

American Seed Trade Association
Substantive Revisions to the Federal Seed Act Regulations
Effective August 6, 2020

Prepared by Pat Miller, ASTA Director State Affairs
pmiller@betterseed.org / (512) 259-2118

Key (within text)

New Language: underline

Deleted Language: ~~strike through~~

***** text that has not changed (and is skipped for this document)

PART 201—FEDERAL SEED ACT REQUIREMENTS

Definitions

§ 201.2

§ 201.2 (h) [Terms defined]

- Delete the following:
 - “Bluestem, big—*Andropogon gerardii* Vitman”
 - “Brome, mountain—*Bromus marginatus* Steud.”
 - “Buffalograss—*Buchloe dactyloides* (Nutt.) Engelm.”
 - “Crambe—*Crambe abyssinica* R.E. Fr.”
 - “Crotalaria, sunn—*Crotalaria juncea* L.”
 - “Galletagrass—*Hilaria jamesii* (Torr.) Benth.”
 - “Guineagrass—*Panicum maximum* Jacq. var. *maximum*”
 - “Kochia, forage—*Kochia prostrata* (L.) Schrad.”
 - “Millet, browntop—*Brachiaria ramosa* (L.) Stapf”
 - “Millet, pearl—*Pennisetum glaucum* (L.) R. Br.”
 - “Napiergrass—*Pennisetum purpureum* Schumach.”
 - “Needlegrass, green—*Stipa viridula* Trin.”
 - “Panicgrass, green—*Panicum maximum* Jacq.”
 - “Rape, bird—*Brassica rapa* L. subsp. *campestris* (L.) A.R. Clapham”
 - “Rape, turnip—*Brassica rapa* L. subsp. *campestris* (L.)”
 - “Smilo—*Piptatherum miliaceum* (L.) Coss”
- Add the following:
 - “Bluestem, big—*Andropogon gerardi* Vitman”
 - “Brome, mountain—*Bromus carinatus* var. *marginatus* (Steud.) Barworth & Anderton”
 - “Buffalograss—*Bouteloua dactyloides* (Nutt.) Columbus”
 - “Camelina—*Camelina sativa* (L.) Crantz subsp. *sativa*”
 - “Crambe—*Crambe hispanica* L. subsp. *abyssinica*”
 - “Crotalaria, sunn or sunn hemp—*Crotalaria juncea* L.”
 - “Galletagrass—*Pleuraphis jamesii* Torr.”
 - “Guineagrass—*Megathyrsus maximus* (Jacq.) B.K. Simon & S.W.L. Jacobs”
 - “Kochia, forage—*Bassia prostrata* (L.) A.J. Scott”
 - “Millet, browntop—*Urochloa ramosa* (L.) T.Q. Nguyen”
 - “Millet, pearl—*Cenchrus americanus* (L.) Morrone”
 - “Napiergrass—*Cenchrus purpureus* (Schumach.) Morrone”
 - “Needlegrass, green—*Nassella viridula* (Trin.) Barkworth”
 - “Panicgrass, green—*Megathyrsus maximus* (Jacq.) B.K. Simon & S.W.L. Jacobs”
 - “Radish—*Raphanus sativus* L.”
 - “Rape, bird—*Brassica rapa* L. subsp. *oleifera*”
 - “Rape, turnip—*Brassica rapa* L. Subsp. *oleifera*”
 - “Smilo—*Oloptum miliaceum* (L.) Röser & Hamasha”
 - “Teff—*Eragrostis tef* (Zuccangi) Trotter”

§ 201.2 (i) [Terms defined]

- Delete the following:
 - “Tomato— *Lycopersicon esculentum* Mill.”
- Add the following:
 - “Tomato—*Solanum lycopersicum* L.”

§ 201.2 (l) [Terms defined]

Complete record

(1) The term “complete record” means information which relates to the origin, treatment (including but not limited to coating, film coating, encrusting, or pelleting), germination, and purity (including variety) of each lot of agricultural seed transported or delivered for transportation in interstate commerce, or which relates to the treatment (including but not limited to coating, film coating, encrusting, or pelleting), germination, and variety of each lot of vegetable seed transported or delivered for transportation in interstate commerce. Such information includes seed samples and records of declarations, labels, purchases, sales, cleaning, bulking, treatment, handling, storage, analyses, tests, and examinations.

(2) The complete record kept by each person for each chemical or biological treatment substance or lot of seed consists of the information pertaining to his own transactions and the information received from others pertaining to their transactions with respect to each chemical or biological treatment substance or lot of seed.

§ 201.2 (w) [Terms defined]

Purity. The term “purity” means the name or names of the kind, type, or variety and the percentage or percentages thereof; the percentage of other agricultural seed ~~or crop seed~~; the percentage of weed seeds, including noxious-weed seeds; the percentage of inert matter; and the names of the noxious-weed seeds and the rate of occurrence of each.

§ 201.2 (x) [Terms defined]

Inoculant. The term “inoculant” means a ~~commercial preparation containing nitrogen-fixing bacteria applied to seed~~ product consisting of microorganisms applied to the seed for the purpose of enhancing the availability or uptake of plant nutrients through the root system.

§ 201.2 (p) [Terms defined]

Mixture. The term “mixture” means seeds consisting of more than one kind or variety, each present in excess of 5 percent by weight of the whole. A mixture of varieties of a single kind may be labeled as a blend.

§ 201.2 (q) [Terms defined]

Coated Seed. The term “coated seed” means any seed unit covered with ~~any substance that changes the size, shape, or weight of the original seed. Seeds coated with ingredients such as, but not limited to, rhizobia, dyes, and pesticides are excluded.~~ a coating material.

§ 201.2 (nn) [Terms defined] ADD

Coating material. The term “coating material” means any substance that changes the size, shape, or weight of the original seed. Ingredients such as rhizobia, dyes, polymers, biologicals, and pesticides are not coating material for purposes of this part.

§ 201.2 (oo) [Terms defined] ADD

Brand. The term “brand” means a name, term, sign, symbol, or design, or a combination of them that identifies the seed of one seller or group of sellers and differentiates that seed from the seed of other sellers.

Records for agricultural and vegetable seeds

§ 201.4

§ 201.4 (b) [Maintenance and accessibility]

Each sample of agricultural seed retained shall be at least the weight required for a noxious-weed seed examination as set forth in §201.46 and each sample of vegetable seed retained shall consist of at least 400 seeds. The record shall be kept in such manner as to permit comparison with the records required to be kept by other persons for the same lot of seed so that the origin, treatment (including, but not limited to, coating, film coating, encrusting, or pelleting), germination, and purity (including variety) of agricultural seed and the treatment (including, but not limited to, coating, film coating, encrusting, or pelleting), germination and variety of vegetable seed may be traced from the grower to the ultimate consumer and so that the lot of seed may be correctly labeled. The record shall be accessible for inspection by the authorized agents of the Secretary for purposes of the effective administration of the act at any time during customary business hours.

§ 201.7

§ 201.7 [Purity (including variety)]

The complete record for any lot of seed shall include (a) records of ~~analyses, tests, and examinations~~ tests including statements of weed seeds, noxious weed seeds, inert matter, other agricultural seeds, and of any determinations of kind, variety, or type and a description of the methods used; and (b) for seeds indistinguishable by seed characteristics, records necessary to disclose the kind, variety, or type, including a grower's declaration of kind, variety, or type or an invoice, or other document establishing the kind, variety, or type to be that stated, and a representative sample of the seed. The grower's declaration shall be obtained and kept by the person procuring the seed from the grower. A copy of the grower's declaration and a sample of the seed shall be retained by the grower.

Labeling agricultural seeds

§ 201.10

201.10 (a) [Variety]

The following kinds of agricultural seeds are generally labeled as to variety and shall be labeled to show the variety name or the words "Variety Not Stated."

Alfalfa; Bahiagrass; Barley; Bean, field; Beet, field; Brome, smooth; Broomcorn; Clover, crimson; Clover, red; Clover, white; Corn, field; Corn, pop; Cotton; Cowpea; Crambe; Fescue, tall; Flax; Lespedeza, striate; Millet, foxtail; Millet, pearl; Oat; Pea, field; Peanut; Radish; Rice; Rye; Safflower; Sorghum; Sorghum-sudangrass, Soybean; Sudangrass; Sunflower; Tobacco; Trefoil, birdsfoot; Triticale; Wheat, common; Wheat, durum.

§ 201.12a

§201.12a [Lawn and turf seed mixtures]

Seed mixtures intended for ~~lawn and turf~~ seeding/planting purposes shall be designated as a mixture on the label and each seed component shall be listed on the label in the order of predominance.

§ 201.16

§ 201.16 (b) Noxious-weed seeds

Seeds or bulblets of the following plants shall be considered noxious-weed seeds in agricultural and vegetable seeds transported or delivered for transportation in interstate commerce (including Puerto Rico, Guam, and the District of Columbia). Agricultural or vegetable seed containing seeds or bulblets of these kinds shall not be transported or delivered for transportation in interstate commerce. Noxious-weed seeds include the following species on which no tolerance will be applied:

- **Remove the terms** " *Emex australis* Steinh.", " *Emex spinosa* (L.) Campd.", " *Leptochola chinensis* (L.) Nees", " *Pennisetum clandestinum* Chiov.", " *Pennisetum macrourum* Trin.",

“*Pennisetum pedicellatum* Trin.”, “*Pennisetum polystachion* (L.) Schult.”, and “*Rubus fruticosus* L. (complex)”

- **Add the terms** “*Cenchrus caudatus* (Schrad.) Kuntze”, “*Cenchrus clandestinus* Morrone”, “*Cenchrus pedicellatus* (Trin.) Morrone”, “*Cenchrus polystachios* (L.) Morrone”, “*Dinebra chinensis* (L.) P. M. Peterson & N. Snow”, “*Rubus plicatus* Weihe & Nees”, “*Rumex hypogaeus* T.M. Schust & Reveal”, and “*Rumex spinosus* L.”.

§ 201.17

§ 201.17 [Noxious-weed seeds in the District of Columbia]

- Removing the words “Quackgrass (*Elytrigia repens*)”
- Adding in their place the words “Quackgrass (*Elymus repens*)”.

§ 201.18

§ 201.18 [Other agricultural seeds (~~crop seeds~~)]

Agricultural seeds other than those included in the percentage or percentages of kind, variety, or type may be expressed as “~~crop seeds~~” or “other crop seeds,” but the percentage shall include collectively all kinds, varieties, or types not named upon the label.

§ 201.20

§ 201.20 [Germination]

The label shall show the percentage of germination for each kind ~~or~~ kind and variety ~~or~~ kind and type ~~or~~ of kind and hybrid of agricultural seed ~~present in excess of comprising more than 5 percent or shown in the labeling to be present in a proportion of 5 percent or less of the whole.~~ The label shall show the percentage of germination for each kind, kind and variety, kind and type, or kind and hybrid of agricultural seed comprising 5 percent of the whole or less if the seed is identified individually on the label.

§ 201.21

§ 201.21 Hard seed ~~or dormant seed.~~

The label shall show the percentage of hard seed ~~or dormant seed~~, as defined in § 201.57 or § 201.57a, if any is present for any seed required to be labeled as to the percentage of germination, and the percentage of hard seed. ~~The percentages of hard seed and dormant seed shall not be included as part of the germination percentage.~~

§ 201.23

§ 201.23 [Seller and buyer information]

~~The full name and address of either the shipper or consignee shall appear upon the label. If the name and address of the shipper are not shown upon the label, a code designation identifying the shipper shall be shown.~~

Consumer packages or containers of agricultural seed for interstate shipment must be labeled as follows:

- (a) The full name and address of the interstate shipper or a code designation identifying the interstate shipper, pursuant to § 201.24, must be printed on the label.
- (b) If pursuant to paragraph (a) only a code is used to identify the interstate shipper, the full name and address of the consignee must appear on the label.
- (c) For purposes of this section and § 201.24, the term *shipper* means the seller or consignor who puts the seed into interstate commerce, and the term *consignee* means the buyer or recipient of the seed shipment.

§ 201.24

§ 201.24 [Code designation.]

~~The code designation used in lieu of the full name and address of the person who transports or delivers seed for transportation in interstate commerce shall be approved by the Administrator of the Agricultural Marketing Service or such other person as may be designated by him for the~~

~~purpose. When used, the code designation shall appear on the label in a clear and legible manner.~~

The code designation used in lieu of the full name and address of the interstate shipper pursuant to § 201.23(a) shall be approved by the Administrator of the Agricultural Marketing Service (AMS) or such other person designated by the Administrator for the purpose. When used, the AMS code designation shall appear on the label in a clear and legible manner, along with the full name and address of the consignee.

Labeling vegetable seeds

§ 201.26a

§ 201.26a [Vegetable seed mixtures] ADD

Vegetable seed mixtures for seeding/planting purposes shall be designated as a mixture on the label, and each seed component shall be listed on the label in the order of predominance.

20. Revise § 201.27 to read as follows:

§ 201.27

§ 201.27 [Seller and buyer information]

~~The full name and address of either the shipper, or consignee, shall appear upon the label except that if the name and address of the shipper are not shown, a code designation identifying the shipper shall be shown.~~

Consumer packages or containers of vegetable seed for interstate shipment must be labeled as follows:

(a) The full name and address of the interstate shipper or a code designation identifying the interstate shipper, pursuant to § 201.28, must be printed on the label.

(b) If pursuant to paragraph (a) only a code is used to identify the interstate shipper, the full name and address of the consignee must appear on the label.

(c) For purposes of this section and § 201.28, the term *shipper* means the seller or consignor who puts the seed into interstate commerce, and the term *consignee* means the buyer or recipient of the seed shipment.

§ 201.28

§ 201.28 [Code designation.]

~~The code designation used in lieu of the full name and address of the person who transports or delivers seed for transportation in interstate commerce shall be approved by the Administrator of the Agricultural Marketing Service or such other person as may be designated by him for the purpose. When used, the code designation shall appear on the label in a clear and legible manner.~~

The code designation used in lieu of the full name and address of the interstate shipper pursuant to § 201.27(a) shall be approved by the Administrator of the Agricultural Marketing Service (AMS) or such other person designated by the Administrator for the purpose. When used, the AMS code designation shall appear on the label in a clear and legible manner, along with the full name and address of the consignee.

§ 201.29

§ 201.29 [Germination of vegetable seed in containers of 1 pound or less]

Vegetable seeds in containers of 1 pound or less which have a germination percentage equal to or better than the standard set forth in § 201.31 need not be labeled to show the percentage of germination and date of test. Each variety of vegetable seed which has a germination percentage less than the standard set forth in § 201.31 shall have the words "Below Standard" clearly shown in a conspicuous place on the label or on the face of the container in type no smaller than 8 points. Each variety which germinates less than the standard shall also be labeled to show the percentage of germination and the percentage of hard seed (if any).

§ 201.30c

§ 201.30c [Noxious-weed seeds of vegetable seed in containers of more than 1 pound] ADD
Except for those kinds of noxious-weed seeds shown in § 201.16(b), the names of kinds of noxious-weed seeds and the rate of occurrence of each shall be expressed in the label in accordance with, and the rate shall not exceed the rate permitted by, the law and regulations of the State into which the seed is offered for transportation or is transported. If in the course of such transportation, or thereafter, the seed is diverted to another State of destination, the person or persons responsible for such diversion shall cause the seed to be relabeled with respect to noxious-weed seed content, if necessary, to conform to the laws and regulations of the State into which the seed is diverted.

Labeling in general

§ 201.31a

§ 201.31a [Labeling treated seed]
(b) *Name of substance or active ingredient.* The name of any active ingredient substance as required by paragraph (a) of this section shall be the commonly accepted coined, chemical (generic), or abbreviated chemical name. The label shall include either the name of the genus and species or the brand name as identified on biological product labels. Commonly accepted coined names are free for general use by the public, are not private trademarks, and are commonly recognized as names of particular substances, such as thiram, captan, lindane, and dichlone. Examples of commonly accepted chemical (generic) names are blue-stone, calcium carbonate, cuprous oxide, zinc hydroxide, hexachlorobenzene, and ethyl mercury acetate. The terms “mercury” or “mercurial” may be used in labeling all types of mercurials. Examples of commonly accepted abbreviated chemical names are BHC (1,2,3,4,5,6-Hexachlorocyclohexane) and DDT (dichloro diphenyl trichloroethane).

Purity analysis in the administration of the act

§ 201.46

§ 201.46 [Weight of working sample]
(b) Mixtures consisting of one predominant kind of seed or groups of kinds of similar size. The weights of the purity and noxious-weed seed working samples in this category shall be determined by the kind or group of kinds which ~~comprise~~ comprise more than 50 percent of the sample.

§ 201.46

§ 201.46 [Weight of working sample] TABLE

Name of seed	Camelina	Radish	Teff
Minimum weight for purity analysis (grams)	4	40	880
Minimum weight for noxious-weed seed exam (grams)	30	300	75
Approximate number of seed per gram	1	10	3288

§ 201.47a

§ 201.47a [Seed Unit]
The seed unit is the structure usually regarded as a seed in planting practices and in commercial channels. The seed unit may consist of one or more of the following structures:

- (a) True seeds;
- (b) For the grass family:
 - (1) Caryopses and single florets;
 - (2) Multiple florets and spikelets in tall oatgrass (*Arrhenatherum elatius*), oat (*Avena* spp.), grammas (*Bouteloua* spp.), rhodesgrass (*Chloris gayana*), barley (*Hordeum vulgare*), and bluegrass (*Poa* spp.);
 - (3) Entire spikelets in bahiagrass, bentgrasses, dallisgrass, guineagrass, browntop millet, foxtail millet, proso millet, panicgrasses, redtop, rice,

switchgrass, and vaseygrass. Entire spikelets which may have attached rachis segments, pedicels, and sterile spikelets in big bluestem, little bluestem, sand bluestem, yellow bluestem, bottlebrush-squirreltail, broomcorn, yellow indiagrass, johnsongrass, sorghum, sorghum- sudangrass, sorghum alnum, sorgrass, and sudangrass;

(4) Spikelet groups:

(i) Spikelet groups that disarticulate as a unit in galletagrass;

(ii) Spikelet groups that disarticulate as units with attached rachis and internodes in bluestems, side-oats grama, and yellow indiagrass;

(5) Fascicles of buffelgrass (*Cenchrus ciliaris*) consisting of bristles and spikelets;

(6) Burs of buffalograss (~~*Buchloe dactyloides*~~ *Bouteloua dactyloides*);

(7) Bulblets of bulbous bluegrass (*Poa bulbosa*);

(8) Multiple units as defined in §201.51a(b)(1).

(c) Dry indehiscent fruits in the following plant families: Buckwheat (Polygonaceae), sunflower (~~Compositae~~ Asteraceae), geranium (Geraniaceae), goosefoot (Chenopodiaceae), and valerian (Valerianaceae);

(d) One- and two-seeded pods of small-seeded legumes (~~Leguminosae~~ Fabaceae), burs of the burclovers (*Medicago arabica*, *M. polymorpha*), and pods of peanuts (*Arachis hypogaea*). (This does not preclude the shelling of small-seeded legumes for purposes of identification.) Pods of legumes normally containing more than two seeds, when occurring incidentally in the working sample, should be hulled if the kind is hulled when marketed;

(e) Fruits or half fruits in the carrot family (~~Umbelliferae~~ Apiaceae);

(f) Nutlets in the following plant families: Borage (Boraginaceae), mint (~~Labiatae~~ Lamiaceae), and vervain (Verbenaceae);

(g) "Seed balls" or portions thereof in multigerm beets, and fruits with accessory structures such as occur in other Chenopodiaceae and New Zealand spinach. For forage kochia refer to §201.48(j) and §201.51(a)(7).

§ 201.48

Kind or variety considered pure seed.

The pure seed shall include all seeds of each kind or each kind and variety under consideration present in excess of 5 percent by weight of the whole.

(a) Immature or shriveled seeds and seeds that are cracked or injured. For seeds of legumes (~~Leguminosae~~ Fabaceae) and crucifers (~~Cruciferae~~ Brassicaceae) with the seed coats entirely removed refer to § 201.51(a)(1);

(f) Intact fruits, whether or not they contain seed, of species belonging to the following families: Sunflower (~~Compositae~~ Asteraceae), buckwheat (Polygonaceae), carrot (~~Umbelliferae~~ Apiaceae), valerian (Valerianaceae), mint (~~Labiatae~~ Laminaceae) and other families in which the seed unit may be a dry, indehiscent one-seeded fruit. For visibly empty fruits, refer to inert matter, § 201.51(a)(6);

(g)(1) Intact burs of buffalograss (~~*Buchloe*~~ *Bouteloua dactyloides*) shall be considered pure seed whether or not a caryopsis is present. Refer to § 201.51(a)(6) for burs which are visibly empty.

(g)(3) Special purity procedures for smooth brome, ~~chewings fescue~~, ~~red fescue~~, ~~orchardgrass~~, fairway crested wheatgrass, standard crested wheatgrass, intermediate wheatgrass, pubescent wheatgrass, tall wheatgrass, and western wheatgrass are listed in § 201.51a(b).

§ 201.51

§ 201.51 [Inert matter]

Inert matter shall include seeds and seed-like structures from both crop and weed plants and other material not seeds as follows:

(a) Seeds and seed-like structures from crop plants:

(1) Seeds of legumes (~~Leguminosae~~ Fabaceae) and crucifers brassica (~~Cruciferae~~ Brassicaceae) with the seed coats entirely removed. Refer to §210.48(a) for pure seed classification.

(b) Seeds and seed-like structures from weed plants, which by visual examination (including the use of light or dissection), can be determined to be within the following categories:

(2) Grass florets and caryopses classed as inert:

(iv) Immature florets of quackgrass (~~Agropyron~~ Elymus repens) in which the caryopses are less than one-third the length of the palea. The caryopsis is measured from the base of the rachilla;

(v) Free caryopses of quackgrass (~~A. E.~~ repens) that are 2 mm or less in length.

(4) Immature seed units, devoid of both embryo and endosperm, such as occur in but not limited to the following plant families: Sedge (Cyperaceae), buckwheat (Polygonaceae), morning glory (Convolvulaceae), nightshade (Solanaceae), puncturevine (Zygophyllaceae) and sunflower (~~Compositae~~ Asteraceae). Cocklebur (Xanthium spp.) burs are to be dissected to determine whether or not seeds are present.

§ 201.51a

§ 201.51a Special procedures for purity analysis. (*replaces all language*)

(a) The laboratory analyst shall use the Uniform Blowing Procedure described in this paragraph to separate pure seed and inert matter in the following: Kentucky bluegrass, Canada bluegrass, rough bluegrass, Pensacola variety of bahiagrass, orchardgrass, blue grama, and side-oats grama.

(1) *Separation of mixtures.* Separate seed kinds listed in this section from other kinds in mixtures before using the Uniform Blowing Procedure.

(2) *Calibration samples.* Obtain calibration samples and instructions, which are available on loan through the Seed Regulatory and Testing Division, S&T, AMS, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054.

(3) *Blowing point.* Use the calibration samples to establish a blowing point prior to proceeding with the separation of pure seed and inert matter for these kinds.

(i) Refer to the specifications on the calibration samples for Kentucky bluegrass, orchardgrass, and Pensacola variety of bahiagrass to determine their appropriate blowing points for the Uniform Blowing Procedure.

(ii) Use the calibration sample for Kentucky bluegrass to determine the blowing points for Canada bluegrass, rough bluegrass, blue grama, and side-oats grama. Start Printed Page 40582

(A) The blowing point for Canada bluegrass shall be the same as the blowing point determined for Kentucky bluegrass.

(B) The blowing point for rough bluegrass shall be a factor of 0.82 (82 percent) of the blowing point determined for Kentucky bluegrass. The 0.82 factor is restricted to the General-type seed blower.

(C) The blowing point for blue grama shall be a factor of 1.157 of the blowing point determined for Kentucky bluegrass. Before blowing, extraneous material that will interfere with the blowing process shall be removed. The sample to be blown shall be divided into four approximately equal parts and each blown separately. The 1.157 factor is restricted to the General-type seed blower.

(D) The blowing point for side-oats grama shall be a factor of 1.480 of the blowing point determined for Kentucky bluegrass. Before blowing, extraneous material that will interfere with the blowing process shall be removed. The sample to be blown shall be divided into four approximately equal parts and each part blown separately. The 1.480 factor is restricted to the General-type seed blower.

(4) *Blower calibration.* Calibrate and test the blower according to the instructions that accompany the calibration samples before using the blower to analyze the seed sample. Use the anemometer to set the blower gate opening according to the calibration sample specifications.

(i) Determine the blowing point using a calibrated anemometer.

(ii) Position the anemometer fan precisely over the blower opening, set it at *meters per second* (m/s), run the blower at the calibrated gate setting, and wait 30 seconds before reading the anemometer.

(iii) Use this anemometer reading to determine the blower gate setting whenever the Uniform Blowing Procedure is required.

(5) *Pure seed and inert matter.* Use the calibrated blower to separate the seed sample into light and heavy portions. After completing the initial separation, remove and separate all weed and other crop seeds from the light portion. The remainder of the light portion shall be considered inert matter. Remove all weed and other crop seeds and other inert matter (stems, leaves, dirt) from the heavy portion and add them to the weed seed, other crop seed, or inert matter separations, as appropriate. The remainder of the heavy portion shall be considered pure seed.

(b) * * *

Table of Factors to Apply to Multiple Units^a

Percent of single units of each kind	Crested wheat-grass ^b	Pubescent wheat-grass	Intermediate wheat-grass	Tall wheat-grass ^c	Western wheat-grass ^c	Smooth brome
50 or below	70	66	72			72
50.01-55.00	72	67	74			74
55.01-60.00	73	67	75			75
60.01-65.00	74	67	76			76
65.01-70.00	75	68	77		60	78
70.01-75.00	76	68	78		66	79
75.01-80.00	77	69	79	50	67	81
80.01-85.00	78	69	80	55	68	82
85.01-90.00	79	69	81	65	70	83
90.01-100.00	79	70	82	70	74	85

^a The factors represent the percentages of the multiple unit weights which are considered pure seed. The remaining percentage is regarded as inert matter.

^b Includes both standard crested wheatgrass and fairway crested wheatgrass.

^c Dashes in table indicate that no factors are available at the levels shown.

Table of Factors To Apply to Multiple Units^a

Germination tests in the administration of the act

§ 201.56

§201.56 Interpretation

(d) Seed units containing more than one seed or embryo, such as New Zealand spinach seed, Beta seed, double fruits of the carrot family (Umbelliferae Apiaceae), multiple seeds of burnet,

and seed units of grasses consisting of multiple florets, shall be tested as a single seed and shall be regarded as having germinated if they produce one or more normal seedlings.

§201.58

§201.58 Substrata, temperature, duration of test, and certain other specific directions for testing for germination and hard seed

(a) Definitions and explanations applicable to table 2—(1) Duration of tests. The following deviations are permitted from the specified duration of tests: Any test may be terminated prior to the number of days listed under “Final count” if the maximum germination of the sample has then been determined. The number of days stated for the first count is approximate and a deviation of 1 to 3 days is permitted. If at the time of the prescribed test period the seedlings are not sufficiently developed for positive evaluation, it is possible to extend the time of the test period two additional days. If the prescribed test period or the allowed extension falls on a weekend or public holiday, the test may be extended to the next working day. (Also, see paragraph (a)(5) of this section and § 201.57.) (Also, see paragraph (a)(5) of this section and § 201.57.)

TABLE 2 TO PARAGRAPH (C)(3)
(additions)

Name of seed	Substrata	Temperature (°C)	First count days	Final count days	Additional directions	
					Specific requirements	Fresh and dormant seed
AGRICULTURAL SEED						
Camelina	TB	20	4	7		
Oat	B,T,S	20:15	5	10	<i>Prechill at 5 or 10 °C for 5 days and test for 7 days or predry and test for 10 days.</i>	
Radish	B,T	20	4	6		
Teff	TB	20-30	4	7	KNO ₃	
VEGETABLE SEED						
Brussels Sprouts	B,P,T	20-30	3	10	Prechill 5 days at 5 or 10 °C for 3 days; KNO ₃ and Light	

Tolerances

§ 201.60

§201.60 Purity percentages

(a) (1) The tolerance for a given percentage of the purity components is the same whether for pure seed, other crop seed, weed seed, or inert matter. Wider tolerances are provided when 33 percent or more of the sample is composed of seed plus empty florets and/or empty spikelets of the following chaffy kinds: bentgrasses, bermudagrasses, bluegrasses, bluestems, bottlebrush-squirreltail, bromes, buffalograss, buffelgrass, carpetgrass, soft chess, dallisgrass, fescues, foxtails, galletagrass, guineagrass, gramas, molassesgrass, tall oatgrass, orchardgrass, redtop, rescuegrass, rhodesgrass, Indian ricegrass, ryegrasses, sweet vernalgrass, teff, vaseygrass, veldtgrass, wheatgrasses, wildryes, and yellow indiagrass. The wider tolerances do not apply to seed devoid of hulls.

(b) (2) All other components. Values for H and L shall be obtained from the last column of Table 1, §201.46, or by laboratory tests for inert matter, weed seeds, or other crop seeds where such values are not obtainable from Table 1. In computing tolerances for nonchaffy kinds the values for T1 are taken from column C of Table 3, and for chaffy kinds the values for T1 are taken from column D of Table

§ 201.61

~~§ 201.61 Fluorescence percentages in ryegrasses.~~ Fluorescence Tolerance, Based on Test Fluorescence (TFL)

§ 201.64

§ 201.64 Pure live seed.

The tolerance for pure live seed shall be determined by applying the respective tolerances to the germination plus the hard seed and dormant seed, and the pure seed.

$$PLS = \frac{[\text{Germination \%} + \text{Hard Seed \%} + \text{Dormant Seed \%}] \times \text{Pure Seed \%}}{100}$$

Certified Seed

§ 201.68

§ 201.68 Eligibility requirements for certification of varieties.

~~The certifying agency shall require the originator, developer, or owner of the variety, or agent thereof, to make the following available when eligibility for certification is requested:~~

When a seed originator, developer, owner of the variety, or agent thereof requests eligibility for certification, the certification agency shall require the person to provide the following information upon request:

(a) The name of the variety.

(b) A statement concerning the variety's origin and the breeding or reproductive stabilization procedure used in its development.

§ 201.70

§ 201.70 Limitations of generations for certified seed.

(a) Recertification of the Certified class may be permitted when no Foundation or Registered seed is being maintained; or

§ 201.74

§ 201.74 Labeling of all classes of certified seed

(a) All classes of certified seed when offered for sale shall have an official certification label affixed to each container clearly identifying the certifying agency, the lot number or other identification, the variety name (~~if certified as to variety~~), and the kind and class of seed.

(b) In the case of seed sold in bulk, the invoice or accompanying document shall identify the certifying agency, the crop kind, variety (~~if certified as to variety~~), class of seed, and the lot number or other identification.

(c) The official certification label may be printed directly on the container when an accounting of the containers is required by the certifying agency. The seed lot number or other identification number, the kind, and variety name (~~if certified to variety~~) shall appear on the official label and/or directly on the container in a position to be viewed in conjunction with the official certification label.

§ 201.75

§ 201.75 Interagency certification

(b) Seed to be recognized for interagency certification must be received in containers carrying official certification labels, or if shipped for processing, evidence of its eligibility from another official certifying agency, together with the following information:

(1) Variety (~~if certified as to variety~~) and kind;

(2) Quantity of seed (pounds or bushels);

(3) Class of certified seed;

(4) Inspection or lot number traceable to the previous certifying agency's records.

(c) Each label used in interagency certification shall be serially numbered or carry the certification identity number and clearly identify the certifying agencies involved, the variety (if certified as to

variety), and the kind and class of seed. The seed lot number or other identification number, the kind, and variety name (if certified to variety) shall appear on the official label and/or directly on the container in a position to be viewed in conjunction with the official certification label.

§ 201.76

§ 201.76 Minimum Land, Isolation, Field, and Seed Standards. **ADD**

Crop	Foundation				Registered				Certified			
	Land	Isolation	Field	Seed	Land	Isolation	Field	Seed	Land	Isolation	Field	Seed
Camelina	⁸ 1	⁶¹ 50 (⁵⁹ 15.24m)	5,000	0.1	⁸ 1	⁶¹ 50 (⁵⁹ 15.24m)	2,000	0.2	⁸ 1	⁶¹ 50 (⁵⁹ 15.24m)	1,000	0.3
Chickpea	⁷ 1	²³ 0	10,000	0.1	⁷ 1	²³ 0	2,000	0.2	⁷ 1	²³ 0	1,000	0.2
Hemp	⁶³	⁶³	⁶³	⁶³	⁶³	⁶³	⁶³	⁶³	⁶³	⁶³	⁶³	⁶³
Radish	⁶⁰ 5	^{1,320} (⁵⁹ 402.34m)	0	0.05	⁶⁰ 5	^{1,320} (⁵⁹ 402.34m)	1,000	0.1	⁶⁰ 5	⁶⁶⁰ (⁵⁹ 201.17m)	500	0.25
Sunn hemp	⁷ 1	^{1,320} (⁵⁹ 402.34m)	⁶² 5,000	0.1	⁷ 1	⁶⁶⁰ (⁵⁹ 201.17m)	⁶² 1,000	0.25	⁷ 1	³³⁰ (⁵⁹ 100.58m)	⁶² 500	0.5

Additional Requirements for the Certification of Plant Materials of Certain Crops

§ 201.78

§ 201.78 Pollen control for hybrids.

(e) *Hybrid alfalfa*. When at least 75 percent of the plants are in bloom and there is no more than 15 percent seed set, 200 plants shall be examined to determine the pollen production index (PPI). Each plant is rated as 1, 2, 3 or 4 with “1” representing no pollen, “2” representing a trace of pollen, “3” representing substantially less than normal pollen, and “4” representing normal pollen. The rating is weighted as 0, 0.1, 0.6 or 1.0, respectively. The total number of plants of each rating is multiplied by the weighted rating and the values are totaled. The total is divided by the number of plants rated and multiplied by 100 to determine the PPI. ~~The maximum PPI allowed is 14 for the Foundation class, and 6 for 95 percent hybrid seed, and 42 for 75 percent hybrid seed of the Certified class. For hybrid production using separate male and female rows, the maximum PPI allowed for 95 percent hybrid seed is 14 for the Foundation class, and 6 for the F1 hybrid. For hybrid production using comingled parent lines, the maximum PPI allowed for 75 percent hybrid Certified class seed is 25, with an allowance for blending to reach a PPI of 25 for fields with a PPI above 25, but no greater than 30.~~