

# VERMONT SEED STANDARD REGULATIONS

## Seed Standard Regulations

### Section I. Statutory Authority

The following seed standard regulations are hereby promulgated by the Secretary of Agriculture, Food and Markets pursuant to the authority of 6 V.S.A. Chapter 35, subchapter 2, 642(b) and 644(b).

### Section II. Definitions

As used in these rules:

- A. "Advertisement" means all representations, other than those on the label, disseminated in any manner or by any means, relating to seed within the scope of these regulations.
- B. "Agency" means the agency of agriculture, food and markets.
- C. "Agricultural Seed" includes the seeds of grass, forage, cereal, oil and fiber crops and any other kinds of seeds commonly recognized within this State as agricultural seeds, lawn seeds and combinations of such seeds, and may include noxious-weed seeds when the secretary determines that such seed is being used as agricultural seed.
- D. "Blend" means seed consisting of more than one variety of a kind, each in excess of five percent (5%) by weight of the whole.
- E. "Brand" means a word, name, symbol, number, or design used to identify seed of one person to distinguish from seed of another person.
- F. "Certifying Agency" means:
  - (1) An agency authorized under the laws of a state, territory or possession to officially certify seed and which has standards and procedures approved by the United States Secretary of Agriculture to assure the genetic purity and identity of the seed certified, or
  - (2) An agency of a foreign country determined by the United States Secretary of Agriculture to adhere to procedures and standards for seed certifying agencies under Section II D.I.

G. "Complete record" means any and all information which relates to the origin, treatment, germination, purity, kind and variety of each lot of agricultural seed sold in this State or which relates to the treatment, germination, kind and variety of each lot of vegetable and flower seed sold in this State. Such information includes: seed samples and records of declarations, labels, purchases, sales, conditioning, bulking, treatment, handling, storage, analyses, tests and examinations.

H. "Conditioning" means drying, cleaning, scarifying and other operations which could change the purity or germination of the seed and require the seed to be retested to determine the label information.

I. "Distributor" means a person who purchases, repackages and sells seeds.

J. "Dormant" means viable seed, excluding hard seed, which fails to germinate when provided the specified germination conditions for the kind of seed in question.

K. "Flower Seed" includes seed of herbaceous plants grown for their blooms, ornamental foliage or other ornamental parts and commonly known and sold under the name of flower seed or wildflower seed.

L. "Genetically engineered (GE) seed" means seed produced using a variety of methods, as identified by the National Organic Program of the U.S. Department of Agriculture, used to modify genetically organisms or influence their growth and development by means that are not possible under natural conditions or processes. Such methods include cell fusion, microencapsulation and macroencapsulation, and recombinant DNA technology (including gene deletion, gene doubling, introducing a foreign gene, and changing the positions of genes when achieved by recombinant DNA technology). Such methods do not include the use of traditional breeding, conjugation, fermentation, hybridization, in vitro fertilization, or tissue culture.

M. "Genetically engineered plant part" means a whole plant or plant part, including scions intended for planting, which contains material derived from a GE seed or is itself produced using the methods described in subdivision L. of these rules.

N. "Genuine grower declaration" means a statement signed by the grower which gives for each lot of seed the lot number, kind, variety (if known), origin, weight, year of production, date of shipment and to whom the shipment was made.

O. "Germination" means the emergence and development from the seed embryo of those essential structures which, for the kind of seed in question, are indicative of the ability to produce a normal plant under favorable conditions.

P. "Hard Seeds" means seeds which remain hard at the end of the prescribed test period because they have not absorbed water due to an impermeable seed coat.

Q. "Hermetically-Sealed Seed" means the seed was packaged within 9 months after harvest, and the container used does 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 or WVP is measured by the standards of the U.S. Bureau of Standards as: gm H<sub>2</sub>O/24 hr./100 sq. in./100° F./90% RH V 0% RH.

R. "Home Garden and Household Plantings" means the use of flower, vegetable, lawn and turf, and tree and shrub seeds which are not bought and sown for commercial agricultural uses.

S. "Hybrid" means the first generation seed of a cross produced by controlling the pollination and by combining (1) two or more inbred lines; (2) one inbred or a single cross with an open pollinated variety; or (3) two varieties or species, except open-pollinated varieties of corn (*Zea mays*). The second generation of subsequent generations from such crosses shall not be regarded as hybrids. Hybrid designations shall be treated as variety names.

T. "Inert Matter" means all matter, not seed, which includes broken seeds, sterile florets, chaff, fungus bodies and stones as determined by methods defined by rule or procedure adopted by the Secretary.

U. "Inoculant" means the organism, bacteria or virus that is deliberately mixed with seed.

V. "Introduced wildflower" means kinds or the types and varieties derived from those kinds that are not indigenous to North America.

W. "Kind" means one or more related species or subspecies which singly or collectively is known by one common name, for example; corn, oats, alfalfa and timothy.

X. "Labeling" includes all tags or other devices attached to, written, stamped, printed on any container or accompanying any seed purporting to set forth the information required on the seed label by these regulations and it may include any other information relating to the labeled seed.

Y. "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.

Z. "Mixture", "Mix" or "Mixed" means seed consisting of more than one kind, each in excess of 5% by weight of the whole.

AA. "Native wildflower" means kinds or the types and varieties derived from those kinds that are indigenous to North America.

BB. "Noxious-Weed Seeds" are defined as follows:

"Prohibited Noxious-Weed Seeds" are those seeds which are prohibited from being present in agricultural, vegetable, flower, tree, or shrub seed. They are the seeds of weeds which are highly destructive and difficult to control by good cultural practices and the use of herbicides. They include, but are not limited to, the seeds of field bindweed (*Convolvulus arvensis L.*), quackgrass (*Elymus repens (L.) Gould*), Canada thistle (*Cirsium arvense (L.) Scop.*), bedstraw (*Galium spp.*), serrated tussock (*Nasella trichotoma* (Nees) Hack.), and velvetleaf (*Abutilon theophrasti Medik.*).

"Restricted Noxious-Weed Seeds" are seeds which are very objectionable in agricultural crops, lawns and gardens of this state and which can be controlled by good cultural practices or the use of herbicides. They include, but are not limited to, the seeds of dodder (*Cuscuta spp.*), horsenettle (*Solanum carolinense L.*) wild mustard (*Brassica spp.*), wild onion (*Allium spp.*), wild radish (*Raphanus raphanistrum L.*), perennial sowthistle (*Sonchus arvensis L.*), purple loosestrife (*Lythrum salicaria L.*), and corncockle (*Agrostemma githago L.*).

CC. "Off-Type" means any seed or plant not a part of the variety in that it deviates in one or more characteristics from the variety; a seed or plant not necessarily any variety; a seed or plant resulting from cross-pollination by another kind of variety; a seed or plant resulting from uncontrolled self pollination during production of hybrid seed; or segregates from any of the other crop seed.

DD. "Persons" includes any individual, partnership, corporation, company, society or association, receiver, trustee or agent.

EE. "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.

FF. "Pure Seed" means any seed exclusive of inert matter and all other seeds not of the seed being considered as determined by methods defined by rule.

GG. "Secretary" means the secretary of agriculture, food and markets, or his or her designee.

HH. "Stop sale" means an administrative order provided by law, restraining the sale, use, disposition and movement of a definite amount of seed.

II. "Treated" means that the seed has received an application of a substance or process which substance or process is designed to reduce, control or repel certain disease organisms, insects or other pests from attacking such seeds or seedlings growing therefrom.

JJ. "Tree and shrub seed" includes seeds of woody plants commonly known and sold as tree and shrub seeds in this State.

KK. "Tree seed collector's declaration" is a statement signed by a grower or person having knowledge of the place of collection giving, for a lot of seed, the lot number, common or scientific name of the species (and subspecies, if appropriate), origin, elevation, and quantity of tree and shrub seed.

LL. "Type" means a group of varieties so nearly similar that the individual varieties cannot be clearly differentiated except under special conditions.

MM. "Undesirable Grass Seeds (UGS)" are seeds of grass species declared to be restricted noxious weed seed when found in lawn and turf seed.

NN. "Variant" means any seed or plant which (a) is distinct within the variety but occurs naturally in the variety, (b) is stable and predictable with a degree of reliability comparable to other varieties of the same kind, within recognized tolerances, when the variety is reproduced or reconstituted, and (c) was originally a part of the variety as released. A variant is not an off-type.

OO. "Variety" means a subdivision of a kind which is distinct, uniform, and stable; "distinct" in the sense that the variety can be differentiated by one or more identifiable morphological, physiological or other characteristics from all other varieties of public knowledge; "uniform" in the sense that variations in essential and distinctive characteristics are describable, and "stable" in the sense that the variety will remain unchanged in its essential and distinctive characteristics and its uniformity when reproduced or reconstituted as required by the different categories of varieties.

PP. "Vegetable Seeds" include the seeds of those crops which are grown in gardens and on truck farms and are generally known and sold under the name of vegetable or herb seeds.

QQ. "Weed Seeds" include the seeds of all plants generally recognized as weeds within this state as determined by procedure by the secretary and include noxious weed seeds.

### Section III. Labeling

Agricultural, vegetable and flower seeds exposed for sale or transported within this state shall be labeled in the following manner:

A. All seeds shall:

- (1) Have a label written in legible English and placed in a conspicuous place on, or attached to the container.
- (2) Seeds that are relabeled in their original container shall display:
  - a. Calendar month and year the test was completed to determine the percentages required for that seed,

- b. The same lot number that appears on the original label, and
- c. The identity of the person(s) relabeling the seed, if different from the original labeler.

(3) The labeling requirements will be deemed to have been met under these regulations if the seed is weighed from a properly labeled container in the presence of the purchaser.

#### B. Labeling - Treated Seeds

Treated Seeds' labels shall:

- (1) Have a word or statement indicating that the seed has been treated,
- (2) Contain commonly, accepted, coined, chemical or abbreviated chemical (generic) name of the applied substance or description of the process used, and
- (3) Contain, if the substance in the amount present with the seed is harmful to human or other vertebrate animals, a caution statement such as "Do not use for food, feed, or oil purposes." The caution for toxic substances shall be a poison statement or symbol.
- (4) If the seed is treated with an inoculant, contain the date beyond which the inoculant is not considered effective (date of expiration).

#### C. Labeling - Agricultural Seeds

For agricultural seeds, except for cool season lawn and turf grass seed and mixtures thereof as provided in Section III D., for seed sold on a pure live seed basis as provided in Section III J.; and for hybrids which contain less than 95% hybrid seed as provided in Section III K., the label shall contain:

- (1) The name of the kind and variety of each agricultural seed component present in excess of five (5) percent of the whole and the percentage by weight of each, provided that, if the variety of those kinds generally labeled as to variety, as designated in the regulations is not stated, the label shall show the name of the kind and the words, "Variety Not Stated". Hybrids shall be labeled as hybrids.
- (2) The lot number or other lot identification.
- (3) Origin (state or foreign country), if known, of alfalfa, red clover and field corn, except hybrid corn. If the origin is unknown, that fact shall be stated.
- (4) Percentage by weight of all weed seeds.

(5) The name and rate of occurrence per pound of each kind of restricted noxious weed seed present.

(6) Percentage by weight of agricultural seeds, which may be designated as "crop seeds", other than those required to be named on the label.

(7) Percentage by weight of inert matter.

(8) The total of (C) (1), (4), (6) and (7) must equal 100%.

(9) For each named agricultural seed:

a. Percentage of germination, exclusive of hard seed,

b. Percentage of hard seeds, if present,

c. The calendar month and year the test was completed to determine such percentages.

Following a. and b. above, the "total germination and hard seed" may be stated as such, if desired.

(10) Name and address of the person who labeled said seed, or who sells, offers or exposes said seed for sale within this state.

D. For cool season lawn and turf grasses including Kentucky bluegrass, red fescue, chewings fescue, hard fescue, tall fescue, perennial ryegrass, intermediate ryegrass, annual ryegrass, colonial bentgrass, creeping bentgrass and mixtures thereof:

(1) For single kinds, the name of the kind or kind and variety.

(2) For mixtures:

a. The word "mix, "mixed", or "mixture" or "blend" shall be stated with the name of the mixture. (Reference "Definitions used in this act" for specific use).

b. The heading "Pure Seed" and "Germination" or "Germ" shall be used in the proper places.

c. Commonly accepted name of kind or kind and variety of each agricultural seed component in excess of five percent of the whole, and the percentage by weight of pure seed in order of its predominance and in columnar form.

(3) Percentage by weight of agricultural seed other than those required to be named on the label (which shall be designated as "crop seed").

(4) The percentage by weight of inert matter for lawn and turf grass not to exceed 10%, except that 15% inert matter is permitted in Kentucky bluegrass labeled without a variety name. Foreign material, other than material used for coating or pelleting, as in Section III E or combination products, as in Section III L (1), to enhance the planting value, not common to grass seed, may not be added.

(5) Percentage by weight of all weed seeds. Maximum weed seed content is not to exceed one-half of one percent (0.50%) by weight.

(6) The total of (D) (1), (2), (3), (4) and (5) must total 100%.

(7) Noxious weeds and Undesirable Grass Seed that are required to be labeled will be listed under the heading "Noxious Weed Seeds" or "Undesirable Grass Seeds". Undesirable Grass Seeds may not exceed 0.50% by weight.

(8) For each agricultural seed named under (1) or (2) above:

a. Percentage of germination, exclusive of hard seed;

b. Percentage of hard seed, if present;

c. Calendar month and year the test was completed to determine such percentages. Oldest test date shall be used.

d. The statement "Sell by \_\_\_\_\_" which may be no more than 15 months from the date of test exclusive of the month of test.

(9) Name and address of the person who labeled said seed, or who sells, offers or exposes said seed for sale with the state.

E. For agricultural seeds that are coated:

(1) Percentage of pure seeds with coating material removed.

(2) Percentage by weight of coating material.

(3) Percentage by weight of inert material exclusive of coating material.

(4) Percentage of germination should be determined on 400 pellets with or without seeds.

(5) In addition to the provisions of Section III E., labeling of coated seed shall comply with the requirements of Section III A, B, and C.

F. 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:

- (1) Name of kind and variety of seed.
- (2) Lot identification, such as by lot number or other means.
- (3) (a) the calendar month and year the germination test was completed and the statement "Sell by \_\_\_\_\_ ", which may be no more than 12 months from the date of test exclusive of the month of test.

OR

- (b) The year for which the seed was packaged for sale as "Packed for yy" and the statement "Sell by yy" which shall be for a calendar year.

OR

- (c) The percentage germination and the calendar month and the test was completed to determine such percentage provided that the germination test must have been completed within 12 months exclusive of the month of test.
- (4) Name and address of the person who labeled said seed or who sells, offers, or exposes said seed for sale within this state.
- (5) For vegetable seeds which germinate less than the standard as outlined in procedures adopted by the secretary:
  - a. Percentage of germination, exclusive of hard seed,
  - b. Percentage of hard seed, if present, and
  - c. The words "Below Standard" in not less than 8-point type.

- (6) 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.

G. For vegetable seeds in containers other than packets as prepared for use in home gardens or household plantings or vegetable seeds in other than pre-planted containers, mats, tapes, or other planting devices:

- (1) The name of each kind and variety present in excess of five percent (5%) and the percentage by weight of each in order of its predominance.
- (2) Lot number or other lot identification.

- (3) For each named vegetable seed:
- a. Percentage germination exclusive of hard seed,
  - b. Percentage of hard seed, if present,
  - c. The calendar month and year the test was completed to determine such percentages.
- (4) For seeds which germinate less than the standard as outlined in procedures adopted by the secretary:
- a. Percentage of germination, exclusive of hard seed,
  - b. Percentage of hard seed, if present,
  - c. The calendar month and year the test was completed to determine such percentages,
  - d. The words "Below Standard" in not less than 8-point type.

Following a. and b. the "total germination and hard seed" may be stated as such, if desired.

- (5) Name and address of the person who labeled said seed, or who sells, offers or exposes said seed for sale within this state.
- (6) The labeling requirements for vegetable seeds in containers of more than one pound shall be deemed to have been met if the seed is weighed from a properly labeled container in the presence of the purchaser.

H. For flower seeds in packets prepared for use in home gardens or household plantings or flower seeds in replanted containers, mats, tapes, or other planting devices:

- (1) For all kinds of flower seeds:
- a. The name of the kind and variety or a statement of type and performance characteristics promulgated under the provisions of these rules.
  - b. (i) The calendar month and year the germination test was completed and the statement "Sell by\_\_ ", which may be no more than 12 months from the date of test exclusive of the month of test,

OR

- (ii) The year for which the seed was packed for sale as "Packed for yy"

and the statement "Sell by yy" which shall be for a calendar year,

OR

(iii) The percentage germination and the calendar month and year the test was completed to determine such percentage provided that the germination test must have been completed within 12 months exclusive of the month of test.

c. The name and address of the person who labeled said seed, or who sells, offers, or exposes said seed for sale within this state.

(2) For seeds of those kinds for which standard testing procedures are prescribed and which germinate less than the germination standard as outlined in procedures established by the secretary:

a. Percentage of germination exclusive of hard seeds, and

b. Percentage of hard or dormant seed, if present; and

c. The words "Below Standard" in not less than 8-point type.

(3) 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.

I. 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:

(1) The name of the kind and variety or a statement of type and performance characteristics promulgated under the provisions of these rules, and for wildflowers, the genus and species and subspecies, if appropriate.

(2) The lot number or other lot identification.

(3) For wildflower seed only with a pure seed percentage of less than ninety percent:

a. The percentage, by weight, of each component listed in order of their predominance;

b. The percentage by weight of weed seed if present; and

c. The percentage by weight of inert matter.

(4) For those kinds of seed for which standard testing procedures are prescribed:

- a. Percentage germination exclusive of hard or dormant seed;
- b. Percentage of hard or dormant seed, if present; and,
- c. The calendar month and year that the test was completed to determine such percentages.

(5) For those kinds of seed for which standard testing procedures are not available, the year of production or collection.

(6) The name and address of the person who labeled the seed or who sells, offers, or exposes the seed for sale within this state.

(7) For seeds of those kinds for which standard testing procedures are prescribed and which germinate less than the germination standard as outlined in procedures established by the secretary:

- a. Percentage of germination exclusive of hard seeds, and
- b. Percentage of hard or dormant seed, if present; and
- c. The words "Below Standard" in not less than 8-point type.

J. For agricultural seeds sold on a pure live seed basis, each container must bear a label containing the information required by subsection C. of this section above, except that:

(1) The label need not show:

- a. The percentage by weight of each agricultural seed component as required by subsection C. (1) of this section; or
- b. The percentage by weight of inert matter as required by subsection C. (7), of this section.

(2) The label must show for each named agricultural seed, instead of the information required by subsection C. (9) of this section:

- a. The percentage of pure live seed determined in accordance with these rules; and
- b. The calendar month and year in which the test determining the percentage of pure live seed was completed.

K. For agricultural and vegetable hybrid seed which contains less than 95% hybrid seed each container must bear a label containing the information required by subsection C. of this section above, and:

- (1) The percent which is hybrid shall be labeled parenthetically in direct association following named variety, i.e., Comet (85% Hybrid).
- (2) Kind or variety must be labeled as "hybrid".
- (3) Varieties in which the pure seed contains less than 75% hybrid seed shall not be labeled hybrids.

L. For combination mulch, seed and fertilizer products:

(1) The word "combination" followed by the words "mulch - seed - fertilizer (if appropriate)" must appear on the upper 30% of the principal display panel. The word "combination" must be the largest and most conspicuous type on the container, equal to or larger than the product name. The words "mulch - seed - fertilizer" shall be no smaller than one-half the size of the word "combination" and in close proximity to the word "combination". These products shall contain a minimum of 70% mulch.

(2) Analysis Label - Agricultural, lawn and turf seeds placed in a germination medium, mat, tape or other device or mixed with mulch shall be labeled as follows:

- a. Product name.
- b. Lot number.
- c. Percentage by weight of pure seed of each kind and variety named which may be less than 5% of the whole.
- d. Percentage by weight of other crop seeds.
- e. Percentage by weight of inert matter which shall not be less than 70%.
- f. Percentage by weight of weed seeds.
- g. The total of (2) (c),(d),(e) and (f) must total 100%.
- h. Name and number of noxious weed seeds per pound, if present.
- i. Percentage of germination (and hard seed if appropriate) of each kind or kind and variety named and date of test.
- j. Name and address of tagger.

M. Label requirement for tree and shrub seeds.

(1) Each container of tree and shrub seed which is sold, offered for sale, or exposed for sale, or transported within this state for sowing purposes shall bear thereon or have attached hereto in a conspicuous place a plainly written or printed label or tag in the English language, giving the following information, which statement shall not be modified or denied in the labeling or on another label attached to the container - except that labeling of seed supplied under a contractual agreement may be by invoice accompanying the shipment or by an analysis tag attached to said invoice if each bag or other container is clearly identified by a lot number stenciled on the container or if the seed is in bulk. Each bag or container that is not so identified must carry complete labeling.

(2) For all tree and shrub seeds treated as defined in these rules (for which a separate label may be used):

- a. Word or statement indicating that the seed has been treated.
- b. The commonly accepted coined, chemical or abbreviated chemical (generic) name of the applied substance or description of the process used.
- c. If the substance in the amount present with the seed is harmful to human or other vertebrate animals a caution statement such as "Do not use for food or feed or oil purposes". The caution for mercurials and similarly toxic substances shall be a poison statement and symbol.
- d. If the seed has been treated with an inoculant, the date beyond which the inoculant is not to be considered effective (date of expiration).

(3) For all tree and shrub seeds subject to these rules:

- a. Common name of the species of seed (and subspecies, if appropriate).
- b. The scientific name of the genus and species (and subspecies, if appropriate).
- 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, or geographic description, or political subdivision such as state or county.
  - (ii) For seed collected from other than a predominantly indigenous stand, identify the area of collection and the origin of the stand or state "Origin not Indigenous".

- e. The elevation or the upper and lower limits of elevations within which said seed was collected.
- f. Purity as a percentage of pure seed by weight.
- g. For those species for which standard germination testing procedures are prescribed by the secretary, the following:
  - (i) Percentage germination exclusive of hard seed,
  - (ii) Percentage of hard seed, if present,
  - (iii) The calendar month and year test was completed to determine such percentages.
- h. In lieu of g (i), (ii), and (iii) above, 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 by the secretary, the calendar year in which the seed was collected.
- j. The name and address of the person who labeled said seed or who sells, offers, or exposes said seed for sale within this state.

#### Section IV. Prohibitions

- A. A person shall not sell, offer for sale, expose for sale, or transport for sale any agricultural, flower, vegetable, or tree and shrub seed within this State that:
  - (1) Is not labeled in accordance with the provisions of these rules, or
  - (2) Has false or misleading labeling or advertisement;
  - (3) If subject to the germination requirements of Section III, unless otherwise stipulated to in Section III, the test to determine the percentage of germination required by Section III shall have been completed within a 9-month period exclusive of the calendar month in which the test was completed, immediately prior to sale, exposure for sale, or offering for sale or transportation. This prohibition does not apply to tree and shrub seeds or to agricultural or vegetable seeds in hermetically-sealed containers. Agricultural or vegetable seeds packaged in hermetically-sealed containers under the conditions defined in and promulgated under the provisions of these rules may be sold, exposed for sale or offered for sale or transportation for a period of thirty-six (36) months after the last day of the month that the seeds were tested for germination prior to packaging. If seeds in hermetically-sealed containers are sold, exposed for

sale, or offered for sale or transportation more than thirty-six (36) months after the last day of the month in which they were tested prior to packaging, they must have been retested within a nine (9) month period, exclusive of the calendar month in which the retest was completed, immediately prior to sale, exposure for sale, or offering for sale or transportation.

(4) Consists of or contains prohibited noxious weed seeds, subject to recognized tolerances.

(5) Consists of or contains restricted noxious weed seeds per pound in excess of the number prescribed by these rules or in excess of the number declared or in excess of the maximum percentage allowed (0.50%) for UGS on the label attached to the container of the seed or associated seed.

(6) Contains more than two and one-half (2 1/2) percent by weight of all weed seeds.

(7) If any labeling, advertising or other representation subject to these rules represents the seed to be certified seed or any class thereof unless:

a. It has been determined by a seed certifying agency that such seed conformed to standards of purity and identity as to kind, species (and subspecies, if appropriate), or variety, and also that tree seed was found to be of the origin and elevation claimed, in compliance with the rules and regulations of such agency pertaining to such seed; and

b. That the seed bears an official label issued for such seed by a seed certifying agency certifying that the seed is of a specified class and a specified kind, species (and subspecies, if appropriate) or variety.

(8) Is labeled with a variety name but not certified by an official seed certifying agency when it is a variety for which a U.S. Certificate of Plant Variety Protection under the Plant Variety Protection Act Subchapter (7 U.S.C. 2321 et seq.) specifies sale only as a class of certified seed; provided that, seed from a certified lot may be labeled as to variety name when used in a mixture by, or with the approval of, the owner of the variety.

B. A person shall not, within this state:

(1) Detach, alter, deface or destroy any label required by 6 V.S.A. Chapter 35 or these rules, or alter or substitute any seed in any manner that may defeat the purposes of 6 V.S.A. Chapter 35 or these rules.

(2) Use relabeling stickers without having both the calendar month and year the germination test was completed, the sell by date, as stated in Section III (d) (9), III (f) (3), and III (h) (1) (b) of these rules, and the lot number that matches the existing, original lot number. A relabeling may not occur more than one time.



- (3) Disseminate any false or misleading advertisements concerning seeds subject to 6 V.S.A. Chapter 35 or these rules in any manner or by any means.
- (4) In any way hinder or obstruct the secretary in the performance of his or her duties under these rules.
- (5) Fail to comply with a "stop sale" order or to move or otherwise handle or dispose of any lot of seed held under a "stop sale" order or tags attached thereto, except with express permission of the secretary, and for purpose specified thereby.
- (6) Use the word "trace" or the phrase "contains > than .01%" as a substitute for any statement that is required by 6 V.S.A. Chapter 35 or these rules.
- (7) To use the word "type" in any labeling in connection with the name of any agricultural seed variety.
- (8) To alter or falsify any seed label(s), seed tests(s), laboratory report(s), record(s), or other document(s) to create a misleading impression as to kind, kind of variety, history, quality or origin of seed.

#### Section V. Records

Each person whose name appears on a label as handling agricultural, flower, vegetable, or tree and shrub seed subject to 6 V.S.A. Chapter 35 or these rules shall keep for a period of two years complete records of each lot of agricultural, flower and vegetable seed handled, and keep for one year a file sample of each lot of seed after final disposition of the lot. All records and samples pertaining to the shipment or shipments involved shall be accessible for inspection by the secretary during customary business hours.

#### Section VI. Exemptions

##### A. The provisions of Sections III and IV do not apply:

- (1) To seed that is sown on the premises upon which the seed was grown.
- (2) To seed grown, sold and delivered by a producer on his or her own premises for seeding purposes to the ultimate consumer, providing such seed has neither been advertised for sale nor been delivered via commercial carrier, and providing the seed contains no prohibited noxious weed seeds or not more than one restricted noxious weed seed per 2,000 of the seeds being sold.
- (3) To seed or grain not intended for sowing purposes.
- (4) To seed in storage in, or being transported or consigned to a cleaning, conditioning or processing establishment for cleaning, conditioning or processing, provided that the invoice or labeling accompanying any shipment of said seed bears the statement, "seeds for conditioning (or processing)"; and provided that any labeling or

other representation which may be made with respect to the unclean, unconditioned or unprocessed seed shall be subject to 6 V.S.A. Chapter 35 or these rules.

(5) To any carrier in respect to any seed transported or delivered for transportation in the ordinary course of business as a carrier; provided that such carrier is not engaged in producing, conditioning or processing, or marketing seeds subject to the provisions of 6 V.S.A. Chapter 35 or these rules.

B. No person shall be subject to the penalties of 6 V.S.A. Chapter 35 or these rules, for selling or offering for sale seeds subject to the provisions of these rules which are incorrectly labeled or misrepresented as to kind, species (and subspecies if appropriate), variety, type or origin, elevation, and year of collection if required, which seeds cannot be identified by examination thereof, unless the person fails to obtain an invoice, genuine growers or tree seed collectors declaration or other labeling information and to take such other precautions as may be reasonable to insure the identity to be that which is stated. A genuine grower's declaration of variety shall affirm that the grower holds records of proof concerning parent seed, such as invoice and labels.

C. The provisions of Sections III, IV and V do not apply to tree seed produced by the consumer.

#### VII. Testing and Sampling Procedures

Methods of inspecting, testing and sampling procedures of agricultural, vegetable and flower seed shall conform to those outlined in Rules for Testing Seeds, Journal of Technology (6) 1981, and subsequently amended by the Association of Official Seed Analysts.

#### VIII. Powers of the Secretary

A. The secretary may issue a stop sale order for the violation of any of the provisions of 6 V.S.A. Chapter 35 or of these rules.

B. The sale, processing and movement of any seed subject to a stop sale order is prohibited until the secretary issues a release from the stop-sale order.

C. Stop sale tags may not be removed from the seed lots except by written permission from the secretary or upon authorized disposal of the seed lot.

D. It shall be a violation of this Section to sell or distribute seed which has been placed on stop-sale and any such violation will be subject to administrative penalties as outlined in 6 V.S.A. Chapter 35, Subchapter 2, Section 647 and/or 3 V.S.A. Chapter 25.

#### IX. Genetically engineered seed labeling

A. For seeds and plant parts which have been genetically engineered, the seed bag, container, bag tags, product use guides, technology use guides or other labeling shall specify:

- (1) the identity and relevant traits or characteristics of such seed which shall include thereon the words "biotechnology traits" "biotechnology seed traits" "biotech seed" "transgenic material" "genetic material" "contain genes that confer tolerance to glyphosate" or equally similar words that indicate to the purchaser that the seeds have been genetically engineered to convey or contain in- plant tolerance to herbicides or contain proteins with pesticidal properties.
- (2) any requirements for the safe handling, storage, transport, and use of the genetically engineered seeds including any insect resistance management or refuge management requirements;
- (3) the contact point for further information; and,
- (4) the name and address of the manufacturer, distributor, or supplier of the genetically engineered seed.

B. The requirements of these rules for the labeling of genetically engineered seeds that contain proteins with pesticidal properties to convey insect resistance shall not apply to the labeling of plant-incorporated protectants otherwise regulated under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) to the extent that these rules are in conflict with that Act or subsequent relevant Federal law (s).

#### X. Inspections and Reporting

- A. Manufacturers or processors who distribute seeds in this state shall pay annual fees to the secretary based on rates as determined by the Legislature.
- B. A flat fee shall be paid by each manufacturing or processing company that sells seeds in this state.
- C. In addition to the flat fee, a fee based on a rate of each hundred pounds of seed sold in this state in containers of more than ten pounds shall also be paid.
- D. The fee based on a rate for each hundred pounds of seed sold in this state in containers of more than ten pounds shall be based upon the prior calendar year sales.
- E. The secretary shall prepare forms to be used by manufacturers or processors who distribute seeds in this state for the remittance of fees and the reporting of seed sold in this state in containers of more than ten pounds.
- F. The manufacturers or processors of seeds sold in this state which have been genetically engineered to convey or contain in-plant tolerance to herbicides or contain proteins with pesticidal properties shall report to the secretary on or before January 15 of each year on forms supplied by the secretary. The annual report shall include the seed crop type, the name brand of the seed, the biotechnology trait expressed in the seed and the amount of each sold in the state based on weight for the previous calendar year.

Germination percentages for vegetable and flower seeds.

**Germination Standard for Vegetable Seeds.** The following standards for the germination of vegetable seeds are hereby adopted as agency procedures.

<b>KIND</b>	<b>PERCENT</b>
ANISE .....	.50
ARTICHOKE.....	.60
ASPARAGUS .....	.70
ASPARAGUSBEAN .....	.75
BASIL, SWEET .....	.70
BEAN, GARDEN.....	.70
BEAN, LIMA .....	.70
BEAN, RUNNER.....	.75
BEET .....	.65
BROADBEAN .....	.75
BROCCOLI .....	.75
BRUSSEL SPROUTS .....	.70
BURDOCK, GREAT .....	.60
CABBAGE.....	.75
CABBAGE, TRONCHUDA.....	.70
CANTALOUPE (SEE MUSKMELON)	
CARAWAY .....	.55
CARDOON .....	.60
CARROT .....	.55
CAULIFLOWER .....	.75
CELERAIC .....	.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 .....	.75
CRESS, UPLAND.....	.60
CRESS, WATER.....	.40
CUCUMBER.....	.80
DANDELION .....	.60
EGGPLANT .....	.60

ENDIVE .....	70
FENNEL, FLORENCE .....	60
FENNEL, SWEET .....	50
KALE .....	75
KALE, CHINESE .....	75
KALE, SIBERIAN .....	75
KOHLRABI .....	75
LEEK.....	60
LETTUCE .....	80
MUSKMELON .....	75
MARJORAM, SWEET .....	50
MUSTARD .....	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.....	65
SOYBEAN .....	75
SPINACH .....	60
SPINACH, NEW ZEALAND .....	40
SQUASH .....	75
THYME.....	50
TOMATO.....	75
TOMATO, HUSK .....	50
TURNIP.....	80
WATERMELON.....	70

The germination standards for all other vegetable and herb seed, for which a standard has not been established, shall be 50%.

**Kind of Flower Seeds. Subject to Germination Labeling Requirement and Germination Standard for Flower Seed.**

The following standards for the germination of flower seeds are hereby adopted as agency procedures. The percentage listed opposite each kind is the germination standard for that kind. For the kinds marked with an asterisk, the percentage is the total of percentage germination and percentage hard seed. For other kinds, it is the percentage germination.

<b>SEED KIND</b>	<b>PERCENT</b>
Archillea (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
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 (primpernel) - <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 plumosus</i> .....	50
Asparagus, sprenger, <i>Asparagus sprengeri</i> .....	55
Aster, China - <i>Callistephus chinensis</i> ; except Pompon, Powderpuff, and Princess types .....	55
Aster, China - <i>Callistephus chinensis</i> ; Pompon, Powderpuff and Princess types .....	50
Aubretia - <i>Aubretia deltoidea</i> .....	45
Baby Smilax - <i>Asparagus asparagoides</i> .....	25
Balsam - <i>Impatiens balsamina</i> .....	70
Begonia - ( <i>Begonia</i> fibrous rooted) .....	60
Begonia - ( <i>Begonia</i> tuberous rooted) .....	50
Bells of Ireland - <i>Molucella laevis</i> .....	60
Brachycome (swan river daisy) - <i>Brachycome iberidifolia</i> .....	60
Browallia - <i>Browallia elata</i> and <i>B. speciosa</i> .....	65
Bupthalam (sunwheel) - <i>Bupthalam salicifolium</i> .....	60
Calceolaria - <i>Calceolaria</i> spp .....	60
Calendula - <i>Calendula officinalis</i> .....	65
California Poppy - <i>Eschscholtzia californica</i> .....	60
Calliopsis - <i>Coreopsis bicolor</i> , <i>C. drummondii</i> , <i>C. elegans</i> .....	65
Campanula: Canterbury Bells - <i>Campanula medium</i> .....	60

**SEED KIND****PERCENT**

Cup and Saucer Bellflower - <i>Campanula medium</i>	
<i>Calycanthema</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> , Cornflower- <i>C. cyanus</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
Cerasium (snow-in-summer) <i>Cerastium biebersteini</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</i> spp. ....	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</i> <i>bipinnatus</i> ; Klondyke type - <i>C. sulphurea</i> .....	65
Crossandra - ( <i>Crossandra infundibuliformis</i> ) .....	50
Dahlia - <i>Dahlia</i> spp .....	55
Daylily - <i>Hemerocallis</i> spp .....	45
Delphinium, Perennial- <i>Belladonna</i> and <i>Bellamosum</i> types; Cardinal Larkspur - <i>Delphinium cardinale</i> ; <i>Chinensis</i> 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>Heddinsis</i> .....	70
Grass Pinks - <i>Dianthus plumarius</i> .....	60
Maiden Pinks - <i>Dianthus deltoids</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

<b>SEED KIND</b>	<b>PERCENT</b>
Dracaena - Dracaena indivisa .....	55
Dragon Tree - Dracaena draco.....	40
English Daisy - Bellis perennis.....	55
Flowering Maple - Abutilon spp.....	35
Flax - Golden flax (Linum flavum); Flowering flax L. randiflorum; Perennial flax, L. perenne .....	60
Foxglove - Digitalis spp .....	60
Gaillardia, Annual - Gaillardia pulchella; G. pieta; Perennial – G. grandiflora.....	45
Gerbera (transvaal daisy) - Gerbera jamesoni .....	60
Geum - Geum spp.....	55
Gilia - Gilia spp .....	65
Gloriosa daisy (rudbeckia) - Echinacea purpurea and Rudbeckia hirta.....	60
Godetia - Godetia amoena, G. grandiflora.....	65
Gloxinia - (Sinningia speciosa) .....	40
Gourds: Yellow Flowered - Cucurbita pepo; White Flowered- Lagenaria sisceraria; Dishcloth - Luffa cylindrical .....	70
Gypsophila: Annual Baby's Breath - Gypsophlla elegans; Perennial Baby's Breath - G. paniculata, G. pacifica G. Repens.....	70
Helenium - Helenium autumnale.....	40
Helichrysum - Helichrysum monstrosum.....	60
Heliopsis - Heliopsis scabra.....	55
Heliotrope - Heliotropium spp.....	35
Helipterum (Acroclinium) Helipterum roseum .....	60
Hesperis (sweet rocket) - Hesperis matronalis .....	65
*Hollyhock - Althea rosea .....	65
Hunnemania (mexican tulip poppy) - Hunnemania Fumariaefolia.....	60
Hyacinh bean - Dolichos lablab.....	70
Impatiens - Impatiens hostii, I. sultani.....	55
*Ipomea - Cypress Vine - Ipomea quamoclit; Moonflower — I. noctiflora; Morning Glories, Cardinal Climber, Hearts and Honey Vine - Ipomea spp .....	75
Jerusalem cross (maltese cross) - Lychnis chalconica.....	70
Job's Tears - Coix lacrymajobi .....	70
Kochia - Kochia childsii .....	55
Larkspur, Annual - Delphinium ajacis.....	60
Lantana - Lantana camara, L. hybrid.....	35
Lilium (regal lily) - Lilium regale .....	50
Linaria - Linaria spp .....	65
Lobelia, Annual - Lobelia erinus .....	65
Lunaria, Annual - Lunaria annua.....	65



<b>SEED KIND</b>	<b>PERCENT</b>
*Lupine - <i>Lupinus</i> spp .....	65
Marigold - <i>Tagetes</i> spp .....	65
Marvel of Peru - <i>Mirabilis jalapa</i> .....	60
Matricaria (feverfew) - <i>Matricaria</i> spp .....	60
Mignonette - <i>Reseda odorata</i> .....	55
Myosotis - <i>Myosotis alpestris</i> , <i>M. oblongata</i> , <i>M. palustris</i> .....	50
Nasturtium - <i>Tropaeolum</i> spp.....	60
Nemesia - <i>Nemesia</i> spp .....	65
Nemophila - <i>Nemophila insignis</i> .....	70
Nemophila, spotted - <i>Nemophila maculate</i> .....	60
Nicotiana - <i>Nicotiana affinis</i> , <i>N. sanderae</i> , <i>N. sylvestris</i> .....	65
Nierembergia - <i>Nierembergia</i> spp .....	55
Nigella - <i>Nigella damascene</i> .....	55
Pansy - <i>Viola tricolor</i> .....	60
Phacelia - <i>Phacelia campanularia</i> , <i>P. minor</i> , <i>P. tanacetifolia</i> .....	65
Penstemon - <i>Penstemon barbatus</i> , <i>P. grandiflorus</i> , <i>P. laevigatus</i> , <i>P. pubescens</i> .....	60
Petunia - <i>Petunia</i> spp .....	45
Phox, Annual - <i>Phlox drummondii</i> all types and varieties .....	55
Physalis - <i>Physalis</i> spp.....	60
Platycodon (balloon flower) - <i>Platycodon grandiflorum</i> .....	60
Plumbago, cape - <i>Plumbago capensis</i> .....	50
Ponytail - <i>Beaucarnea recurvata</i> .....	40
Poppy: Shirley Poppy - <i>Papaver rhoeas</i> ; Iceland Poppy - <i>P.</i> <i>nudicaule</i> ; Oriental Poppy - <i>P. orientale</i> ; Tulip Poppy – <i>P. glaucum</i> .....	60
Portulaca - <i>Portulaca grandiflora</i> .....	55
Primula (primrose) - <i>Primula</i> spp .....	50
Pyrethrum (painted daisy) - <i>Pyrethrum coccineum</i> .....	60
Salpiglossis - <i>Salpiglossis gloxinaeflora</i> , <i>S. sinuata</i> .....	60
Salvia - Scarlet Sage - <i>Salvia splendens</i> ; Mealycup Sage (blue bedder) — <i>Salvia</i> <i>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</i> spp.....	60
*Sensitive pant (mimosa) - <i>Mimosa pudica</i> .....	65
Shasta Daisy - <i>Chrysanthemum maximum</i> C. <i>Leucanthemum</i> .....	65
Silk Oak - <i>Grevillea robusta</i> .....	25
Snapdragon - <i>Antirrhinum</i> spp .....	55
Solanum - <i>Solanum</i> spp.....	60
Stocks: Common - <i>Mathiola incana</i> ; Evening Scented — <i>Mathiola bicornis</i> .....	65
Sunflower - <i>Helianthus</i> spp .....	70
Sunrose - <i>Helianthemum</i> spp.....	30

**SEED KIND****PERCENT**

*Sweet Pea, Annual and Perennial other than dwarf bush - Lathyrus odoratus, L latifolius.....	75
*Sweet Pea, dwarf bush - Lathyrus odoratus.....	65
Tahoka daisy - Machaeanthera tanacetifolia .....	60
Thunbergia - Thunbergia alata.....	60
Torch Flower - Tithonia speciosa .....	70
Torenia (wishbone flower) - Torenia fournieri.....	70
Tritoma Kniphofia spp.....	65
Verbena, Annual - Verbena hybrid.....	35
Vinca - Vinca rosea .....	60
Viola - Viola cornuta .....	55
Virginian stocks - Malcolmia maritime .....	65
Wallflower - Cheiranthus allioni .....	65
Yucca (Adam's needle) - Yucca filamentosa.....	50
multiflora, Z. pumila.....	65
Zinna (except Linearis and Creeping) - Zinnia angustifolia, Z. elegans, Z. grandiflora, Z. gracillima, Z. haegeana, Z. Zinnia, Linearis and Creeping - Zinnia linearis, Sanvitalia	
Procumbens.....	50
<b>All other kinds</b> .....	50

A mixture of kinds of flower seeds will be considered to be below the standard if the germination of any kind or combination of kinds constituting 25 percent or more of the mixture by number is below standard for the kind or kinds involved.

