§ 201.49 Other crop seed.

(a) Seeds of plants grown as crops (other than the kind(s) and variety(ies) included in the pure seed) shall be considered other crop seeds, unless recognized as weed seeds by applicable laws, or regulations, or by general usage. All interpretations and definitions for “pure seed” in §201.48 shall also apply in determining whether seeds are “other crop seed” or “inert matter” with the following two exceptions which may be applied as acceptable alternatives:

(1) Uniform Blowing Procedure in §201.51a(a) for kinds listed in §201.47(e) may be disregarded. If disregarded, all seed units (as defined in §201.47a) for these kinds found in the working sample shall be manually separated into pure seed and inert matter. Only units containing at least one caryopsis with some degree of endosperm development which can be detected either by slight pressure or by examination over light are considered other crop seed.

(2) Multiple Unit Procedure in §201.51a(b) for kinds listed in §201.48(g)(3) may be disregarded. If disregarded, all multiple units and single units (as defined in §201.51a(b)) for these kinds found in the working sample shall be manually separated into single florets. Each floret containing a caryopsis with some degree of endosperm development, which can be detected either by slight pressure or examination over light, are considered other crop seed. Empty florets and glumes, if present, are considered inert matter. Refer to §201.51(a)(4).

(b) [Reserved]

§ 201.50 Weed seed.

Seeds (including bulblets or tubers) of plants shall be considered weed seeds when recognized as weed seeds by the law or rules and regulations of the State into which the seed is offered for transportation or transported; or by the law or rules and regulations of Puerto Rico, Guam, or District of Columbia into which transported, or District of Columbia in which sold; or found by the Secretary of Agriculture to be detrimental to the agricultural interests of the United States, or any part thereof. Damaged weed seeds and immature seedlike structures, as described in §201.51(b), shall be considered inert matter. Weed seeds, as defined above in this section, requiring further separation into weed seed and inert matter components are as follows:

(a) The individual seeds are to be removed from fruiting structures such as pods and heads. The seeds are classified as weed seed and the remaining fruiting structures classified as inert matter.

(b) Wild onion and wild garlic (Allium spp.) bulblets that have any part of the husk remaining and are not damaged at the basal end are considered weed seeds regardless of size. Bulblets that are completely devoid of husk, and are not damaged at the basal end, and are retained by a 1/13-inch (1.9 mm) round-hole sieve are considered weed seeds. For wild onion and wild garlic (Allium spp.) bulblets classed as inert matter, refer to §201.51(b)(5).

§ 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) and crucifers (Cruciferae) with the seed coats entirely removed. Refer to §210.48(a) for pure seed classification.
(2) Pieces of broken and damaged seed units, including those that are insect damaged, which are one-half the original size or less. If greater than one-half, refer to §201.48(b) and (c) for pure seed classification. Also included as inert matter are separated cotyledons of legumes, irrespective of whether or not the radicle-plumule axis and/or more than one-half of the seed coat may be attached.

(3) Chalcid-damaged seeds (puffy, soft, or dry and crumbly) of alfalfa, red clover, crimson clover, and similar kinds of small seeded legumes. Refer to §201.48(c) for pure seed classification.

(4) Glumes and empty florets except as stated under pure seed. Refer to §201.48 (g) and (h) for pure seed classification.

(5) Seed units with nematode galls or fungal bodies (smut, ergot, and other sclerotia) that are not entirely enclosed within the seed unit. Refer to §201.48(h) for pure seed classification.

(6) Broken seed units of Chenopodiaceae and fruit portions or fragments of monogerm beets, New Zealand spinach, buffalograss, and families in which the seed unit is a dry indehiscent one-seeded fruit that visibly do not contain a seed. Refer to §201.48 (f), (g)(1), (i), and (j) for pure seed classification.

(7) Seed units of forage kochia that pass through a 1 mm opening, square-hole sieve, when shaken for 30 seconds.

(8) The thin pericarp (fruit wall), if present on seeds of northern sweetvetch.

(9) Immature florets of smooth brome, fairway crested wheatgrass, standard crested wheatgrass, tall wheatgrass, intermediate wheatgrass, pubescent wheatgrass, western wheatgrass, fescues (Festuca spp.), and ryegrasses (Lolium spp.) in which the caryopses are less than one-third the length of the palea; the caryopsis is measured from the base of the rachilla.

(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:

(1) Damaged seed (other than grasses) with over one-half of the embryo missing.

(2) Grass florets and caryopses classed as inert:
   (i) Glumes and empty florets of weedy grasses;
   (ii) Damaged grass caryopses, including free caryopses, with over one-half the root-shoot axis missing (the scutellum excluded);
   (iii) Immature free caryopses devoid of embryo and/or endosperm;
   (iv) Immature florets of quackgrass (Agropyron 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. repens) that are 2 mm or less in length.

(3) Seeds of legumes and species of Brassica with the seed coats entirely removed.

(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). Cocklebur (Xanthium spp.) burs are to be dissected to determine whether or not seeds are present.

(5) Wild onion and wild garlic (Allium spp.) bulblets:
   (i) Bulblets which are completely devoid of the husk and pass through a 1/13th-inch, round-hole sieve.
   (ii) Bulblets which show evident damage to the basal end, whether husk is present or absent. Refer to §201.50(c) for wild onion and wild garlic (Allium spp.) bulblets classed as weed seeds.

(6) Dodder (Cuscuta spp.): Seeds devoid of embryos and seeds which are ashy gray to creamy white in color are inert matter. Seeds should be sectioned when necessary to determine if an embryo is present as when seeds have a normal color but are slightly swollen, dimpled or have minute holes.

(7) Buckhorn (Plantago lanceolata): Black seeds, with no brown color evident, whether shriveled or plump; the color of questionable seeds shall be determined by use of a stereoscopic microscope with magnification of approximately 10x and a fluorescent lamp with two 15-watt daylight-type tubes.
§ 201.51a Special procedures for purity analysis.

(a) The Uniform Blowing Procedure shall be used for the separation of 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) When kinds listed in this section appear in mixtures they shall be separated from other kinds before using the Uniform Blowing Procedure.

(2) To determine the blowing point for these procedures, individual calibration samples for Kentucky bluegrass, orchardgrass, and Pensacola variety of bahiagrass shall be used. The calibration sample for Kentucky bluegrass shall be used for Canada bluegrass, rough bluegrass, blue grama, and side-oats grama.

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

(ii) 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.

(iii) 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.

(iv) 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.

(3) Calibration samples and instructions are available on loan through the Seed Regulatory and Testing Branch, LS, AMS, Building 306, Room 213, Beltsville, Maryland 20705.

(4) The calibration samples shall be used to establish a blowing point prior to proceeding with the separation of pure seed and inert matter for these kinds. After completing the blowing procedure, remove all weed and other crop seeds from the light portion and add these to the weed or other crop separation, as appropriate. 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 these to the weed seed, other crop seed, or inert matter separations, as appropriate. The remainder of the heavy portion shall be considered pure seed.

(5) With orchardgrass, after the blowing, proceed with the multiple unit procedure.

(b) The Multiple Unit Procedure of determining the pure seed fraction shall be used only for the kinds included in the following table when multiple units are present in a sample. These methods are applicable to the kinds listed when they occur in mixtures or singly. Any single unit without attached structures, as described below, shall be considered a single unit. Multiple units and single units for the kinds listed shall remain intact. The attached glumes and fertile or sterile florets shall not be removed from the fertile floret.

(1) A multiple unit is a seed unit that includes one or more structures as follows (the length of the awn shall be disregarded when determining the