Iowa Crop Improvement Association

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Organization and Purposes of
Iowa Crop Improvement Association

Iowa Crop Improvement Association (ICIA) is a nonprofit organization designated by Chapter 177 in the Iowa Legislature as the official seed certifying agency in Iowa. ICIA is composed of member companies and individuals working in the seed industry and advancing seed and crop improvement.

The purpose of ICIA is:

- To promote the production and use of improved seed stocks.
- To provide seed certification and quality assurance services.
- To conduct, in cooperation with Iowa State University College of Agriculture and Life Sciences, testing and disseminate information regarding the adaptation and performance of crop cultivars.
- To support research, educational, and leadership opportunities regarding crop improvement.
- To provide other related services to benefit its members and the seed industry.

ISU Seed Lab mailing address:

Seed Testing Laboratory
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Iowa State University
Ames, IA  50011
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I. Introduction

The Approved Conditioner system offers an opportunity for a seed conditioning facility to perform sampling and label printing operations that were previously performed by Iowa Crop Improvement Association (ICIA). In addition, the system allows for the pre-labeling of seed during the conditioning operation and for reconditioning, rebagging, and relabeling of certified seed (RRR).

This manual describes procedures and records used by Approved Conditioner personnel to meet Iowa’s seed certification requirements. Approved Conditioner personnel should be familiar with these requirements and have this manual readily available for reference.

Contact ICIA if you have any concerns prior to printing labels, when meeting certification requirements, and unique certification situations.

II. Objectives

Objectives of ICIA’s Approved Conditioner system are:

1. Improve and standardize seed quality and varietal purity.

2. Promote acceptance of certified seed.

3. Improve efficiency for Approved Conditioners and expedite the movement of seed.

III. Becoming an Approved Conditioner Facility

1. Submit an application to ICIA.

2. A plant inspection of the conditioning facility will be performed by ICIA to verify all appropriate equipment is in place.

3. A certificate and Approved Conditioner number will be issued once all requirements are met.

IV. Minimal Machinery, Facilities, and Equipment

Machinery, facilities, and equipment are required for an Approved Conditioner to protect the genetic and mechanical purity of certified seed. The table below lists the specific requirements for the following: Soybean, Corn, Grasses (orchardgrass, bromegrass, and reed canarygrass), Legumes (alfalfa, birdsfoot trefoil, clover, and crowntetch), Small Grain (barley, oat, rye, and wheat), Native Species, and Reconditioning, rebagging, and relabeling certified seed (RRR).
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Soybeans</th>
<th>Corn</th>
<th>Grasses</th>
<th>Legumes</th>
<th>Small Grain</th>
<th>Native</th>
<th>RRR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air and screen cleaner with a minimum of three screens with mechanical screen cleaners or a two-screen commercial air and screen cleaner plus a gravity table.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Scales for weighing seed as bagged.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Bag closing equipment.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bulk and/or bag storage adequate to protect the quality of the seed.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Elevator legs, pits, boots and heads must be accessible for cleaning.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X²</td>
</tr>
<tr>
<td>Two separate conveying systems for handling seed are mandatory; intake and conditioned seed.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>All elevators, spouting, legs and bins must be constructed to prevent mixing. Conditioning bins must have hopper bottoms.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Air cleaning equipment; both vacuum and compressed air.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Dockage screens, moisture tester, and bin and bag probes</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X³</td>
</tr>
<tr>
<td>ICIA approved automatic sampler</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Seed cleaning equipment with 2 or more of the following processes:</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspiration; Gravity separation; Screen cleaning; color sorter; or other ICIA approved method.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width and thickness grading equipment</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seed treater</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheller and adequate drying facilities - requirements may be waived if facility receives only dry shelled corn</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand screens or similar equipment for screen and/or cylinder selection</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length grader, either disc or cylinder</td>
<td>X⁵</td>
<td>X⁶</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gravity separator</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Velvet roll mill</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huller or scarifier</td>
<td>X⁷</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinery, facilities, and equipment adequate to complete the intended or desired process to protect the genetic and mechanical purity of certified seed.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air and screen cleaner</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debearder</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ For Native Species, only required to have elevator legs, pits, boots and heads accessible for cleaning.
² One leg is required, two are preferred; one intake and one for conditioned seed.
³ Recommended for Native Species.
⁴ Only bag probes are required.
⁵ Oat only.
⁶ Orchardgrass only; requires a disc length grader.
⁷ Crownvetch only.
V. Personnel

A. Agent

1. An Agent is a representative of an Approved Conditioner facility who is responsible for all requirements of an Approved Conditioner.

2. One person shall be appointed by the Approved Conditioner and approved by ICIA to act as an Agent.

3. The Agent must be trained by ICIA and commit to the understanding of:
   a. How to properly condition seed;
   b. The importance of proper labeling;
   c. The importance of keeping file samples and records;
   d. How to maintain the highest quality standards in seed lots; and
   e. How to abide by the Federal and Iowa Seed Laws and the Iowa Seed Certification Requirements.

4. The Agent is responsible for:
   a. Following the objectives and requirements established by ICIA for Approved Conditioners;
   b. Accurately reporting the amount of seed in each lot and completing forms;
   c. Correctly printing labels for each seed lot;
   d. Accounting for all labels and return all damaged, misprinted, and unused labels to ICIA;
   e. Cleaning equipment as required to maintain varietal purity; and
   f. Notifying ICIA of any changes to Approved Conditioner personnel at the facility.

B. Sampler

1. An Agent may serve as the Sampler or designate Sampler(s) for the Approved Conditioner.

2. Samplers’ responsibilities are, but not limited to:
   a. Taking bin and lot samples.
   b. Signing ICIA paperwork.
   c. Correctly labeling each lot of seed.
   d. Maintaining file samples and records of all incoming and outgoing lots of seed.
   e. Preserving the highest quality standards in each lot of seed.
3. Samplers must be trained by the Agent with ICIA training materials on ICIA records and procedures.
   a. A completed test to verify the Sampler’s understanding of ICIA requirements must be submitted to ICIA for grading.
   b. Training must be renewed every five years.

VI. Maintaining Approved Conditioner Status

1. Approved Conditioner status must be renewed each year.

2. The following minimum quality standards must be met to maintain Approved Conditioner status:
   a. At least 95% of the seed (bushels) cleaned and sold as a class of certified seed must meet the minimum standards for Approved Conditioners.
   b. At least 80% of the seed (bushels) cleaned and sold as a class of certified seed must meet the quality goals for Approved Conditioners.

3. Records and certified seed lots must be readily available to ICIA upon request. A representative of ICIA may re-sample bins or lots on a random basis at an Approved Conditioner’s conditioning plant/seed storage facility and submit samples to the laboratory for varietal purity check.

4. The Approved Conditioner status may be denied if:
   a. Label printing irregularities and errors are found.
   b. Requirements for conditioning are not met.
   c. Minimum standards for seed certification are not met.

5. If the Approved Conditioner status is revoked, a request to be reinstated is required.
VII. Quality Goals and Minimum Standards

Approved Conditioners should meet the following quality goals and minimum standards when conditioning certified seed:

A. Small Grains (Oats, Barley, Wheat, Rye)

1. Quality Goals

<table>
<thead>
<tr>
<th></th>
<th>Foundation</th>
<th>Registered</th>
<th>Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure seed (min.)</td>
<td>99.5%</td>
<td>99.5%</td>
<td>99.5%</td>
</tr>
<tr>
<td>Total inert matter</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Other crop seed (max. per lb.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barley in Oat, Oat in Barley</td>
<td>1 per 5 lbs.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Rye in Wheat, Wheat in Rye</td>
<td>1 per 5 lbs.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Additional (excluding forage crops)</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Common weed seed (max. per lb.)</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Secondary noxious weed seed (max. per lb.)</td>
<td>None</td>
<td>None</td>
<td>1</td>
</tr>
<tr>
<td>Primary noxious weed seed (max. per lb.)</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Germination (min.)</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>Minimum germination before penalty</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
</tbody>
</table>

2. Minimum Standard

<table>
<thead>
<tr>
<th></th>
<th>Foundation</th>
<th>Registered</th>
<th>Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure seed (min.)</td>
<td>99.5%</td>
<td>99.5%</td>
<td>99.5%</td>
</tr>
<tr>
<td>Varietal mixture for Oat</td>
<td>0.20%</td>
<td>0.30%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Varietal mixture for Barley, Rye Wheat</td>
<td>0.05%</td>
<td>0.10%</td>
<td>0.20%</td>
</tr>
<tr>
<td>Other crop seed (max. per lb.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barley in Oat, Oat in Barley</td>
<td>1 per 5 lbs.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Rye in Wheat, Wheat in Rye</td>
<td>1 per 5 lbs.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Additional (excluding forage crops)</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Common weed seed (max. per lb.)</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Secondary noxious weed seed (max. per lb.)</td>
<td>None</td>
<td>None</td>
<td>1</td>
</tr>
<tr>
<td>Primary noxious weed seed (max. per lb.)</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Germination (min.) for Oat, Wheat, Rye</td>
<td>90%</td>
<td>90%</td>
<td>85%</td>
</tr>
<tr>
<td>Germination (min.) for Barley</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>Minimum germination before penalty</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
</tbody>
</table>

B. Hybrid Corn

1. Quality Goals

<table>
<thead>
<tr>
<th></th>
<th>Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure seed (min.)</td>
<td>99.0%</td>
</tr>
<tr>
<td>Total inert matter</td>
<td>1.0%</td>
</tr>
<tr>
<td>Total other crops - including other varieties (max.)</td>
<td>0.5%</td>
</tr>
<tr>
<td>Total weed seed (max.)</td>
<td>None</td>
</tr>
<tr>
<td>Germination (min.)</td>
<td>90%</td>
</tr>
<tr>
<td>Minimum germination before penalty</td>
<td>80%</td>
</tr>
<tr>
<td>Moisture</td>
<td>14%</td>
</tr>
</tbody>
</table>
2. Minimum Standards

<table>
<thead>
<tr>
<th></th>
<th>Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure seed (min.)</td>
<td>98.0%</td>
</tr>
<tr>
<td>Total inert matter</td>
<td>2.0%</td>
</tr>
<tr>
<td>Total other varieties</td>
<td>0.5%</td>
</tr>
<tr>
<td>Total weed seed (max.)</td>
<td>None</td>
</tr>
<tr>
<td>Germination (min.)</td>
<td>90.0%</td>
</tr>
<tr>
<td>Minimum germination before penalty</td>
<td>80.0%</td>
</tr>
<tr>
<td>Moisture (max.)</td>
<td>14.0%</td>
</tr>
</tbody>
</table>

C. Soybeans

1. Quality Goals

<table>
<thead>
<tr>
<th></th>
<th>Foundation</th>
<th>Registered</th>
<th>Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure seed (min.)</td>
<td>99.0%</td>
<td>99.0%</td>
<td>99.0%</td>
</tr>
<tr>
<td>Total inert matter</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Other crop seed (max. per lb.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn and sunflower</td>
<td>None</td>
<td>None</td>
<td>1 per 5 lbs.</td>
</tr>
<tr>
<td>Additional (excluding forage crops)</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Common weed seed (max. per lb.)</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Secondary noxious weed seed (max. per lb.)</td>
<td>None</td>
<td>None</td>
<td>1 per 5 lbs.</td>
</tr>
<tr>
<td>Primary noxious weed seed (max. per lb.)</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Germination (min.)</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Minimum germination before penalty</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
</tr>
</tbody>
</table>

2. Minimum Standards

<table>
<thead>
<tr>
<th></th>
<th>Foundation</th>
<th>Registered</th>
<th>Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure seed (min.)</td>
<td>98%</td>
<td>98%</td>
<td>98%</td>
</tr>
<tr>
<td>Varietal Mixture</td>
<td>0.10%</td>
<td>0.20%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Total inert matter</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Other crop seed (max. per lb.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn and sunflower</td>
<td>None</td>
<td>None</td>
<td>1 per 5 lbs.</td>
</tr>
<tr>
<td>Additional (excluding forage crops)</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Common weed seed (max. per lb.)</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Secondary noxious weed seed (max. per lb.)</td>
<td>None</td>
<td>None</td>
<td>1 per 5 lbs.</td>
</tr>
<tr>
<td>Primary noxious weed seed (max. per lb.)</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Germination (min.)</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Minimum germination before penalty</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
</tr>
</tbody>
</table>

VIII. Carry-over Seed

1. Certified carry-over seed from a previous season must be fully documented for traceability purposes.

2. Access to records must be available to ICIA during site visits.

3. Carry-over seed information must be submitted to ICIA upon request.
IX. Lot Numbers

1. A Lot Number, also called the ICIA Lot Number, is assigned by the Approved Conditioner to each lot and must be printed on the label.
   a. The Lot Number must be two to five digits in length.
   b. The first digit of the Lot Number must reference the year the seed was grown. For example, lot 63 indicates a lot grown in 2016.
   c. Seed of a given variety and class must have a unique lot number.

2. An optional Internal Lot Number can be assigned by the Approved Conditioner. The Internal Lot Number must be followed by a dash (-) and the ICIA Lot Number. For example, Lot 4XPE7586-63, with 63 being the ICIA Lot Number.

X. Grower & Approved Conditioner Numbers

1. Grower Number
   a. Grower Numbers are assigned by ICIA and must be printed on the labels attached on the seed lot.
   b. The Grower Number is used to identify where the seed was grown.
   c. Seed produced out of state or the country and shipped to Iowa to condition will have a unique Grower Number.

2. Approved Conditioner Number
   a. Every Approved Conditioning facility is assigned an Approved Conditioner Number by ICIA.
   b. The Approved Conditioner Number must be printed on all labels and attached to the seed lots conditioned at your facility.
   c. With a few exceptions, the Approved Conditioner number is the same as the facility’s Grower Number.

XI. Bag Stenciling Requirements

Each bag of certified seed must be stenciled with the following information if it is not pre-labeled:

a. Variety;

b. ICIA Lot Number;

c. Grower Number; and

d. Approved Conditioner Number, if different than Grower Number.
XII. Seed Sampling Guidelines

Obtaining a representative sample of a bin or lot is the goal of seed sampling. It is important to develop a method of sampling that provides the best possible access to the bin or lot. Care should be taken to keep all equipment clean and mark samples carefully to prevent any contamination or mislabeling of samples.

A. Bin Sampling

1. A bin is unconditioned or un-cleaned seed from a certified field.

2. Bin samples must be taken when the Approved Conditioner does not have an automatic sampler on the bagging line.

3. An Agent or Sampler must take the sample.

4. Take probes from as many angles as possible (top, side, and bottom of the bin) when sampling a bin of seed.
   a. To obtain a good composite sample, place seed from all probes of the bin in a container and mix thoroughly.
   b. For bins of 5,000 bushels or more it is recommended that each load be sampled during bin filling to form a composite sample.

5. A Bin Record must be completed for each bin sample.

6. A varietal purity test is required. Other testing is done at the Approved Conditioner’s discretion. See Submitting Samples for Testing for sample information.

7. A Certificate of Seed Analysis will be issued by ICIA once all testing is complete.

B. Lot Sampling

1. A lot is cleaned seed that is the same variety, year grown, and conditioned at one time.

2. The seed must be sampled in the final conditioned state to be considered a lot sample. Appropriate methods of lot sampling are:
   a. **Automatic Sampler.** An automatic sampler is a device placed in the conditioning line leading to the bagging device. All automatic sampling devices must be inspected and approved by ICIA prior to use.
   b. **Sampling Open Bags.** Sampling open bags as conditioned involves taking a handful of seed on a regular interval from bags prior to sealing. The interval of sampling will depend on the size of the lot being conditioned.
   c. **Probing Bags.** Probing bags involves probing individual bags or units within a lot for a composite sample. The conditioned seed must be accessible so that probes can be obtained from all units in the lot. The number of probes taken will depend on the size of the lot being conditioned.
d. **Bulk Bin Probe.** Bulk bin probe is probing bulk lots of seed to be sold as bulk retail seed, or conditioned seed sold retail to the person planting the seed in large, unbagged quantities. The number of probes taken will depend on the size of the lot being conditioned.

e. **ICIA Lot Sampling.** ICIA must sample if:

   i. The bin sample did not pass laboratory analysis and your facility does not have an automatic sampler.

   ii. The lot sample did not pass laboratory analysis and Certification is still requested by the Approved Conditioner.

3. A Lot Conditioning Record must be submitted to ICIA for each lot of seed. Lot samples require a Purity, Germination, Iowa noxious weed exam, and varietal purity (PGNV on the sample bag).

4. Following sampling, the seed must not be moved out of control of the Approved Conditioner until all testing requirements for certification have been met.

5. A Certificate of Seed Analysis will be issued by ICIA once testing is complete.

### C. **Recommended Sampling Intensity for Seed in Bags**

Bags are sampled according to the intensity recommended in the Association of Official Seed Analysts, “Rules for Testing Seeds” in the following table:

<table>
<thead>
<tr>
<th>Total Bags of the Lot</th>
<th>Number sampled</th>
<th>Total Bags of the Lot</th>
<th>Number sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 6</td>
<td>*</td>
<td>125 to 134</td>
<td>18</td>
</tr>
<tr>
<td>7 to 14</td>
<td>6</td>
<td>135 to 144</td>
<td>19</td>
</tr>
<tr>
<td>15 to 24</td>
<td>7</td>
<td>145 to 154</td>
<td>20</td>
</tr>
<tr>
<td>25 to 34</td>
<td>8</td>
<td>155 to 164</td>
<td>21</td>
</tr>
<tr>
<td>35 to 44</td>
<td>9</td>
<td>165 to 174</td>
<td>22</td>
</tr>
<tr>
<td>45 to 54</td>
<td>10</td>
<td>175 to 184</td>
<td>23</td>
</tr>
<tr>
<td>55 to 64</td>
<td>11</td>
<td>185 to 194</td>
<td>24</td>
</tr>
<tr>
<td>65 to 74</td>
<td>12</td>
<td>195 to 204</td>
<td>25</td>
</tr>
<tr>
<td>75 to 84</td>
<td>13</td>
<td>205 to 214</td>
<td>26</td>
</tr>
<tr>
<td>85 to 94</td>
<td>14</td>
<td>215 to 224</td>
<td>27</td>
</tr>
<tr>
<td>95 to 104</td>
<td>15</td>
<td>225 to 234</td>
<td>28</td>
</tr>
<tr>
<td>105 to 114</td>
<td>16</td>
<td>235 to 244</td>
<td>29</td>
</tr>
<tr>
<td>115 to 124</td>
<td>17</td>
<td>245 to 254</td>
<td>30</td>
</tr>
<tr>
<td>255 or more</td>
<td></td>
<td>255 or more</td>
<td>30</td>
</tr>
</tbody>
</table>

* For lots of 1 to 6 bags, sample each bag and take a total of at least 5 cores or handfuls.

See [https://store.extension.iastate.edu/Product/ncr403-pdf](https://store.extension.iastate.edu/Product/ncr403-pdf) for additional information about obtaining a representative sample.
XIII. Submitting Samples for Testing

1. Laboratory testing through Iowa State University (ISU) Seed Laboratory is required on all samples except AOSCA Foundation corn.
   a. Lot samples require a Purity, Germination, Iowa noxious weed exam, and varietal purity test (PGNV on the sample bag).
   b. Bin samples require a varietal purity test.
   c. Additional testing can be requested by the Approved Conditioner.

2. Samples must be submitted in ICIA sample bags.

3. The sample bag indicates how much seed to send. Samples short on weight must have additional seed submitted and will result in a delay of lab results.
4. Treated Soybean Seed
   a. Two samples must be submitted and sent to ISU Seed Laboratory.
      a) One sample must be taken from the lot before the seed is treated. The varietal purity
         exam will be conducted on this sample.
      b) The second sample must be of the lot after seed treatment. This sample will be used for
         the rest of the laboratory tests including noxious weed, purity, and germination.
   b. Send the sample to the ISU Seed Laboratory. The mailing address is:
      
      Seed Testing Laboratory
      109 Seed Science Center
      Iowa State University
      Ames, IA  50011

5. A Certificate of Seed Analysis will be issued by ICIA once testing is complete.

XIV. Reconditioning, Rebagging, and Relabeling (RRR) Seed

1. Only certified seed clearly labeled may be RRR. Seed in unlabeled containers cannot be relabeled as
   certified seed.

2. Certification labels removed from a bag of certified seed cannot be reused and must be returned to
   ICIA.

3. Conditioning equipment including legs, pits, boots, heads, spouting, and bins must be clean.

4. Seed samples must be submitted within 48 hours after conditioning.

5. Two or more lots of completely certified seed can be thoroughly mixed into a single lot.
   a. All lots combined must be of the same kind, variety, and class (except lots representing more than
      one seed class may be combined if the lowest class is applied).
   b. If seed lots from more than one state are combined, the percentage of seed in the mixture
      originating from each state must be listed on the certification label.

XV. Label Printing Guidelines

Approved Conditioners are allowed to print labels and pre-label conditioned seed as bags are being filled
with seed. Pre-labeling allows seed to be ready for marketing in advance of laboratory testing. However,
the seed cannot be moved into commerce until certification requirements have been met.
A. **General Guidelines**

1. All Approved Conditioners must follow a uniform style when printing labels.
   a. All information must be printed in capital letters and lined up on the left margin.
   b. Dots, dashes, colons, or other similar characters must not be used other than those required.
   c. All acceptable printing formats are available from ICIA.
   d. Iowa Seed Law specifies that the type size may not be smaller than 8 point.

2. The Approved Conditioner must assign an ICIA Lot Number to each lot and be printed on the label. The first digit of the Lot Number indicates the year the seed was grown. For example, lot 6385 describes a lot grown in 2016.
   a. The Lot Number must be two to five digits in length.
   b. Seed of a given variety and class must have a unique lot number, (i.e. no duplications).
   c. The Approved Conditioner may assign an Internal Lot Number if desired. This Internal Lot Number is not the ICIA Lot Number. If an Internal Lot Number is assigned, it must be followed by a dash (−) and the ICIA Lot Number. For example lot 6385-4354, with 4354 being the ICIA Lot Number.

3. The Approved Conditioner must use serially numbered certification labels from ICIA.
   a. Labels are issued in units of 1,200.
   b. Labels must be sewn or stapled to seed bags during conditioning.

4. Once pre-labeling has started on a lot, it must be completed within 72 hours (Sundays and official holidays excluded).

5. If there is a change in varieties during pre-labeling, the lot of the variety being pre-labeled must be terminated. A new lot must be started when cleanup and bagging begins again.

6. Certification labels may not be printed more than seven consecutive days in advance of bagging a seed lot.

7. Damaged or unused labels must be appropriately accounted for and sent to ICIA.

8. **Submitting Forms and Seed Samples**
   a. Prepare a Lot Conditioning Record for each conditioned lot.
   b. Send the sample to the ISU Seed Laboratory within 48 hours after conditioning.
   c. If the seed was bin sampled and did not meet seed certification requirements, the seed must be sampled by ICIA.

9. Never intermingle seed produced in more than one year.
10. Completely Certified Pre-labeled Seed

a. For seed that was bin sampled and met established genetic requirements, the seed may be moved into commerce after certification requirements are met.

b. The seed that did not meet bin genetic requirements may be moved into commerce after the conditioned seed has been sampled by ICIA and met certification requirements.

B. Returning Labels

1. Certification labels must be returned to ICIA when:

   a. labels are damaged during printing or bagging;

   b. labels are printed, but not used;

   c. labels are attached to a lot that does not meet certification requirements or is downgraded;

   d. labels are removed during the RRR process; or

   e. labels are removed from low quality seed lots that would impact the Approved Conditioner status.

2. When returning labels to ICIA, the labels must be counted, bundled, and labeled in groups of 50 or 100 and marked by variety and lot number.

3. Certification labels unused for 2 years must be returned to ICIA. Up to two years after purchase, a refund will be issued for unused labels. After two years, the unused labels will not be eligible for a refund.
C. Method of Handling Printing Irregularities and Errors

If an Approved Conditioner prints labels containing errors or omissions of required information, ICIA will use the table below “Method of Handling Printing Irregularities and Errors” to determine how the error or omission should be remedied. Proof that the corrections were made must be submitted to ICIA.

1. There are four decision categories requiring changes or corrections to labels:
   a. Category 1: Errors that can be overlooked, but request a change in the future.
   b. Category 2: Errors requiring correction with marking pencil, stamp, or re-labeling. Two or more errors within a conditioning year will be considered a category 3 error.
   c. Category 3: Errors requiring re-labeling.
   d. Category 4: Review of Approved Conditioner status.

2. Method of Handling Printing Irregularities and Errors

<table>
<thead>
<tr>
<th>Irregularities and Errors</th>
<th>Decision Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variance in format</td>
<td></td>
</tr>
<tr>
<td>Not lined up on left side</td>
<td>1</td>
</tr>
<tr>
<td>No dash in front of the ICIA lot number</td>
<td>1</td>
</tr>
<tr>
<td>(if a prefix number is used)</td>
<td></td>
</tr>
<tr>
<td>Poor spacing (Vinton81 instead of Vinton 81)</td>
<td>1</td>
</tr>
<tr>
<td>Printing information on two lines that should be one</td>
<td>1</td>
</tr>
<tr>
<td>Addition of Class on the label (Certified, Registered)</td>
<td>1</td>
</tr>
<tr>
<td>Omissions</td>
<td></td>
</tr>
<tr>
<td>Variety name not complete</td>
<td></td>
</tr>
<tr>
<td>(Vinton Soybean instead of Vinton 81 Soybean)</td>
<td>3</td>
</tr>
<tr>
<td>No variety or crop listed</td>
<td>3</td>
</tr>
<tr>
<td>No grower number</td>
<td>3</td>
</tr>
<tr>
<td>No Approved Conditioner number</td>
<td>3</td>
</tr>
<tr>
<td>No lot number</td>
<td>3</td>
</tr>
<tr>
<td>Interagency reference omitted</td>
<td>2</td>
</tr>
<tr>
<td>Improper spelling</td>
<td>1</td>
</tr>
<tr>
<td>Incorrect variety name, brand, or hybrid designation</td>
<td>3</td>
</tr>
<tr>
<td>Incorrect lot number</td>
<td>3</td>
</tr>
<tr>
<td>Incorrect grower number</td>
<td>3</td>
</tr>
<tr>
<td>Incorrect Approved Conditioner number</td>
<td>3</td>
</tr>
<tr>
<td>Printing not clear</td>
<td></td>
</tr>
<tr>
<td>Overprinted in logo</td>
<td>1</td>
</tr>
<tr>
<td>Overprinted in Class at the top of the label</td>
<td>1</td>
</tr>
<tr>
<td>Messy print (too dark, too light, or smeared)</td>
<td>1</td>
</tr>
<tr>
<td>Too many abbreviations</td>
<td>1</td>
</tr>
<tr>
<td>Letters missing</td>
<td>1</td>
</tr>
<tr>
<td>Errors continue after notified and change requested</td>
<td>4</td>
</tr>
<tr>
<td>Failure to account for damaged or unused labels</td>
<td>4</td>
</tr>
<tr>
<td>Failure to remove labels from seed not meeting certification requirements</td>
<td>4</td>
</tr>
<tr>
<td>Failure to return labels from no pass lots, printing errors, etc., within one week of a request from ICIA.</td>
<td>4</td>
</tr>
</tbody>
</table>
XVI. Label Formatting Guidelines and Examples

A. Corn - AOSCA Certified Label

1. Example for seed grown, certified, and conditioned in Iowa.

[VARIETY NAME] HYBRID CORN
LOT [INTERNAL LOT#]-[ICIA LOT#]
GROWER [GROWER#]
APPROVED CONDITIONER [CONDITIONER#]

![Certified Seed Label](image)

2. Example for seed grown and certified in another state and conditioned in Iowa.

[VARIETY NAME] HYBRID CORN
LOT [INTERNAL LOT#]-[ICIA LOT#]
INTERAGENCY CERTIFIED SEED
GROWN IN [STATE OR COUNTRY]
GROWER [GROWER#]
APPROVED CONDITIONER [CONDITIONER#]

![Certified Seed Label](image)
B. Corn - AOSCA Certified Refuge In A Bag (RIB) Label

Many variations exist. Contact ICIA with questions. Example of RIB Label originating in 2 states.

HYBRID SEED CORN BLEND
VARieties [MAJOR COMPONENT VARIETY]
[REFUGE VARIETY]
LOT [INTERNAL LOT#]-[ICIA LOT#]
GROWN IN [STATE OF MAJOR COMPONENT/STATE OF REFUGE]
GROWER [GROWER# OF MAJOR COMPONENT/GROWER# OF REFUGE]
APPROVED CONDITIONER [CONDITIONER#]

CERTIFIED SEED

HYBRID SEED CORN BLEND
VARieties  JX89253
           JF47124
LOT 16CXW201-61
GROWN IN MICHIGAN / IOWA
GROWER 991 / 222
APPROVED CONDITIONER 747

MEMBER OF ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES
C. Corn - AOSCA Foundation Label

1. Example for Foundation Inbred seed grown, certified, and conditioned in Iowa.

   **CORN INBRED**
   [VARIETY]
   LOT [INTERNAL LOT#]-[ICIA LOT#]
   GROWER [GROWER#]
   APPROVED CONDITIONER [CONDITIONER#]

![Foundation Inbred Label]

   **CORN INBRED**
   JX89253
   LOT 16CXW201-601
   GROWER 554
   APPROVED CONDITIONER 554

2. Example for Foundation Single Cross seed grown, certified, and conditioned in Iowa.

   **CORN SINGLE CROSS**
   [VARIETY]
   LOT [INTERNAL LOT#]-[ICIA LOT#]
   GROWER [GROWER#]
   APPROVED CONDITIONER [CONDITIONER#]

![Foundation Single Cross Label]

   **CORN SINGLE CROSS**
   PG4749 X PG4750
   LOT 16CXW201-601
   GROWER 554
   APPROVED CONDITIONER 554
4. Example for Foundation Inbred seed grown and certified in another state and conditioned in Iowa.

CORN INBRED
[VARIETY]
LOT [INTERNAL LOT#]-[ICIA LOT#]
INTERAGENCY CERTIFIED SEED
GROWN IN [STATE]
GROWER [GROWER#]
APPROVED CONDITIONER [CONDITIONER#]

![Foundation Seed Label](image1)

D. Soybean - AOSCA Foundation, Registered, Certified, and QA (Quality Assurance) Labels

Example for soybean seed grown, certified and conditioned in Iowa.

[VARIETY NAME] SOYBEAN
LOT [INTERNAL LOT#]-[ICIA LOT#]
GROWER [GROWER#]
APPROVED CONDITIONER [CONDITIONER#]

![Certified Seed Label](image2)
E. Small Grain (oat, wheat, barley, alfalfa) AOSCA Certified and QA Labels

1. Example of AOSCA small grain seed grown, certified, and conditioned in Iowa.

[VARIETY NAME] OAT
LOT [INTERNAL LOT#]-[ICIA LOT#]
GROWER [GROWER#]
APPROVED CONDITIONER [CONDITIONER#]

F. Certification Label with Analysis Information

Contact ICIA when printing analysis information on labels.