

Rule Change Proposal - 4

Purpose: To standardize the pure seed unit assignment for species of *Artemisia*, adjust the working sample sizes stated in Table 2.4 for *A. ludoviciana* and *A. nova*, and add a noxious weed seed and bulk examination minimum working weight for *A. nova*.

Present rule:

Table 2.4 Weights for working samples.

Pure Seed Unit #	Kind of seed	Minimum weight for purity analysis ^a	Minimum weight for noxious-weed seed or bulk examination	Approximate number of seeds per gram ^b	Approximate number of seeds per ounce ^c
		Grams	Grams	Number	Number
27	<i>Artemisia ludoviciana</i> Nutt. Louisiana sagewort	0.5	5	8,900	253,000
27	<i>Artemisia nova</i> A. Nelson black sagebrush	1.5		2,200	62,400

Table 3A. Pure seed unit definitions

PSU Number	Description of Pure Seed Unit
27	Intact achene whether or not a seed is present. Piece of broken achene larger than one-half of the original size, unless no seed is present. Seed, with or without pericarp/seed coat. Piece of broken seed, with or without pericarp/seed coat, larger than one-half the original size.

Proposed Rule:

Table 2.4 Weights for working samples.

Pure Seed Unit #	Kind of seed	Minimum weight for purity analysis ^a	Minimum weight for noxious-weed seed or bulk examination	Approximate number of seeds per gram ^b	Approximate number of seeds per ounce ^c
		Grams	Grams	Number	Number
50	<i>Artemisia ludoviciana</i> Nutt. Louisiana sagewort	<u>0.3</u>	<u>3</u>	8,900	253,000
50	<i>Artemisia nova</i> A. Nelson black sagebrush	<u>1.2</u>	<u>12</u>	2,200	62,400

Table 3A. Pure seed unit definitions

PSU Number	Description of Pure Seed Unit
50	Intact achene, with or without one or more of the following structures: beak, bristle, hairs, pappus, wing, or firmly attached floral remnants, provided a true seed with some degree of embryo development can be detected (either by slight pressure or by examination over light). Piece of broken achene larger than one-half of the original size, unless no seed is present. Seed, with or without pericarp/seed coat. Piece of broken seed, with or without pericarp/seed coat, larger than one-half the original size.

Harmonization and impact statement: This species is not covered by the Federal Seed Act, the Canadian Food Inspection Agency Methods and Procedures for Testing Seeds, or the International Seed Testing Association Rules for Seed Testing. Standardization of the pure seed unit definition for *Artemisia* will allow for equal treatment of all species concerned and eliminate confusion among test results.

Supporting evidence: In 2007, *Artemisia tridentata* was assigned to PSU 50. At that time other species of *Artemisia* with similar achene structure were not transferred to PSU 50. This proposal recommends reassignment of *Artemisia ludoviciana* and *Artemisia nova* to PSU 50 in order to standardize the treatment of all species of *Artemisia* included under the AOSA Rules for Testing Seeds.

The purity working weight for *A. ludoviciana* is reduced from 0.5g to 0.3g based on information provided in Table 2.4 column five regarding the approximate number of seeds per gram. A working weight of 0.3g will provide approximately 2,670 seed units. Since the working weights of most small seeded species listed in Table 2.4 are given to the tenths of a gram, for *A. ludoviciana* the 0.3g will slightly exceed the minimum 2,500 seed requirement. The noxious exam working weight is generally ten times the amount for the purity analysis working weight; therefore, this working weight is reduced from 5g to 3g.

The purity working weight for *A. nova* is reduced from 1.5g to 1.2g based on information provided in Table 2.4 column five regarding the approximate number of seeds per gram. A working weight of 1.2g will provide approximately 2,640 seed units, slightly exceed the minimum 2,500 seed requirement. The noxious exam working weight is generally ten times the amount for the purity analysis working weight; therefore, 12g is recommended.

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