

Rule Change Proposal No. 5

Purpose

To clarify the pure seed unit (PSU) definitions for species associated with PSU numbers 46 and 47 currently listed in the Rules. The PSU 46 applies to *Armeria* spp., *Limonium sinuatum* (statice) and *Psylliostachys suworowii* (statice), all members of the Plumbaginaceae. The PSU 47 applies to *Poa bulbosa*, bulbous bluegrass.

Present Rule

2.6.e Pure seed unit (PSU) definitions -

46	Flower cluster or flower, with or without pedicel, unless it is obvious no achenes are present.
47	Bulblet with or without attached glumes and pedicel.

Proposed Rule

2.6.e Pure seed unit (PSU) definitions -

46	Flower cluster or flower, with or without pedicel, unless it is obvious no achenes are present. Intact achene whether or not a seed is present. Piece of broken achene larger than one-half the original size, unless no seed is present. Seed with or without seed coat Piece of broken seed, with or without seed coat, larger than one-half the original size.
47	Bulblet with or without attached glumes and pedicel. Piece of broken bulblet larger than one-half the original size.

Harmonization

The species under consideration in this proposal are not listed in the CFIA Methods and Procedures for Testing Seed.

Of the species under consideration in this proposal, only *Poa bulbosa* is listed in the Federal Seed Act. The seed unit consists of bulbets.

In the ISTA Rules the following definitions apply for the kinds considered in this proposal.

Armeria – PSD 2.

- Achene, with or without perianth, unless it is obvious that no seed is present.
- Piece of achene larger than one-half the original size, unless it is obvious that no seed is present.
- Seed, with the pericarp/testa partially or entirely removed.
- Piece of seed larger than one-half the original size, with the pericarp/testa partially or entirely removed.

Limonium and *Psylliostachys* – PSD 27.

- Flower head, with or without pedicel, unless it is obvious that no achenes are present.
- Achene, with or without perianth, unless it is obvious that no seed is present.
- Piece of achene larger than one-half the original size, unless it is obvious that no seed is present.
- Seed, with the pericarp/testa partially or entirely removed.
- Piece of seed larger than one-half the original size, with the pericarp/testa partially or entirely removed.

Poa bulbosa - PSD 63.

- Bulbil
- Piece of bulbil larger than one-half the original size.

The differences between the proposed AOSA PSU definitions versus the FSA and ISTA definitions include:

- *Armeria*, *Limonium* and *Psylliostachys* are currently combined together in under one definition in the AOSA Rules and remain so in this proposal.
- In the AOSA Rules the intact achenes of *Armeria*, *Limonium* and *Psylliostachys* are not required to contain a seed to be considered pure seed units. This is consistent with the traditional pure seed unit definition for indehiscent fruits within AOSA and species with indehiscent fruits continue to be defined in this manner in the AOSA Rules. ISTA takes a more subjective approach by including the statement “achene, ...unless it is obvious that no seed is present.” By viewing only the exterior of an indehiscent fruit this determination cannot be accurately made.

- In the case of *Poa bulbosa* the glumes and pedicel often remain attached to the bulblet (bulbil). The AOSA definition does not require the time consuming removal of the structures. The FSA and ISTA rules require the removal of these structures.

Supporting Evidence

PSU 46 applies to *Armeria* spp., *Limonium sinuatum* (statice) and *Psylliostachys suworowii* (statice) and PSU 47 applies to *Poa bulbosa*, bulbous bluegrass. The PSU 46 and 47 were inadvertently incompletely printed in the February 2002 AOSA/SCST Seed Technologist Newsletter, and as a result when the PSU definitions were adopted by AOSA in 2002 the complete definitions were never formally adopted. The definitions adopted in 2002 do not adequately describe all the structures that are considered “seed” in planting practices and commercial channels. Unfortunately this mistake was not recognized until after the 2002 AOSA business meeting. This proposal will correct the definitions to what was recommended by the AOSA Purity Subcommittee during the development of these PSU definitions for the original 2002 proposal.

Submitted By

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