



Oregon State
University

Oregon Seed Certification Service

Sampler & Tagger Guide

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I. Purpose and Scope

This guide, combined with the Oregon Seed Certification Handbook, provides the main rules and policies applying to warehouses, sampling, and tagging. Individual samplers who are authorized by the Oregon Seed Certification Service (OSCS) represent the seed certifying agency in these steps of the OSCS program. All sampling of certified seed (Oregon and OECD) must be done by an authorized OSCS sampler in a manner that ensures a proper representative sample of the seed lot.

II. Definitions

- A. Seed Conditioner: also referred to as a warehouse; cleans, treats, mixes, blends, or otherwise processes certified seed
- B. Seed Lot: a “definite quantity of seed identified by a lot number, every portion or bag of which is uniform, within permitted tolerances, for the factors which appear in the labeling.” (Federal Seed Act Regulations § 201.2)
- C. Container: receptacle in which seed is held or packaged (e.g., sack/bag, box, bin, bulk)
- D. Blend: Certified seed lots of two or more varieties of the same crop kind are blended and labeled as “Blend of Certified [Species]”
- E. Mixture: Certified seed lots of two or more crop kinds mixed and labeled as “Mixture of Certified Seed”
- F. Augmented Lot: Eligible seed lots of one crop kind and variety mixed and homogenized to form a larger lot of uniform quality that meets Oregon Seed Certification Service (OSCS) standards
- G. Isolation Lot: a seed lot consisting of seed from an isolation area of a certified field. Seed from this isolation area must be harvested separately and conditioned as uncertified.
- H. Homogenous: uniform composition throughout. Seed lots must be as homogenous as is practicable.
- I. Treated Seed: seed that has had an application of a compound such as fungicide, pesticides, dyes, etc. resulting in minimal weight gain. Seed treatment does not significantly change the shape and general size of the untreated seed.
- J. Coated Seed: seed covered with external material (e.g., mixtures of clay, nutrients, and pesticides) to such an extent that in most cases seed cannot be identified without removing the coating material
- K. Sampler: person authorized by OSCS and responsible for sampling, tagging, and verification of seed lots
- L. Automatic Sampler: device installed at the end of the seed cleaning process that uniformly samples the cross section of the seed stream at timed intervals and is operated under automatic control
- M. Primary Sample: a portion taken from the seed lot during one single sampling action
- N. Sampling Intensity: the number of primary samples taken when sampling a seed lot
- O. Composite Sample: formed by combining and mixing all the primary samples taken from the seed lot
- P. Submitted Sample: the sample of seed to be submitted to the laboratory, which could be the entire composite sample or a subsample depending on the situation
- Q. Sealed: closed in such a way that a container cannot be opened and closed again without leaving evidence of tampering
- R. AOSCA: Association of Official Seed Certifying Agencies, of which OSCS is a vested member
- S. OECD: Organisation for Economic Co-operation and Development is an international organization that promotes standardized and certified seed. Cooperative agreements with USDA allow seed certifying agencies such as OSCS to perform seed testing and field inspections on behalf of the U.S. OECD Seed Schemes Program. OSCS is the recognized agent for OECD in Oregon.

III. Seed Conditioners/Warehouses

Only OSCS-inspected and approved seed conditioning warehouses may handle certified seed. Please refer to the most recent approved warehouse list (available upon request). If any certification activities are to take place at a seed storage facility, it must also be approved by OSCS. Additional inspections may be conducted at the discretion of OSCS. An out-of-state facility that is located within 20 miles of an OSU Extension office may be approved as an Oregon certified warehouse to condition seed produced in Oregon. The designated state certification authority of the state in which the facility is physically located and the OSCS Program Manager must approve.

Warehouses are responsible for:

- A. Adequately maintaining the identity, purity, and uniformity of seed lots at all times. The mode of operation and facilities must be such that conditioning and/or storage is performed without introducing admixtures;
- B. Conditioning the entire seed lot prior to sampling;
- C. OSCS must be notified via filing a movement online when an untagged seed lot is moved to another warehouse or storage location. This can be done by any entity on the sample record. Certified lots must be sampled before being moved to a different warehouse;
- D. Maintaining complete records for all operations involving certified seed in accordance with federal and state seed laws, and OSCS policies. Isolation lots must be documented as uncertified in the receiving, cleaning, and distribution records. See Coated Seed section for additional requirements. These records must be made available to OSCS upon request;
- E. Maintaining a record seed sample for at least one year after final disposition of the seed lot;
- F. Seed lots to be probed must be stacked no more than two pallets high; bulk bags must be set down in a single layer. Seed lots must be easily and safely accessible for sampling without the use of ladders or forklifts. Because of the possibility of an injury, OSCS samplers are not allowed to climb sacks or pallets, use ladders, or be lifted by forklifts to perform sampling or tagging duties. Samplers must be able to safely reach and sample all containers in a seed lot while standing on the ground. Samplers have the discretion to refuse sampling/tagging if there are any dangerous conditions such as dark alleyways, leaning pallets, unleashed dogs or other hazards at a warehouse;
- G. Stacking sacks and pallets in such a way that a visual check of the lot number, and an accurate counting of the seed lot can be done by the sampler. Hidden or tie-in bags on pallets are not allowed;
- H. Ensuring seed lots are free of extraneous material that could result in contamination of a seed sample or poorly represent OSCS;
- I. Accurately filling out sample certificates and requesting sampling via eCertification online, and having the printed sample certificate ready for the sampler. Adhesive labels are available from the OSCS office. Handwritten sample certificates will result in an extra charge. All samples will be assumed to be original samples unless it is marked as resample, reclean, blend, or isolation. Not marking the sample correctly may result in ineligible samples and inaccurate billing;
- J. All lots must be ready for sampling or OECD verification by the time the sampler has scheduled the visit. There is a minimum charge for sampling/verification if the lot is not accessible or prepared when the sampler arrives.

IV. Seed Lots, Lot Size, Packaging, Lot Number

A. Uniformity

- i. Every portion or bag of a seed lot must be as uniform as is practicable.
- ii. Samplers must check for uniformity by comparing primary samples.
- iii. Other evidence of non-uniformity could include a mixture of plain and printed bags, or bags of varying thicknesses, indicating some bags have more inert or may be a different species.

- iv. Once the lot has been sampled, no seed may be added to the seed lot.
- B. **Bulking of multiple fields** of the same variety and class from the same grower is allowed. Seed harvested from isolation areas of the field is uncertified, and must not be bulked with certified seed. If seed from a rejected field or isolation area is bulked with seed from certified fields, the entire lot will be rejected.
- C. **Lot Size**
 - i. Seed lots should not exceed the legal limit. Lot size is regulated by the State Seed Law. See chapter 603, paragraph 056-125 of the Oregon State Seed Regulations.
 - a. The following agricultural seeds are limited to 55,000 pounds: bentgrass, bluegrass, brome, clover, fescue, meadow foxtail, orchardgrass, ryegrass, timothy, wheatgrass, and vetch.
 - b. Small grains do not have a maximum lot size for Oregon.
 - ii. OECD seed lots of seed smaller than wheat, the maximum lot size is 10,000 kilograms (44,000 pounds), except that lots of grass seed may have a maximum size of 25,000 kilograms (55,000 pounds) if produced according to international methods. Seed the size of wheat or larger must not exceed 20,000 kilograms (44,000 pounds). Some species such as pea and bean may be raised to 30,000 kilograms (66,000 pounds)—see the OECD Seed Schemes for a list.
 - iii. A 5% tolerance on these maxima is allowed.
- D. **Packaging**
 - i. Certified seed may be cleaned into many kinds of containers; examples include polypropylene (poly) bags (PY), burlap or cotton bags (BU), Valve Pac paper bags (VP), boxes (BX), buckets, bulk bags (BB), or bulk (BK).
 - ii. New containers must be used for certified seed except in the following cases:
 - a. Certified class grass seed lots may be cleaned into reused fifty-pound poly bags with prior approval by OSCS and may only be used for internal handling of seed.
 - b. For small grains, Certified class may be in new or cleaned used bags. Bagged Foundation or Registered cereal seed must be in new bags.
 - c. A lot may be recleaned back into the same bags when there is no change to the lot number. Paper bags should not be re-used when a lot is recleaned.
 - d. Only clean bulk containers may be used in conditioning certified seed. Boxes and bins may be reused for in-state movement of seed but must be thoroughly cleaned between uses. Re-use of bulk bags for conditioned seed destined for mixtures, blends, or repackaging may be allowed with prior approval by OSCS.
 - A written request must be submitted to OSCS for bulk bag re-use authorization.
 - Approval for bulk bag re-use is given to a warehouse on a renewable one-year basis.
 - The approval process will include the inspection of bags that may be used for bulk bag certification activity and determination that a warehouse has the ability to properly clean bags between uses.
 - The approval process will include the review of lot number identification removal. The warehouse must have the ability to remove previous lot number identifications chemically to allow for proper and thorough identification.
 - Bulk bags have the potential of being used for final certification activity and shipping to the final consumer. The approval process described above could also be utilized for this type of request; however, inspection would be necessary to ensure proper cleanliness and appearance of the bulk bags, and the legibility of the numbers stenciled on the bags.
 - iii. If there is a variety designation on the bag, it must match the variety on the certification or experimental cultivar tag. Brand names must be clearly shown as a brand, not a variety.
- E. **Repackaging**
 - i. When a seed lot is repackaged (e.g., from bulk bags to small sacks), an accurate accounting of all container sizes must be recorded using eCertification. A maximum

weight gain of 5% is permitted. Any gain above 5% will need to be justified and the lot size visually verified by OSCS.

- ii. Do not reattach certification tags. If tags had already been issued for the lot, a reissue must be requested if tags need to be attached.

F. Isolation Lots

- i. All production and warehouse records through the receiving, cleaning, and distribution process must be capable of tracking back to a production field. If isolation is required, then isolation lots must be documented as uncertified in the receiving, cleaning, and distribution records.
- ii. The Oregon Seed Certification Service has an on-going warehouse visitation program to “spot-check” that isolation lots are accounted for properly. ***Please remember that isolation areas must be harvested, conditioned, and stored as uncertified. Mixture of seed from isolation areas with seed from the certified part of the field will result in rejection of the entire seed lot.***
- iii. Grower and/or warehouse records must be maintained to confirm that isolation lots are handled as uncertified.

G. Marking of the Lot Number

- i. The lot number must be clearly visible and legible. There is currently a limit of 19 digits for lot numbers due to printing limitations.
- ii. The lot number must be stenciled on the sewn end of sacks.
- iii. For bulk bags and boxes, lot numbers must be stenciled on the package. With prior approval from OSCS, it is possible to use non-stenciled bulk bags or boxes to transport seed for further conditioning within Oregon. In that case, the lot number must be recorded on 3x5” (minimum size) cards securely attached to the container in two places.
- iv. For seed produced in Oregon, the lot number indicates the county and warehouse number where the seed was conditioned, year of harvest, and the unique number assigned by the warehouse. For example, B8-23-XXXX where “B8” represents the county and warehouse number assigned by OSCS, “23” indicates the seed was +harvested in 2023, and “XXXX” represents the location where the warehouse can assign their own identification number for specific lot identity. This identification may include letters and numbers, but spaces and symbols are not allowed.
- v. Seed lots recleaned at a second warehouse must have both warehouse codes in the lot number. For example, lot B9-23-123ABC originally cleaned at warehouse B9, and moved to warehouse B5 for recleaning, must be a final lot number as follows: B5-B9-23-123ABC.
- vi. **Treated seed:** There is no special designation required in the lot number for treated seed without coating.
- vii. **Coated seed:** The lot number must have a coating designation at the end of the original lot number, for example, B1-23-1234CTD where the original lot number was B1-23-1234.
 - a. Coating facilities must be approved by OSCS. The facility is responsible for conducting a pre-coating inspection before each lot to ensure the cleanliness of all parts of the line and proper functioning of the equipment. A record of this check must be kept on file for at least 3 years after disposition of the lot, and be available to OSCS upon request. See Appendix A for an example; the form may be adapted to cover the equipment used by the facility if needed.
- viii. **Mixtures:** The lot number must have an “M” added behind the warehouse code, for example where B1 is the warehouse code, B1M-23-1234.
- ix. **Blends:** The lot number must have a “B” added behind the warehouse code, for example where B1 is the warehouse code, B1B-23-1234.
- x. **Augmented lot:** The lot number must have an “A” added behind the warehouse code, for example where B1 is the warehouse code, B1A-23-1234.

H. Augmented Seed Lot

- i. Augmented seed lots consist of multiple seed lots of one crop kind and variety mixed and homogenized to form a larger lot of uniform quality that meets Oregon Seed Certification Service (OSCS) standards.
- ii. Experimental varieties are allowed.
- iii. Each component seed lot must be derived from a certified field; however, it does not necessarily need to meet the seed standards for a certification class.
- iv. The augmented seed lot must be as uniform as is practicable.
- v. The final product must be sampled and tested, and meet certification standards for seed quality in order to be tag-eligible.
- vi. If lots of different classes are augmented, the lowest class shall be applied to the resultant lot.
- vii. For current procedures, see Certified Augmented Lots guidelines available at <https://seedcert.oregonstate.edu/special-forms-guidelines>.

I. Mixtures and Blends

- i. Mixture: certified seed lots of two or more crop kinds mixed and labeled as “Mixture of Certified Seed.”
- ii. Blend: certified seed lots of two or more varieties of the same crop kind are blended and labeled as “Blend of Certified [Species]”
- iii. If lots of different classes are blended or mixed, the lowest class shall be applied to the resultant blend or mixture.
- iv. Experimental varieties are not allowed.
- v. Mixture and blend seed lots must be as uniform as is practicable.
- vi. All lots included in a blend or mixture must be certified and tag-eligible. Purity and viability testing of the blend or mixture is not required.
- vii. For current procedures, see Certified Mixtures or Certified Blends guidelines available at <https://seedcert.oregonstate.edu/special-forms-guidelines>.

J. Retesting: requesting another test on a file sample previously sent to the OSU Seed Laboratory.

- i. The OSU Seed Lab maintains file samples for approximately two years.
- ii. Noxious weeds are reported as the average of the number found in both tests.
- iii. Other than for updated viability testing, only one retest is allowed per sample for crops other than ryegrass. Retests are not allowed for small grains.
- iv. For ryegrass, two retests per sample for either the original sample or the resample, for a total of four tests is allowed. Example (for ryegrass only):

Original Sample	Resample	Total Tests
Test, retest, retest	Test	4
Test, retest	Test, retest	4
Test	Test, retest, retest	4

K. Resampling: taking another sample of a lot.

- i. Resampling of lots that were originally sampled by an automatic sampler must be probed by OSCS personnel.
- ii. If a lot has been resampled because it failed to qualify for certification, only one resample is allowed, after which it must be recleaned.
- iii. Lots showing Oregon prohibited contaminants listed in Section V. Weeds Prohibited in All Oregon Certified Seeds and/or species listed in the individual crop standards in the OSCS Handbook must be recleaned before being resampled or augmented. In the case of cereal grains only, this includes immature seeds of prohibited weeds.
- iv. Lots showing more than twice the number of Group A weeds allowed for that specific crop must be recleaned before being resampled or augmented.

L. Recleaning

- i. Seed lots may be recleaned as many times as necessary.
- ii. If multiple lots are to be recleaned and they are bulked together before recleaning, then all resulting lots must be given new lot numbers.
- iii. If only a portion of a seed lot is recleaned, it must be given a new lot number.

V. Sampling

Obtaining a representative sample of a seed lot is essential to ensure that the seed testing report properly represents the lot tagged. No matter how accurately an analysis is made, it can only show the quality of the sample submitted. To facilitate this, certified seed must be taken in accordance with the AOSA Rules for Testing Seed. The minimum number of primary samples required depends on the number and size of the containers in the seed lot. It is sometimes necessary to increase the sampling intensity to ensure a sufficient sample size.

- A. Commercial seed lots are not to be sampled by OSCS samplers. Sampling isolation lots is allowed.
- B. As long as the sampler is already at the warehouse sampling certified lots, it is allowed for an OSCS sampler to deliver commercial seed samples along with certified samples. However, commercial samples will not be shipped by OSCS.
- C. Certified samples must be placed in the white sample bags provided by OSCS. Do not give warehouses the white sample bags to use for commercial samples.
- D. OSCS samplers are not allowed to take samples for phytosanitary or regulatory purposes. These must be drawn by the Oregon Department of Agriculture or USDA.
- E. Samplers should use static-free cups and buckets; metal is preferred. Inspect and clean all equipment to prevent cross-contamination.
- F. **Treated Seed:** Treated seed is allowed for all species except wheat. For initial certification of wheat, seed must be sampled before being treated. Resampling treated wheat seed for germination is allowed. Treated seed must be marked as such on the sample certificate.
- G. **Manual Sampling**
 - i. All manual sampling must be conducted by OSCS personnel. For small, free-flowing seed in bags, use a probe or a trier long enough to sample all portions of the bag. Avoid a probe that will cause excessive damage to the bag.
 - ii. Seed that is not free-flowing should be hand sampled.
 - iii. **Probe Type and Size**
 - a. Probes must be of sufficient size for seed and contaminants to enter the probe and flow freely.
 - b. "Thief" probes are not allowed.
 - c. Nobbe and double-sleeved probes are allowed. Nobbe probes must be long enough to reach at least halfway into the container.
 - d. Double-sleeved triers must be long enough to reach all parts of the container.
 - e. The following probe sizes are suitable. An equivalent probe may be used with prior approval.
 - Bentgrass or smaller seed: Nobbe probe with one opening and no partitions, approximately 11 1/2" long and 1 1/32" diameter. Double-sleeved trier with five openings, approx. 18" long and 1/2" outer diameter.
 - Bluegrass or clover: Nobbe probe with one opening and no partitions, approx. 10 1/2" long and 3/8" diameter. Double-sleeved trier with five openings, approx. 18" long and 1/2" outer diameter.
 - Ryegrass, fescue, orchardgrass, small grains: Nobbe probe with one opening and no partitions, approx. 11 5/8" long and 3/4" diameter. Double-sleeved trier with five openings, approx. 30" long and 1/2" outer diameter.
 - iv. **Primary samples** of approximately equal size should be taken from evenly distributed parts of the seed lot being sampled. For example, take some seed from the sewn end, middle, and bottom end of bags in sequence and equally throughout the seed lot. Make sure the entire lot is represented by sampling from all pallets.
 - v. The amount of seed drawn from each container should be gauged by experience to get properly-sized samples. The sample may be as large as necessary to properly represent the lot. Once a sample has been drawn, it should not be divided unless proper equipment is available. If no proper equipment is available, submit the entire sample to the Seed Lab, and it will be divided down at that time.

- vi. For poly bags, run the tip of the probe back and forth across the poly weave to close the hole. For paper bags, tap firmly to close the hole, or dust off the area and put a seal over the hole if needed.
- vii. **Use of Nobbe Probe**
 - a. May only be used horizontally.
 - b. Insert at a 30-degree angle with the opening facing down. When it reaches the desired position, turn the probe so that the opening is facing up.
 - c. If the probe reaches the opposite side of the container, withdraw at a constant speed while gently agitating.
 - d. If the probe reaches halfway into the container, withdraw at a decreasing speed while gently agitating.
 - e. Do not “milk” the container or over-represent part of the bag.
 - f. Compare primary samples for evidence of non-uniformity. If non-uniformity is observed, contact the OSCS office for guidance.
- viii. **Use of Double-Sleeved Trier**
 - a. Double-sleeved triers should only be used horizontally unless it is partitioned or opens in a spiral pattern.
 - b. Insert in the closed position until it reaches the opposite side of the container, taking care to not pierce through the other side.
 - c. Once it is in position, twist the probe to open and gently agitate to fill the compartments.
 - d. Close very carefully to avoid damage to the seed. Twist only until you feel resistance and then withdraw. Empty the primary sample into a container.
 - e. Compare primary samples for evidence of non-uniformity. If non-uniformity is observed, contact the OSCS office for guidance.
- ix. **Sampling in Bulk:** Seed in bulk should be sampled with a bulk trier. Bulk bin sampling that requires ladders must be done by a warehouse employee under direct supervision of the OSCS sampler.
- x. **Sampling Intensity for Manual Sampling**
 - a. For lots of one to six containers, sample each container and take at least five primary samples. When sampling the same container more than once, take each primary sample from a different path or area.
 - b. For lots of than six containers, each primary sample should be taken from different containers. Regardless of lot size, it is not necessary to sample more than 30 containers.
 - c. **Seed in Containers (typically packaged in 60 pounds or less)**

Number of Containers in the Lot	Minimum Number of Containers to Sample	Number of Containers in the Lot	Minimum Number of Containers to Sample	Number of Containers in the Lot	Minimum Number of Containers to Sample
1 - 4	Sample each container (min. 5)	75 - 84	13	175 - 184	23
5	5	85 - 94	14	185 - 194	24
6	6	95 - 104	15	195 - 204	25
7 - 14	6	105 - 114	16	205 - 214	26
15 - 24	7	115 - 124	17	215 - 224	27
25 - 34	8	125 - 134	18	225 - 234	28
35 - 44	9	135 - 144	19	235 - 244	29
45-54	10	145 - 154	20	245 or more	30
55 - 64	11	155 - 164	21		
65 - 74	12	165 - 174	22		

d. **Seed in Mini-bulk Containers (typically containing 1,000 – 3,000 pounds)**

Number of Containers in the Lot	Minimum Number of Primary Samples
1	At least 5 primary samples from different sections of the container.
2 – 10	At least 6 primary samples. If fewer than 6 containers in the lot, an equal number must be taken from each container.
11 or more	At least 6 primary samples from different containers.

H. **Automatic Sampling**

- i. Automatic samplers must be approved by OSCS before they are used.
- ii. Automatic samplers are subject to a spot-checking program where probed samples are compared to certified samples.
- iii. The only type of automatic sampler approved for OSCS samples is the "pelican" or cross-cut type, which takes a sample from the entire stream of flowing seed anytime it is activated. The sampler must be installed at the end of the seed cleaning process just before bagging.
- iv. OSCS staff takes subsamples by hand or cup from the automatic sampler composite sample until a sufficient submitted sample size is reached.
- v. In cases where the sample is divided, prior approval of the process from OSCS must be obtained. Dividing the sample obtained by automatic sampler is the OSCS sampler's responsibility; however, with proper equipment and auditing it can be done by approved warehouse personnel under the OSCS sampler's supervision.
- vi. The frequency of automatic samplers should be set to extract one sample from every 50 pounds for lots of 1500 pounds or less, and one sample from every 1000 pounds for lots bigger than 1500 pounds. For lots bigger than 1500 pounds, no less than 30 samples must be taken. The collected sample should always exceed the minimum required sample weight for a particular crop (see individual standards).

I. **Verification:** Whether manual or automatic sampling, the OSCS sampler must verify that the container type, lot number, and lot size (number of containers and total weight) match the sample certificate. If a correction needs to be made, cross out the incorrect information, write the correct information in colored ink, and initial it.

J. **Uniformity:** Do not sample if there is evidence of non-uniformity in a seed lot. Examples of non-uniformity are bags of varying thicknesses, indicating some bags have more inert or fluffier seed, different types of bags (poly vs. paper), or primary samples that are visually different than one another.

K. **Submitted Samples:**

- i. The minimum required submitted sample size can be found in each particular crop's standards. The most commonly sampled crops are also shown here.
 - a. Small grass seed like bluegrass or bentgrass, alsike or white clover, or seeds not larger than these: ¼ pound (approx. 113g) Larger grass seed like ryegrass, tall fescue, fine fescue, orchardgrass: ½ pound (approx. 227g)
 - b. Alfalfa, red clover: 1000g
 - c. Small grains such as wheat, oats, barley: 2.5 pounds (approx. 1000g)
- ii. Unless the composite sample is usually large, such as automatic samples of cereals, send the entire composite sample to the laboratory. If the composite sample is too large, OSCS staff can homogenize and divide it down using a riffle divider.
- iii. Do not overfill sample bags as they are likely to break during transit. If more than one sample bag must be used, put the sample certificate with "1 of 2" written on one bag and write the transaction number, lot number, and "2 of 2" on the other. Seal both bags.
- iv. Attach the sample certificate to the sample bag either with glue or the use of self-adhesive labels. Sign, date, and seal the sample with the OSCS-provided adhesive labels. Small seeds such as bentgrass, bluegrass, or white clover should be placed inside plastic bags. Regardless of how the samples are dispatched to the lab, care must be taken to protect them against damage or leakage. Do not ship samples in

envelopes—only use boxes. The OSU Seed Laboratory cannot accept samples that are obviously contaminated or too damaged.

VI. Testing Requirements

- A. What tests are required for certification? See Appendix B, “Required Tests for Certification” at the end of this document; also available at seedcert.oregonstate.edu/special-forms-guidelines.
- B. **Resampling vs. recleaning**
 - i. For resamples, the viability (within 18 months), fluorescence/grow-out, and ploidy results from the original sample may be used for setting tag eligibility on the resample record. These results will not be reflected on the new test report.
 - ii. For recleaned lots, the original viability (within 18 months), ploidy, or fluorescence/grow-out results from the original sample may be used to set the tag eligibility on the sample record of a recleaned lot. These results will not be reflected on the new test report, and the original test report will not be changed to show the new sack counts and poundage. New testing should still be obtained to fulfill the requirements of Federal Seed Act Regulations.
 - iii. For OECD, all testing must be done on the same sample. In some cases, a ploidy or grow-out from the original sample may be used for setting tag eligibility.

VII. Tagging

Seed lots must meet the field and seed testing requirements for that particular crop and tag type. Certification tags/labels may be stapled-on or sewn-in cardstock, adhesive, or attached to bulk bags with a zip tie. Certification tags, labels, and seals will be affixed to seed containers under the supervision of the certifying agency. They must be attached at the tagging warehouse and cannot be sent to a third party. Tags must not be removed and reattached. Tags are issued for a specific lot and may only be attached to that lot; tags are not transferable. All tags must be attached to the containers in such a way that they cannot be removed and reattached without leaving evidence of tampering. This is also referred to as **sealing** or **fastening of the container** in the OECD Seed Schemes.

If any seed lot has a poor appearance because of rodent or bird damage, torn or very dirty sacks, or any condition that would reflect unfavorably upon Oregon certified seed, refuse to attach tags and notify the OSCP office.

A. Oregon (AOSCA)

An Oregon certification tag represents production for a variety that has been reviewed and accepted into the Oregon Seed Certification Program (per AOSCA Guidelines) as eligible to produce certified seed. An Oregon Certification tag is issued after all record checks, field evaluations, and seed testing requirements meet published standards for the particular crop type and variety. An Oregon Certification tag is issued as part of the domestic certification scheme through the Association of Official Seed Certifying Agencies (AOSCA) and further standards established through the Oregon Seed Certification Service.

- i. **Ordering:** any entity on the sample record may order tags for Certified class. Foundation and Registered class must be ordered by the contractor of the field.
- ii. **Classes:** Experimental (Exp-F, Exp-R, Exp-C all on white, cardstock only), Foundation (white), Registered (purple), Certified (blue)
- iii. **Sod Quality:** PNW Sod Quality Seed tags (orange, cardstock only) are issued by OSCP on behalf of the Oregon Department of Agriculture. They can be issued on single components, blends, or mixtures but all constituents must meet both Oregon and sod quality standards. Experimental varieties are not allowed.
- iv. **Experimental Tag:** An Oregon Experimental tag represents production for an experimental line that has not been reviewed or accepted as a certified variety into the Oregon or OECD Certification program and thus is not eligible for certification tags. An

Oregon Experimental tag is issued after all record checks, field evaluations, and seed testing quality checks meet published standards for the particular crop type. An Oregon Experimental tagged lot cannot be sold as or represented to be certified seed and cannot be included in a mixture or blend of certified seed. Once the variety is accepted into the OSCS program, the lot will be eligible for regular certification tags.

v. **Attachment:**

- a. Cardstock tags can be stapled on using one heavy-duty staple, or two if a light-duty stapler, such as a desk stapler, is used. Staples must be of the clip type, not the flare type. They can also be sewn in. They must be attached to the end of the bag that has the stenciled lot number.
- b. Adhesive tags on bags must be placed at the end of the bag that has the stenciled lot number. For buckets, place the tag where it can be seen in conjunction with the lot number.
- c. Adhesive tags may be used on any container on which it will remain securely attached during transport. This would include paper bags, smooth poly bags, and plastic buckets. The outside of the container must be free of dust to ensure proper adhesion. Contact OSCS if there is any question if the container is acceptable for adhesive tags.
- d. All Foundation and Registered tags must be attached by or under the direct supervision of the OSCS sampler. However, some warehouses may be allowed to attach their own tags with special approval from OSCS.

B. **OECD**

- i. An OECD certification tag represents production for a variety that has been reviewed and accepted into the OECD Seed Certification Scheme. OECD stands for Organization for Economic Cooperation and Development and is an international certification program covering many different crop types. OSCS is the recognized agent for OECD in Oregon; therefore, all OSCS certification criteria (field and records checks) must be met before an OECD certification tag is issued. Depending on the destination country, additional tests may be required. An OECD certification tag is issued as part of the international certification scheme administered in the USA by the United States Department of Agriculture (the National Designated Authority for the OECD Seed Schemes).
- ii. **Ordering:** OECD tags must be ordered by the contractor of the field. Using eCertification, the contractor may transfer ownership of a seed lot, or portion of a seed lot, to another contractor who can then order tags.
- iii. **Classes:** Pre-basic (white with purple stripe), Basic (white), 1st Generation Certified (blue), 2nd or successive Generation Certified (red), Not Finally Certified (grey), Mixture (green)
- iv. **Attachment**
 - a. Staples: The international community prefers that OECD tags be sewn in, not attached by stapling. If staples must be used, a minimum of two heavy-duty staples are required. They must be attached on the same end that has the lot number stenciled.
 - b. Sewn: cardstock tags can be sewn in and must be attached on the same end that has the lot number stenciled.
 - c. Adhesive tags may be used on any container on which it will remain securely attached during transport. This would include paper bags, smooth poly bags, and plastic buckets. The outside of the container must be free of dust to ensure proper adhesion. Adhesive tags may also be attached to special sewn-in cardstock that can be purchased from OSCS. Contact OSCS if there is any question if the container is acceptable for adhesive tags.
 - Adhesive tags on bags must be placed at the sewn end of the bag so that it can be seen in conjunction with the lot number. For buckets, place the label on the side of the bucket where it can be seen in conjunction with the lot number. Place two large OSCS tamper-evident adhesive seals on opposite sides of the lid and onto the side of the bucket (see Appendix C). These seals will break when the lid is opened.

- d. Bulk bags: OECD tags for bulk bags are printed on special cardstock. They must be attached to the top of the bulk bag with OSCS-provided zip ties. If one zip tie does not reach around the top of the bulk bag, more than one zip tie may be connected together. It is not acceptable to insert the certification tag into the plastic envelope on the side of the bulk bags.
- v. **Verification:**
 - a. All lots must be verified by OSCS staff before shipment. OSCS staff must be able to view all the containers including their lot number and attached OECD tag. Make sure that the number of containers matches the certificate, that the lot numbers on the containers match the OECD tags, and that the tags are properly attached. The tags must be placed in such a way that the lot number on the tag can be seen in conjunction with the stenciled/marked lot number on the container.
 - b. Requests must be submitted using eCertification by the tagging warehouse, but can be monitored by the contractor. OSCS staff uses an internal app to approve or deny OECD certificates, and notates if the final count differs from the certificate. The OSCS office revises the OECD certificate to reflect what was verified. If there are any extra tags, they must be returned to the OSCS office or destroyed by the OSCS sampler.
- C. **Reissuance of Tags**
 - a. A request for reissue of certification tags must be made to the Oregon Seed Certification Service (OSCS) when new certification or OECD tags are needed. Reasons for a reissue may include a sack/container change, a seed treatment, or a revision to the tag type or generation. Certification tags that have removed from bags may not be reattached under any circumstances. See current procedures available at <https://seedcert.oregonstate.edu/special-forms-guidelines>

VIII. Tag Printing at Company Facility

- A. A company may request to be allowed to print certification tags. If approved, a signed memorandum of agreement for printing certification tags is signed by the company and OSCS.
- B. OSCS supplies all tag stock. The company is responsible for equipment and ribbons.
- C. Printing Oregon certification tags is done through eCertification.
- D. OECD tags must be requested by the contractor. Using eCertification, the contractor may transfer ownership of a seed lot, or portion of a seed lot, to another contractor who can request tags. If the company facility is authorized to print OECD tags, the OSCS office creates the tag image which the company downloads for printing.
- E. All tag stock must be accounted for using the eCertification tag audit program. The company is also responsible for mailing the record tags to the OSCS office.

IX. Virtual Tagging

- A. For stock seed to be used in Oregon, virtual tags may be issued in lieu of physical tags.
- B. Stock seed being shipped out of state must have physical tags attached unless it is being shipped in bulk.
- C. For private varieties, only the contractor on the field may create the virtual tag number (VTN). Using eCertification, the contractor may transfer ownership of a seed lot, or portion of a seed lot, to another contractor who can then create VTNs.

X. Movement of Seed

Oregon certified seed must be conditioned and sampled at the same location. Sometimes, seed lots are shipped to another warehouse location to be stored, augmented, reconditioned, used in mixtures or blends of certified seed, or treated prior to tagging. In cases where seed is to be certified, but is moved to another warehouse prior to tagging, the following procedures must be used to retain certification eligibility:

- A. Seed must be sampled at the original warehouse before it is eligible to be moved to another location.

- B. If the seed lot is being moved to another warehouse in Oregon, a movement must be filed online using eCertification. The entity responsible for moving the seed should file the movement, but it can be done by any entity on the sample record (warehouse, grower, or cc).
- C. All seed lots to be considered eligible for certification must have a lot number stenciled on each bag, or two attached lot number cards on each bin. In addition, bins used to transport seed must be numbered, labeled, and covered.
- D. **Field Transfer Certificate:** used to move in-the-dirt seed from farm storage to an out-of-state warehouse for conditioning and final certification. Can be used for any species.
- E. **Certificate of Pending Final Certification:** used to move conditioned seed prior to completion of testing, usually for immediate planting needs. Small grains only; an exception may be made for some non-grass miscellaneous crops—contact OSCS. This should be used with extreme caution and at the client’s own risk due to the possibility that the lot does not meet certification standards.
- F. **Final Shipping Certificate:** used to move conditioned seed that meets all certification standards and is tag-eligible. Small grains only; an exception may be made for some non-grass miscellaneous crops—contact OSCS.

XI. OECD Pre-control Samples

When a variety is of foreign-origin, whether foreign or domestically produced, it must have an OECD pre-control sample drawn by OSCS prior to planting to be eligible for OECD production. Domestic-origin varieties do not require pre-control samples. The origin of all varieties accepted into the OSCS program can be viewed using eCertification.

- A. An application for a pre-control sample must be submitted using eCertification by the contractor of the field to be planted. Each contractor must have their own pre-control sample even if the seed is from the same lot.
- B. Each lot must be sampled separately.
- C. A ploidy test is required on all annual ryegrass pre-control samples, which will be charged to the contractor.
- D. The type of probe, sampling technique, and the sampling intensity are the same as for other certified sampling. The minimum sample size is 100 grams.
- E. Make sure all containers are sealed and have a tag attached. Count and record the number of containers present.
- F. Verify that the reference number, and lot number if applicable, match the information showing in the Sampling app. Correct the lot number/reference number on the sample bag if necessary. If the lot has been partially distributed prior to taking a pre-control sample, take the sample from the remaining portion of the lot but notate the number of containers & lot weight on the sample bag.
- G. Take a picture of one tag and email it to the OSCS office.
- H. Mark all tags in the lot with a Sharpie with a single diagonal line, being careful not to obscure the reference number or variety name.
- I. Send the pre-control sample to the OSCS office. **DO NOT SEND TO THE OSU SEED LAB.**

Appendix A: Warehouse Pre-Coating Inspection Checklist

Variety and Crop:		
Lot Number:		
Pounds to be Coated:		
Coating Line Number:		
	Approved	Not Approved
1. Delivery elevator		
2. Bulk seed bin(s)		
3. Mixing vat		
4. Conveyor – mixer to elevator		
5. Elevator and drop to dryer #1		
6. Dryer #1		
7. Conveyor to dryer #2		
8. Dryer #2		
9. Cooler		
10. Elevator to scalper		
11. Scalper		
12. Scalper elevator to holding bin		
13. Holding bin		
14. Bagging area elevators		
15. Downspout bagger		
16. Overall condition of plant		

All areas must be approved before proceeding.

Approved by: _____ **Date:** _____



Oregon Seed Certification Service

seedcert.oregonstate.edu
seedcertrequests@oregonstate.edu

WHAT TESTS SHOULD I ORDER FOR SEED CERTIFICATION?

TESTS INDICATED FOR CERTIFICATION TAGGING IN OREGON ONLY AND DO NOT NECESSARILY COVER OTHER STATES OR COUNTRY'S SEED LAW REQUIREMENTS

	Oregon Foundation (White)	Oregon Registered (Purple)	Oregon Certified (Blue)	OECD Pre-Basic or Basic with EC Norms	OECD Pre-Basic or Basic WITHOUT EC Norms	OECD Certified with EC Norms	OECD Certified WITHOUT EC Norms
*Red clover, Alfalfa	FS/EX Purity Germ or TZ	FS/EX Purity Germ or TZ	FS/EX Purity Germ or TZ	AOSA/EC Purity Crop & Weed AOSA/EC Germ or TZ	FS/EX Purity Germ or TZ	AOSA/EC Purity Crop & Weed AOSA/EC Germ or TZ	FS/EX Purity Germ or TZ
Kentucky bluegrass	Purity 10g Rough blue search Germ or TZ	Purity 10g Rough blue search Germ or TZ	Purity Germ or TZ	AOSA/EC Purity Crop & Weed AOSA/EC Germ or TZ	Purity Germ or TZ	AOSA/EC Purity Crop & Weed AOSA/EC Germ or TZ	Purity Germ or TZ
Diploid Ryegrass	Purity Fluorescence	Purity Fluorescence	Purity Fluorescence	AOSA/EC Purity Crop & Weed AOSA/EC Fluor.	Purity Fluorescence	AOSA/EC Purity Crop & Weed AOSA/EC Fluor.	Purity Fluorescence
Tetraploid Ryegrass	Purity Fluorescence Ploidy	Purity Fluorescence Ploidy	Purity Fluorescence Ploidy	AOSA/EC Purity Crop & Weed AOSA/EC Fluor. Ploidy	Purity Fluorescence Ploidy	AOSA/EC Purity Crop & Weed AOSA/EC Fluor. Ploidy	Purity Fluorescence Ploidy
Wheat	Purity Crop & Weed (bk) 500g Ergot & Smut Exam Germ or TZ 1000WT (wt)	Purity Crop & Weed (bk) 500g Ergot & Smut Exam Germ or TZ 1000WT (wt)	Purity Crop & Weed (bk) 500g Ergot & Smut Exam Germ or TZ 1000WT (wt)	AOSA/EC Purity 1000g Fungus Bodies Exam Crop & Weed (bk) AOSA/EC Germ or TZ	Purity Crop & Weed (bk) 500g Ergot & Smut Exam Germ or TZ 1000WT (wt)	AOSA/EC Purity 1000g Fungus Bodies Exam Crop & Weed (bk) AOSA/EC Germ or TZ	Purity Crop & Weed (bk) 500g Ergot & Smut Exam Germ or TZ 1000WT (wt)
Other Small Grains	Purity 500g Ergot & Smut Exam Crop & Weed (bk) Germ or TZ	Purity 500g Ergot & Smut Exam Crop & Weed (bk) Germ or TZ	Purity 500g Ergot & Smut Exam Crop & Weed (bk) Germ or TZ	AOSA/EC Purity 1000g Fungus Bodies Exam Crop & Weed (bk) AOSA/EC Germ or TZ	Purity 500g Ergot & Smut Exam Crop & Weed (bk) Germ or TZ	AOSA/EC Purity 1000g Fungus Bodies Exam Crop & Weed (bk) AOSA/EC Germ or TZ	Purity 500g Ergot & Smut Exam Crop & Weed (bk) Germ or TZ
Hard, Hair, sheep, Idaho fescue	Purity Germ with Ammonia Test	Purity Germ with Ammonia Test	Purity Germ with Ammonia Test	AOSA/EC Purity Crop & Weed AOSA/EC Germ or TZ	Purity Germ with Ammonia Test	AOSA/EC Purity Crop & Weed AOSA/EC Germ or TZ	Purity Germ with Ammonia Test
Red, chewing fescue	Purity Germ with Ammonia Test	Purity Germ with Ammonia Test	Purity Germ or TZ	AOSA/EC Purity Crop & Weed AOSA/EC Germ or TZ	Purity Germ with Ammonia Test	AOSA/EC Purity Crop & Weed AOSA/EC Germ or TZ	Purity Germ or TZ
All Other Crops*	Purity Germ or TZ	Purity Germ or TZ	Purity Germ or TZ	AOSA/EC Purity Crop & Weed AOSA/EC Germ or TZ	Purity Germ or TZ	AOSA/EC Purity Crop & Weed AOSA/EC Germ or TZ	Purity Germ or TZ
Mixture or Blend	N/A	N/A	Required Testing on All Component Lots	N/A	N/A	Required Testing on All Component Lots	Required Testing on All Component Lots
Augmented Lot	Required Testing on Final Product	Required Testing on Final Product	Required Testing on Final Product	Required Testing on Final Product	Required Testing on Final Product	Required Testing on Final Product	Required Testing on Final Product

FS/EX = friction separation exam (dodder exam)
1000WT = weight of 1000 seeds (number per pound)

*All clovers require an orobanche exam on a separate sample if small brownrape was found in a certification field inspection.

Appendix B: Required Tests for Certification

Appendix C: OECD Bucket Seal Placement

