

# Seed Certification Handbook

This handbook describes procedures required for participation in the seed certification program. It was developed to supplement the requirements in the MCI A Agronomic Seed Certification Standards. Certified seed producers and conditioners are responsible for compliance with all federal and state seed laws and certification requirements. We hope you will find this handbook to be a useful aid in consistently producing a high-quality seed product.

All MCI A standards, handbooks, forms and other program documents are updated and revised as needed. The current versions of seed certification documents are available on the MCI A website at [www.mncia.org](http://www.mncia.org).

## **CONFIDENTIALITY OF INFORMATION**

All information regarding seed lots for which certification has been requested is considered confidential by MCI A. Unless approved by the applicant, information will be provided only to the applicant and the seed conditioner they have designated.

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# BAGGING AND BULK SEED REQUIREMENTS

## SALE OF CERTIFIED AND QA SEED IN BAGS

### Bagging

The following rules apply when bagging Foundation, Registered, Certified or QA seed:

1. New jute, cotton, plastic or paper bags must be used.
2. All bags in a given seed lot must be of the same kind, size and net weight.
3. Lot sizes in bags - Lot size may not normally exceed 55,000 lbs. for small-seeded legumes and grasses, 44,000 lbs. for sunflowers, 88,000 lbs. for corn and 2,500 bushels for other crops.
4. State seed law prohibits any labeling or other representation conveying the seed to be certified unless it has been determined by a seed certifying agency that the seed conforms to certification standards. **The seed must have a certified seed label attached.**

### Rebagging

The following rules apply when rebagging Foundation, Registered, Certified or QA seed:

1. Rebagging may be desired for transfer to brand bags, for recleaning or for other reasons. When rebagging is performed by someone other than the original seed producer, it must be done under supervision of a MCIA representative.
2. Rebagged lots must be assigned a new lot number.
3. Regular sampling requirements apply when submitting samples of rebagged seed. Draw a representative sample as required for bagged seed lots.
4. Complete a sampling report for the new lot. Indicate that the lot was certified previously by writing the following in the "Remarks" section:
  - a. "Rebagged".
  - b. The MCIA number of the previously bagged lot.
5. Determine the retesting method required:
  - a. For fragile commodities, such as soybeans, that have been moved through a seed plant or lifted by a leg, submit the completed sampling report and sample to a MCIA authorized laboratory for germination and purity testing.
  - b. For nonfragile commodities that have been moved through a seed plant or lifted by a leg, submit the completed sampling report and sample to a MCIA authorized laboratory for purity testing.
  - c. For commodities that are directly rebagged from bag or portable bulk container, no further testing may be required. A facility must be approved to use this method based on an evaluation of the facility. Submit the completed sampling report to the MCIA office reflecting the new bag lot information and retain the sample for your files.
6. When all requirements have been met, MCIA will issue a final certification report. When lots do not require a germination test, purity test, or both, MCIA will apply the test results from the original certified lot and issue the final certification report.

### Bagging Seed from Certified or QA Bulk Lots

The following rules apply when bagging seed from certified or QA bulk lots:

1. When bagging seed previously certified as part of a certified or QA bulk lot, follow all rules for bagging seed, including assigning a new lot number.
2. Draw a representative sample as required for bagged seed lots.

3. Complete a sampling report indicating that the seed was certified previously as a bulk lot by writing the following in the "Remarks" section:
  - a. "Bagged from Bulk".
  - b. The MCIA number of the bulk lot.
4. Determine the retesting method required:
  - a. For fragile commodities, such as soybeans, that have been moved through a seed plant or lifted by a leg, submit the completed sampling report and sample to a MCIA authorized laboratory for germination and purity testing.
  - b. For nonfragile commodities that have been moved through a seed plant or lifted by a leg, submit the completed sampling report and sample to a MCIA authorized laboratory for purity testing.
  - c. For commodities that are directly bagged from bin or portable bulk container, no further testing may be required. A facility must be approved to use this method based on an evaluation of the facility. Submit the completed sampling report to the MCIA office reflecting the new bag lot information and retain the sample for your files.
5. When all requirements have been met, MCIA will issue a final certification report. When lots do not require a germination test, purity test, or both, MCIA will apply the test results from the original certified lot and issue the final certification report.

## **SALE OF CERTIFIED SEED IN BULK**

Certified, Registered and Foundation seed of wheat, oats, barley, rye, and soybeans may be sold in bulk, subject to the following regulations:

1. All field and seed standards applying to bagged seed shall also apply to classes of bulk certified seed.
2. All classes of certified seed may be sold in bulk.
  - a. Bulk Certified seed may be sold by an approved retail seed facility or by the applicant producer. A maximum of two physical seed transfers are permitted after the lot has been certified.
    1. From applicant/company completing final certification of the seed lot to an approved retailer or consumer.
    2. From approved retailer to consumer.
  - b. To be eligible for certification, bulk Registered class seed must be sold by the applicant producer or by an approved conditioner. A maximum of two transfers of seed are permitted after the lot has been certified:
    1. From the person/company completing final certification of the seed lot to an approved processor or consumer.
    2. From approved conditioner to consumer.
3. To be eligible for certification, bulk Foundation class seed must be transferred by the applicant producer or by an approved conditioner directly to the certified seed producer. A maximum of one sale is permitted. The maximum lot size for the bulk Foundation class shall be 10,000 bushels.
4. It is the seller's responsibility to:
  - a. Handle seed in a manner to prevent mixtures and contamination.
  - b. Supply seed that is representative of the seed tested and approved for certification.
  - c. See that all bins, augers, conveyors, and other equipment are adequately cleaned before handling classes of certified seed.
  - d. Determine that the vehicle receiving bulk classes of certified seed is clean. If it is not clean, this condition is to be noted on the bill of sale or bulk sale certificate.
  - e. Keep a sample of each lot of bulk certified seed sold.
  - f. Furnish a completed bulk sale certificate to seed purchaser.

5. It is the buyer's responsibility to maintain purity of the seed after it has been loaded into the buyer's vehicle.
6. Each load of bulk certified seed shall be accompanied by a bulk sales certificate.
7. Retail seed facilities must be approved before classes of certified seed can be handled in bulk, and must be inspected annually. Such facilities may be part of a seed conditioning plant or may be approved only for handling bulk Certified seed. Before approval, all procedures for receiving, storing, dispensing and record keeping must be inspected. The applicant must demonstrate acceptable procedures for maintaining purity and identity of bulk lots.
8. For all bulk certified seed:
  - a. Storage bins must be cleaned between each variety that will be sold in bulk.
  - b. All bins, augers, conveyors and other equipment must be cleaned before storing or handling of classes of certified seed.
  - c. All bins must be clearly and prominently marked to maintain identity. Seed offered for sale must be marked with a complete label including kind, variety, lot number, origin, percentage of: weed seeds, other crops, inert, germination, hard and dormant seeds, name and rate of occurrence per pound of noxious weeds, name and address of labeler and seed treatment information as required by the Minnesota State Seed Law.
  - d. All bin openings must be closed except when seed is being put in or removed from the bin, or have sufficient separation from other bins to prevent cross contamination.
9. The following records must be maintained:
  - a. Amount of seed grown and conditioned or purchased for bulk sale.
  - b. Amount of bulk certified seed sold by variety and lot number.
  - c. A current inventory of seed available for sale of each variety.
10. One lot number will be assigned to each bin per filling. The maximum lot size is the bin capacity. All bins must be prominently identified to assure maintaining identity of the seed therein. Components of lots larger than 2,500 bushels should be pretested before cleaning. The MCIA field supervisor is available to consult with the approved conditioning plant operator to determine which components can be combined into the certified lot, based on results of pre-tests.
11. Bulk certified seed shall not move through any commercial grain-handling facilities.

## **SALE OF CERTIFIED AND QA SEED IN PORTABLE BULK CONTAINERS**

Certified, Registered and Foundation seed of wheat, oats, barley, rye, soybeans, small-seeded grasses and legumes may be sold in portable bulk containers using a bulk sale certificate or certification tag as proof of certification. When certification tags are used the tag must be attached to the container and given to the seed purchaser when the container is unloaded. For QA seed, a QA tag may be used as proof that seed has met QA requirements.

### **Procedures:**

1. Portable bulk containers must be cleaned thoroughly before they are filled.
2. The conditioner must indicate on the sampling report whether bulk sale certificates or certification tags are to be used for proof of certification.
3. If certification tags are used, a tag must be securely attached to each container.
4. When Registered or Certified seed is sold to a non-approved retailer in portable bulk containers, certification tags must be attached to the containers.

5. It is the seller's responsibility to:
  - a. See that all augers, conveyors, and other equipment are adequately cleaned prior to handling certified seed.
  - b. Determine that the vehicle receiving certified seed is clean. If it is not clean this condition is to be noted on the bill of sale or bulk sale certificate.
  - c. Furnish a completed bulk sale certificate or the certification tag(s) from the container(s) to the seed purchaser.
6. It is the buyer's responsibility to maintain purity of the seed after loading into the buyer's vehicle.
7. To be eligible for recertification, Foundation seed in portable bulk containers sold as bulk Foundation must be sold by the applicant producer or by an approved conditioner directly to the certified seed producer. A maximum of one sale is permitted.
8. Retail seed facilities can sell only the Certified class of seed in portable bulk containers using bulk sale certificates as proof of certification. These facilities must be inspected annually and approved as bulk handlers.
9. Portable bulk containers must be clearly and prominently marked to maintain identity. Seed offered for sale must be marked with a complete label including kind, variety, lot number, origin, percentage of: weed seeds, other crops, inert, germination, hard and dormant seeds, name and rate of occurrence per pound of noxious weeds, name and address of labeler and seed treatment information as required by the Minnesota State Seed Law.
10. The maximum size of certified seed lots in portable bulk containers is 2,500 bushels for small grains and soybeans. For small-seeded grasses and legumes, the maximum size is 55,000 pounds.

# SEED SAMPLING REQUIREMENTS

A seed sample submitted for seed certification or QA inspection must be an accurate representation of the entire lot from which it was drawn. Each sample must be drawn carefully and conscientiously in order to yield reliable information. **Samples submitted for seed certification or QA inspection must be drawn in accordance with procedures derived from the Association of American Seed Control Officials AASCO Handbook on Seed Sampling as described below.**

## General Requirements

1. MCIA shall determine eligibility of samplers for submitting official samples for seed certification.
2. Approved seed conditioning facilities shall designate a person (or persons) responsible for submitting representative samples.
3. To secure a representative sample, equal portions shall be drawn from evenly distributed parts of the quantity of seed to be sampled. Access shall be had to all parts of that quantity.
4. As the seed is sampled, each portion shall be examined. If there appears to be a lack of uniformity, the portions shall not be combined but shall be retained separately for laboratory analysis. If the portions appear uniform, they shall be combined to form a composite sample. Thoroughly mix the composite sample.
5. Composite samples shall be obtained to determine the quality of a lot of seed, such as the percentages of pure seed, other crop seed, weed seed, inert matter, germination, and varietal purity.
6. Samples must be labeled at all times and should be stored in sealed containers in a cool, dry location to prevent contamination and loss of germination.
7. Seed samples are to be submitted for testing as soon after conditioning as possible.

A sample of each lot of conditioned seed must be kept on file for at least one year after the lot has been completely sold as required by the Minnesota Seed Law (Section 21.84).

## Sampling Equipment

### Probes (triers)

1. For sampling free-flowing seed in bags:
  - a. The trier shall be designed so that it will remove an equal volume of seed from each part of the bag through which the trier travels.
  - b. A trier long enough to reach all areas in the bag shall be used.
  - c. Unless the trier has partitions in the seed chamber it must be inserted into the bags horizontally.
  - d. When more than one trierful of seed is drawn from a bag, different paths shall be followed.
2. For sampling free-flowing seed in bins or portable bulk containers - a trier long enough to reach all areas in the bin shall be used.

### Stream sampling

1. The containers used must be of sufficient size to prevent seed from escaping during the sampling process.
2. The device must be capable of passing through the entire stream of seed.
3. The speed and timing of each cut must be uniform to produce uniform sized samples at regular intervals.
4. Ten percent of the seed must pass before and after the first and last samples respectively, as sampling must only take place when a uniform volume of seed is present.
  - a. Automatic mechanical sampling devices may be used to continually or intermittently draw representative samples as a seed lot is conditioned.

- b. Hand-held sampling container – Any container or other device hand-held by the seed sampler that can be passed through the entire stream of seed to capture all of the seed in a cross-section cut may be used.

### **Hand sampling**

Non-free-flowing seeds that are difficult to sample with a trier shall be sampled by thrusting the hand into the seed and removing representative portions.

1. Insert the hand flat with the fingers together. Keep the fingers together as the hand is closed and withdrawn.
2. When more than one handful is drawn from a bag, the handfuls shall be taken from well separated points.

## SAMPLING INSTRUCTIONS

When sampling seed, draw a representative sample from conditioned seed in the following manner:

Bagged lots and seed in portable bulk containers:

1. Draw the sample from the last piece of conditioning equipment or as bags are filled.

Or

If sampling after closing the containers, use a probe (see seed sampling equipment) to draw the sample from the bags.

2. For lots of six bags or less, each bag shall be sampled.
3. For lots of more than six bags, a minimum of 5 bags plus 10% of the total number of bags in the lot must be sampled. No more than 30 bags need to be sampled, regardless of the size of the lot.

Bulk lots:

1. Bulk lot samples may be drawn from the last piece of conditioning equipment if the seed is going directly to the final storage bin.
2. If seed is to be transferred to a bin outside the seed plant, draw the sample from the stream of seed as it enters the final bin.
3. If sampling after filling the bin, use a probe (see sampling equipment) to draw cores from well-distributed points throughout the bin.
4. To obtain a composite sample, take as many cores or handfuls as if the same quantity of seed were in bags of ordinary size. At least seven probes either by hand or trier shall be made from uniformly distributed parts of the quantity being sampled.

### Sample size requirements

1. Submit samples in the sample bags available from MCIA. Use a ball point pen to label each sample bag with the required information.
2. Fill the bags to the level indicated for that crop on the sample bag.
3. MCIA has standards for seed lot purity that go beyond the testing requirements of the Federal Seed Act (FSA) and Minnesota Seed law. Larger samples than what is defined in the FSA may be required. Please refer to chart for amount to submit for testing.
4. Keep in mind that there can be some dry down and seed loss at the testing labs; enclose enough extra seed to account for small weight losses.
5. For **treated lots** of all crops, **one sample bag (at least 500gm) of untreated seed** from each lot to be certified must be submitted in addition to a representative sample of the treated seed. The untreated sample will be examined for varietal purity. The treated sample will be tested for germination and purity.

| AMOUNT TO SUBMIT   |  |                 |
|--|--|-----------------|
| Crop   | All Classes  | Minimum weight  |
| Small grains, Soybeans, Corn, and Field beans  | One sample bag filled to upper fill line                             | 1000 gm (2¼ lb) |
| Sunflower  | Two filled sample bags or enough to meet minimum weight requirements | 1000 gm (2¼ lb) |
| Alfalfa, Birdsfoot trefoil, Kentucky bluegrass, Ryegrass, Timothy, Reed canarygrass and seed of similar size | One bag filled to lower fill line                                    | 142 gm (5 oz)   |

# SUBMITTING SAMPLES FOR TESTING

MCIA has authorized the following laboratories to conduct testing for the Seed Certification and Quality Assurance programs. Applicants must select a laboratory authorized to perform testing for the crop species to be tested (see table below). In addition, MCIA shall allow seed of pre-variety germplasm of native seeds to be tested at a USA Accredited Seed Laboratory (ASL). Contact MCIA for details.

## Authorized Testing Laboratories

|   |   |
|---|---|
| <p><b>BioDiagnostics, Inc.</b><br/>                     507 Highland Drive<br/>                     River Falls, WI 54022<br/>                     Phone: (715) 426-0246<br/>                     Fax: (715) 426-0251</p>   | <p>Contact: Denise Thiede or Danell Jamieson<br/>                     Email: <a href="mailto:denise.thiede@biodiagnostics.net">denise.thiede@biodiagnostics.net</a><br/> <a href="mailto:danell.jamieson@biodiagnostics.net">danell.jamieson@biodiagnostics.net</a><br/>                     Website: <a href="http://www.biodiagnostics.net">http://www.biodiagnostics.net</a></p> |
| <p><b>North Dakota State Seed Dept.</b><br/>                     1313 18th Street North<br/>                     Fargo ND 58105<br/>                     Phone: (701) 231-5400<br/>                     Fax: (701) 231-5401</p>   | <p>Contact: Mark Hafdahl<br/>                     Email: <a href="mailto:mhafdahl@ndseed.ndsu.edu">mhafdahl@ndseed.ndsu.edu</a><br/>                     Website: <a href="http://www.nd.gov/seed/lab">http://www.nd.gov/seed/lab</a></p>   |
| <p><b>SDSU Seed Testing Laboratory</b><br/>                     Agricultural Hall 242<br/>                     Box 2207-A<br/>                     Brookings, SD 57007-1096<br/>                     Phone: (605) 688-4589<br/>                     Fax: (605) 688-4013</p> | <p>Contact: Brent Turnipseed, Sharon Clasen, or Ronny Parmely<br/>                     Email: <a href="mailto:brent.turnipseed@sdstate.edu">brent.turnipseed@sdstate.edu</a><br/>                     Website: <a href="http://plantsci.sdstate.edu/seedlab">http://plantsci.sdstate.edu/seedlab</a></p>  |

| Crop/Species        | Authorized Laboratory |                              |                                    |
|---------------------|-----------------------|------------------------------|------------------------------------|
|                     | BioDiagnostics, Inc.  | SDSU Seed Testing Laboratory | North Dakota State Seed Department |
| Barley              | X                     | X                            | X                                  |
| Corn                | X                     | X                            |                                    |
| Field Beans         |                       |                              | X                                  |
| Flax                | X                     | X                            | X                                  |
| Grasses – Group I   | X                     |                              |                                    |
| Grasses – Group II  | X                     | X                            |                                    |
| Legumes – Group III | X                     | X                            |                                    |
| Native Species      |                       | X                            |                                    |
| Oats                | X                     | X                            | X                                  |
| Rye                 | X                     | X                            | X                                  |
| Soybeans            | X                     | X                            | X                                  |
| Sunflowers          | X                     |                              | X                                  |
| Triticale           | X                     | X                            | X                                  |
| Wheat               | X                     | X                            | X                                  |

Grasses – Group I: Bluegrass, Canarygrasses, and Timothy

Grasses – Group II: Bentgrass, Bromegrass, Fescues, Orchardgrass, Redtop, Ryegrass, and Wheatgrass

Legumes – Group III: Alfalfa, Clovers, Crownvetch, and Trefoils

To complete seed certification, follow these steps:

1. Sign the Release of Records form and return it to MCIA.
2. Draw an official representative sample of each conditioned lot according to MCIA sampling procedures and place in a sample bag provided by MCIA. Use a ball point pen to label each sample bag with the required information.
3. Fill out the MCIA sampling report correctly and completely. Indicate in the remarks section – “Send results to MCIA”. Be sure that the information and tests requested on the sampling report match the information and tests on the sample bag. Laboratories will bill you directly for testing so address information is required.
4. Send the sample and sampling report to a laboratory authorized for the species to be tested. The laboratory will send a copy of the sampling report to MCIA. The sample information will be entered into the MCIA database and will be used to facilitate any required follow-up on the lot.
5. **Please note** – moisture and test weight are not required for certification. If you would like these tests performed, request the test on the sample bag and sample report. A separate fee may be charged.
6. **The sample tag should be submitted directly to MCIA** accompanied by a copy of the sampling report via email, fax or regular mail. Any additional information, such as transfers of seed coming in from other states, OECD tagging reports, incoming bulk sales certificates, and certification tags or other supporting documentation should also be sent directly to MCIA.
7. Test results will be sent by the laboratory directly to the owner of the lot and to MCIA. Questions regarding testing should be made directly to the laboratory conducting the test.
8. Certification status of the lot will be determined by MCIA and a final certification report will be sent to the owner and conditioner.

# PRINTING CERTIFICATION AND QA LABELS

## PROOF OF SEED CERTIFICATION

For certification to be complete, all seed must be properly labeled with a certification tag or represented by a Bulk Seed Sales Certificate.

On bagged seed a Certification tag is required as proof of certification.

For seed in portable bulk containers a Certification tag or a Bulk Seed Sales Certificate can be used as proof of certification. The following rules apply when determining the appropriate proof of certification to issue for seed in portable bulk containers. If seed **is for resale** issue a Certification tag, if the buyer is not an approved bulk handler or seed conditioner. Issue a Bulk Seed Sales Certificate or Certification tag if the buyer is a bulk handler or seed conditioner. If seed **is not for resale** issue a Certification tag or a Bulk Seed Sales Certificate.

For bulk certified seed a Bulk Seed Sales Certificate is issued as proof of certification.

## SEED CERTIFICATION LABELS

Official certification labels supplied by MCIA shall be affixed to each container of bagged seed. These labels identify the certification agency and seed class. Variety name, seed kind, lot number and identifying number are imprinted before attaching labels. Certification labels shall contain only information approved by MCIA.

All seed must be properly labeled with seed analysis information as required under state and federal seed laws. Analysis information may be printed on the certification label or on a separate tag in addition to the certification label. Analysis tags may be printed by the applicant or distributor. MCIA will print analysis tags for certified lots at the request of the applicant.

Plant Variety Protection (PVP) statements are required on some varieties. A current list of protected varieties is available at <http://www.ars-grin.gov/cgi-bin/npgs/html/pvplist.pl>

MCIA publishes a list of protected varieties in its annual Directory. Certification reports for protected varieties also indicate the PVP status of the variety tested in the "Remarks" section.

### Applying certification tags

State and Federal Seed Laws require that certification labels be securely fastened to bags before seed leaves the original owner's possession. Seed in containers with no certification labels attached is not certified seed.

### Pre-printed certification tags

1. Approved plants that do not have tag-printing privileges may request pre-printed tags to sew into bags as they are filled. When this system is used, the applicant must agree to keep seed under his control until certification is granted.
2. Submit a sampling report to MCIA with all information except amount of seed and request the number of tags you need. Request "Pre-print tags" in the "Remarks" section of the report.
3. You will receive serially numbered tags registered in your name for which you are accountable. You must report lost, damaged or unused tags to MCIA. Return damaged or unused tags to your field supervisor.
4. After seed is bagged and sampled, complete a sampling report. Note in the report "remarks" section that you have received pre-printed tags and indicate the actual amount of seed and final number of bags in the lot.

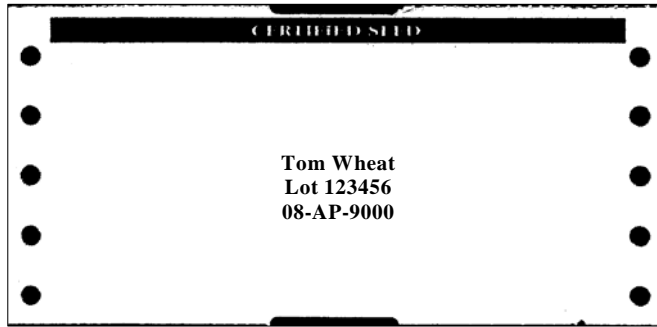
### Printing tags

1. Approved conditioning plants (AP) with tag-printing privileges shall print tags only for seed conditioned in that plant unless special authorization is given by MCIA.

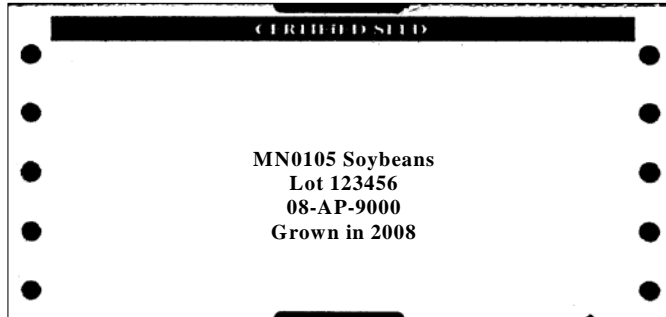
2. Each plant must designate an individual in charge of certification tags and provide his/her name to MCIA. This person will be accountable for printing, attaching tags to bags, and record keeping.
3. Certification tags will be issued upon request to plants approved for tag printing. Plants are accountable for all tags issued to them.
4. Plants must maintain an accurate account of all certification tags issued to them. A form for reporting tag use is sent with each lot of tags. These reports are preprinted with the sequence of tag numbers they cover; they are to be completed accurately and returned to the MCIA field supervisor when all tags listed on them have been used.
5. Tags are serially numbered and consecutive numbers must be assigned to each seed lot. Report the numbers on the sampling report, and attach a sample tag to a copy of the sampling report and submit to the MCIA office. If tags are printed after the sampling report is submitted, a new sampling report indicating the tag numbers must be completed and sent to MCIA. A sample tag must be attached to this report.
6. Tag printing must be clear, uniform and legible. Please follow the sample tag format. Plants electing to include seed analysis information on the certification label must comply with all applicable seed law labeling requirements.
7. Plants that print tags are accountable for all seed tagged prior to testing. This accountability lasts until all tests are completed and you are notified that the seed lot is passed or rejected. Do not attach certification tags to bags if you cannot maintain control of seed until tests are completed. Shipping seed prior to receiving test results could bring revocation of tag-printing privileges.
8. If a seed lot is rejected, you must remove certification tags and return them to your MCIA field supervisor.
9. An inventory of tags will be taken by the MCIA field supervisor at least annually.
10. These requirements must be followed to maintain accurate certification records. MCIA reserves the right to revoke special tagging privileges in case of violation.
11. Damaged tags must be returned to the field supervisor.
12. The prefix to your AP number changes to that of the current calendar year each July 1.



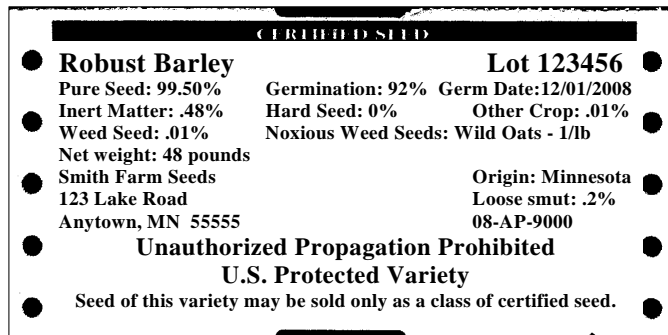
Certification tag - Front side



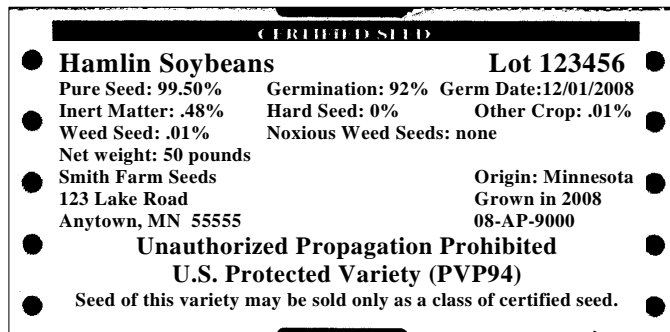
Example 1 - Tag for crops except soybeans



Example 2 - Tag for soybeans.



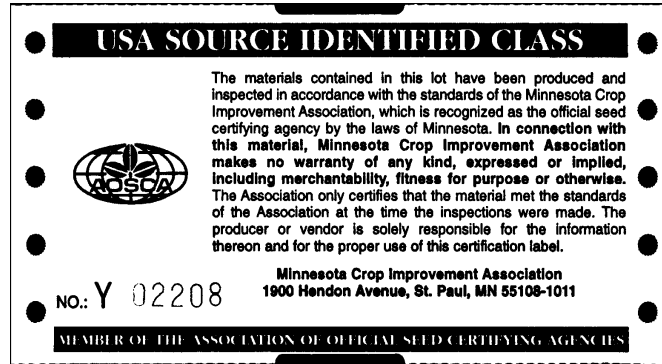
Example 3 - Tag with analysis for barley.



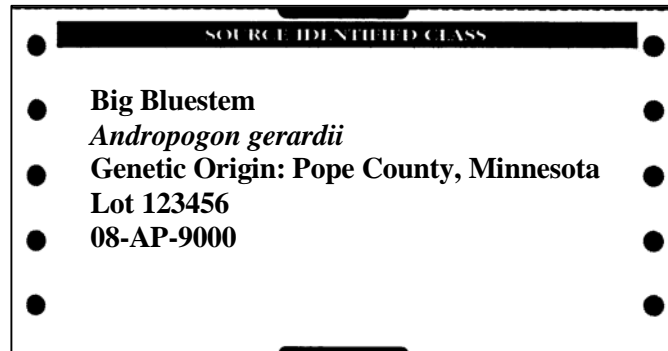
Example 4 - Tag with analysis for soybeans.

# CERTIFICATION LABELS - PRE-VARIETY GERmplasm OF NATIVE GRASSES AND FORBS

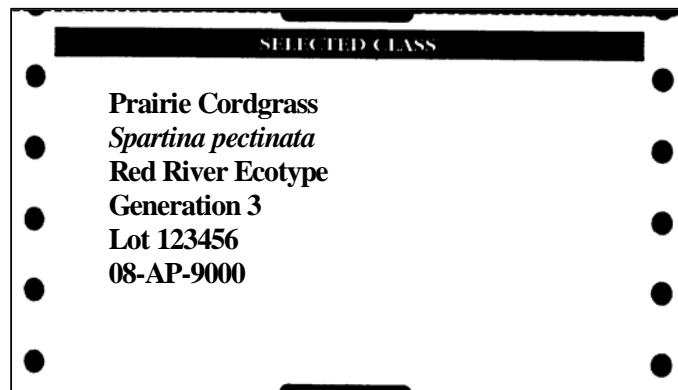
Follow the procedures described on the previous pages when printing tags for pre-variety germplasm of native grasses and forbs. Use the following formats when printing certification labels for the Source Identified, Selected and Tested seed classes. Do not use pre-variety germplasm certification labels for germplasm that has been released as a named variety - use the certification label for the applicable seed class and the format shown on the previous page (Example 2).



Pre-variety Germplasm Certification Tag  
Front Side



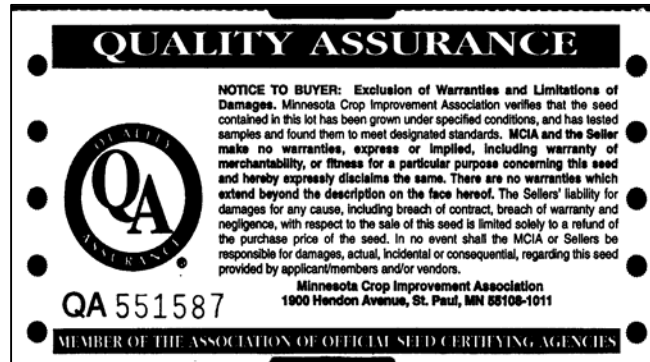
Example 6: Source Identified class



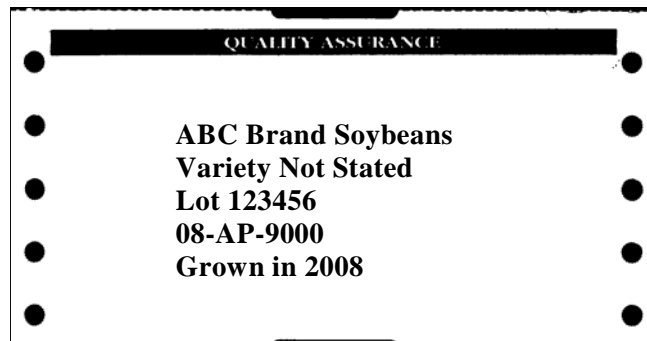
Example 7: Selected Class Tag

## QUALITY ASSURANCE LABELS

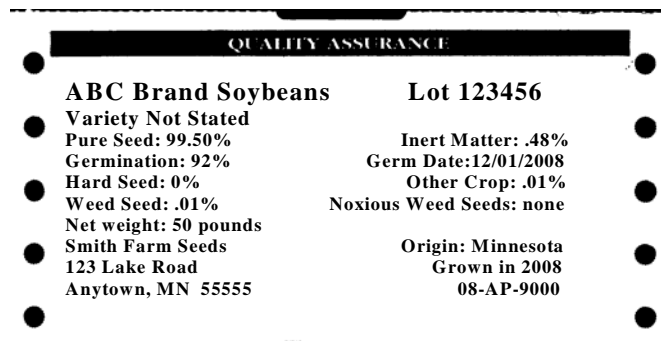
Official Quality Assurance (QA) labels supplied by MCIA may be affixed to each container of bagged seed eligible to be so labeled under the MCIA Quality Assurance program. These labels identify the certification agency and seed class. Variety name, seed kind, lot number and identifying number are imprinted before attaching labels. QA labels shall contain only information approved by MCIA. Approved conditioners printing QA labels should follow the procedures described for printing certification tags. Follow all applicable seed law requirements when labeling seed using brand names. See examples below:



QA label - Front side



Example 1: Tag for soybeans



Example 2: QA tag with analysis

# ISSUING BULK SEED SALES CERTIFICATES

Bulk Seed Sales Certificates supplied by MCIA shall be issued for each sale of certified seed sold in bulk. Plant Variety Protection (PVP) statements should be checked on some varieties. A current list of protected varieties is available at <http://www.ars-grin.gov/cgi-bin/npgs/html/pvplist.pl>.

MCIA publishes a list of protected varieties in its annual Directory. Certification reports for protected varieties also indicate the PVP status of the variety tested in the “Remarks” section.

## Blank Bulk Seed Sales Certificates

Approved facilities may request blank Bulk Seed Sales Certificates to be filled out at a later date. When this system is used, the facility must agree to issue a certificate for each sale once certification is or has been granted.

1. Request blank certificates from the MCIA office.
2. You will receive serially numbered certificates in your name for which you are accountable.
3. You must supply your field supervisor with the yellow copy of all certificates issued, all copies of voided certificates, and report lost, damaged or unused certificates.

## Bulk Seed Sales Certificates printed by MCIA

An applicant may request the MCIA office to print required information on the Bulk Seed Sales Certificates once certification has been granted. When this system is used, the applicant must agree to return the yellow copy of completed certificates to the field supervisor and also report lost, damaged or unused certificates. All copies of voided certificates must be returned to the field supervisor.

1. Indicate “printed” next to the number of certificates requested on the Sampling Report.
2. At time of sale complete the certificate by writing in the buyer’s name, address, amount of seed sold, whether for resale/not for resale and signing the certificate.

## Issue Bulk Seed Sales Certificates Online

If you choose to use this method, contact the MCIA office to set up a user name and password. It is best to set this up a couple of days prior to wanting to use the electronic system.

Here are the general guidelines for use. If you have questions or want more detailed instructions contact the MCIA office.

1. The Seed Hub is located at <http://www.seedhub.com>. Click on the Seed Hub Login button.
2. Before use, you will need to edit your profile. Enter your data, and be sure to check the Inventory, Bulk Certs and Seed Sales options. Once this is complete, click on the Your Accounts on the Admin menu.
3. From the Lab pick list, choose MCIA; enter the user name and password that was set up in the PureHarvest database.
4. From the Inventory menu select Add Seed Lot. Always remember to click the Save button.
5. Add buyers on the Seed Sales menu – Add Buyer.
6. Create a Bulk Seed Sale Certificate by clicking on Seed Sales – Create a Bulk Cert. Choose your Buyer and your Seed lot from the pick lists. Enter the amount ordered, units, and if for resale.
7. Hit Preview and review the information. If correct, press Commit. This will generate a Bulk Certificate.
8. To save a copy to your computer, click Save A Copy in the web browser. Print a copy for your customer.
9. To void a sale, go to List Bulk Certs, view. Click the To Void Sale, Click Here button. Voids cannot be reversed.

# SUBSTANDARD SEED

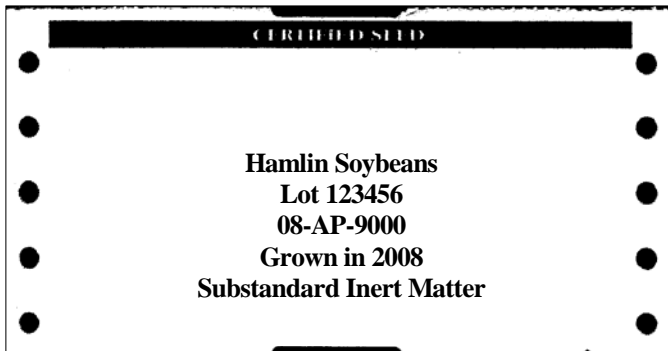
Certain qualities of seed may be affected by environmental conditions, such as unfavorable weather. Seed that fails to meet the certification standards for inert matter and/or germination may be certified, with the cause for the substandard classification stated on the certification label. However, all possible means of upgrading the quality of the seed lot must be used before substandard classification is given. The labeler is responsible for ensuring that seed analysis information printed on labels is accurate and in compliance with seed law labeling requirements.

Barley containing more than 4% loose smut may be labeled substandard. The percentage of loose smut found in the test shall be included on the label (see example below).

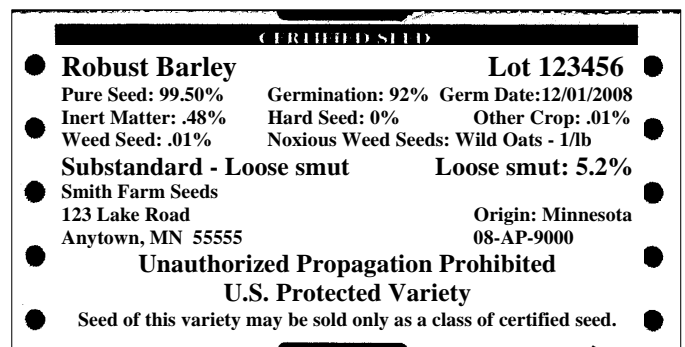
## Certification of Substandard Seed lots

The form "Substandard Seed" is sent to all seed certification applicants whose seed lots do not meet germination, inert matter and/or loose smut standards. The form must be completed and returned to MCIA to receive "Passed - Substandard" status on a failed lot. When completing this form, indicate which of the following options is being used to label the seed as substandard:

1. Tags have been stamped by the owner to show the substandard status.
2. Tags or adhesive labels requested from MCIA.
3. The approved conditioner has printed new certification tags showing substandard status. The serial numbers of the tags used must be indicated and a sample tag attached to the form. The following are two examples of certification labels for substandard seed lots:



Certification Label for Substandard Seed - No Analysis



Certification Label for Substandard Seed – With Analysis

## Quality Assurance - Substandard Seed

The form "Quality Assurance – Substandard Seed" is sent to QA applicants whose seed lots do not meet germination or inert matter standards. Follow the procedures described above for certification of substandard lots to receive "Passed - Substandard" status for rejected lots.

# REJECTED SEED LOTS

## Seed lots rejected for prohibited weed seeds

1. Seed lots rejected for prohibited weed seeds can neither be offered for sale in Minnesota nor blended with other lots of seed.
2. Samples of seed lots rejected for prohibited weed seeds cannot be resubmitted for certification.
3. Seed lots rejected for prohibited weeds can be reconditioned. Issue a new lot number for reconditioned seed lots and submit a sample for purity and germination testing.
4. Certification or QA labels from rejected lots must be returned to the MCIA field supervisor.

## Seed lots rejected for other reasons

Use either option below for seed lots rejected for reasons other than prohibited weeds:

1. Resample the seed lot using the required sampling procedures - see *Seed Sampling Requirements*. The designated sampler of the approved seed conditioning plant that conditioned the seed may draw one resample per lot.
2. A rejected lot can be reconditioned. Issue a new lot number for the reconditioned seed lot. The designated sampler of the approved seed conditioning plant may draw and submit a sample of the reconditioned lot for purity and germination testing.

Certification or QA labels from rejected lots must be returned to the MCIA field supervisor.

## APPROVING LOTS "FOR OWN USE ONLY"

Occasionally, when a Foundation or Registered lot of seed fails to meet certification standards, an applicant may request that the lot be passed for his own use for further seed production. Before MCIA will consider such a request, all reasonable measures must be taken to correct problems with the seed lot. Where seed conditioning may correct the problem(s), it is recommended that the applicant recondition and retest the seed lot prior to requesting "For Own Use Only" status.

To be eligible, seed lots must comply with all requirements of the Minnesota Seed Law. Lots containing prohibited weed seeds, restricted weed seeds in excess of 25 per pound or total weed seed in excess of one percent are not eligible.

Upon receipt of a written request from the applicant, individual lots will be evaluated based on several factors including the experience of the applicant, seed supply, and end use of the seed. If approval is granted, certification tags will be issued that include the statement: "For Own Use Only". Seed so labeled may not be offered for sale.

# DOWNGRADING SEED

Registered seed of public varieties, except for new varieties, may be downgraded to the Certified class at the discretion of the owner of the seed. New variety releases require approval from the owner of the variety prior to downgrading. Contact MCIA prior to downgrading Registered seed of new public varieties. Private varieties may be downgraded with approval from the owner of the variety.

When it has been determined that the variety is eligible for downgrading, please use the following procedures to downgrade seed:

## **Prior to Completing Certification**

Mark “Certified” seed class on the *Sampling Report* and write “downgrade” in the “Remarks” area of the form.

## **After Completing Certification to Registered Class**

Bagged Seed - If downgrading only a portion of a lot the following steps must be met:

1. Assign a new lot number to the Certified class seed lot.
2. Submit a *Sampling Report* for the new Certified class seed lot. Include the following:
  - a. New lot number.
  - b. Previous lot number (from Registered class seed lot).
  - c. Previous MCIA number (from Registered class seed lot).
  - d. If new Certified class seed tags are printed, indicate the serial numbers of the tags used and attach a sample tag.
  - e. Number of bushels/pounds to be downgraded.
  - f. Number of containers.
  - g. Write “downgrade” in the “Remarks” area of the form.
3. Return Registered tags to MCIA or your field supervisor.
4. MCIA will issue certification reports for the Registered and Certified lots indicating the correct number of bushels for each.

Bagged Seed - If downgrading the entire lot the following steps must be met:

1. Submit a corrected *Sampling Report* with the correct seed class and indicate “downgrade” in the “Remarks” area of the form.
2. Return Registered tags to MCIA or your field supervisor.
3. MCIA will issue a certification report indicating the correct seed class.

Bulk Seed – If downgrading only a portion or the entire lot, issue a Bulk Seed Sales Certificate indicating the seed class as Certified.

# CARRYOVER SEED

1. Determine whether the date of the germination test on the label meets applicable seed law requirements:
  - a. Minnesota State Seed Law requires a germination test within 12 months of sale. Grass seed must be germination tested within 15 months of sale. The first full month after the test was done is counted as the first month.
  - b. Seed that moves interstate must comply with the Federal Seed Act, which requires a germination test within 5 months of the date of interstate shipment. The first full month after the test was done is counted as the first month.
2. If the germination test date on the label requires updating, resample the lot and submit the sample for a germination test.
3. All containers offered for sale must be labeled with the new germination test date (and germination rate if changed). Labeling options include:
  - a. Applying stickers with the new germination information to all analysis labels. Stickers must adhere securely and should cover only the analysis information to be updated.
  - b. Attaching a new analysis tag to each container indicating the new germination information. When only the germination test date and germination rate information is being updated, a label including only that information may be attached to the containers in addition to the existing label(s).
  - c. When analysis information was printed on the certification labels and new certification tags are printed to replace the existing labels, use the following procedures:
    - i. Submit a seed sampling report to MCIA indicating:
      1. The number of tags printed.
      2. The serial numbers of the tags used.
      3. The lot is "carryover seed" in the "Remarks" area of the report.
      4. The original MCIA number of the lot.
    - ii. Attach a sample tag to the sampling report.
    - iii. Remove the old tags from the bags and return to the MCIA field supervisor.

# VARIETY BLENDS AND MIXTURES

## Blend/Mixture Approval

1. To be eligible for certification, variety blends and mixtures must be approved by MCIA.
2. A blend of varieties must be tested at least one year by an agency designated by MCIA or the components must be listed on the certification label.
3. For blends whose components are not listed, current performance data from official tests must be available to the purchaser each year that a blend is offered for sale as certified seed. A blend shall be tested at two or more locations in the area of adaptation, in comparison with appropriate check varieties. The fee for official testing shall be paid by the owner or developer.
4. Only MCIA approved seed conditioners that can demonstrate the ability to blend/mix seed within specified tolerances will be permitted to do varietal blending and mixing.

## Composition

1. Only Certified seed of each of the component varieties shall be used in a certified blend/mixture. Proof of certification of seed used must be submitted to the certifying agency.
2. Formulas for the blend/mixture shall be recorded with MCIA and shall not vary between lots and between years.
3. Permission to use a protected or private variety in a blend must be obtained from the owner or breeder of the variety and labeling must be in accordance with the owner's requirements.

## Identification

1. A blend may be identified by a brand name or by names of the components. For example: ABC Brand Soybeans Blend or Evans/Hardin Soybean Blend. A variety may be used in a blend only with permission of the owner and under conditions specified by the owner. If the blend contains component varieties for which owners specify that the identity may not be divulged, the components of the blend and proportions of each shall be recorded in confidence in MCIA files. These components and proportions shall not vary between lots and between years.
2. If seed of individual components of a certified blend are not visibly distinguishable from one another, MCIA may require that its representative be present during the blending process.

## Certification Procedures

1. Request approval for each blend/mixture to be certified by submitting an *Application for Certification of Variety Blends/Mixtures*.
2. Submit evidence of the owner or breeder's permission to use a protected or private variety in a blend.
3. Draw a representative sample of each component prior to blending according to MCIA sampling procedures.
4. Submit a sample of each component for testing. For the blend to be eligible for certification, each component must meet certification requirements. If components have been certified in another state, submit a certification label as proof of certification of the component lot to be used.
5. Submit a *Notification of Blending Certified Seed* to MCIA two days prior to blending or mixing seed.
6. Draw a representative sample of the final blend according to MCIA sampling procedures.
7. Submit a sample of the blended lot for purity and germination testing. To be eligible to be labeled with certification tags, the blend/mixture must meet certification requirements for germination and purity.

# INTERAGENCY SEED CERTIFICATION

Interagency certification is a procedure for completing or maintaining certification of seed originating in one state for which certification is either completed or retained in another state. Interagency certification is used in three ways:

1. Certification has been completed by another state and a seedsman wishes to blend, condition or rebag in Minnesota.
2. Field inspection was completed in another state and certification is to be completed in Minnesota.
3. Field inspection was completed in Minnesota and certification is to be completed in another state.

## CERTIFICATION COMPLETED IN ANOTHER STATE

When certification is completed in another state and a seedsman wishes to recondition or rebag in Minnesota, seed is conditioned and samples are submitted as usual. Include a completed bulk certificate or tag from the state of origin along with a copy of the sampling report and submit to the MCIA office.

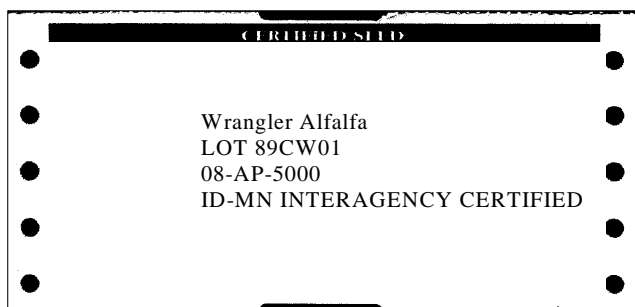
When certification is completed in another state and a seedsman wishes to blend lots in Minnesota, preliminary samples of each must be taken by an official MCIA inspector or by a designated sampler at an approved plant. Each seed lot must be inspected to verify that all bags display certified tags from the originating state. Bags without certified tags cannot be included. The number of bags must be verified with the mill record. Complete the following steps:

1. Sample component lots:
  - a. Samples from each component lot of 20 bags or less shall be one-half pound; samples from more than 20 bags shall be one pound.
  - b. A sample is not necessary if the component lot has Minnesota tags. Simply include a certified tag with the other component samples of the blend.
  - c. Remove one certified tag from each component lot and include it along with a copy of the sampling report and submit to the MCIA office.
  - d. Label component sample bag with variety, lot number and class of seed.
  - e. Complete MCIA seed sampling report. Under "Remarks", identify as a component sample of blended lot number and indicate quantity and identification numbers of bags received.
  - f. Send component lot seed samples with final sample along with the sampling report.
2. Blend and retag seed.
3. Sample blended lot:
  - a. Sample blended lot. Sample size is the same as for component lots.
  - b. Label sample bag with blend name, lot number and seed class.
  - c. Complete MCIA sampling report. Under "Remarks," identify as final sample.
  - d. Submit sample and sampling report to an MCIA authorized laboratory for testing.
4. All original certification tags must be available for inspection by MCIA.
5. The seed lot must be held until all tests are completed and notice is received that it has passed certification standards. Tags must be removed if the lot is rejected.

## FIELD INSPECTION IN ANOTHER STATE, CERTIFICATION COMPLETED IN MINNESOTA

1. Procedures are the same as for seed grown in Minnesota except that the applicant must furnish a completed *Certificate of Transfer* signed by a representative of the certification agency of the state in which the seed was produced.
2. Seed is conditioned and samples are submitted as usual with the sampling report. Submit a copy of the sampling report and the *Certificate of Transfer* to the MCIA office.
3. Seed must be held until all tests are completed and the lot is passed. Certification tags may be issued by MCIA or printed by approved conditioning plants with tag-printing privileges. Information required on the certification tag and bulk sale certificate are shown in the examples below.

Certification Tag Example: Use standard US postal service abbreviations for the states in which the seed was produced followed by MN and the words "interagency certified." If the seed was produced in Canada use CDN for the abbreviation.



Bulk Certificate Example:

### INTERAGENCY CERTIFICATION

If the seed represented by this certificate was grown in a state other than Minnesota, complete one of the following:

The seed was grown in (State) Idaho and certification was completed in Minnesota.

Certification was completed in (State) \_\_\_\_\_

Identification number from Bulk Sale Certificate of originating State  
\_\_\_\_\_

## FIELD INSPECTION IN MINNESOTA, CERTIFICATION COMPLETED IN ANOTHER STATE

When field inspection was completed in Minnesota and certification is to be completed in another state, the applicant for field inspection shall complete the "Certificate of Transfer for Seed Pending Certification" and submit the form to MCIA for completion. MCIA shall send the original to the conditioner/purchaser of the seed. Signed copies shall be sent to the producer/seller and to the certification agency in the state where the seed is to be shipped.

# RESOURCES

## Minnesota Crop Improvement Association (MCIA)

Home Page <http://www.mncia.org>

Seed Certification [http://www.mncia.org/program\\_seedcert.html](http://www.mncia.org/program_seedcert.html)

## United States Department of Agriculture (USDA)

Federal Seed Act and other publications

<http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateI&navID=Publications&rightNav1=Publications&topNav=&leftNav=FairTradingRegulations&page=SeedTestingPublications&resultType=&acct=lsgeninfo>

Plant Variety Protection

<http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateC&navID=PlantVarietyProtectionOffice&rightNav1=PlantVarietyProtectionOffice&topNav=&leftNav=ScienceandLaboratories&page=PlantVarietyProtectionOffice&resultType>

## Minnesota Department of Agriculture (MDA)

Home page <http://www.mda.state.mn.us/>

Minnesota Seed Regulatory Program, Minnesota Seed Law, and other publications <http://www.mda.state.mn.us/licensing/grainseed/fsmsrp.htm>

## Association of Official Seed Certifying Agencies (AOSCA)

Home page <http://www.aosca.org>  
National Variety Review  
Board information

## Canadian Food Inspection Agency (CFIA)

Information on importing seed into Canada <http://www.inspection.gc.ca/english/plaveg/seezem/abce.shtml>

## Organization for Economic Co-operation and Development (OECD)

USDA site

<http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateG&navID=OECDProgram&rightNav1=OECDProgram&topNav=&leftNav=CommodityAreas&page=SeedTestingOCED&resultType=&acct=lsgeninfo>

International site

[http://www.oecd.org/document/0/0,3343,en\\_2649\\_33905\\_1933504\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/0/0,3343,en_2649_33905_1933504_1_1_1_1,00.html)