Agricultural Marketing Service, USDA § 201.51b

(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 length of a fertile floret or an attached structure):

   (i) An attached sterile or fertile floret that extends to or beyond the tip of a fertile floret;
   (ii) A fertile floret with basally attached glume, glumes, or basally attached sterile floret of any length;
   (iii) A fertile floret with two or more attached sterile and/or fertile florets of any length.

(2) Procedure for determination of multiple units:

   (i) For the single kind: determine the percentage of single units present, based on the total weight of single units and multiple units. Apply the appropriate factor, as determined from the following table, to the weight of the multiple units and add that portion of the multiple unit weight to the weight of the single units. The remaining multiple unit weight shall be added to the weight of the inert matter.

   (ii) For mixtures that include one or more of the kinds in the following table, determine the percentage of single units, based on the total weight of single units and multiple units, for each kind. Apply the appropriate factor as determined from the following table, to the weight of multiple units of each kind.

### TABLE OF FACTORS TO APPLY TO MULTIPLE UNITS

<table>
<thead>
<tr>
<th>Percent of single units of each kind</th>
<th>Chewing fescue</th>
<th>Red fescue</th>
<th>Crested wheatgrass</th>
<th>Pubescent wheatgrass</th>
<th>Intermediate wheatgrass</th>
<th>Tall wheatgrass</th>
<th>Western wheatgrass</th>
<th>Smooth brome</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 or below</td>
<td>91</td>
<td>80</td>
<td>80</td>
<td>70</td>
<td>66</td>
<td>72</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>50.01–55.00</td>
<td>91</td>
<td>81</td>
<td>81</td>
<td>72</td>
<td>67</td>
<td>74</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>55.01–60.00</td>
<td>91</td>
<td>82</td>
<td>81</td>
<td>73</td>
<td>67</td>
<td>75</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>60.01–65.00</td>
<td>91</td>
<td>83</td>
<td>82</td>
<td>74</td>
<td>67</td>
<td>76</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>65.01–70.00</td>
<td>91</td>
<td>84</td>
<td>82</td>
<td>75</td>
<td>68</td>
<td>77</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>70.01–75.00</td>
<td>91</td>
<td>86</td>
<td>82</td>
<td>76</td>
<td>68</td>
<td>78</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>75.01–80.00</td>
<td>91</td>
<td>87</td>
<td>83</td>
<td>77</td>
<td>69</td>
<td>79</td>
<td>50</td>
<td>67</td>
</tr>
<tr>
<td>80.01–85.00</td>
<td>91</td>
<td>88</td>
<td>83</td>
<td>78</td>
<td>69</td>
<td>80</td>
<td>55</td>
<td>68</td>
</tr>
<tr>
<td>85.01–90.00</td>
<td>91</td>
<td>89</td>
<td>83</td>
<td>79</td>
<td>69</td>
<td>81</td>
<td>65</td>
<td>70</td>
</tr>
<tr>
<td>90.01–100.00</td>
<td>91</td>
<td>90</td>
<td>84</td>
<td>79</td>
<td>70</td>
<td>82</td>
<td>70</td>
<td>74</td>
</tr>
</tbody>
</table>

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

Includes both standard crested wheatgrass and fairway crested wheatgrass.

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

[59 FR 64498, Dec. 14, 1994]

§ 201.51b Purity procedures for coated seed.

(a) The working sample for coated seed is obtained as described in § 201.46(d) (1) and (2), and weighed in grams to four significant figures.

(b) Any loose coating material shall be sieved, weighed, and included with the inert matter component.

(c) Coating material is removed from the seed by washing with water or other solvents such as, but not limited to, dilute sodium hydroxide (NaOH). Use of fine mesh sieves is recommended for this procedure, and stirring or shaking the coated units may be necessary to obtain de-coated seed.

(d) Spread de-coated seed on blotters or filter paper in a shallow container. Air dry overnight at room temperature.

(e) Separation of component parts:

(1) Kind or variety considered pure seed.
§ 201.52

(2) Other crop seed.
(3) Inert matter.
(4) Weed seed.
(f) The de-coated seed shall be separated into four components in accordance with §§ 201.48 through 201.51. §§ 201.51a (a) and (b) shall not be followed. The weight of the coating material is determined by subtracting the sum of the weights of the other four components from the original weight of the working sample. The percentage of coating material shall be included with the inert matter percentage. Calculate percentages of all components based on the original weight of the working sample (see paragraph (a) of this section).

[59 FR 64499, Dec. 14, 1994]

§ 201.52 Noxious-weed seeds.

(a) The determination of the number of seeds, bulblets, or tubers of individual noxious weeds present per unit weight should be made on at least the minimum quantities listed in § 201.46 Table 1: Provided, That if the following indicated numbers of a single kind of seed, bulblet, or tuber are found in the pure seed analysis (or noxious-weed seed examination of a like amount) the occurrence of that kind in the remainder of the bulk examined for noxious-weed seeds need not be noted: ½-gram purity working sample, 16 or more seeds; 1-gram purity working sample, 23 or more seeds; 2-gram purity working sample or larger, 30 or more seeds. The seeds per unit weight shall be based on the number of single seeds. The number of individual seeds shall be determined in burs of sandbur (Cenchrus spp.) and cocklebur (Xanthium spp.); in capsules of dodder (Cuscuta spp.); in berries of groundcherry, horehound, and nightshade (Solanaceae); and in the fruits of other noxious weeds that contain more than one seed. Refer to §§ 201.50 and 201.51(b)(4) for the classification of weed seeds and inert matter, respectively.

(b) A noxious-weed seed examination of coated seed samples shall be made by examining approximately 25,000 units obtained in accordance with § 201.46(d) and which have been de-coated by the method described in § 201.51b(c).

[59 FR 64499, Dec. 14, 1994]

GERMINATION TESTS IN THE ADMINISTRATION OF THE ACT

§ 201.53 Source of seeds for germination.

(a) When both purity and germination tests are required, seeds for germination shall be taken from the separation of the kind, variety, or type considered pure seed and shall be counted without discrimination as to size or appearance.

(b) When only a germination test is required and the pure seed is estimated or determined to be at least 98 percent, the pure seed for the germination test may be taken indiscriminately from a representative portion of the bulk.

(c) When only a germination test is required and the pure seed is found to be less than 98 percent, the seed for the test shall be obtained by separating the sample into two components as follows:

(1) Pure seed and (2) other crop seed, weed seed, and inert matter. In making this separation at least ¼ of the quantity required for a regular purity analysis shall be used. The whole sample must be well mixed and divided in such a manner as to get a completely representative subsample.

[10 FR 9952, Aug. 11, 1945, as amended at 20 FR 7931, Oct. 21, 1955]

§ 201.54 Number of seeds for germination.

At least 400 seeds shall be tested for germination; except that in mixtures, 200 seeds of each of those kinds present to the extent of 15 percent or less may be used in lieu of 400, in which case an additional 2 percent is to be added to the regular germination tolerances. The seeds shall be tested in replicate tests of 100 seeds or less.

[59 FR 64500, Dec. 14, 1994]

§ 201.55 Retests.

Retests shall be made as follows:

(a) When the range of 100-seed replicates of a given test exceeds the maximum tolerated range in the table appearing in this section.