

**CHAPTER 111. SEED TESTING, LABELING AND STANDARDS****GENERAL PROVISIONS**

- Sec.  
111.1. Sampling and testing of seeds.  
111.2. Condition of seeds for testing.  
111.3. Fees and schedule of charges.  
111.4. Prohibitions and requirements.

**LABELING**

- 111.11. General labeling requirements.  
111.12. Labeling of flower seeds.  
111.13. Labeling of lawn or turf grasses and mixtures.  
111.14. Labeling of treated seeds.  
111.15. Misleading labeling.  
111.16. Responsibility for labeling.  
111.17. Labeling of seeds for sprouting.

**WEED SEEDS**

- 111.21. Weed seeds classified.  
111.22. Prohibited noxious weed seeds.  
111.23. Restricted noxious weed seeds.

**GERMINATION STANDARDS**

- 111.31. Vegetable seeds.  
111.32. Flower seeds.

**MISCELLANEOUS PROVISIONS**

- 111.41. Stop sale procedures.  
111.42. Hermetically sealed containers.

**Authority**

The provisions of this Chapter 111 issued under The Pennsylvania Seed Act of 1965 (3 P. S. §§ 285-1—285-10), unless otherwise noted.

**Source**

The provisions of this Chapter 111 adopted November 1, 1965, unless otherwise noted.

111-1

**Cross References**

This chapter cited in 7 Pa. Code § 113.53 (relating to seed testing).

**GENERAL PROVISIONS****§ 111.1. Sampling and testing of seeds.**

The terms used in seed testing and the methods of sampling, inspecting, analyzing, testing and examining agriculture, vegetable, flower, tree and shrub seeds, and lawn and turf mixtures and the tolerance allowed thereof shall be those adopted by the Association of Official Seed Analysts, effective October 1, 1981, as amended, except that tolerance will not be allowed for prohibited noxious weed seeds. A copy of the rules may be obtained from the current Secretary-Treasurer of the association (AOSA), or from: Botany and Seed Division; Bureau of Plant Industry; Department of Agriculture; 2301 North Cameron Street; Harrisburg, Pennsylvania 17110, at cost.

**Source**

The provisions of this § 111.1 amended through April 12, 1985, effective July 1, 1985, 15 Pa.B. 1354. Immediately preceding text appears at serial page (48863).

**§ 111.2. Condition of seeds for testing.**

- (a) Dirty or uncleaned seeds, mixed seed samples or samples sent by non-residents of this Commonwealth will not be tested.
- (b) Seed samples treated with a material will not be tested unless the name of the substance is plainly marked on the container in accordance with this chapter.
- (c) The year of harvest, if known, shall be marked on the container.

**Source**

The provisions of this § 111.2 amended November 7, 1986, effective November 8, 1986, 16 Pa.B. 4383. Immediately preceding text appears at serial page (98518).

**§ 111.3. Fees and schedule of charges.**

- (a) The testing fee shall accompany the sample and no test shall be made until the fee is paid.
- (b) Fees shall be paid by check or money order made payable to the Commonwealth of Pennsylvania. Cash will not be accepted through the mails but is accepted in the laboratory.
- (c) A Pennsylvania Noxious Weed Seed Examination shall be included with all purity analyses.

<i>Kind of Seed</i>	<i>Purity Analysis (including Pennsylvania State Noxious Weed Seed Examination)</i>	<i>Germination Test</i>	<i>Combined Purity Analysis and Germination Test</i>
Alfalfa	\$ 7.00	\$ 5.50	\$12
Barley	7.00	5.50	12
Beans, Garden	6.00	6.50	12
Beans, Lima	6.00	7.50	13
Bentgrass	14	8.00	21.50
Big bluestem	26	8.00	33.50
Birdsfoot trefoil	7.00	5.50	12
Bluegrass	15	8.00	22.50
Brome	10	7.50	17
Buckwheat	7.00	5.50	12
Clovers	7.00	5.50	12
Corn	5.00	6.50	11
Crownvetch	8.00	6.50	14
Deertongue grass	10	7.50	17
Fescues	10	7.50	17
Flatpea	6.00	7.50	13
Millets	8.50	6.50	14.50
Oats (including fluorescence test)	8.00	5.50	13
Orchardgrass	12	7.00	18.50
Peas	5.00	6.50	11
Redtop	14	8.00	21.50
Reed Canarygrass	9.00	6.50	15
Rye	7.00	5.50	12
Ryegrass	9.00	6.00	14.50
Ryegrass (including fluorescence test)	9.00	10.50	19
Sorghums	8.00	6.50	14
Soybeans	6.00	7.50	13
Sudangrass	8.00	6.50	14
Timothy	7.00	5.50	12
Tobacco	8.00	6.50	14
Vetch	8.00	6.50	14
Wheat	7.00	5.50	12
Flowers	8.00	6.50	14

<i>Kind of Seed</i>	<i>Purity Analysis (including Pennsylvania State Noxious Weed Seed Examination)</i>	<i>Germination Test</i>	<i>Combined Purity Analysis and Germination Test</i>
Vegetables and Herbs, except beans, corn and peas	8.00	5.50	13
Tree, Forb and Shrub:			
without embryo excision	8.00	9.00	16.50
with embryo excision	8.00	20	27
with embryo excision and removal of pits.	8.00	22	29
Mixtures:			
Lawn and Turf:			
Two components	22	16	36
Each additional component	8.00	8.00	15
Germination only		8.00 extra	
Pasture, hay and conservation:			
Two components	12	14	25
Each additional component	5.00	7.00	11
Germination only	6.00 extra		
Miscellaneous charges:			
Interstate Noxious Weed Examinations:			
Lawn and turf, with purity		6.00 extra	
Lawn and turf, without purity		20	
All others, with purity		5.00 extra	
Pennsylvania Noxious Weed Seed Examination:			
Lawn and Turf Grasses & Mixtures		15	
All Others		4.00	
Cold test		10	
Varietal test		12	
Moisture test		3.00	
Tetrazolium test		12.50	
Bio-assay for seed treatment		6.00	

<i>Kind of Seed</i>	<i>Purity Analysis (including Pennsylvania State Noxious Weed Seed Examination)</i>	<i>Germination Test</i>	<i>Combined Purity Analysis and Germination Test</i>
Phenol test:			
Bluegrass, ryegrass		7.00	
Cereals		6.00	
Embryo excision test		15	
Rush		4.00	
Extra laboratory report		2.00	
Tests not listed, special procedures, extra time, etc.		12 per hour	

**Source**

The provisions of this § 111.3 amended through November 7, 1986, effective November 8, 1986, 16 Pa.B. 4383. Immediately preceding text appears at serial pages (98518) and (98520).

**Cross References**

This section cited in 7 Pa. Code § 111.4 (relating to prohibitions and requirements).

**§ 111.4. Prohibitions and requirements.**

(a) Seeds of which the analysis is already known will not be sent for testing unless:

- (1) There is suspicion that the law is being violated.
- (2) Verification of the analysis is required, in which case a copy of the analysis given by the dealer shall accompany the sample.

(b) The analysis and test may be used for labeling purposes but the name of the Bureau of Plant Industry shall in no way be used for advertising purposes.

(c) During the months of February to May not more than five samples per firm or corporation shall be tested, unless the number of official law enforcement samples permit a larger number. No more than one of the five samples will be a mixture as provided for in § 111.3(c)(7) (relating to fees and schedule of charges).

(d) Samples to be tested shall be sent to the Bureau of Plant Industry at least 30 days before the seeds are to be planted or sold.

- (e)
  - (1) Samples shall be analyzed in the order in which they are received and reports shall be made as promptly as the work permits.
  - (2) The time required for germination tests of seeds shall be between 6 and 28 days, depending on the kind of seed.
  - (3) The time required for germination tests of tree seeds varies greatly.

**Source**

The provisions of this § 111.4 amended February 29, 1980, effective March 1, 1980, 10 Pa.B. 910. Immediately preceding text appears at serial page (38164).

**LABELING****§ 111.11. General labeling requirements.**

(a) In labeling the kind of agriculture, vegetable, flower, tree or shrub seeds as required in section 3 of The Pennsylvania Seed Act of 1965 (3 P. S. § 285-3), the following shall apply:

(1) Names used shall be those specified in the Rules for Seed Testing by the Association of Official Seed Analysts.

(2) Variety names shall be confined to the recognized names for the kind and may not include names or terms which create a misleading impression as to the history or quality of the seeds.

(3) Abbreviations of names of the kind and variety of seed may not be permitted.

(4) The following kinds of agricultural seed are generally labeled as to variety and shall be labeled to show either the variety name or the words "Variety Not Stated":

- (i) Alfalfa
- (ii) Bahiagrass
- (iii) Barley
- (iv) Bean, field
- (v) Beet, field
- (vi) Brome, smooth
- (vii) Broomcorn
- (viii) Clover, crimson
- (ix) Clover, red
- (x) Clover, white
- (xi) Corn, field
- (xii) Corn, pop
- (xiii) Cowpea
- (xiv) Fescue, tall
- (xv) Flax
- (xvi) Lespedeza, striata
- (xvii) Millet, foxtail
- (xviii) Millet, pearl
- (xix) Oats
- (xx) Pea, field
- (xxi) Peanut
- (xxii) Rice
- (xxiii) Rye

- (xxiv) Safflower
- (xxv) Sorghum
- (xxvi) Sorghum sudangrass hybrid
- (xxvii) Soybean
- (xxviii) Sudangrass
- (xxix) Sunflower
- (xxx) Tobacco
- (xxxi) Trefoil, birdsfoot
- (xxxii) Wheat, common
- (xxxiii) Wheat, durum

(b) When variety or strain names are stated, they shall be used in connection with the full kind name, such as “Alta Tall Fescue,” “Merion Kentucky Bluegrass,” and “Michihli Chinese Cabbage.”

**Source**

The provisions of this § 111.11 amended January 28, 1972, 2 Pa.B. 121. Immediately preceding text appears at serial page (1762).

**§ 111.12. Labeling of flower seeds.**

Section 3 of The Pennsylvania Seed Act of 1965 (3 P. S. § 285-3) requires that flower seeds be labeled with the name of the kind and variety or a statement of type and performance characteristics as prescribed by the Department of Agriculture. This provision shall be complied with as follows:

(1) 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, such as: “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, such as: “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, such as: “Marigold, Dwarf Double French, Mixed Colors.”

(iv) If the seeds consist of an assortment or mixture of kinds and varieties, it shall be clearly indicated that the seed is assorted or mixed and specific use of the assortment or mixture shall be indicated, such as: “Cut Flower Mixture,” or “Rock Garden Mixture.” Statements such as “General Purpose Mixture,” “Wonder Mixture” or another statement which fails to indicate the specific use of the seed may not be considered as meeting the requirements of this section unless the specific use of the mixture is also stated. Containers over 3 grams shall list the kind or kind and variety names

in excess of 5.0% in the order of their predominance giving the percentage by weight of each. Components of less than 5.0% shall be listed but need not be in order of predominance. A single percentage by weight shall be given for these components. Containers of 3 grams or less shall list the components without giving percentage by weight and need not be in order of predominance.

(v) Flower seed mixtures shall be considered misleading if the kinds or kinds and varieties found by analysis differs by 20% or more of those listed on the label.

(2) 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, such as: "Ornamental Gourds," "Small Fruited," "Mixed."

#### Source

The provisions of this § 111.12 amended through November 7, 1986, effective November 8, 1986, 16 Pa.B. 4383. Immediately preceding text appears at serial pages (98522) to (98523).

### § 111.13. Labeling of lawn or turf grasses and mixtures.

(a) In labeling lawn and turf seeds, the following information shall be provided:

(1) The commonly accepted name of the kind or kind and variety of each agricultural seed component in excess of 5.0% of the whole and the percentage by weight of pure seed in the order of its predominance. Where more than one component is required to be named, the word, "mixture," or the word, "mixed," shall be stated. Percentages of pure seed for mixtures shall be listed under the headings, "Pure Seed."

(2) The percentage by weight of all agricultural seed other than those required to be labeled.

(3) The percentage by weight of inert matter not to exceed 10%, except that 15% inert matter is permitted in Kentucky bluegrass labeled without a variety manner. Foreign material, other than material used for coating or pelleting to enhance the planting value, not common to grass seed may not be added.

(4) The percentage by weight of all weed seeds, not to exceed 1.0%.

(5) Noxious weed seeds shall be listed under the heading "Noxious Weed Seeds" or as otherwise specified.

(6) The percentage of germination, exclusive of hard seed; hard seed, if present, and the calendar month and year that the germination test was completed. If a single test date is used for mixtures, it shall be that of the oldest tested component.

(7) Percentages of germination for mixtures shall be listed under the headings, "Germination" or "Germ."

(b) In addition to this section, labeling of lawn and turf mixtures shall comply with the requirements of section 3 of The Pennsylvania Seed Act of 1965 (3 P. S. § 285-3).

**Source**

The provisions of this § 111.13 amended through November 7, 1986, effective November 8, 1986, 16 Pa.B. 4383. Immediately preceding text appears at serial pages (98523) to (98524).

**Cross References**

This section cited in 7 Pa. Code § 111.15 (relating to misleading labeling); and 7 Pa. Code § 111.23 (relating to restricted noxious weed seeds).

**§ 111.14. Labeling of treated seeds.**

- (a) Packages containing treated seeds shall be labeled as such.
- (b) Whenever a separate treatment tag is not used and the treatment statement is printed on the container, the statement "See Treatment Statement on Container" shall be printed on the analysis label.
- (c) Except as provided in subsection (d), printed on the container or tag, in type no smaller than eight-point, shall be the statement: "Treated with \_\_\_\_\_," giving the generic, accepted, coined or abbreviated chemical name; and the phrase "Do not use for food, feed or oil purposes."
- (d) When seed is treated with a nonpoisonous substance the nonpoisonous nature of the substance shall have been clearly and definitely established by the processor. When packaged in containers of 4 ounces or less, it is not required to label substances on treated seed. When packaged in containers of more than 4 ounces, it is not required to label the following substances when present at a rate less than the number of parts per million indicated:

<i>Substance</i>	<i>P.P.M.</i>
Allethrin	2
Malathion	8
Methoxychlor	2
Pyrethrins:	
On oats and sorghum	1
On all other seeds	3
Piperonyl butoxide:	
On oats and sorghum	8
On all other seeds	20

(e) In addition to the statements required in subsection (c), seeds treated with a poisonous substance shall bear on the container or tag, in a contrasting color, the word "Poison" and show a representation of a skull and crossbones at least twice the size of other information on the label. Mercurials and similarly toxic substances including, but not limited to, the following, shall be considered poi-

sonous materials: Aldrin, technical; Demeton; Dieldrin; P-Dimethylaminobenzenediazo sodium sulfonate; Endrin; Ethion; Heptachlor; Mercurials, all types; Parathion; Phorate; O-O-Diethyl-O-(isopropyl-4-methyl-6-pyrimidy) thiophosphate; and O-O-Diethyl-S-2-(ethylthio) ethyl phosphorodithi-cate.

(f) Other treatment materials or processes not included in subsections (d) and (e) and not including inoculation may be labeled to reflect the purpose of the treatment or process. The name of the applied material or process shall be stated.

(g) If seeds are treated with an inoculant, the expiration date of the inoculant shall be stated.

**Source**

The provisions of this § 111.14 amended through November 7, 1986, effective November 8, 1986, 16 Pa.B. 4383. Immediately preceding text appears at serial pages (98524) to (98525).

**§ 111.15. Misleading labeling.**

(a) Notwithstanding § 111.13 (relating to labeling of lawn or turf grasses and mixtures) white clover may be claimed as a component of a mixture in quantities of 1.0% or more and redtop may be claimed as a component in mixtures, other than for lawn and turf, in quantities of 3.0% or more. The germination percentage of each shall be given.

(b) Other components of less than 5.0% shall be totaled and this sum listed as "other crop seed."

(c) Labeling not complying with this section may be considered as misleading.

**Source**

The provisions of this § 111.15 amended April 12, 1985, effective July 1, 1985, 15 Pa.B. 1354. Immediately preceding text appears at serial pages (32400) and (14721).

**§ 111.16. Responsibility for labeling.**

(a) The person or dealer upon whose premises seeds are located and are exposed or offered for sale shall be responsible for labeling of the seeds.

(b) The person or dealer shall also be responsible for procuring a new germination test and subsequently attaching new analysis tags before the expiration date of the required nine-month period as provided in section 4 of The Pennsylvania Seed Act of 1965 (3 P. S. § 285-4). Tests shall be made according to the Rules for Testing Seed published by the Association of Official Seed Analysts, and no test may be considered official unless the rules are followed.

**§ 111.17. Labeling of seeds for sprouting.**

The following information shall be indicated on labels of seeds sold for sprouting for salad or culinary purposes:

- (1) Commonly accepted name of kind, or kinds.

- (2) Lot number.
- (3) Percentage by weight of a pure seed component in excess of 5.0% of the whole, other crop seed, inert matter and weed seeds if occurring.
- (4) Percentage of germination of a pure seed component.
- (5) The calendar month and year the test was completed to determine the percentages.

**Source**

The provisions of this § 111.17 adopted March 1, 1974, 4 Pa.B. 361; amended April 12, 1985, effective July 1, 1985, 15 Pa.B. 1354. Immediately preceding text appears at serial page (14721).

**WEED SEEDS**

**§ 111.21. Weed seeds classified.**

The following shall be classified as weed seeds in this Commonwealth and shall be labeled as such:

- (1) Black medic (*Medicago lupulina*).
- (2) Small hop clover (*Trifolium dubium*).
- (3) Large hop clover (*Trifolium procumbens*).
- (4) Carpet grass (*Axonopus affinis*).
- (5) Annual bluegrass (*Poa annua*). When present in agricultural, vegetable and flower seeds other than those lawn and turf grasses and mixtures listed in § 111.23(b)(1) (relating to restricted noxious weed seeds).
- (6) Bulbous bluegrass (*Poa bulbosa*)

**Source**

The provisions of this § 111.21 amended April 12, 1985, effective July 1, 1985, 15 Pa.B. 1354. Immediately preceding text appears at serial page (14721).

**§ 111.22. Prohibited noxious weed seeds.**

It shall be unlawful to sell or offer for sale seeds that contain the following prohibited weed seeds:

- (1) Bindweed (*Convolvulus spp.*).
- (2) Quackgrass (*Agropyron repens*).
- (3) Canada thistle (*Cirsium arvense*).
- (4) Multiflora rose (*Rosa multiflora*).
- (5) Johnsongrass (*Sorghum halepense*), its crosses with other grasses and other grasses which produce seed which are not readily distinguishable from Johnsongrass.

**Source**

The provisions of this § 111.22 amended April 12, 1985, effective July 1, 1985, 15 Pa.B. 1354. Immediately preceding text appears at serial pages (14721) to (14722).

**§ 111.23. Restricted noxious weed seeds.**

(a) Presence of restricted noxious weed seeds in agricultural, vegetable and flower seed, other than lawn and turf grasses, and mixtures thereof listed in subsection (b)(1) shall be governed by the following:

(1) *List.* The seeds of the following plants shall be restricted noxious weed seeds and shall be listed on the tag or label under the heading “Noxious Weed Seeds” by name and number per pound:

- (i) Bedstraw (*Galium spp.*).
- (ii) Buckhorn plantain (*Plantago lanceolata*).
- (iii) Corncockle (*Agrostemma githago*).
- (iv) Dodder (*Cuscuta spp.*).
- (v) Horsenettle (*Solanum carolinense*).
- (vi) Perennial sow thistle (*Sonchus arvensis*).
- (vii) Wild garlic (*Allium vineale*).
- (viii) Wild onion (*Allium canadense*).
- (ix) Wild mustard (*Brassica juncea*, *B. Kaber*, and *B. nigra*).

(2) *Other states.* Seeds designated as noxious weed seeds in other states shall be listed under the heading “Noxious Weed Seeds” if included on the tag or label.

(3) *Rate of occurrence in small size seeds.* The seeds of *Agrostis spp.*, Bermuda grass, timothy, orchardgrass, fescues, alsike and white clover, Reed canary grass, ryegrass, foxtail millet, alfalfa, red clover, sweet clovers, lespedezas, smooth brome, tall oat grass, crimson clover, *Brassica spp.*, flax, *Agropyron spp.*, and other agricultural, vegetable and flower seeds of similar size and weight or mixtures thereof shall not contain more than one seed or bulblet, single or collectively, of restricted noxious weed seeds per 5 grams of seed—equivalent to 90 weed seeds per pound—except that not more than five seeds of buckhorn plantain per 5 grams of agricultural seed may be permitted equivalent to 450 weed seeds per pound.

(4) *Rate of occurrence in large size seeds.* The seeds of wheat, Sudan grass, oats, rye, barley, buckwheat, sorghums, vetches and other agricultural, vegetable and flower seeds of similar or greater size and weight or mixtures thereof may not contain more than one seed of restricted noxious weed seeds per 100 grams of seed—equivalent to five seeds per pound—except that not more than five seeds of buckhorn plantain per 100 grams of agricultural seeds may be permitted—equivalent to 25 weed seeds per pound, and seed wheat is not permitted to contain bulblets of wild garlic or wild onion—equivalent to zero bulblets per pound.

(b) Presence of restricted noxious weed seeds in lawn and turf grasses and mixtures thereof shall be governed by the following:

(1) Except as provided in paragraph (3) the seeds of the following plants shall be restricted noxious weed seeds and shall be listed on the tag or label

under the heading “Undesirable Grass Seeds” by name and number per pound when present in bentgrass, Kentucky bluegrass, chewings fescue, hard fescue, red fescue, varieties of named turf type tall fescue, varieties of perennial ryegrass or mixtures containing these grasses:

- (i) Bermudagrass. (*Cynodon spp.*).
- (ii) Annual bluegrass. (*Poa annua*).
- (iii) Rough bluegrass. (*Poa trivialis*).
- (iv) Bentgrass (creeping, colonial, velvet), (*Agrostis spp.*).
- (v) Meadow fescue (*Festuca pratensis*).
- (vi) Tall fescue (*Festuca arundinaceae*).
- (vii) Orchardgrass (*Dactylis glomerata*).
- (viii) Timothy (*Phleum pratense*).
- (ix) Velvetgrass (*Holcus lanatus*).
- (x) Redtop (*Agrostis gigantea*).

(2) Restricted noxious weed seeds set forth in paragraph (1) may not exceed 0.50% by weight.

(3) The restricted noxious weed seeds set forth in paragraph (1) may not apply:

- (i) To grasses or mixtures clearly labeled for pasture, forage, hay, conservation or spoil bank reclamation usages.
- (ii) When the seeds are present in excess of 5.0% of the whole and the label contains the information required by § 111.13(a)(1) (relating to labeling of lawn or turf grasses and mixtures).

#### Source

The provisions of this § 111.23 amended through November 7, 1986, effective November 8, 1986, 16 Pa.B. 4383. Immediately preceding text appears at serial pages (98527) to (98528).

#### Cross References

This section cited in 7 Pa. Code § 111.21 (relating to weed seeds classified).

### GERMINATION STANDARDS

#### § 111.31. Vegetable seeds.

(a) The germination standards for vegetable seeds, including hard seeds, shall be the following:

<u>Seed</u>	<u>Percent</u>
All other kinds	50
Anise	50
Artichoke	60
Asparagus	70

<i>Seed</i>	<i>Percent</i>
Asparagus bean	75
Basil, sweet	60
Beans, garden	70
Bean, lima	70
Bean, runner	75
Beet	65
Borage	70
Broadbean	75
Broccoli	75
Brussels sprouts	70
Cabbage	75
Cantaloupe	75
Caraway	55
Cardoon	60
Carrot	55
Cauliflower	75
Celeriac	55
Celery	55
Chard, Swiss	65
Chervil, salad	65
Chicory	65
Chinese cabbage	75
Chives	50
Citron	65
Collards	80
Coriander	70
Corn, Pop	75
Corn, sweet	75
Cornsalad	70
Cowpea	75
Cress, garden	60
Cress, upland	60
Cress, water	40
Cucumber	80
Dandelion	45
Dill	60
Eggplant	60
Endive	70
Fennel, florence	60
Fennel, sweet	50

<u>Seed</u>	<u>Percent</u>
Kale	75
Kale, Chinese	75
Kohlrabi	75
Leek	60
Lettuce	80
Marjoram, sweet	50
Muskmelon	75
Mustard, India	75
Mustard, spinach	75
Okra	50
Onion	70
Onion, Welsh	70
Oregano	60
Pak-choi	75
Parsley	60
Parsnip	60
Pea	80
Peanut	60
Pepper	55
Pumpkin	75
Radish	75
Rhubarb	60
Roquette	60
Rosemary	30
Rutabaga	75
Sage	60
Salsify	75
Savory, summer	55
Sorrel	60
Soybean	75
Spinach	60
Spinach, New Zealand	40
Squash	75
Thyme	50
Tomato	75
Tomato, husk	50
Turnip	80
Watermelon	70

(b) Hard seeds may be present in the following: asparagus bean; bean, garden; bean, lima; bean, runner; cowpea; okra; pea; and soybean.

## Source

The provisions of this § 111.31 amended through April 12, 1985, effective July 1, 1985, 15 Pa.B. 1354. Immediately preceding text appears at serial pages (3868) to (3869), and (17610).

## § 111.32. Flower seeds.

(a) Germination standards for flower seeds, including hard seeds, shall be the following:

<i>Seed</i>	<i>Percent</i>
Achillea (The Pearl) ( <i>Achillea ptarmica</i> )	50
African daisy ( <i>Dimorphotheca aurantiaca</i> )	55
African violet ( <i>Saintpaulia</i> spp.)	30
Ageratum ( <i>Ageratum mexicanum</i> )	60
Agrostemma (rose campion) ( <i>Agrostemma coronaria</i> )	65
All other kinds	50
Alyssum ( <i>Alyssum compactum</i> , <i>A. Maritimum</i> , <i>A. procumbens</i> , <i>A. saxatile</i> )	60
Amaranthus ( <i>Amaranthus</i> spp.)	65
Anagalis (pimpernel) ( <i>Anagalis arvensis</i> , <i>Anagalis Coerulea</i> , <i>Anagalis grandiflora</i> )	60
Anemone ( <i>Anemone coronaria</i> , <i>A. pulsatilla</i> )	55
Angel's trumpet ( <i>Datura arborea</i> )	60
Arabis ( <i>Arabis alpina</i> )	60
Arctotis (African lilac daisy) ( <i>Arctotis grandis</i> )	45
Armeria ( <i>Armeria formosa</i> )	55
Asparagus, fern ( <i>Asparagus phemosus</i> )	50
Asparagus, sprenger ( <i>Asparagus sprengeri</i> )	55
Aster, Chine ( <i>Callistephus chinensis</i> ), except Pompon, Powderpuff and Princess types	55
Aster, China ( <i>Callistephus chinensis</i> ), Pompon, Poderpuff and Princess types	50
Aubrietia ( <i>Aubrietia deltoides</i> )	45
Baby Smilax ( <i>Asparagus asparagoides</i> )	25
Balsam ( <i>Impatiens balsamina</i> )	70
Begonia ( <i>Begonia fibrous rooted</i> )	60
Begonia ( <i>Begonia tuberos rooted</i> )	50
Bells of Ireland ( <i>Molecella laevis</i> )	60
Brachycome (swan river daisy) ( <i>Brachycome iberidifolia</i> )	60
Browallia ( <i>Browallia elata</i> and <i>B. speciosa</i> )	65
Buphthalmum (sunwheel) ( <i>Buphthalmum salicifolium</i> )	60
Calceolaria ( <i>Calceolaria</i> spp.)	60
Calendula ( <i>Calendula officinalis</i> )	65

<i>Seed</i>	<i>Percent</i>
California poppy ( <i>Eschscholtzia californica</i> )	60
Calliopsis ( <i>Coreopsis bicolor</i> , <i>C. drummondi</i> , <i>C. elegans</i> )	65
Campanula:	
Canterbury bells ( <i>Campanula medium</i> )	60
Cup and Saucer bellflower ( <i>Campanula medium calycanthera</i> )	60
Carpathian bellflower ( <i>Campanula carpatica</i> )	50
Peach bellflower ( <i>Campanula persicifolia</i> )	50
Candytuft, annual ( <i>Iberis amara</i> , <i>I. umbellata</i> )	65
Candytuft, perennial ( <i>Iberis gibraltarica</i> , <i>I. sempervirens</i> )	55
Castor bean ( <i>Ricinus communis</i> )	60
Cathedral bells ( <i>Cobaea scandens</i> )	65
Celosia ( <i>Celosia argentea</i> )	65
Centaurea, basket flower:	
( <i>Centaurea americana</i> )	
Dusty Miller ( <i>C. candidissima</i> )	
Royal centaurea ( <i>C. imperialis</i> )	
Sweet sultan ( <i>C. moschata</i> )	
Velvet centaurea ( <i>C. gymnocarpa</i> )	60
Cerastium (snow-in-winter) ( <i>Cerastium blebersteini</i> and <i>C. tomentosum</i> )	65
Chinese forget-me-not ( <i>Cynoglossum amabile</i> )	55
Chrysanthemum, annual ( <i>Chrysanthemum carinatum</i> , <i>C. coronarium</i> , <i>C. segetum</i> )	50
Cineraria ( <i>Senecio cruentus</i> )	60
Clarkia ( <i>Clarkia elegans</i> )	65
Cleome ( <i>Cleome gigantea</i> )	65
Coleus ( <i>Coleus blumei</i> )	65
Columbine ( <i>Aquilegia spp.</i> )	50
Coral bells ( <i>Heuchera sanguinea</i> )	55
Coreopsis, perennial ( <i>Coreopsis lanceolata</i> )	40
Corn, Ornamental ( <i>Zea mays</i> )	75
Cosmos:	
Sensation, Mammoth and Crested types ( <i>Cosmos bipinnatus</i> )	
Klondyke type ( <i>C. sulphureus</i> )	65
Crossandra ( <i>Crossandra infundibuliformis</i> )	50
Dahlia ( <i>Dahlia spp.</i> )	55
Daylily ( <i>Hemerocallis spp.</i> )	45
Delphinium, perennial:	

<i>Seed</i>	<i>Percent</i>
Belladonna and Bellamosum types; Cardinal larkspur ( <i>Delphinium cardinale</i> )	
Chinensis types; Pacific Giant, Gold Medal and other hybrids of <i>D. elatum</i>	55
Dianthus:	
Carnation ( <i>Dianthus caryophyllus</i> )	60
China pinks ( <i>Dianthus chinensis</i> , <i>Heddewigi</i> , <i>Heddensis</i> )	70
Grass pink ( <i>Dianthus plumarius</i> )	60
Maiden pinks ( <i>Dianthus deltoides</i> )	60
Sweet William ( <i>Dianthus barbatus</i> )	70
Sweet Wivelsfield ( <i>Dianthus allwoodi</i> )	60
Didiscus (blue lace flower) ( <i>Didiscus coerulea</i> )	65
Doronicum (leopard's bane) ( <i>Doronicum caucasicum</i> )	60
Dracena ( <i>Dracaena indivisa</i> )	55
Dragon tree ( <i>Dracaena, draco</i> )	40
English daisy ( <i>Bellis perinnis</i> )	55
Flax:	
Golden flax ( <i>Linum flavum</i> )	
Flowering flax ( <i>L. grandiflorum</i> )	
Perennial flax ( <i>L. perenne</i> )	60
Flowering maple ( <i>Abulition</i> )	35
Foxglove ( <i>Digitalis spp.</i> )	60
Gaillardia, annual ( <i>Gaillardia pulchella</i> , <i>G. picta</i> ); perennial ( <i>G. grandiflora</i> )	45
Gerbera (transvaal daisy) ( <i>Gerbera jamesoni</i> )	60
Geum ( <i>Geum spp.</i> )	55
Gilia ( <i>Gilia spp.</i> )	65
Gloriosa daisy (rudbeckia) ( <i>Echinacea purpurea and Rudbeckia     hirta</i> )	60
Gloxinia ( <i>Sinningia speciosa</i> )	40
Godetia <i>Godetia amoena</i> , <i>G. grandiflora</i>	65
Gourds: yellow-flowered ( <i>Cucurbita pepo</i> ); white-flowered (Lagenaria sisceraria); Dishcloth ( <i>Luffa cylindrica</i> )	70
Gypsophila: annual baby's breath ( <i>Gypsophila elegans</i> ); perennial baby's breath ( <i>G. paniculata</i> , <i>G. pacifica</i> , <i>G. repens</i> )	70
Helenium ( <i>Helenium autumnale</i> )	40
Helichrysum ( <i>Helichrysum monstrosum</i> )	60
Heliopsis ( <i>Heliopsis scabra</i> )	55
Heliotrope ( <i>Heliotropium spp.</i> )	35
Helipterum (Acroclinium) ( <i>Helipterum roseum</i> )	60

<i>Seed</i>	<i>Percent</i>
Hesperis (sweet rocket) ( <i>Hesperis matronalis</i> )	65
Hollyhock ( <i>Althea rosea</i> )	65
Hunnemania (mexican tulip poppy) ( <i>Hunnemania fumariaefolia</i> )	60
Hyacinth bean ( <i>Dolichos lablab</i> )	70
Impatiens ( <i>Impatiens holstii</i> , <i>I. sultani</i> )	55
Ipomea: Cypress vine ( <i>Ipomea quamoclit</i> ); Moonflower ( <i>I. noctiflora</i> ); Morning glories, Cardinal climber, Hearts and Honey Vine ( <i>Ipomea spp.</i> )	75
Jerusalem cross (Maltese cross) ( <i>Lychinis chalconica</i> )	70
Job's tears ( <i>Coix lacrymajobi</i> )	70
Kochia ( <i>Kochia childsi</i> )	55
Larkspur, annual ( <i>Delphinium ajacis</i> )	60
Lantana ( <i>Lantana camara</i> , <i>L. hybrids</i> )	35
Lilium (regal lily) ( <i>Lilium regale</i> )	50
Linaria ( <i>Linaria spp.</i> )	65
Lobelia, annual ( <i>Lobelia erinua</i> )	65
Lunaria, annual ( <i>Lunaria annua</i> )	65
Lupine ( <i>Lupinus spp.</i> )	65
Marigold ( <i>Tagetes spp.</i> )	65
Marvel of Peru ( <i>Mirabilis jalapa</i> )	60
Matricaria (fever few) ( <i>Matricaria spp.</i> )	60
Mignonette ( <i>Reseda odorata</i> )	55
Myosotis ( <i>Myosotis alpestris</i> , <i>M. oblongata</i> , <i>M. palustris</i> )	50
Nasturtium ( <i>Tropaeolum spp.</i> )	60
Nemesia ( <i>Nemesia spp.</i> )	65
Nemophila ( <i>Nemophila insignis</i> )	70
Nemophila, spotted ( <i>Nemophila maculata</i> )	60
Nicotiana ( <i>Nicotiana affinis</i> , <i>N. Sanderae</i> , <i>N. Sylvestris</i> )	65
Nierembergia ( <i>Nierembergia spp.</i> )	55
Nigella ( <i>Nigella damascena</i> )	55
Pansy ( <i>Viola tricolor</i> )	60
Penstemon ( <i>Penstemon barbatus</i> , <i>P. grandiflorus</i> , <i>P. laevigatus</i> , <i>P. Puplescens</i> )	60
Petunia ( <i>Petunia spp.</i> )	45
Phacelia ( <i>Phacelia campanularia</i> , <i>P. minor</i> , <i>P. tanacetifolia</i> )	65
Phlox, annual ( <i>Phlox drummondii</i> ) all types and varieties	55
Physalis ( <i>Physalis spp.</i> )	60
Platycodon (ballon flower) ( <i>Platycodon grandiflorum</i> )	60
Plumbago, cape ( <i>Plumbago capensis</i> )	50

<i>Seed</i>	<i>Percent</i>
Ponytail ( <i>Beaucarner recurveta</i> )	40
Poppy: Shirley ( <i>Papaver rhoeas</i> ); Iceland ( <i>P. nudicaule</i> ); Oriental ( <i>P. Orientale</i> ); Tulip ( <i>P. glaucum</i> )	60
Portulaca ( <i>Portulaca grandiflora</i> )	55
Primula (primrose) ( <i>Primula spp.</i> )	50
Pyrethrum (painted daisy) ( <i>Pyrethum coccineum</i> )	60
Salpiglossis ( <i>Salpiglossis gloxinaeflora</i> , <i>S. sinuata</i> )	60
Salvia: Scarlet Sage ( <i>Salvia spendens</i> ) Mealycup Sage (blue bedder) ( <i>Salvia farinacea</i> )	50
Saponaria ( <i>Saponaria ocymoides</i> , <i>S. vaccaria</i> )	60
Scabiosa, annual ( <i>Scabiosa atropurpurea</i> )	50
Scabiosa, perennial ( <i>Scabiosa caucasica</i> )	40
Schizanthus ( <i>Schizanthus spp.</i> )	60
Sensitive plant (mimosa) ( <i>Mimosa pudica</i> )	65
Shasta Daisy ( <i>Chrysanthemum maximum</i> , <i>C. leucanthemum</i> )	65
Silk oak ( <i>Grevilla, robusta</i> )	25
Snapdragon ( <i>Antirrhinum spp.</i> )	55
Solanum ( <i>Solanum spp.</i> )	60
Statice (flower heads) ( <i>Statice sinuata</i> , <i>S. Suworonii</i> )	50
Stocks: Common ( <i>Mathiola incana</i> ); Evening Scented ( <i>Mathiola bicornis</i> )	65
Sunflower ( <i>Helianthus spp.</i> )	70
Sunrose ( <i>Helianthemum spp.</i> )	30
Sweet pea, annual and perennial other than dwarf bush ( <i>Lathyrus odoratus</i> , <i>L. latifolius</i> )	75
Sweet pea, dwarf bush ( <i>Lathyrus odoratus</i> )	65
Tahoka daisy ( <i>Machaneanthera tanacetifolia</i> )	60
Thunbergia ( <i>Thunbergia alata</i> )	60
Torch flower ( <i>Tithonia speciosa</i> )	70
Torenia (wishbone flower) ( <i>Torenia fournieri</i> )	70
Tritoma ( <i>Kniphofla spp.</i> )	65
Verbena, annual ( <i>Verbena hybrida</i> )	35
Vinca ( <i>Vinca rosea</i> )	60
Viola ( <i>Viola cornuta</i> )	55
Virginian stocks ( <i>Malcolmia maritima</i> )	65
Wallflower ( <i>Cheiranthus allioni</i> )	65
Yucca (Adam's needle) ( <i>Yucca filamentosa</i> )	50
Zinnia (except linearis and creeping) ( <i>Zinnia angustifolia</i> , <i>Z. elegans</i> ,	

<i>Seed</i>	<i>Percent</i>
Z. grandiflora, Z. gracillima, Z. haegeana, Z. multiflora, Z. pumilla)	65
Zinnia, linearis and creeping ( <i>Zinnia linearis</i> , <i>Sanvitalia procumbens</i> )	50

(b) Hard seeds may be present in the following: hollyhock; hyacinth bean; Ipomea; Lupine; sensitive pea and sweet pea, all kinds.

(c) Mixture of kinds of flower seeds shall be considered to be below standard if the germination of any kind or combination of kinds constituting 25% or more of the mixture by number is below standard for the kinds involved.

#### Source

The provisions of this § 111.32 amended through April 12, 1985, effective July 1, 1985, 15 Pa.B. 1354. Immediately preceding text appears at serial pages (17610), to (17614).

### MISCELLANEOUS PROVISIONS

#### § 111.41. Stop sale procedures.

(a) The owner or custodian of any lot of seeds held under “stop sale” shall be allowed 90 days to correct deficiencies so that the lot conforms to the requirements of this chapter and The Pennsylvania Seed Act of 1965 (3 P. S. § 285-1—285-10).

(b) If subsection (a) has not been complied with, the seed shall be condemned as unfit for seeding purposes, unless the owner or custodian can show cause why the seed should not be condemned.

(c) Seed under a “stop sale” may not be moved from the premises of the owner or custodian without written release from the inspector.

(d) When requirements of subsection (a) have been met, a copy of the corrected label shall be sent to the address specified by the seed inspector for a written release.

(e) Section 2 (22), of The Pennsylvania Seed Act of 1965 ( 3 P. S. § 285-2(22)) containing further requirements for “stop sale” notice, shall be followed.

#### Source

The provisions of this § 111.41 amended November 7, 1986, effective November 8, 1986, 16 Pa.B. 4383. Immediately preceding text appears at serial page (98536).

#### § 111.42. Hermetically sealed containers.

(a) The 36-month test period may not apply unless the following conditions have been met:

- (1) The seed was packaged within 9 months after harvest.

(2) The container used does not allow water vapor penetration (WVP) 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% and on the other side of zero percent as is measured by the standards of the United States Bureau of Standards.

(3) The seed in the container does not exceed the percentage of moisture, on a wet weight basis, as follows:

<i>Agricultural Seeds</i>	<i>Percent</i>
Beet, field	7.5
Beet, sugar	7.5
Bluegrass, Kentucky	6.0
Clover, crimson	8.0
Clover, red	8.0
Ryegrass, annual	8.0
Ryegrass, perennial	8.0
All others	6.0
Mixtures of above	8.0
Bean, garden	7.0
Bean, Lima	7.0
Beet	7.5
Broccoli	5.0
Brussels sprouts	5.0
Cabbage	5.0
Carrot	7.0
Cauliflower	5.0
Celeriac	7.0
Celery	7.0
Chard, Swiss	7.5
Chinese Cabbage	5.0
Chives	6.5
Collards	5.0
Corn, sweet	8.0
Cucumber	6.0
Eggplant	6.0
Kale	5.0
Kohlrabi	5.0
Leek	6.5
Lettuce	5.5
Muskmelon	6.0
Mustard, India	5.0
Onion	6.5

<i>Agricultural Seeds</i>	<i>Percent</i>
Onion, Welsh	6.5
Parsley	6.5
Parsnip	6.0
Pea	7.0
Pepper	4.5
Pumpkin	6.0
Radish	5.0
Rutabaga	5.0
Spinach	8.0
Squash	6.0
Tomato	5.5
Turnip	5.0
Watermelon	6.5
All others	6.0

(4) The container is conspicuously labeled in not less than eight-point type to indicate:

- (i) The container is hermetically sealed.
- (ii) The seed has been preconditioned as to moisture content.
- (iii) The calendar month and year in which the germination test was completed.

**Source**

The provisions of this § 111.42 adopted January 28, 1972, effective January 29, 1972, 2 Pa.B. 121.

[Next page is 113-1.]

111-24

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