THE COLORADO STATE SEED LABORATORY
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THE COLORADO PURE SEED LAW
and
USE OF THE SEED LABORATORY

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The Colorado Pure Seed Law is primarily for the protection of the legitimate seed dealer, the seed producer, and the seed buyer and planter.

The Colorado Pure Seed Law is purely a labeling law and requires that field seeds sold or offered for sale shall have been tested and shall have affixed to the container thereof (sacks, bins, etc.), in a conspicuous place, a plainly written tag indicating the quality of the seed contained therein.

Information Required

The following representative tag sets forth the information required in various states and is required in Colorado except as otherwise indicated:

<table>
<thead>
<tr>
<th>Kind</th>
<th>Variety</th>
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</thead>
<tbody>
<tr>
<td>Variety</td>
<td>Variety</td>
</tr>
<tr>
<td>Grown in</td>
<td>Locality</td>
</tr>
<tr>
<td>Pure Seed %</td>
<td>Germination %</td>
</tr>
<tr>
<td>*Weed Seed %</td>
<td>Hard Seed %</td>
</tr>
<tr>
<td>*Crop Seed %</td>
<td>Total G.-H.S. %</td>
</tr>
<tr>
<td>*Inert %</td>
<td></td>
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</tbody>
</table>

NOXIOUS WEEDS: name and number per pound in excess of 90 seeds per pound.

*Not required under present Colorado law, but is desirable information that is required by many neighboring states. Persons engaged in shipping seeds into other states should consult the laws of those states and the Federal Seed Act.

1. Kind: Commonly accepted name, as: alfalfa, barley, corn, etc.
2. Variety: As Grimm, Lico, Colo. 13, etc. Not required, but if it is given the variety must be true to name.
4. Locality: If grown in Colorado the county or similar designation must be given or plainly marked "unknown."
5. Pure Seed %: By weight, meaning freedom from other crop and weed seeds distinguishable by their appearance and from inert matter.
6. Weed Seed %: By weight, of all weed seeds. (Not required in Colorado.) Some states prohibit sale of seed containing more than 3% weed seeds by weight.
7. Crop Seed %: By weight, of crop seeds other than required on label. (Not required in Colorado.)
8. Inert %: By weight, of foreign matter other than crop or weed seeds. (Not required in Colorado.)
9. Germination %: As revealed by suitable test. Test should not be more than 12 months old, which is the requirement in some states. The Federal Act, applying to seeds in interstate commerce, limits the age of test to 5 months.
10. Hard Seed %: Applies to alfalfa, sweet clover, etc. Seeds which do not germinate in test because of failure to absorb sufficient moisture are usually live seeds.

11. Total G. and H.S. %: Sum of germination and hard seed percentages, indicating probable total live seed. May be given if desired.

12. NOXIOUS WEEDS: Need not be named in Colorado unless in excess of 90 per pound. However, recent laws in other states prohibit the sale of seed containing primary noxious weed seeds, a list of which in Colorado would include bindweed, Canada thistle, leafy spurge, white horse nettle, Russian knapweed, perennial sow thistle, and whiteweed. Agricultural seeds containing any of these weeds should not be planted, and the reliable dealer who is concerned about the welfare of his patrons and his community will not sell such seed without advising the purchaser of its character if he is inclined to sell it at all.

**IMPORTANT!** The presence of a label is not a guarantee of good or even acceptable seed. It merely guarantees the seed to be of the character set forth by the label. Any kind of seed may bear a label. Study the label and be sure that you understand it. Buy only that seed that is shown to be of good quality and free from noxious weeds. If in doubt about the noxious weed content, ask the dealer. If still in doubt after buying the seed, send in a representative sample for examination.

**Obtaining the Test**

The test upon which the label is based may be obtained anyplace. The law simply requires that the label honestly represent the character of the seed. The Seed Laboratory is maintained by the State at Fort Collins to provide facilities for properly testing seed that is to be offered for sale and also for testing farmers' seed that is to be planted.

**Sending in Sample for Test**

1. **Taking the sample:** If the sample is to be representative of the seed lot, it is essential that it be made up of numerous small portions taken from various places in the bin, both top and bottom; or from every fifth sack, if the seed is in sacks; or from the top, center, and bottom of each sack if in but a single sack or so. A test from a sample that is not representative is of little value.

2. **Size of sample:** From \( \frac{1}{2} \) to 1 pound of cereals and proportionately smaller amounts of smaller seeds should be sent in. Thus about \( \frac{1}{2} \) pound of alfalfa or sweet clover will be required.

3. **Other information:** Name of sender, return address, type of test desired, and testing fee should accompany sample. About 6 to 8 days are required for the germination test of most agricultural seeds, although some take considerably longer. Western wheatgrass, for instance, requires 35 days. A purity analysis requires from 1 to several hours, depending upon kind of seed and condition, dirty seed requiring much longer than clean seed. In case of emergency it is frequently possible to wire or mail a report of the purity test before completion of the germination test. However, during the "rush" season it is sometimes difficult to get the reports out as quickly as might be desired. It pays to get seeds in for test as early as possible.

**Kinds of Test**

1. **Regular Test** (necessary where seed is to be labeled for sale): Gives percentage purity, percentage (usually name and number also) of common weeds; name and number of NOXIOUS weeds; percentage germination. Fee for this test is $1.00 except for certain grasses, etc., which are higher in accordance with time required to make analysis.
2. Farmer's Test or Examination (furnishes sufficient information to protect against losses resulting from planting inferior and weed infested seed): Gives approximate purity, name and number of NOXIOUS weeds, and percentage germination. Fee is $.50 per sample.

3. Gemination only: Fee is $.25 per sample for either field or garden seeds.

Sample Bags and Tags

As a matter of accommodation the Laboratory can furnish sample bags for sending in seed samples and standard label tags for labelling seed for sale at approximate cost, which is less than a cent apiece for tags and about 3 cents apiece for the bags.