING, AND LABELING OF CERTIFIED SEED

A. DEFINITION

1. Seed Conditioning means the mechanical handling of seed from harvest until marketing. This may include separating impurities from the seed such as inert matter, other crop seed, and weed seed. In addition, a seed conditioner may scarify, size, and/or apply a seed treatment before packaging and labeling seed for sale.
2. Mechanical Standards refers to requirements such as purity, germination, etc. in the Seed Standards (see individual crops) other than genetic standards.

B. "CERTIFIED ELIGIBLE" SEED MOVEMENT

Great care must be taken in transporting seed in order to prevent contamination or loss of identity. Equipment must be clean and be inspected by a UCIA representative before moving seed from farm storage to conditioning plants. Non-tagged seed transported between conditioning plants or from a grower to an out-of-state conditioner must be accompanied by an official "Transfer of Seed Pending Certification" certificate specifying certification number, lot, amount, and other information relating to the shipment. (See Part E. 2 below)

C. REQUIREMENTS FOR CONDITIONING FACILITIES

Approval of commercial conditioning plants to clean certified seed will be based on periodic inspection and the annual filing of an application form along with an application fee of \$5.00. A Certificate of Approval will be issued yearly to eligible conditioners. Requirements are as follows:

1. Necessary equipment available to complete cleaning of the crop(s) seeds involved.
2. The facility (machinery, elevators, etc.,) so built and installed as to provide for thorough cleanup.
3. Facility established chiefly to clean crops for seed purposes.
4. Records of all operations must be complete and adequate to account for and maintain identity of all certifiable seed. These shall include:

- a. Receiving record:
 - (1) Variety, kind, and class.
 - (2) Date received.
 - (3) Name and address of producer or shipper.
 - (4) Shippers lot number and/or producers certification number.
 - (5) Number of bags and/or weight of seed received.
 - (6) Receiving lot number assigned to the seed.

- b. Record of conditioning (or re-conditioning, blending, rebagging, etc.):
 - (1) Variety, kind, and class.
 - (2) Date of conditioning process.
 - (3) Lot number(s) of component lot(s) used in making final or blended lot
and
number. lot
 - (4) Number of bags and/or weight of each component and final number
of bags and/or weight.
 - (5) Weight of refuse or screenings and its disposition.

NOTE: Any reconnditioning, blending, rebagging, etc. must have prior approval of UCIA. Completion of a UCIA Blending Report Form is required for blended lots.

- c. Record of disposition of certified seed:
 - (1) Variety, kind, and class
 - (2) Date sold or shipped
 - (3) Name and address of buyer or consignee
 - (4) Certification number and lot number
 - (5) Number of bags and/or weight of shipment

5. Conditioners shall permit inspection by the UCIA of all conditioning, seed

handling, and storage facilities, and of all records of seed conditioned, including both certified and non-certified seed.

6. Machinery, hoppers, floors, etc. must be thoroughly cleaned prior to inspection and be approved by a UCIA representative before processing a given variety. Cleanup between classes or lots of the same variety is required at the discretion of the inspector.
7. Temporary or special conditioning approval: A commercial or on-the-farm conditioning facility may be approved for cleaning specific lots of certified eligible seed provided:
 - a. All requirements regarding adequate equipment and maintenance of seed lot identity are met.
 - b. The conditioning facility must be free of contaminants, and be inspected and approved by a UCIA representative prior to conditioning the seed.

D. SEED SAMPLING PROCEDURE

1. A sample of the conditioned seed considered for certification (except mint and potatoes) must be submitted to the Utah State Seed Laboratory for germination, purity, and disease analysis. A sample will be drawn under the supervision of a UCIA representative and placed in a cloth bag or envelope available from the seed laboratory. An evaluation as to the seed lot meeting certification standards (see individual crop standards) will be based on the seed test results.
2. In order to secure a representative sample, seed should be sampled according to official AOSA procedures. Equal portions shall be taken from evenly distributed parts of the quantity of seed to be sampled. A probe or trier long enough to sample all portions shall be used for free flowing seed in bags or bulk. Non-free flowing seed may be sampled by thrusting the hand into the bags or bulk and withdrawing representative portions.
 - a. Bagged Seed -- for lots of one to six bags, sample each bag; for lots of more than six bags, sample five bags plus 10% of the number of bags in the lot, not to exceed 30 bags.
 - b. Bulk Seed -- Samples from at least seven uniformly distributed parts of the quantity. Automatic or periodic hand samples at the point where seed has finished the conditioning process is permissible at the discretion of the UCIA representative.
 - c. Minimum Sample Size -- (1) Four ounces of grass seed not otherwise mentioned, white or alsike clover or seeds of similar size. (2) Eight ounces of alfalfa, red or crimson clover, rye grass, bromegrass, onions, or seed of similar size. (3) One and one half pounds of proso, sudangrass, or seeds of similar size. (4) Three pounds of cereals, beans, or seeds of

similar size.

NOTE: Foundation class samples must be twice the normal size.

3. Resampling: Seed lots for which the sample is found to exceed the tolerance for specific weed seed, disease, or purity standards for certification (as listed in the individual crop standards), may be resampled. An official sample three times the normal size may be submitted, and determination of certification eligibility, rejection, or necessity for reconditioning will be made in accordance with the retesting results on twice the normal amount of the sample examined. NOTE 1: Contamination of conditioned seed with any Utah Prohibited Noxious Weed may make the lot ineligible for certification, even if subsequent recleaning removes detectable levels of the contaminant. NOTE 2: Allowing re-sampling further qualifies and defines the term "none" or "zero" (0) as listed under Section II.E. in that this tolerance is now based on the re-sampling and re-testing results.

E. LABELING OF CERTIFIED SEED

1. All seed stocks, when sold or otherwise distributed as certified seed, must have an official Utah Crop Improvement Association tag properly affixed to each container (in a manner that prevents removal and reattachment without tampering being obvious) or shall be sold with a bulk sale certificate (see below). Heavy staples may be used, though for certain high value lots of some crops (alfalfa, onions, forbs, grasses, etc.), UCIA may require or a grower may request that tags be attached with a seal or sewn into the bag. Tags shall be attached by or under the supervision of a UCIA representative.
2. A Bulk Sale Certificate may be used in lieu of certification tags for seed sold or otherwise distributed in bulk to the consumer. Such transactions must be under the supervision of a UCIA representative in order to verify equipment and vehicle cleanliness, amount of seed, and compliance with certification standards. Certified eligible seed which has been conditioned and tested and is being transferred in bulk between dealers must also be accompanied by a bulk sale certificate. In this case a basic \$5.00 fee for the certificate will be charged, as long as one of the parties pays, in addition, the normal bulk certification or tagging fee before the seed is distributed to consumers (See Part F below).
3. Substandard Certified Seed -- Certain lots of seed which do not meet certification standards for factors other than those relating to genetic purity or seed origin may be needed for seed increase or to alleviate shortages of a certain variety. Such seed, at the discretion of the UCIA, may be tagged but must have the word "SUBSTANDARD" written on the tag along with a listing of those factors for which the seed does not meet regular Utah Certification standards.
4. Responsibility for any obligations arising from the sale or shipment of seed which has been certified rests with the grower or subsequent handler making the

sale or shipment. This includes compliance with the Federal Seed Act, Plant Variety Protection Act, Utah Seed Act, the standards of the Association of Official Seed Certifying Agencies, and the Requirements and Standards of UCIA.

5. Interagency Certification: Two or more official certifying agencies may participate in performing the services required to certify the same lot or lots of seed.
 - a. Documentation must accompany the seed lot as to its eligibility for certification from the originating state, to include: variety and kind, quantity of seed, class of seed, field inspection results, and inspection or lot number traceable to the previous certifying agency's records.
 - b. Seed shipped into Utah for completion of certification must, at the time of tagging, meet the Utah seed standards for the particular crop.
6. Growers desiring to plant back their own seed (of proper class for certification) must complete certification on such seed through bagging and tagging or bulk sales certificates.
7. NOTICE: IT IS UNLAWFUL IN THE STATE OF UTAH TO SELL, ADVERTISE, EXPOSE OR OFFER FOR SALE ANY SEED AS CERTIFIED THAT HAS NOT BEEN OFFICIALLY TAGGED OR THAT WILL NOT BE ACCOMPANIED BY AN OFFICIAL BULK SALE CERTIFICATE. GROWERS OR CONDITIONERS IN VIOLATION WILL BE SUBJECT TO PENALTY UNDER THE LAW AND MAY LOSE UCIA MEMBERSHIP PRIVILEGES.
8. Tag color used to identify classes of certified seed shall be:
 - a. White for Breeder and Foundation class seed.
 - b. Purple for Registered class seed.
 - c. Blue for Certified class seed. Also indicates U.S. #1 Seed Potato Grade (see Potato Requirements and Standards) and Tested class seed (see Pre-Variety Germplasm Standards).
 - d. Yellow designates a contract grade for seed potatoes only (see Potato Requirements and Standards), and for Source Identified class seed (see Pre-Variety Germplasm Standards).
 - e. Green for Selected class seed (see Pre-Variety Germplasm Standards).

F. TAGGING AND BULK CERTIFICATION FEES

Tagging and Bulk Certification Fees are updated each year and can be found in the current UCIA Certified Seed Directory or supplied on request.

NOTE: When the crop from any field passing the pre-harvest field inspection is sold for seed, UCIA reserves the right to collect the bulk certification rate for such seed, whether or not certification is completed (sealing and/or tagging, or bulk certificates written). This will ensure that UCIA services will not be wasted and encourages completion of certification of quality seed.