



The  
**Arizona**  
Seed Law and Seed Rules  
Reference Book

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Arizona  
Revised Statutes  
Title 3  
Chapter 2  
Article 2 - Seeds  
August 2006

Arizona  
Administrative Code  
Title 3. Agriculture  
Chapter 4  
Article 4. Seeds  
June 2007

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**Seed Trade Association of Arizona**



## Seed Trade Association of Arizona

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The Seed Trade Association of Arizona (STAA) was founded in 1992 to provide a forum in which its members could discuss and debate issues affecting one of the state's most vital industries - the production and sale of superior quality planting seed. Arizona's arid climate and the agricultural production practices of its growers combine to make the state an ideal locale for producing most kinds of seeds. STAA maintains vigilance of issues affecting its members and seeks to keep them informed to their most favorable interest.

### About this booklet

This booklet is intended to be a public service and is a faithful recitation of the relevant titles of the Arizona Revised Statutes and the Arizona Administrative Code. However, the Seed Trade Association of Arizona (STAA) assumes no responsibility, of any kind, for any misrepresentation or misinterpretation or typographical or other mistakes concerning the material contained in this booklet. The official versions of the statute and rules are published by the Arizona Secretary of State's office and are deemed to be the final authority as to any discrepancies that might develop between those versions and the versions printed herein.

# Introduction

This booklet brings together the two documents that regulate the trade of seed in Arizona. The statutes adopted by the Arizona legislature primarily deal with the laws and authorizations for governing the trade of seed that are developed and enforced by the Arizona Department of Agriculture. The administrative code (the rules) mainly deals with the specific requirements and information related to the labeling of seed for sale and the export certification of seed. Both documents contain a significant number of definitions that pertain to the language contained therein. Both documents also deal with issues of violations and associated penalties.

The rules of the administrative code were closely adapted from the Recommended Uniform State Seed Law (RUSSL) as published by the Association of American Seed Control Officials (as amended July 2005.) The board of directors of the STAA participated directly with staff of the Environmental Services Division of the Arizona Department of Agriculture in adapting the terms of RUSSL to conform to industry and regulatory practice in the state.

The rules also were amended to include the seed of all species listed as noxious plants in the state as noxious when found in planting seed. Therefore, seed labelers are advised to compare the results of seed analyses with the list of noxious weed species before labeling any lot of seed for sale within the state.

The proper labeling of virtually all seed offered for sale in the state conforms to certain basic requirements, regardless of whether the seed is classified as agricultural, vegetable or flower seed. These requirements include stating the following, by weight, where applicable:

- Kind
- Variety - if known
- Lot number assigned by the labeler and tied to all records
- Net weight of all of the container contents
- Pure Seed percentage - of the seed in the container that is the named kind and variety
- Other Seed percentage - of the seed in the container that is NOT the named kind and variety
- Weed Seed percentage - of the container net weight that is weed seeds
- Inert Matter percentage - of the total weight that is not pure, other or weed seed
- Incidence of restricted noxious weed seeds, if present, within allowable limits
- Germination percentage - of the pure seed
- Month and year tested for germination - and “sell by (month/year)” in some instances
- Name and address of the person that labeled the seed (the “labeler”) or offers it for sale

The labeling rules are very precise for a range of seed products. Therefore, individuals seeking exact labeling requirement to meet their needs are advised to carefully study § R3-4-402 from the beginning and § R3-4-406 before determining those exact requirements. Failure to thoroughly review these sections could expose the labeler to the risk of mislabeling.

The STAA will gladly receive comments and criticisms of this presentation and will consider constructive suggestions for improving it in future editions. Contact the STAA office with your communications.

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## STAA Advisory on Germination Test Date Validity in Arizona

A.R.S. § 2-242 (A)(1) states that it is a violation of Arizona statute to not have completed any required germination test immediately before offering seed for sale, selling seed or transporting seed for sale within the following period of time, exclusive of the calendar month in which the test was completed:

- **Nine (9) months** for all agricultural (including lawn and turf), ornamental or vegetable seeds intended for purchase by wholesale or commercial producers.
- **Fifteen (15) months** for all agricultural (including lawn and turf), ornamental or vegetable seeds intended for retail purchase.

These effective periods of validity for germination test results will prevail over any differing periods that may be cited in the administrative code and are to be applied to any kind of seed, regardless of its style of packaging.

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**Arizona Revised Statutes - Title 3**  
**Chapter 2**  
**Article 2 - Seeds**  
**August 2006**

**3-231. Definitions**

In this article, unless the context otherwise requires:

1. **“Advertisement”** means all representations, other than those on the label, made in any manner relating to seed within the scope of this article.
  2. **“Agricultural seed”** means the seeds of grass, forage, cereal, and fiber crops and any other kinds of seeds commonly recognized within this state as agricultural seeds, lawn seeds and mixtures of such seeds, and may include noxious-weed seeds when the department determines that such seed is being used as agricultural seed.
  3. **“Cease and desist order”** means an administrative order provided by law restraining the sale, use, disposition and movement of a definite amount of seed.
  4. **“Certified seed”** or **“registered seed”** means seed that has been produced and labeled in accordance with the procedures and in compliance with the rules and regulations of an officially recognized seed certifying agency.
  5. **“Custom application”** means an application of pesticide to a seed by a pesticide applicator who does not hold title to the seed.
  6. **“Dealer”** means any person who sells seed.
  7. **“Division”** means the Environmental Services Division of the Arizona Department of Agriculture.
  8. **“Established plant, warehouse, or place of business”** means any permanent office headquarters maintained by an importer, broker, seller or authorized manufacturer’s agent, or any permanent warehouse, building or structure in or from which a permanent business is operated, at which stocks of agricultural seed, vegetable seed or ornamental plant seed regulated by this article are sold, distributed, processed, mixed, stored or kept.
  9. **“Hybrid”** means the first generation seed of a crossbreed produced by controlling pollination and by combining two or more inbred lines, or one inbred or a single crossbreed with an open pollinated variety, or two varieties or species, except open pollinated varieties of corn (*Zea mays*). The second generation, or subsequent generations from such crosses, shall not be regarded as crosses. Hybrid designations shall be treated as variety names. Any kinds or varieties that have pure seed which is less than ninety-five percent but more than seventy-five per cent hybrid seed as a result of incompletely controlled pollination in a cross shall be labeled to show the percentage of pure seed that is hybrid seed, or shall be labeled with a statement such as “contains from seventy-five per cent to ninety-five per cent hybrid seed”. No one kind of seed shall be labeled as hybrid if the pure seed contains less than seventy-five per cent hybrid seed.
  10. **“Inoculant”** means a commercial preparation containing nitrogen-fixing bacteria that is applied to seed.
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11. **“Kind”** means one or more related species or subspecies which singly or collectively are known by one common name, such as corn, oats, alfalfa and timothy.
12. **“Label”** means any label or other written, printed or graphic representations, in any form whatsoever, accompanying or pertaining to any seed whether in bulk or in containers and includes representations or invoices.
13. **“Labeler”** means any person whose name and address appear on the label pertaining to or attached to a lot or container of agricultural, vegetable or ornamental plant seed sold, offered for sale, exposed for sale or transported for sowing purposes.
14. **“License”** means an Arizona state seed license that is obtained from the department.
15. **“Lot”** means a definite quantity of seed identified by a lot number or other mark, every portion or bag of which is uniform within recognized tolerances for the factors which appear in the labeling.
16. **“Noxious-weed seeds”** means “prohibited noxious-weed seeds” and “restricted noxious-weed seeds” as defined as follows and as listed in the rules adopted under this article.
- (a) **“Prohibited noxious-weed seeds”** are the seeds of perennial or annual weeds which, when established, are highly destructive and difficult to control by ordinary good cultural practice and the seed of which is prohibited by this article subject to recognized tolerances.
- (b) **“Restricted noxious-weed seeds”** are all noxious-weed seed not classified as prohibited noxious-weed seed.
17. **“Ornamental plant seed”** means the seed of any plant used for decorative or ornamental purposes and includes flower seed.
18. **“Person”** means any individual, partnership, corporation, company, society or association.
19. **“Pure seed”, “germination”** and other seed labeling and testing terms in common usage shall be defined as in the federal seed act (53 Stat. 1275; 7 United States Code sections 1551 through 1611) and the rules and regulations promulgated under that act.
20. **“Record”** means all information relating to the shipment or shipments involved and includes a file sample of each lot of seed.
21. **“Sell”** means offer for sale, expose for sale, possess for sale, exchange, barter or trade.
22. **“Treated”** means that the seed has received an application of a substance or process that is designed to reduce, control or repel certain disease organisms, insects or other pests attacking such seeds or seedlings growing from the seeds.
23. **“Type”** means either a group of varieties so similar that the individual varieties cannot be clearly differentiated except under special conditions or, when used with a variety name, seed of the variety named which may be mixed with seed of other varieties of the same kind and of similar character. If type is designated, the designation may be associated with the name of the kind but in all cases shall be clearly associated with the word “type”. If the type designation does not include a variety name, it shall include a name that describes a group of varieties of similar character, and the pure seed shall be at least ninety per cent of one or more varieties all of which conform to the type designation.
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24. **“Variety”** means a subdivision of a kind characterized by growth, yield, plant, fruit, seed or other characteristics by which it can be differentiated from other plants of the same kind.
25. **“Vegetable seeds”** means seeds of those crops which are grown in gardens and on truck farms and are generally known and sold under the name of vegetable seeds in this state.
26. **“Weed seeds”** means the seeds of all plants generally recognized as weeds within this state and includes noxious-weed seeds.

### **3-232. Enforcement of article**

A. The director shall enforce the provisions of this article. The director shall:

1. Sample, inspect, analyze and test agricultural, vegetable and ornamental plant seed transported, sold or offered or exposed for sale for sowing purposes, as provided by section 3-233 and to the extent he deems necessary to determine whether the agricultural, vegetable and ornamental plant seeds are in compliance with the provisions of this article, and he shall notify promptly the person who transported, sold, offered or exposed the seed for sale of any violation.
2. Prescribe and, after public hearing following due public notice, adopt rules governing:
  - (a) The methods of sampling, inspecting, analyzing, testing and examining agricultural, vegetable and ornamental plant seed and the tolerances to be followed in the administration of this article that comply with the federal seed act (7 United States Code sections 1551 through 1611; 53 Stat. 1275) and the rules and regulations promulgated under that act.
  - (b) A prohibited and restricted noxious weed list and subsequent revisions to the list.
  - (c) Reasonable standards of germination for vegetable seeds.
  - (d) Such other rules as are necessary to secure the efficient enforcement of this article.
3. Designate seed certifying agencies which he finds qualified to certify agricultural or vegetable seeds as to variety, purity, quality or other related designation. The director shall consult with the director of the University of Arizona agricultural experiment station before approving the qualifications of any agency to certify as to variety, strain or other genetic character of agricultural or vegetable seeds.

B. The director may assign personnel from the office of inspections to perform any of the inspection-related activities prescribed by this article.

### **3-233. Powers and duties; fees; penalty**

A. For the purpose of carrying out this article, the director may:

1. In order to have access to seeds and the records pertaining to seeds subject to this article and the rules adopted under this article, enter upon:
  - (a) Any established plant, warehouse or place of business during customary business hours.
  - (b) Any truck or other conveyance operated on land, on water or in the air on probable cause or reasonable suspicion to believe that a violation of this article has occurred.



2. Issue and enforce a written cease and desist order to the owner or custodian of any lot of agricultural, vegetable or ornamental plant seed which the director finds is in violation of this article, as provided in section 3-238, and any lot or lots of seed sold, or transported for sale, which do not meet all requirements of the plant variety protection act (P.L. 91-577; 84 Stat. 1542; 7 United States Code sections 2321 through 2582).
  3. Provide through the state agricultural laboratory for seed testing facilities, employ qualified persons and incur expenses necessary to comply with this article.
  4. Through the state agricultural laboratory:
    - (a) Provide for making purity, germination, noxious weed, tetrazolium and pathology tests of seeds for farmers and dealers on request pursuant to rules prescribed by the director governing such testing.
    - (b) Collect charges for the tests as prescribed by the director.
  5. Cooperate with the United States Department of Agriculture and other agencies in seed law enforcement.
  6. Revoke, suspend, restrict, deny or choose not to renew a license issued under this article or fix periods and terms of probation for a license holder after a hearing at which the license holder is found by a preponderance of the evidence to have violated this article or any of the rules adopted under this article.
  7. Establish by rule fees that are sufficient to cover the costs of interstate and international exportation inspection activities under section 3-232, subsection A, paragraph 1, but annually not more than one dollar fifty cents per acre. Monies received under this paragraph shall be deposited in the seed law fund pursuant to section 3-234.
- B. For the purposes of this article, the director, after an opportunity for a hearing, shall establish and collect the following fees:
1. For a seed dealer's license, not more than fifty dollars per year.
  2. For a labeler's license, not more than five hundred dollars per year.
- C. The director shall assess a license holder who does not submit the annual license renewal fees to the department by July 1 a penalty of ten per cent of the amount of the license fee per month for not more than three months. Penalties collected under this subsection shall be deposited in the seed law fund pursuant to section 3-234.

### **3-234. Seed law fund**

- A. A seed Law fund is established. All monies collected pursuant to section 3-233 shall be deposited, pursuant to sections 35-146 and 35-147, in the seed law fund.
  - B. The director shall administer the fund. On notice from the director, the state treasurer shall invest and divest monies in the fund as provided by section 35-313, and monies earned from investment shall be credited to the fund.
  - C. All monies in the seed law fund are subject to legislative appropriation to the department to be spent as directed by the director to carry out the provisions of this article.
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**3-235. Seed dealer and labeler licenses; fee; exception**

A. An Arizona seed dealer or an out-of-state seed dealer who sells, distributes, processes or mixes for the use of others any agricultural, vegetable or ornamental plant seed, except vegetable and ornamental plant seed in packages of less than one pound, shall obtain a license from the division, authorizing the dealer to sell, distribute, process or mix such seed. A dealer is not entitled to have a license unless the dealer has an established plant, warehouse or place of business. A separate seed dealer license is required for each place of business in this state from which seed regulated by this article is sold.

B. A seed labeler who labels any agricultural, vegetable or ornamental plant seed for sale, distribution or processing shall obtain a seed labeler license from the division for each place of business at which seed regulated by article is labeled.

C. An application for a license shall be accompanied by the fee prescribed by section 3-233. A license shall be renewed annually not later than July 1, and the application for renewal shall be accompanied by the fee prescribed by section 3-233.

D. This section does not apply to a farmer growing seed crops for sale to a seed dealer or labeler. The portion of crops received by an individual who harvests the producer's crop and receives part of the crop as payment for services rendered in the harvesting shall be exempt from this section.

**3-236. Retention of invoices and records**

Each person whose name appears on the label of and handles agricultural and vegetable seeds subject to this article shall keep for a period of two years complete records of each lot of agricultural or vegetable seed handled, and keep for one year a file sample of each lot of seed after disposition of the lot. All records pertaining to the lot or lots involved shall be accessible for inspection during customary business hours. All invoices, receiving records and records of purchases must have the kind, variety and lot number of seed sold in the state of Arizona.

**3-237. Label requirements; rules**

The director shall adopt rules to specify labeling requirements for each container of agricultural, vegetable and ornamental plant seed sold, offered for sale, exposed for sale or transported in this state for sowing purposes. The labeling requirements shall include:

1. Germination.
2. Purity.
3. Noxious weed content.
4. Precautionary statements the director considers to be necessary.
5. Labeler or packager information.
6. Seed origin.
7. Other issues the director considers to be necessary.

**3-238 Cease and desist order; appeal**

A. The director may issue and enforce a written cease and desist order to the owner or custodian of any lot of agricultural, vegetable or ornamental plant seed which the director finds is in violation of any of the provisions of this article, which order shall prohibit further sale, processing and movement of the seed except on approval of the director, until the director has evidence that the law has been complied with and the director has issued a release of the seed from the cease and desist order.

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B. The owner or custodian of seeds which have been denied further sale, processing and movement may request a hearing pursuant to title 41, chapter 6, article 10.

C. This section shall not be construed as limiting the right of the director to proceed as authorized by other sections of this article.

### **3-239. Seizure and disposition of noncomplying seed**

A. Any lot of agricultural, vegetable or ornamental plant seed not in compliance with the provisions of this article is subject to seizure upon complaint of the director to a court of competent jurisdiction in the locality in which the seed is located.

B. If the court finds the seed is in violation of this article and orders condemnation of the seed, it shall be denatured, processed, destroyed, relabeled or otherwise disposed of in compliance with the laws of this state. Before the court orders such disposition of the seed, it shall first give the claimant an opportunity to apply to the court for release of the seed or permission to process or relabel it to bring it into compliance with this article.

### **3-240. Prosecutions; classification; publication of results; injunction**

A. Any person violating any provision of this article is guilty of a petty offense.

B. A person who violates any provision of this article with the intent to commit fraud is guilty of a class 6 felony.

C. When the director finds that a person has violated any of the provisions of this article, the director may institute proceedings in a court of competent jurisdiction in the locality in which the violation occurred to have the person prosecuted for the violation, or may file with the county attorney, with the view of prosecution, such evidence as the county attorney deems necessary.

D. The county attorney of the county in which the violation occurred shall institute proceedings at once against any person charged with a violation of this article if, in his judgment, the information submitted warrants such action.

E. After judgment by the court in any case arising under this article, the director shall publish any information pertinent to the issuance of the judgment by the court in such media as he may at any time designate.

F. The director may enjoin any violation of this article in a court of competent jurisdiction without commencing any other action.

### **3-241. Exemptions; exceptions**

A. The provisions of sections 3-237 and 3-242 do not apply:

1. To seed or grain not intended for sowing purposes.

2. To seed in storage in, or being transported or consigned to a cleaning or processing establishment for cleaning or processing, if the invoice or labeling accompanying any shipment of such seed bears the statement "seed for processing," and if any labeling or other representation which may be made with respect to the uncleaned or unprocessed seed shall be subject to this article.

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3. To any carrier in respect to any seed transported or delivered for transportation in the ordinary course of its business as a carrier, if the carrier is not engaged in producing, processing, or marketing agricultural, vegetable or ornamental plant seed subject to provisions of this article.

B. No person shall be subject to the penalties of this article for having sold or offered or exposed for sale in the state any agricultural, vegetable or ornamental plant seeds, which were incorrectly labeled or represented as to kind, variety, type or origin, which seeds cannot be identified by examination thereof, unless he has failed to obtain an invoice or grower's declaration, if required, and to take such other precautions as are necessary to insure the identity to be that stated.

### **3-242. Violations; civil penalties**

A. The director may assess a civil penalty of at least fifty dollars but not more than three hundred dollars for each violation, with each affected customer constituting a separate violation, against a seed dealer or labeler who, after a hearing is found by a preponderance of the evidence:

1. To have not completed the test to determine the percentage of germination required by section 3-237 immediately before the sale, offering for sale or transportation:

(a) Within a nine month period, exclusive of the calendar month in which the test was completed, for any agricultural, ornamental or vegetable seed intended for wholesale or commercial producers purchase.

(b) Within a fifteen month period, exclusive of the calendar month in which the test was completed, for any agricultural, ornamental or vegetable seed intended for retail purchase.

2. To have not obtained any license that is required by this article.

B. The director may assess a civil penalty of not more than two thousand five hundred dollars for each violation, with each affected customer constituting a separate violation, against a seed dealer or labeler who, after a hearing, is found by a preponderance of the evidence:

1. To have labeled or sold seed represented to be certified seed, registered seed or foundation seed unless it has been produced and labeled according to the rules and regulations of an officially recognized seed certification or registration agency.

2. To have labeled or sold seed that has been treated with any approved substance designed to control or repel plant disease organisms or insect pests attacking the seeds, unless each container bears a label giving information in the form the director prescribes by rule, showing the commonly accepted name and kind or nature of the substance and, if the substance may be harmful to humans or other vertebrate animals, a warning or cautionary statement that is adequate to protect the public.

3. To have hindered or obstructed an authorized agent of the department from performing official duties under this article.

4. To have failed to comply with a cease and desist order.

5. To have labeled or sold seed that has a false or misleading label.

6. To have labeled or sold seed that has been advertised in a false or misleading manner.

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**3-243. Seed labeling regulation; state preemption**

The regulation and use of seeds are of statewide concern. The regulation of seeds pursuant to this article and their use is not subject to further regulation by a county, city, town or other political subdivision of this state.

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**TITLE 3. AGRICULTURE**

**CHAPTER 4. DEPARTMENT OF AGRICULTURE**

**PLANT SERVICES DIVISION**

**ARTICLE 4. SEEDS**

Section

- R3-4-401. Definitions
  - R3-4-402. Labeling
  - R3-4-403. Noxious Weed Seeds
  - R3-4-404. Seed Germination Standards
  - R3-4-405. Seed-certifying Agencies
  - R3-4-406. Sampling and Analyzing Seed
  - R3-4-408. Licenses: Seed Dealer and Seed Labeler; Fees
  - R3-4-409. Violations and Penalties
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## ARTICLE 4. SEEDS

**R3-4-401. Definitions**

In addition to the definitions provided in A.R.S. § 3-231, the following shall apply to this Article:

1. **"Blend"** means seed consisting of more than one variety of a kind, with each variety in excess of five percent by weight of the whole.
  2. **"Brand"** means a word, name, symbol, number, or design used to identify seed of one person to distinguish it from seed of another person.
  3. **"Certifying agency"** means:
    - a. An agency authorized under the laws of this state to officially certify seed and that has standards and procedures approved by the U. S. Secretary of Agriculture to assure the varietal purity and identity of the seed certified, or
    - b. An agency of a foreign country determined by the U.S. Secretary of Agriculture to adhere to procedures and standards for seed certification comparable to the procedures and standards adhered to generally by seed-certifying agencies under subsection (a) of this definition.
  4. **"Coated seed"** means seed that has been covered with a substance that changes the size, shape, or weight of the original seed. Seed coated with ingredients such as rhizobia, dyes, and pesticides is not coated seed.
  5. **"Conditioning"** or **"conditioned"** means drying, cleaning, scarifying, and other operations that could change the purity or germination of the seed and require the seed lot to be retested to determine the label information.
  6. **"Dormant"** means viable seed, excluding hard seed, that fails to germinate when provided the specified germination conditions for that kind of seed.
  7. **"Federal Seed Act"** means the federal law at 7 U.S.C. 1551-1611 and regulations promulgated under the Act: 20 CFR part 201.
  8. **"Flower seeds"** means seeds of herbaceous plants grown for their blooms, ornamental foliage, or other ornamental parts, and commonly known and sold under the name of flower or wildflower seeds in this state.
  9. **"Germination"** means the emergence and development from the seed embryo of those essential structures that, for the kind of seed in question, are indicative of the ability to produce a normal plant under favorable conditions.
  10. **"Hard seeds"** means seeds that remain hard at the end of the prescribed germination test period because they have not absorbed water due to an impermeable seed coat.
  11. **"Inert matter"** means all matter that is not seed, including broken seeds, sterile florets, chaff, fungus bodies, and stones.
  12. **"Mixture", "mix", or "mixed"** means seed consisting of more than one kind, each in excess of five percent by weight of the whole.
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13. "**Mulch**" means a protective covering of any suitable substance placed with seed that acts to retain sufficient moisture to support seed germination, sustain early seedling growth and aid in preventing soil moisture evaporation, control of weeds, and erosion prevention.
14. "**Origin**" means the state where the seed was grown, or if not grown in the United States, the country where the seed was grown.
15. "**Other crop seed**" means seeds of plants grown as crops other than the kind or variety included in the pure seed, as determined by methods defined in this Article.
16. "**Pure live seed**" means the product of the percent of germination plus hard or dormant seed multiplied by the percent of pure seed divided by 100. The result is expressed as a whole number.
17. "**Pure seed**" means a kind of seed excluding inert matter and all other seed not of the kind being considered.
18. "**Replacement date sticker**" means a sticker on a label that displays a new test date.
19. "**Retail**" means sales that are not intended for agricultural use and are prepared for use by a consumer in home gardens or household plantings only.
20. "**Seed count**" means the number of seeds per unit weight in a container.
21. "**Seizure**" means taking possession of seed pursuant to a court order.
22. "**Wholesale**" means sales of seeds that are intended for agricultural use normally in quantities for resale, as by an agricultural retail merchant and are not prepared for use in home gardening or household plantings.
23. "**Working sample**" means the number of seeds required under §§ 402 and 403 of the Federal Seed Act.

### **R3-4-402. Labeling**

#### **A. General requirements:**

1. Blank spaces or the words "free or none" mean "0" and "0.00%" for the purpose of applying the tolerances prescribed in this Article.
  2. Labeling for purity and germination shall not show higher results than actually found by test.
  3. The terms "foundation seed," "registered seed," and "certified seed" are authorized for use on seed certified by a seed certifying agency under the laws of Arizona as delineated in R3-4-405.
  4. Relabeling. Any person re-labeling seed in its original container shall include the following information on a label or a replacement date sticker:
    - a. The calendar month and year the germination test was completed to determine the germination percentage and the sell-by date as required by subsection (C)(3)(i)(iv) or (C)(5)(c)(i), [**STAA NOTE:** This also applies to requirements under all similar situations.]
    - b. The same lot designation as on the original labels, and
    - c. The identity of the person re-labeling the seed if different from the original labeler.
  5. Labeling of seed distributed to wholesalers. After seed has been conditioned, a labeler shall ensure the seed is labeled as follows:
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- a. When supplied to a retailer or consumer, each bag or bulk lot must be completely labeled.
  - b. When supplied to a wholesaler, if each bag or other container is clearly identified by a lot number permanently displayed on the container or if the seed is in bulk, the labeling of seed may be by invoice.
  - c. When supplied to a wholesaler, if each bag or container is not identified by a lot number, it must carry complete labeling.
6. Seeds for sprouting. All labels of seeds sold for sprouting for salad or culinary purposes shall indicate the following information:
- a. Commonly accepted name of kind or kinds;
  - b. Lot number;
  - c. Percentage by weight of each pure seed component in excess of 5 percent of the whole, other crop seeds, inert matter, and weed seeds, if occurring;
  - d. Percentage of germination of each pure seed component;
  - e. Percentage of hard seed, if present; and
  - f. The calendar month and year the germination test was completed to determine the percentages in subsections (c), (d) and (e).

**B. Kind, variety, or type.**

1. All agricultural seeds sold in this state, except as stated in subsection (B)(2), shall be labeled to include the recognized variety name or type or the words "Variety not stated." A brand is not a kind and variety designation and shall not be used instead of a variety name.
2. All cotton planting seed sold, offered for sale, exposed for sale, or transported for planting purposes in this state, shall have a label that includes both kind and variety.

**C. Agricultural, vegetable, or flower seeds** that are sold, offered for sale, or exposed for sale within this state shall bear on each container a plainly written or printed label or tag in English. No modifications or disclaimers shall be made to the required label information in the labeling or on another label attached to the container. No misleading information shall appear on the label. The label shall include the following information:

1. For agricultural, vegetable, and flower seeds that have been treated, the following is required and may appear on a separate label:
    - a. Language indicating that the seed has been treated;
    - b. The commonly-accepted chemical name of the applied substance or a description of the process used;
    - c. If a substance that is harmful to human or animals is present with the seed, a caution statement such as "Do not use for food, feed, or oil purposes." The caution for highly toxic substances shall be a poison statement and symbol; and
    - d. If the seed is treated with an inoculant, the date of expiration, which is the date beyond which the inoculant is not to be considered effective.
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2. For agricultural seeds, except for lawn and turf grass seed and mixtures of lawn and turf grass seed as provided in subsection (C)(3); for seed sold on a pure live seed basis as provided in subsection (C) (7); and for hybrids that contain less than 95 percent hybrid seed as provided in subsection (C)(8):
    - a. The name of the kind and variety for each agricultural seed component in excess of five percent of the whole and the percentage by weight of each. If the variety of the kinds generally labeled as a variety designated in this Article is not stated, the label shall show the name of the kind and the words, "variety not stated." Hybrid seed shall be labeled as hybrid;
    - b. Lot number or other lot identification;
    - c. Origin of alfalfa, red clover, and field corn (except hybrid corn) or if the origin is unknown, a statement that the origin is unknown;
    - d. Percentage by weight of all weed seeds;
    - e. The name and rate of occurrence per pound of each kind of restricted noxious weed seed present;
    - f. Percentage by weight of agricultural seeds other than those required to be named on the label. Agricultural seeds may be designated as "crop seeds."
    - g. Percentage by weight of inert matter;
    - h. The sum total of weight identified in subsections (a), (d), (f), and (g) shall equal 100 percent;
    - i. For each named agricultural seed:
      - i. Percentage germination, excluding hard seed;
      - ii. Percentage of hard seeds, if present; and
      - iii. The calendar month and year the test was completed to determine the percentages. The statement "total germination and hard seed" may be included following the percentages required under subsections (i) and (ii).
    - j. Net weight of seed in the container or seed count per unit weight; and
    - k. Name and address of the labeler, or the person who sells, offers, or exposes the seed for sale within this state.
  3. For lawn and turf grass seed and lawn and turf grass seed mixtures:
    - a. For single kinds, the name of the kind or kind and variety and the percentage by weight.
    - b. For mixtures, the word "mix", "mixed", or "mixture" or "blend" shall be stated with the name of the mixture, along with the commonly accepted name of each kind or kind and variety of each agricultural seed component in excess of five percent of the whole and the percentages by weight.
    - c. The percentage by weight of each kind of pure seed shall be listed in order of its predominance and in columnar form. The heading "pure seed" and "germination" or "germ" shall be placed consistent with generally accepted industry practices.
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- d. Percentage by weight of agricultural seed other than those required to be named on the label which shall be designated as "crop seed."
  - e. The percentage by weight of inert matter for lawn and turf grass shall not exceed ten percent, except that 15 percent inert matter is permitted in Kentucky bluegrass labeled without a variety name. Foreign material that is not common to grass seed shall not be added, other than material used for coating, as in subsection (C)(4), or combination products, as in subsection (C)(9).
  - f. Percentage by weight of all weed seeds. Weed seed content shall not exceed one-half of one percent by weight.
  - g. The sum total for subsections (a), (b), (c), (d), (e) and (f) shall equal 100 percent.
  - h. Noxious weeds that are required by this Article to be labeled shall be listed under the heading "noxious weed seeds."
  - i. For each lawn and turf seed named under subsection (a) or (b):
    - i. Percentage of germination, excluding hard seed;
    - ii. Percentage of hard seed, if present;
    - iii. Calendar month and year the germination test was completed to determine percentages in subsections (i) and (ii); and
    - iv. For seed sold for retail non-farm usage the statement "sell by (month/year)" which shall be no more than 15 months from the date of the germination test excluding the month of the test.
  - j. Name and address of the labeler, or the person who sells, offers or exposes the seed for sale within this state.
4. For coated agricultural, vegetable, flower, or lawn and turf seeds that are sold by weight:
- a. Percentage by weight of pure seeds with coating material removed;
  - b. Percentage by weight of coating material;
  - c. Percentage by weight of inert material not including coating material;
  - d. Percentage of germination determined on 400 pellets with or without seeds;
  - e. All other applicable requirements in subsections (C)(1), (2), and (3).
5. For vegetable seeds in packets as prepared for use in home gardens or household plantings or vegetable seeds in pre-planted containers, mats, tapes, or other planting devices:
- a. Name of kind and variety of seed;
  - b. Lot identification, such as by lot number or other means;
  - c. One of the following:
    - i. The calendar month and year the germination test was completed and the statement "Sell by (month/year)." The date indicated shall be no more than 12 months from the date of the test, excluding the month of the test; **[STAA NOTE: See advisory on page ii.]**
    - ii. The calendar year for which the seed was packaged for sale as "packed for (year)" and the statement "sell by (year)"; or
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- iii. The percentage germination and the calendar month and year the test was completed to determine the percentage if the germination test was completed within 12 months, excluding the month of the test; **[STAA NOTE: See advisory on page ii.]**
    - d. Name and address of the labeler, or the person who sells, offers, or exposes the seed for sale within this state;
    - e. For seeds that germinate less than the standard established under R3-4-404(A) and (B): percentage of germination, excluding hard seed; percentage of hard seed, if present; and the words "Below Standard" in not less than 8-point type;
    - f. For seeds placed in a germination medium, mat, tape, or other device in such a way as to make it difficult to determine the quantity of seed without removing the seeds from the medium, mat, tape or device, a statement to indicate the minimum number of seeds in the container.
  6. For vegetable seeds in containers other than packets prepared for use in home gardens, household plantings, pre-planted containers, mats, tapes, or other planting devices:
    - a. The name of each kind and variety present in excess of five percent and the percentage by weight of each in order of its predominance;
    - b. Lot number or other lot identification;
    - c. For each named vegetable seed:
      - i. Percentage germination, excluding hard seed;
      - ii. Percentage of hard seed, if present; and
      - iii. The calendar month and year the test was completed to determine the percentages; The statement "Total germination and hard seed" may be included following the percentages required under subsections (i) and (ii);
    - d. Name and address of the labeler, or the person who sells, offers or exposes the seed for sale within this state; and,
    - e. The labeling requirements for vegetable seeds in containers of more than one pound are met if the seed is weighed from a properly labeled container in the presence of the purchaser.
  7. For agricultural seeds sold on a pure live seed basis, each container shall bear a label containing the information required by subsection (C)(2), except:
    - a. The label need not show:
      - i. The percentage by weight of each agricultural seed component as required by subsection (C)(2)(a); or
      - ii. The percentage by weight of inert matter as required by subsection (C)(2)(g); and,
    - b. For each named agricultural seed, the label must show instead of the information required by subsection (C)(2)(h):
      - i. The percentage of pure live seed; and
      - ii. The calendar month and year in which the test determining the percentage of live seed was completed.
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8. For agricultural and vegetable hybrid seeds that contain less than 95 percent hybrid seed:
  - a. Kind or variety shall be labeled as "hybrid,"
  - b. The percentage that is hybrid shall be labeled parenthetically in direct association following the named variety; for example - comet (85% hybrid), and
  - c. Varieties in which the pure seed contains less than 75 percent hybrid seed shall not be labeled hybrids.
9. For combination mulch, seed, and fertilizer products:
  - a. The word "combination" followed by the words "mulch - seed - fertilizer", as appropriate, shall appear on the upper 30 percent of the principal display panel. The word "combination" shall be the largest and most conspicuous type on the container, equal to or larger than the product name. The words "mulch - seed - fertilizer", as appropriate, shall be no smaller than one-half the size of the word "combination" and in close proximity to the word "combination."
  - b. The products shall not contain less than 70 percent mulch.
  - c. Agricultural, flower, vegetable, lawn, and turf seeds placed in a germination medium, mat, tape, or other device or mixed with mulch shall be labeled as follows:
    - i. Product name;
    - ii. Lot number;
    - iii. Percentage by weight of pure seed of each kind and variety named. The kind and variety named may be less than 5 percent of the whole;
    - iv. Percentage by weight of other crop seeds;
    - v. Percentage by weight of inert matter, which shall not be less than 70 percent;
    - vi. Percentage by weight of weed seeds;
    - vii. The total of subsections (iii), (iv), (v), and (vi) shall equal 100 percent;
    - viii. Name and number of noxious weed seeds per pound, if present;
    - ix. Hard seed percentage, if present, and percentage of germination of each kind or kind and variety named and the month and year the test was completed; and
    - x. Name and address of the labeler or the person who sells, offers or exposes the product for sale within this state.

#### **D. Labeling requirements: flowers.**

1. For flower seeds in packets prepared for use in home gardens or household plantings or flower seeds in pre-planted containers, mats, tapes, or other planting devices:
    - a. For all kinds of flower seeds:
      - i. The name of the kind and variety or a statement of type and performance characteristics as prescribed in subsection (D)(3);
      - ii. One of the following:
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- a. The calendar month and year the germination test was completed and the statement "Sell by (month/year)." The date indicated shall be no more than 12 months from the date of the test excluding the month of the test; [**STAA NOTE:** See advisory on page ii.]
  - b. The calendar year for which the seed was packaged for sale as "packed for (year)" and the statement "sell by (year)"; or
  - c. The percentage germination and the calendar month and year the test was completed to determine the percentage if the germination test was completed within 12 months, excluding the month of the test; [**STAA NOTE:** See advisory on page ii.]
  - iii. Name and address of the labeler, or the person who sells, offers, or exposes the seed for sale within this State.
- b. For kinds of flower seeds for which standard testing procedures are prescribed by the Association of Official Seed Analysts and that germinate less than the germination standards prescribed under the provisions of R3-4-404(B):
    - i. Percentage of germination, excluding hard seeds;
    - ii. Percentage hard seed, if present; and
    - iii. The words "Below Standard" in not less than 8-point type.
  - c. For flower seeds placed in a germination medium, mat, tape, or other device in such a way as to make it difficult to determine the quantity of seed without removing the seeds from the medium, mat, tape, or device, a statement to indicate the minimum number of seeds in the container.
2. For flower seeds in containers other than packets and other than pre-planted containers, mats, tapes, or other planting devices and not prepared for use in home flower gardens or household plantings:
    - a. The name of the kind and variety or a statement of type and performance characteristics as prescribed in subsection (D)(3), and for wildflowers, the genus and species and subspecies, if appropriate;
    - b. The lot number or other lot identification;
    - c. For wildflower seed with a pure seed percentage of less than ninety percent:
      - i. The percentage, by weight, of each component listed in order of the component's predominance;
      - ii. The percentage by weight of weed seed, if present; and
      - iii. The percentage by weight of inert matter;
    - d. For kinds of seed for which standard testing procedures are prescribed by the Association of Official Seed Analysts:
      - i. Percentage of germination, excluding hard or dormant seed;
      - ii. Percentage of hard or dormant seed, if present; and
      - iii. The calendar month and year that the test was completed to determine the percentages in subsections (i) and (ii);
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- e. For those kinds of flower seed for which standard testing procedures are not prescribed by the Association of Official Seed Analysts, the year of production or collection; and
  - f. Name and address of the labeler, or the person who sells, offers, or exposes the flower seed for sale within this state.
3. Requirements to label flower seeds with kind and variety, or type and performance characteristics as prescribed in subsection (D)(1)(a)(i) and (D)(2)(a) shall be met as follows:
- a. For seeds of plants grown primarily for their blooms:
    - i. If the seeds are of a single named variety, the kind and variety shall be stated, for example, "Marigold, Butterball";
    - ii. If the seeds are of a single type and color for which there is no specific variety name, the type of plant, if significant, and the type and color of bloom shall be indicated, for example, "Scabiosa, Tall, Large Flowered, Double, Pink";
    - iii. If the seeds consist of an assortment or mixture of colors or varieties of a single kind, the kind name, the type of plant, if significant, and the type or types of bloom shall be indicated. It shall be clearly indicated that the seed is mixed or assorted. An example of labeling such a mixture or assortment is "Marigold, Dwarf Double French, Mixed Colors";
    - iv. If the seeds consist of an assortment or mixture of kinds or kinds and varieties, it shall clearly indicate that the seed is assorted or mixed and the specific use of the assortment or mixture shall be indicated, for example, "Cut Flower Mixture", or "Rock Garden Mixture". Statements such as "General Purpose Mixture", "Wonder Mixture", or any other statement that fails to indicate the specific use of the seed shall not be considered as meeting the requirements of this subsection unless the specific use of the mixture is also stated. Containers with over three grams of seed shall list the kind or kind and variety names of each component present in excess of five percent of the whole in the order of their predominance, giving the percentage by weight of each. Components equal to or less than five percent shall be listed, but need not be listed in order of predominance. A single percentage by weight shall be given for these components that are less than five percent of the whole. If no component of a mixture exceeds five percent of the whole, the statement, "No component in excess of 5%" may be used. Containers with three grams of seed or less shall list the components without giving percentage by weight and need not be in order of predominance.
  - b. For seeds of plants grown for ornamental purposes other than their blooms, the kind and variety shall be stated, or the kind shall be stated together with a descriptive statement concerning the ornamental part of the plant, for example, "Ornamental Gourds, Small Fruited, Mixed".

**E. Label requirement for tree and shrub seeds.**

Tree or shrub seeds that are sold, offered for sale, or exposed for sale within this state shall bear on each container a plainly written or printed label or tag in English. No modifications or disclaimers shall

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be made to the required label information in the labeling or on another label attached to the container. Labeling of seed supplied under a contractual agreement meets this requirement if the shipment is accompanied by an invoice or by an analysis tag attached to the invoice if each bag or other container is clearly identified by a lot number permanently displayed on the container or if the seed is in bulk. Each bag or container not clearly identified by a lot number must carry complete labeling. The label shall include the following information:

1. For tree and shrub seeds that have been treated, the following may appear on a separate label:
  - a. Language indicating that the seed has been treated;
  - b. The commonly accepted chemical name of the applied substance or description of the process used;
  - c. If the substance is harmful to human or animals, a caution statement such as "do not use for food or feed or oil purposes". The caution for highly toxic substances shall be a poison statement and symbol; and
  - d. If the seed has been treated with an inoculant, the date of expiration, which is the date the inoculant is no longer considered effective;
2. For all tree and shrub seeds subject to this Article:
  - a. Common name of the species of seed and if appropriate, the subspecies;
  - b. The scientific name of the genus and species and if appropriate, the subspecies;
  - c. Lot number or other lot identification;
  - d. Origin.
    - i. For seed collected from a predominantly indigenous stand, the area of collection given by latitude and longitude, a geographic description, or identification of a political subdivision, such as a state or county; or
    - ii. For seed collected from other than a predominantly indigenous stand, identification of the area of collection and the origin of the stand, or the statement "origin not indigenous;"
  - e. The elevation or the upper and lower limits of elevations within which the seed was collected;
  - f. Purity as a percentage of pure seed by weight;
  - g. For those species listed under R3-4-404(C), the following apply except as provided in subsection (E)(2)(h):
    - i. Percentage germination excluding hard seed;
    - ii. Percentage of hard seed, if present;
    - iii. The calendar month and year the test was completed to determine the percentages in subsection (a) and (b);
  - h. Instead of complying with subsections (E)(2)(g)(i), (ii), and (iii), the seed may be labeled, "Test is in process, results will be supplied upon request";
  - i. For those species for which standard germination testing procedures have not been prescribed, the calendar year in which the seed was collected; and



- j. Name and address of the labeler, or the person who sells, offers, or exposes the seed for sale within this state.

**F. Hermetically sealed seed shall meet the following requirements:**

1. The seed shall have been packaged within nine months of harvest;
  2. The container used shall not allow water vapor penetration through any wall, including the seals, greater than 0.05 grams of water per 24 hours per 100 square inches of surface at 100°F with a relative humidity on one side of 90 percent and on the other side 0 percent. Water vapor penetration (WVP) is measured in accordance with the U.S. Bureau of Standards as: gm H<sub>2</sub>O/24 hr/100 sq in/ 100°F /90% RHV 0% RH;
  3. The seed in the container shall not exceed the percentage of moisture, on a wet weight basis, as listed below:
    - a. Agricultural Seeds,
      - i. Beet, Field: 7.5;
      - ii. Beet, Sugar: 7.5;
      - iii. Bluegrass, Kentucky: 6.0;
      - iv. Clover, Crimson: 8.0;
      - v. Fescue, Red: 8.0;
      - vi. Ryegrass, Annual: 8.0;
      - vii. Ryegrass, Perennial: 8.0;
      - viii. All Others: 6.0; and
      - ix. Mixture of Above: 8.0;
    - b. Vegetable Seeds,
      - i. Bean, Garden: 7.0;
      - ii. Bean, Lima: 7.0;
      - iii. Beet: 7.5;
      - iv. Broccoli: 5.0;
      - v. Brussels Sprouts: 5.0;
      - vi. Cabbage: 5.0;
      - vii. Carrot: 7.0;
      - viii. Cauliflower: 5.0;
      - ix. Celeriac: 7.0;
      - x. Celery: 7.0;
      - xi. Chard, Swiss: 7.5;
      - xii. Chinese Cabbage: 5.0;
      - xiii. Chives: 6.5;
      - xiv. Collards: 5.0;
      - xv. Corn, Sweet: 8.0;
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- xvi. Cucumber: 6.0;
  - xvii. Eggplant: 6.0;
  - xviii. Kale: 5.0;
  - xix. Kohlrabi: 5.0;
  - xx. Leek: 6.5;
  - xxi. Lettuce: 5.5;
  - xxii. Muskmelon: 6.0;
  - xxiii. Mustard, India: 5.0;
  - xxiv. Onion: 6.5;
  - xxv. Onion, Welsh: 6.5;
  - xxvi. Parsley: 6.5;
  - xxvii. Parsnip: 6.0;
  - xxviii. Pea: 7.0;
  - xxix. Pepper: 4.5;
  - xxx. Pumpkin: 6.0;
  - xxxi. Radish: 5.0;
  - xxxii. Rutabaga: 5.0;
  - xxxiii. Spinach: 8.0;
  - xxxiv. Squash: 6.0;
  - xxxv. Tomato: 5.5;
  - xxxvi. Turnip: 5.0;
  - xxxvii. Watermelon: 6.5; and
  - xxxviii. All others: 6.0.
4. The container shall be conspicuously labeled in not less than 8-point type to indicate:
- a. That the container is hermetically sealed,
  - b. That the seed has been preconditioned as to moisture content, and
  - c. The calendar month and year in which the germination test was completed; and
5. The germination percentage of the seed at the time of packaging shall have been equal to or higher than the standards specified elsewhere in subsection R3-4-404. **[STAA NOTE:** See R3-4-404(E) for retesting requirements after containers are hermetically sealed.]

### **R3-4-403. Noxious Weed Seeds**

#### **A. Prohibited noxious weed seeds.**

A person shall not allow the following prohibited noxious weed seeds in seed regulated under this Article:

- 1. *Acroptilon repens* (L.) DC. - Russian knapweed;
  - 2. *Aegilops cylindrica* Host. - Jointed goatgrass;
  - 3. *Alhagi maurorum* - Camelthorn;
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4. *Alternanthera philoxeroides* (Mart.) Griseb. - Alligator weed;
5. *Cardaria pubescens* (C.A. Mey) Jarmolenko -Hairy whitetop;
6. *Cardaria chalepensis* (L.) Hand-Maz - Lens-podded hoary cress;
7. *Cardaria draba* (L.) Desv. - Globed-podded hoary cress (Whitetop);
8. *Carduus acanthoides* L. - Plumeless thistle;
9. *Cenchrus echinatus* L. - Southern sandbur;
10. *Cenchrus incertus* M.A. Curtis - Field sandbur;
11. *Centaurea calcitrapa* L. - Purple starthistle;
12. *Centaurea iberica* Trev. ex Spreng. - Iberian starthistle;
13. *Centaurea squarrosa* Willd. - Squarrose knapweed;
14. *Centaurea sulphurea* L. - Sicilian starthistle;
15. *Centaurea solstitialis* L. - Yellow starthistle (St. Barnaby's thistle);
16. *Centaurea diffusa* L. - Diffuse knapweed;
17. *Centaurea maculosa* L. - Spotted knapweed;
18. *Chondrilla juncea* L. - Rush skeletonweed;
19. *Cirsium arvense* L. Scop. - Canada thistle;
20. *Convolvulus arvensis* L. - Field bindweed;
21. *Coronopus squamatus* (Forsk.) Ascherson - Creeping wartcress (Coronopus);
22. *Cucumis melo* L. var. *Dudaim* Naudin - Dudaim melon (Queen Anne's melon);
23. *Cuscuta* spp. – Dodder;
24. *Cyperus rotundus* – Purple nutgrass or Nutsedge;
25. *Cyperus esculentus* – Yellow nutgrass or Nutsedge;
26. *Drymaria arenarioides* H.B.K. - Alfombrilla (Lightningweed);
27. *Eichhornia azurea* (SW) Kunth. - Anchored waterhyacinth;
28. *Elymus repens* – Quackgrass;
29. *Euphorbia esula* L. - Leafy spurge;
30. *Halogeton glomeratus* (M. Bieb.) C.A. Mey – Halogeton;
31. *Helianthus ciliaris* DC. - Texas blueweed;
32. *Hydrilla verticillata* Royale - Hydrilla (Florida-elodea);
33. *Ipomoea* spp. - Morning glory. All species except *Ipomoea carnea*, Mexican bush morning glory; *Ipomoea triloba*, Three-lobed morning glory (which is considered a restricted pest); *Ipomoea aborescens*, Morning glory tree; *Ipomea batatas* – sweetpotato; *Ipomoea quamoclit*, Cypress vine; *Ipomoea noctiflora*, Moonflower– Morning Glories, Cardinal Climber, Hearts and honey vine
34. *Isatis tinctoria* L. - Dyers woad;
35. *Linaria genistifolia* var. *dalmatica* - Dalmation toadflax;
36. *Lythrum salicaria* L. - Purple loosestrife;
37. *Medicago polymorpha* L. – Burclover;
38. *Nassella trichotoma* (Nees.) Hack. - Serrated tussock;

39. *Onopordum acanthium* L. - Scotch thistle;
40. *Orobanche ramosa* L. - Branched broomrape;
41. *Panicum repens* L. - Torpedo grass;
42. *Peganum harmala* L. - African rue (Syrian rue);
43. *Portulaca oleracea* L. - Common purslane;
44. *Rorippa austriaca* (Crantz.) Bess. - Austrian fieldcress;
45. *Salvinia molesta* - Giant salvinia;
46. *Senecio jacobaea* L. - Tansy ragwort;
47. *Solanum carolinense* - Carolina horsenettle;
48. *Solanum elaeagnifolium* - Silverleaf nightshade;
49. *Sonchus arvensis* L. - Perennial sowthistle;
50. *Solanum viarum* Dunal - Tropical soda apple;
51. Sorghum species, perennial (*Sorghum halepense* - Johnson grass, *Sorghum almum*, and perennial sweet sudangrass);
52. *Stipa brachychaeta* Godr. - Puna grass;
53. *Striga* spp. – Witchweed;
54. *Trapa natans* L. - Water-chestnut;
55. *Tribulus terrestris* L. – Puncturevine.

**B. Restricted noxious weeds.**

A person shall not allow more than the number shown of the following restricted noxious weed seeds in a working sample of seed regulated by this Article; or, any more than 50 of any combination of the following restricted noxious weed seeds per working sample.

1. *Avena fatua* – Wild oat: 5;
2. *Brassica campestris* – Bird rape: 30;
3. *Brassica juncea* – Indian mustard: 30;
4. *Brassica niger* – Black mustard: 30;
5. *Brassica rapa* – Field mustard: 30;
6. *Cenchrus pauciflorus* – Sandbur: 10;
7. *Eichhornia crassipes* (Mart.) Solms – Floating waterhyacinth: 10;
8. *Euryops sunbarnosus* subsp. *vulgaris* – Sweet resinbush: 10;
9. *Ipomoea triloba* L. – Three-lobed morning glory: 10;
10. *Rumex crispus* – Curly dock: 30;
11. *Salsola kali* var. *tenuifolia* – Russian thistle: 30;
12. *Sinapis arvensis* – Charlock or Wild mustard: 30; and
13. *Sida hederacea* – Alkali mallow: 30.

**R3-4-404. Germination Standards**

**A. Vegetable seed shall have the following minimum percent germination or the minimum percent germination** as found in the Federal Seed Act 20 CFR 201.31 (as amended January 1, 2002), which is incorporated by reference, not including future editions or amendments. The material is on file with the Department and available for purchase from the U. S. Government Bookstore (<http://bookstore.gpo.gov/>) or at the U.S. Government Printing Office, 732 N. Capitol Street, NW, Washington, DC 20401 or it can be found on-line at <http://ecfr.gpoaccess.gov/cgi/t/text/textidx?c=ecfr&sid=42bcf6d966081e2f2cf9d03315fb999f&rgn=div8&view=text&node=7:3.1.1.7.28.0.317.38&idno=7>.

1. Artichoke: 60;
  2. Asparagus: 70;
  3. Asparagusbean: 75;
  4. Bean, garden: 70;
  5. Bean, Lima: 70;
  6. Bean, runner: 75;
  7. Beet: 65;
  8. Broadbean: 75;
  9. Broccoli: 75;
  10. Brussels sprouts: 70;
  11. Burdock, great: 60;
  12. Cabbage: 75;
  13. Cabbage, tronchuda: 70;
  14. Cardoon: 60;
  15. Carrot: 55;
  16. Cauliflower: 75;
  17. Celeriac: 55;
  18. Celery: 55;
  19. Chard, Swiss: 65;
  20. Chicory: 65;
  21. Chinese cabbage: 75;
  22. Chives: 50;
  23. Citron: 65;
  24. Collards: 80;
  25. Corn, sweet: 75;
  26. Cornsalad: 70;
  27. Cowpea: 75;
  28. Cress, garden: 75;
  29. Cress, upland: 60;
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30. Cress, water: 40;
  31. Cucumber: 80;
  32. Dandelion: 60;
  33. Dill: 60;
  34. Eggplant: 60;
  35. Endive: 70;
  36. Kale: 75;
  37. Kale, Chinese: 75;
  38. Kale, Siberian: 75;
  39. Kohlrabi: 75;
  40. Leek: 60;
  41. Lettuce: 80;
  42. Melon: 75;
  43. Mustard, India: 75;
  44. Mustard, spinach: 75;
  45. Okra: 50;
  46. Onion: 70;
  47. Onion, Welsh: 70;
  48. Pak-choi: 75;
  49. Parsley: 60;
  50. Parsnip: 60;
  51. Pea: 80;
  52. Pepper: 55;
  53. Pumpkin: 75;
  54. Radish: 75;
  55. Rhubarb: 60;
  56. Rutabaga: 75;
  57. Sage: 60;
  58. Salsify: 75;
  59. Savory, summer: 55;
  60. Sorrel: 65;
  61. Soybean: 75;
  62. Spinach: 60;
  63. Spinach, New Zealand: 40;
  64. Squash: 75;
  65. Tomato: 75;
  66. Tomato, husk: 50;
  67. Turnip: 80;
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68. Watermelon: 70; and
69. All Others: The germination standard for all other vegetable and herb seed for which a standard has not been established shall be 50 percent.

**B. Flower seed shall meet the following minimum percent germination standards.** For the kinds marked with an asterisk, the percentage listed is the sum total of the percentage germination and percentage of hard seed. A mixture of kinds does not meet the germination standard if the germination of any kind or combination of kinds constituting 25 percent or more of the mixture by number of seed is below the germination standard for the kind or kinds involved.

1. Archillea (The Pearl) - *Achillea ptarmica*: 50;
2. African Daisy - *Dimorphotheca aurantiaca*: 55;
3. African Violet - *Saintpaulia* spp: 30;
4. Ageratum - *Ageratum mexicanum*: 60;
5. Agrostemma (rose campion) - *Agrostemma coronaria*: 65;
6. Alyssum - *Alyssum compactum*, *A. maritimum*, *A. procumbens*, *A. saxatile*: 60;
7. Amaranthus - *Amaranthus* spp: 65;
8. Anagalis (primpernel) - *Anagalis arvensis*, *Anagalis coerulea*, *Anagalis grandiflora*: 60;
9. Anemone - *Anemone coronaria*, *A. pulsatilla*: 55;
10. Angel's Trumpet - *Datura arborea*: 60;
11. Arabis - *Arabis alpine*: 60;
12. Arctotis (African lilac daisy) - *Arctotis grandis*: 45;
13. Armeria - *Armeria formosa*: 55;
14. Asparagus, Fern - *Asparagus plumosus*: 50;
15. Asparagus, Sprenger, *Asparagus sprenger*: 55;
16. Aster, China - *Callistephus chinensis*, except Pompon, Powderpuff, and Princess types: 55;
17. Aster, China - *Callistephus chinensis*; Pompon, Powderpuff, and Princess types: 50;
18. Aubretia - *Aubretia deltoids*: 45;
19. Baby Smilax - *Aparagus asparagoides*: 25;
20. Balsam - *Impatiens balsamina*: 70;
21. Begonia - (*Begonia* fibrous rooted): 60;
22. Begonia - (*Begonia* tuberous rooted): 50;
23. Bells of Ireland - *Molucella laevis*: 60;
24. Brachycome (Swan river daisy) - *Brachycome iberidifolia*: 60;
25. Browallia - *Browallia elata* and *B. speciosa*: 65;
26. Bupthalam (Sunwheel) - *Bupthalam salicifolium*: 60;
27. Calceolaria - *Calceolaria* spp: 60;
28. Calendula - *Calendula officinalis*: 65;

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29. California Poppy - *Eschscholtzia californica*: 60;
  30. Calliopsis - *Coreopsis bicolor*, *C. drummondii*, *C. elegans*: 65;
  31. Campanula:
    - a. Canterbury Bells - *Campanula medium*: 60;
    - b. Cup and Saucer Bellflower - *Campanula medium calycanthema*: 60;
    - c. Carpathian Bellflower - *Campanula carpatica*: 50;
    - d. Peach Bellflower - *Campanula persicifolia*: 50;
  32. Candytuft, Annual - *Iberis amara*, *I. umbellata*: 65;
  33. Candytuft, Perennial - *Iberis gibraltarica*, *I. sempervirens*: 55;
  34. Castor Bean - *Ricinus communis*: 60;
  35. Cathedral Bells - *Cobaea scandens*: 65;
  36. *Celosia argentea*: 65;
  37. Centaurea: Basket Flower - *Centaurea americana*, Cornflower - *C. cyanus*, Dusty Miller – *C. candidissima*, Royal Centaurea - *C. imperialis*, Sweet Sultan - *C. moschata*, Velvet Centaurea - *C. gymnocarpa*: 60;
  38. Cerasium (Snow-in-Summer) - *Cerastium biebersteini* and *C. tomentosum*: 65;
  39. Chinese Forget-Me-Not - *Cynoglossum amabile*: 55;
  40. Chrysanthemum, Annual - *Chrysanthemum carinatum*, *C. coronarium*, *C. Cineraria* – *Senecio cruentus*: 60;
  41. Clarkia - *Clarkia elegans*: 65;
  42. Cleome - *Cleome gigantea*: 65;
  43. Coleus - *Coleus blumei*: 65;
  44. Columbine - *Aquilegia* spp.: 50;
  45. Coral Bells - *Heuchera sanguinea*: 55
  46. Coreopsis, Perennial - *Coreopsis lanceolata*: 40;
  47. Corn, Ornamental - *Zea mays*: 75;
  48. Cosmos: Sensation, Mammoth and Crested types - *Cosmos bipinnatus*, Klondyke type - *C. sulphureus*: 65;
  49. Crossandra - (*Crossandra infundibuliformis*): 50;
  50. Dahlia - *Dahlia* spp: 55;
  51. Daylily - *Hemerocallis* spp: 45;
  52. Delphinium, Perennial- *Belladonna* and *Bellamosum* types; Cardinal Larkspur – *Delphinium cardinale*, *Chinensis* types; *Pacific Giant*, *Gold Medal* and other hybrids of *D. elatum*: 55;
  53. Dianthus:
    - a. Carnation - *Dianthus caryophyllus*: 60;
    - b. China Pinks - *Dianthus chinensis*, *heddewigi*, *heddensis*: 70;
    - c. Grass Pinks - *Dianthus plumarius*: 60;
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- d. Maiden Pinks - *Dianthus deltoideus*: 60;
- e. Sweet William - *Dianthus barbatus*: 70;
- f. Sweet Wivelsfield - *Dianthus allwoodii*: 60;
54. Didiscus - (Blue Lace Flower) - *Didiscus coerulea*: 65;
55. Doronicum (Leopard's Bane) - *Doronicum caucasicum*: 60;
56. Dracaena - *Dracaena indivisa*: 55;
57. Dragon Tree - *Dracaena draco*: 40;
58. English Daisy - *Bellis perennis*: 55;
59. Flax - Golden Flax (*Linum flavum*); Flowering Flax *L. randiflorum*;  
Perennial Flax, *L. perenne*: 60;
60. Flowering Maple - *Abutilon* spp: 35;
61. Foxglove - *Digitalis* spp: 60;
62. Gaillardia, Annual - *Gaillardia pulchella*; *G. picta*; Perennial - *G. grandiflora*: 45;
63. Gerbera (Transvaal Daisy) - *Gerbera jamesoni*: 60;
64. Geum - *Geum* spp: 55;
65. Gilia - *Gilia* spp: 65;
66. Glosiosa Daisy (*rudbeckia*) - *Echinacea purpurea* and *Rudbeckia Hirta*: 60;
67. Gloxinia - (*Sinningia speciosa*): 40;
68. Godetia - *Godetia amoena*, *G. grandiflora*: 65;
69. Gourds: Yellow Flowered - *Cucurbita pepo*; White Flowered - *Lagenaria sisceraria*; Dishcloth - *Luffa cilíndrica*: 70;
70. Gypsophila: Annual Baby's Breath - *Gypsophylla elegans*; Perennial Baby's Breath - *G. paniculata*, *G. pacifica* *G. repens*: 70;
71. Helenium - *Helenium autumnale*: 40;
72. Helichrysum - *Helichrysum monstrosum*: 60;
73. Heliopsis - *Heliopsis scabra*: 55;
74. Heliotrope - *Heliotropium* spp: 35;
75. Helipterum (Acroclinium) - *Helipterum roseum*: 60;
76. Hesperis (Sweet Rocket) - *Hesperis matronalis*: 65;
77. \*Hollyhock - *Althea rosea*: 65;
78. Hunnemanian (Mexican Tulip Poppy) - *Hunnemanian fumariaefolia*: 60;
79. Hyacinth Bean - *Dolichos lablab*: 70;
80. Impatiens - *Impatiens hostii*, *I. sultani*: 55;
81. \**Ipomoea* - Cypress Vine - *Ipomoea quamoclit*; Moonflower - *I. noctiflora*; Morning Glories,  
Cardinal Climber, Hearts and Honey Vine - *Ipomoea* spp: 75;
82. Jerusalem Cross (Maltese Cross) - *Lychnis chalconica*: 70;
83. Job's Tears - *Coix lacrymajobi*: 70;
84. Kochia - *Kochia childsi*: 55;

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85. Larkspur, Annual - *Delphinium ajacis*: 60;
  86. Lantana - *Lantana camara*, *L. hybrida*: 35;
  87. Liliium (Regal Lily) - *Lilium regale*: 50;
  88. Linaria - *Linaria* spp: 65, exception: *Linaria genistifolia* var. *dalmatica* - Dalmation toadflax which is a prohibited noxious weed;
  89. Lobelia, Annual - *Lobelia erinus*: 65;
  90. Lunaria, Annual - *Lunaria annua*: 65;
  91. \*Lupine - *Lupinus* spp: 65;
  92. Marigold - *Tagetes* spp: 65;
  93. Marvel of Peru - *Mirabilis jalapa*: 60;
  94. Matricaria (Feverfew) - *Matricaria* spp: 60;
  95. Mignonette - *Reseda odorata*: 55;
  96. Myosotis - *Myosotis alpestris*, *M. oblongata*, *M. palustres*: 50;
  97. Nasturtium - *Tropaeolum* spp: 60;
  98. Nemesia - *Nemesia* spp: 65;
  99. Nemophila - *Nemophila insignis*: 70;
  100. Nemophila, Spotted - *Nemophila maculate*: 60;
  101. Nicotiana - *Nicotiana affinis*, *N. sanderae*, *N. sylvestris*: 65;
  102. Nierembergia - *Nierembergia* spp: 55;
  103. Nigella - *Nigella damascena*: 55;
  104. Pansy - *Viola tricolor*: 60;
  105. Penstemon - *Penstemon barbatus*, *P. grandiflorus*, *P. laevigatus*, *P. pubescens*: 60;
  106. Petunia - *Petunia* spp: 45;
  107. Phacelia - *Phacelia campanularia*, *P. minor*, *P. tanacetifolia*: 65;
  108. Phlox, Annual - *Phlox drummondii* - all types and varieties: 55;
  109. Physalis - *Physalis* spp: 60;
  110. Platycodon (Balloon Flower) - *Platycodon grandiflorum*: 60;
  111. Plumbago, cape - *Plumbago capensis*: 50;
  112. Ponytail - *Beaucarnea recurvata*: 40;
  113. Poppy: Shirley Poppy - *Papaver rhoeas*; Iceland Poppy - *P. nudicaule*;  
Oriental Poppy - *P. orientale*; Tulip Poppy - *P. glaucum*: 60;
  114. Portulaca - *Portulaca grandiflora*: 55;
  115. Primula (Primrose) - *Primula* spp: 50;
  116. Pyrethrum (Painted Daisy) - *Pyrethrum coccineum*: 60;
  117. Salpiglossis - *Salpiglossis gloxinaeflora*, *S. sinuata*: 60;
  118. Salvia - Scarlet Sage - *Salvia splendens*; Mealycup Sage (Blue Bedder)  
- *Salvia farinacea*: 50;
  119. Saponaria - *Saponaria ocymoides*, *S. vaccaria*: 60;
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120. Scabiosa, Annual - *Scabiosa atropurpurea*: 50;
121. Scabiosa, Perennial - *Scabiosa caucasica*: 40;
122. Schizanthus - *Schizanthus* spp: 60;
123. \*Sensitive plant (Mimosa) - *Mimosa pudica*: 65;
124. Shasta Daisy - *Chrysanthemum maximum* C. *leucanthemum*: 65;
125. Silk Oak - *Grevillea robusta*: 25;
126. Snapdragon- *Antirrhinum* spp: 55;
127. Solanum - *Solanum* spp: 60; exceptions: *Solanum carolinense* - Carolina Horsenettle and *Solanum elaeagnifolium* - Silverleaf Nightshade which are prohibited noxious weeds;
128. Statice - *Statice sinuata*, *S. suworonii* (flower heads): 50;
129. Stocks: Common - *Mathiola incana*; Evening Scented – *Mathiola bicornis*: 65;
130. Sunflower - *Helianthus* spp: 70, exception; *Helianthus ciliaris* DC. - Texas Blueweed which is a prohibited noxious weed;
131. Sunrose - *Helianthemum* spp: 30;
132. \*Sweet Pea, Annual and Perennial other than dwarf bush - *Lathyrus odoratus*, *L. latifolius*: 75;
133. \*Sweet Pea, Dwarf Bush - *Lathyrus odoratus*: 65;
134. Tahoka Daisy - *Machaeantha tanacetifolia*: 60;
135. Thunbergia - *Thunbergia alata* : 60;
136. Torcn Flower - *Tithonia speciosa*: 70;
137. Torenia (Wishbone Flower) - *Torenia fournieri*: 70;
138. *Tritoma friphofia* Spp: 65;
139. Verbena, Annual - *Verbena hybrida*: 35;
140. Vinca - *Vinca rosea*: 60;
141. Viola - *Viola cornuta*: 55;
142. Virginian Stocks - *Malcolmia maritima*: 65;
143. Wallflower - *Cheiranthus allioni*: 65;
144. Yucca (Adam's Needle) - *Yucca filamentosa*: 50;
145. Zinnia (Except Linearis and Creeping) –  
*Zinnia angustifolia*, *Z. elegans*, *Z. grandiflora*, *Z. gracillima*, *Z. haegeana*, *Z. multiflora*, *Z. pumila*: 65;
146. Zinnia, Linearis and creeping - *Zinnia linearis*, *Sanvitalia procumbens*: 50;
147. All Other Kinds: 50.

**C. The germination labeling provisions of R3-4-402(E) apply to the following tree and shrub species:**

1. *Abies amabilis* (Dougl.) Forbes - Pacific Silver Fir;
  2. *Abies balsamea* (L.) Mill. - Balsam Fir;
  3. *Abies concolor* (Gord. Glend.) Lindl. - White Fir;
  4. *Abies fraseri* (Pursh.) Poir - Fraser Fir;
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5. *Abies grandis* (Dougl.) Lindl. - Grand Fir;
  6. *Abies homolepis* Sieb Zucc. - Nikko Fir;
  7. *Abies lasiocarpa* (Hook) Nutt. - Subalpine Fir;
  8. *Abies magnifica* A. Murr. - California Red Fir;
  9. *Abies magnifica* var. *shastensis* Lemm. - Shasta Red Fir;
  10. *Abies procera* Rehd. - Nobel Fir;
  11. *Abies veitchii* (Lindl.) - Veitch Fir;
  12. *Acer ginnala* Maxim. - Amur Maple;
  13. *Acer macrophyllum* Pursh. - Bigleaf Maple;
  14. *Acer negundo* L. - Boxelder;
  15. *Acer pensylvanicum* L. - Striped Maple;
  16. *Acer platanoides* L. - Norway Maple;
  17. *Acer pseudoplatanus* L. - Sycamore Maple;
  18. *Acer rubrum* L. - Red Maple;
  19. *Acer saccharinum* L. - Silver Maple;
  20. *Acer saccharum* Marsh, - Sugar Maple;
  21. *Acer spicatum* Lam. - Mountain Maple;
  22. *Aesculus pavia* L. - Red Buckeye;
  23. *Ailanthus altissima* (Mill.) Swingle - Tree of Heaven, Ailanthus;
  24. *Berberis thunbergii* DC. - Japanese Barberry;
  25. *Berberis vulgaris* L. European Barberry;
  26. *Betula lenta* L. - Sweet Birch;
  27. *Betula alleghaniensis* Britton - Yellow Birch;
  28. *Betula nigra* L. - River Birch;
  29. *Betula papyrifera* Marsh. - Paper Birch;
  30. *Betula pendula* Roth. - European White Birch;
  31. *Betula populifolia* Marsh. - Gray Birch;
  32. *Carya illinoensis* (Wang.) K. Koch - Pecan;
  33. *Carya ovata* (Mill) K. Koch - Shagbark Hickory;
  34. *Casuarina* spp. - Beefwood;
  35. *Catalpa bignonioides* Walt. - Southern Catalpa;
  36. *Catalpa speciosa* Warder. - Northern Catalpa;
  37. *Cedrus atlantica* Manetti - Atlas Cedar;
  38. *Cedrus deodara* (Roxb.) Loud. - Deodar Cedar;
  39. *Cedrus libani* (Loud.) - Cedar of Lebanon;
  40. *Clastrus scandens* L. - American Bittersweet;
  41. *Celastrus orbiculata* Thunb. - Oriental Bittersweet;
  42. *Chamaecyparis lawsoniana* (A. Murr.) Parl - Port Oxford Cedar;
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43. *Chamaecyparis nootkatensis* (D. Don.) Spach. - Alaska Cedar;
  44. *Cornus florida* L. - Flowering Dogwood;
  45. *Cornus stolonifera* Michx. - Red-osier Dogwood;
  46. *Crataegus mollis* - Downy Hawthorn;
  47. *Cupressus arizonica* Greene - Arizona Cypress;
  48. *Eucalyptus deglupta*;
  49. *Eucalyptus gradis*;
  50. *Fraxinus americana* L. - White Ash;
  51. *Fraxinus excelsior* L. - European Ash;
  52. *Fraxinus latifolia* Benth. - Oregon Ash;
  53. *Fraxinus nigra* Marsh. - Black Ash;
  54. *Fraxinus pensylvanica* Marsh. - Green Ash;
  55. *Fraxinus pensylvanica* var. *lanceolata* (Borkh.) Sarg. - Green Ash;
  56. *Gleditsia triacanthos* L. - Honey Locust;
  57. *Grevillea robusta* - Silk-oak;
  58. *Larix decidua* Mill, - European Larch;
  59. *Larix eurolepis* Henry - Dunkfeld Larch;
  60. *Larix leptolepis* (Sieb. Zucc.) Gord. - Japanese Larch;
  61. *Larix occidentalis* Nutt. - Western Larch;
  62. *Larix sibirica* Ledeb. - Siberian Larch;
  63. *Libocedrus decurrens* -Incense Cedar;
  64. *Liquidambar styraciflua* L. – Sweetgum;
  65. *Liriodendron tulipifera* L. - yellow-poplar;
  66. *Magnolia grandiflora* - Southern magnolia;
  67. *Malus* spp. – Apple;
  68. *Malus* spp. – Crabapple;
  69. *Nyssa aquatica* L. - Water Tupelo;
  70. *Nyssa sylvatica* var. *sylvatica* - Black Tupelo;
  71. *Picea abies* (L.) Karst. - Norway Spruce;
  72. *Picea engelmanni* Parry - Engelmann Spruce;
  73. *Picea glauca* (Moench.) Voss - White Spruce;
  74. *Picea glauca* var. *albertiana* (S. Brown) Sarg. - Western White Spruce, Alberta White Spruce;
  75. *Picea glehnii* (Fr. Schmidt) Mast. - Sakhalin Spruce;
  76. *Picea jezoensis* (Sieb. Zucc.) Carr - Yeddo Spruce;
  77. *Picea koyamai* Shiras. - Koyama Spruce;
  78. *Picea mariana* (Mill.) B.S.P. - Black Spruce;
  79. *Picea omorika* (Pancic.) Purkyne - Serbian Spruce;
  80. *Picea orientalis* (L.) Link. - Oriental Spruce;
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81. *Picea polita* (Sieb. Zucc.) Carr - Tigertail Spruce;
  82. *Picea pungens* Engelm. - Blue Spruce, Colorado Spruce;
  83. *Picea pungens* var. *glauca* Reg. - Colorado Blue Spruce;
  84. *Picea rubens* Sarg. - Red Spruce;
  85. *Picea sitchensis* (Bong.) Carr - Sitka Spruce;
  86. *Pinus albicaulis* Engelm. - Whitebark Pine;
  87. *Pinus aristata* Engelm. - Bristlecone Pine;
  88. *Pinus banksiana* Lamb. - Jack Pine;
  89. *Pinus canariensis* C. Smith - Canary Pine;
  90. *Pinus caribaea* - Caribbean Pine;
  91. *Pinus cembroides* Zucc. - Mexican Pinyon Pine;
  92. *Pinus clausa* - Sand Pine;
  93. *Pinus conorta* Dougl. - Lodgepole Pine;
  94. *Pinus contorta* var. *latifolia* Engelm. - Lodgepole Pine;
  95. *Pinus coulteri* D. Don. - Coulter Pine, Bigcone Pine;
  96. *Pinus densiflora* Sieb. Zucc. - Japanese Red Pine;
  97. *Pinus echinata* Mill. - Shortleaf Pine;
  98. *Pinus elliotii* Engelm. - Slash Pine;
  99. *Pinus flexilis* James - Limber Pine;
  100. *Pinus glabra* Walt. - Spruce Pine;
  101. *Pinus griffithi* McClelland - Himalayan Pine;
  102. *Pinus halepensis* Mill. - Aleppo Pine;
  103. *Pinus jeffreyi* Grev. Balf. - Jeffrey Pine;
  104. *Pinus khasya* Royle - Khasia Pine;
  105. *Pinus lambertiana* Dougl. - Sugar Pine;
  106. *Pinus heldreichii* var. *leucodermis* (Ant.) Markgraf ex Fitschen - Balkan Pine, Bosnian Pine;
  107. *Pinus markusii* DeVriese - Markus Pine;
  108. *Pinus monticola* Dougl. - Western White Pine;
  109. *Pinus mugo* Turra. - Mountain Pine;
  110. *Pinus mugo* var. *mughus* (Scop.) Zenari - Mugo Swiss Mountain Pine;
  111. *Pinus muricata* D. Don. - Bishop Pine;
  112. *Pinus nigra* Arnold - Austrian Pine;
  113. *Pinus nigra poiretiana* (Ant.) Aschers Graebn. - Corsican Pine;
  114. *Pinus palustris* Mill. - Longleaf Pine;
  115. *Pinus parviflora* Sieb. Zucc. - Japanese White Pine;
  116. *Pinus patula* Schl. Cham. - Jelecote Pine;
  117. *Pinus pinaster* Sol. - Cluster Pine;
  118. *Pinus pinea* L. - Italian Stone Pine;
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119. *Pinus ponderosa* Laws. - Ponderosa Pine, Western Yellow Pine;
  120. *Pinus radiata* D. Don. - Monterey Pine;
  121. *Pinus resinosa* Ait. - Red Pine, Norway Pine;
  122. *Pinus rigida* Mill. - Pitch Pine;
  123. *Pinus serotina* Michx. - Pond Pine;
  124. *Pinus strobus* L. - Eastern White Pine;
  125. *Pinus sylvestris* L. - Scotch Pine;
  126. *Pinus taeda* L. - Loblolly Pine;
  127. *Pinus taiwanensis* Hayata - Formosa Pine;
  128. *Pinus thunbergii* Parl. - Japanese Black Pine;
  129. *Pinus virginiana* Mill. - Virginia Pine, Scrub Pine;
  130. *Platanus occidentalis* L. - American Sycamore;
  131. *Populus* spp. – Poplars;
  132. *Prunus armeniaca* L. – Apricot;
  133. *Prunus avium* L. – Cherry;
  134. *Prunus domestica* L. - Plum, Prune;
  135. *Prunus persica* Batsch. – Peach;
  136. *Pseudotsuga menziesii* var. *glauca* (Beissn.) Franco - Blue Douglas Fir;
  137. *Pseudotsuga menziesii* var. *caesia* (Beissn.) Franco - Gray Douglas Fir;
  138. *Pseudotsuga menziesii* var. *viridis* - Green Douglas Fir;
  139. *Pyrus communis* L. – Pear;
  140. *Quercus* spp. - (Red or Black Oak group);
  141. *Quercus alba* L. - White Oak;
  142. *Quercus muehlenbergii* Engelm. - Chinkapin Oak;
  143. *Quercus virginiana* Mill. - Live Oak;
  144. *Rhododendron* spp. – Rhododendron;
  145. *Robinia pseudoacacia* L. - Black Locust;
  146. *Rosa multiflora* Thunb. - Japanese Rose;
  147. *Sequoia gigantea* (Lindl.) Decne. - Giant Sequoia;
  148. *Sequoia sempervirens* (D. Don.) Engl. – Redwood;
  149. *Syringa vulgaris* L. - Common Lilac;
  150. *Thuja occidentalis* L. - Northern White Cedar, Eastern Arborvitae;
  151. *Thuja orientalis* L. - Oriental Arborvitae, Chinese Arborvitae;
  152. *Thuja plicata* Donn. - Western Red Cedar - Giant Arborvitae;
  153. *Tsuga canadensis* (L.) Carr. - Eastern Hemlock, Canada Hemlock;
  154. *Tsuga heterophylla* (Raf.) Sarg. - Western Hemlock, Pacific Hemlock;
  155. *Ulmus americana* L. - American Elm;
  156. *Ulmus parvifolia* Jacq. - Chinese Elm;
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157. *Ulmus pumila* L. - Siberian Elm; and

158. *Vitis vulpina* L. - Riverbank Grape.

**D. A person shall not indicate a quality of seed higher than the actual quality as found through germination test.**

E. The labeler or the person who sells, offers, or exposes for sale within this state seeds in hermetically-sealed containers more than 36 months after the last day of the month in which the seeds were tested prior to packaging, shall retest the seeds within nine months, excluding of the calendar month in which the retest was completed, immediately prior to sale, exposure for sale, or offering for sale or transportation.

**R3-4-405. Seed-certifying Agencies**

A. Any agency seeking to obtain designation as a seed-certifying agency in Arizona shall meet the following requirements:

1. The agency shall be qualified by USDA to certify agricultural or vegetable planting seed as to variety, strain and genetic purity.
2. The agency shall have written seed certification protocol which includes standards, rules, and procedures for the certification of planting seed.
3. The agency shall have procedures for accepting crops and varieties into a certification program.
4. The agency shall be a member in good standing of a USDA-recognized association of official seed-certifying agencies such as the Association of Official Seed Certifying Agencies.

B. The Director or the Director's designee shall meet each calendar year with the director of the seed-certifying agency to review the agency's standards, rules, and procedures.

C. The Director may, after consulting with the Director of the Arizona Agricultural Experiment Station, revoke the agency's designation as the state seed-certifying agency after written 30 days' notice if the organization:

1. Fails to maintain qualifications, protocols, procedures, and membership as set forth on subsection (A); or
2. Fails to follow federal and state standards, rules, and procedures.

**R3-4-406. Sampling and Analyzing Seed**

A. A person shall follow the methods of taking, handling, analyzing, and testing samples of seed and the tolerances and methods of determination as prescribed in the Federal Seed Act Regulations, 7 CFR 201.39 through 201.65, amended January 1, 2002, and in the Rules for Testing Seeds, 2006, published by the Association of Official Seed Analysts. This material is incorporated by reference, and is on file with the Department. The materials incorporated by reference do not include any later amendments or editions. The Rules for Testing Seeds are also available through the website: <http://www.aosaseed.com>. The CFR may be ordered from the Superintendent of Documents, P.O.



Box 371954, Pittsburgh, PA, 15250-7954 and the Rules for Testing Seeds may be ordered from the AOSA Management Office, Mail Boxes Etc. #285, 601 S. Washington, Stillwater, OK 74074-4539. If there is a conflict between the two documents, the requirements in CFR will prevail.

- B. A labeler offering a seed for sale shall pay the cost of original germination and purity tests on each lot of seed offered for sale, and a dealer or labeler shall pay the cost of any subsequent germination test required by A.R.S. §3-237. The Department shall pay the cost of testing seed samples drawn by a seed inspector from lots bearing valid labels. The dealer or labeler shall reimburse the Department for the cost of the test if the dealer or labeler chooses to use the Department's germination and purity results in subsequent re-labeling.

### **R3-4-407. Phytosanitary Field Inspection; Fee**

- A. Applicants seeking phytosanitary certification for interstate and international exportation of agricultural, vegetable and ornamental planting shall submit a \$20 inspection fee and provide the following information on a form furnished by the department:
1. The company name and address of the applicant;
  2. The kind, variety, and lot number of the seed;
  3. The number of acres on which the seed will be grown;
  4. The name of the grower;
  5. The date of the application;
  6. The countries of export;
  8. The seed treatment, if applicable;
  9. The amount of treatment, if applicable;
  10. The approximate planting date;
  11. The approximate harvest date; and
  12. The export requirements.
- B. The Department may contract with the state seed-certifying agency for field inspection at 20 cents per acre for a single required inspection and 10 cents per acre for each subsequent required inspection which shall be performed in conjunction with the seed certification program.
- C. Field inspections conducted by the Department shall be based on the following fee schedule and shall not exceed the maximum fee prescribed by A.R.S. § 3-233(A)(7);
1. Cotton: 80 cents per acre;
  2. Small grain: 20 cents per acre for the first inspection and 80 cents per acre for the second inspection;
  3. Vegetable and all other crops; 20 cents for the first inspection and 80 cents for the second inspection.
- D. If both field inspection fee and application fee exceeds the maximum fee prescribed by A.R.S. § 3-233(A)(7), the application fee shall be voided and the maximum cost per acre shall be assessed.

**R3-4-408. Licenses: Seed Dealer and Seed Labeler; Fees**

- A. An applicant for a seed dealer or seed labeler license shall provide the following information to the Department:
1. The year for which the applicant wishes to be licensed;
  2. The applicant's name, company name, address, and telephone number, fax number and e-mail address, as applicable;
  3. Verification of previous seed dealer or labeler license, if applicable;
  4. The mailing and physical address of each business location being licensed;
  5. Company Tax ID number or if not a legally-recognized business entity, the applicant's Social Security number;
  6. The date of the application; and
  7. The signature of the applicant.
- B. Seed dealer and seed labeler licenses are not transferable, expire on June 30, and are valid for no more than one year, or period thereof, unless otherwise revoked, suspended, denied or otherwise acted upon by the Department as provided in A.R.S. §3-233(A)(6).
- C. An applicant shall submit a completed application to the Department accompanied by a the following fee which is nonrefundable unless ARS §41-1077 applies.
1. Seed dealers, \$50.00 per location; and
  2. Seed labelers, \$100.00.

**R3-4-409. Violations and Penalties**

- A. The Department may assess the following penalties against a dealer or labeler for each customer affected by a violation listed below: \$50 for the first offense, \$150 for the second offense, and \$300 for each subsequent offense within a three-year period:
1. Failure to complete the germination requirements on agricultural, vegetable, or flower seed intended for wholesale or commercial use within nine months prior to sale, exposing for sale, or offering for sale within the state, excluding the month in which the test was completed. This penalty does not apply to a violation under subsections (A) (2), or (3);
  2. Failure to complete the germination requirements for agricultural, ornamental, or vegetable seed intended for retail purchase within the 15 months prior to the sale, exposing for sale, or offering for sale within the state, excluding the month in which the test was completed; and  
[**STAA NOTE:** This violation clause conflicts with, but prevails over, the violation cited in (B)(7)(j) following.]
  3. Failure to obtain any license required by this Article;
- B. The Department may assess the following penalties against any person committing the following acts: up to \$500 for the first offense, up to \$1250 for the second offense, and up to \$2500 for each subsequent offense within a three-year period.
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1. To label, advertise, or represent seed subject to this Article to be certified seed or any class of certified seed unless:
    - a. It has been determined by a certifying agency that the seed conforms to standards of purity and identification as to kind, species and subspecies, if appropriate, or variety; and,
    - b. The seed bears an official label issued for the seed by a certifying agency certifying that the seed is of a specified class and a specified kind, species and subspecies, if appropriate, and variety;
  2. To disseminate in any manner or by any means, any false or misleading advertisements concerning seeds subject to this Article;
  3. To hinder or obstruct in any way, any authorized agent of the Department in the performance of the person's duties under this Article;
  4. To fail to comply with a cease and desist order or to move or otherwise handle or dispose of any lot of seed held under a cease and desist order or tags attached to the order, except with express permission of the enforcing officer, and for a purpose specified by the officer;
  5. To label or sell seed that has been treated without proper labeling;
  6. To provide false information to any authorized person in the performance of the person's duties under this Article; or
  7. To label or sell seed that has false or misleading labeling, including:
    - a. Labeling or selling seed with a label containing the word "trace" or the phrase "contains 01%" as a substitute for any statement that is required by this Article;
    - b. Altering or falsifying any seed label, seed test, laboratory report, record, or other document to create a misleading impression as to kind, variety, history, quality or origin of seed;
    - c. Labeling as hermetically sealed containers of agricultural or vegetable seeds that have not had completed the germination requirements with 36 months prior to sale, excluding the month in which the test was completed.
    - d. Failure to label in accordance with the provisions of this Article;
    - e. If applicable, failing to label as containing prohibited noxious weed seeds, subject to recognized tolerances;
    - f. If applicable, failing to label as containing restricted noxious weed seeds in excess of the number prescribed in R3-4-403 on the label attached to the container of the seed or associated with seed;
    - g. If applicable, failing to label as containing more than two and one-half percent by weight of all weed seeds;
    - h. Detaching, altering, defacing, or destroying any label provided for in this Article, or altering or substituting seed in a manner that may defeat the purpose of this Article;
    - i. Using re-labeling stickers without having both the calendar month and year the
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germination test was completed, the sell by date if appropriate, and the lot number that matches the existing, original lot number; and

- j. Selling, exposing for sale, or offering for sale within the state vegetable seed intended for retail purchase that has labeling containing germination information that has not been completed within the 12 months prior to selling, exposing for sale, or offering for sale.

**[STAA NOTE:** This violation conflicts with the violation cited in (A)(2)previous.]

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# Notes

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