2019 Rule Change Proposal 17- Amended

Purpose: To provide clarification for counting the number of grass ‘seeds’ when found as weed contaminants.

Present and Proposed Rule: (proposed changes indicated in red text)

3.4 Weed seed. — Seeds, florets, bulblets, tubers, or sporocarps of plants recognized as weeds by laws, official regulations, or by general usage shall be considered weed seeds; refer to section 4. For classification of badly damaged or immature weed seeds or seed-like structures refer to section 3.5 b. Special requirements are as follows:

a. Individual seeds and seed-like structures are to be removed from fruiting structures (such as capsules, heads, pods, etc.), counted and included with the weed seeds. Grass spikelets or spikelet groups are to be separated into individual florets and those containing caryopses are counted as weed seeds (refer to section 3.5 b for inert matter related to grass weeds). Fruiting structures and accessory structures as specified in section 3.5 b are included with the inert matter. For Ambrosia spp. refer to section 3.5 b (8).

b. Wild onion and wild garlic (Allium spp.) bulblets:

   (1) Bulblets that have any part of the husk remaining and are not damaged at the basal end are considered weed seeds regardless of size.

   (2) Bulblets that are completely devoid of husk, and are not damaged at the basal end, and are retained by a 1/13-inch round-hole sieve are considered weed seeds. For Allium spp., bulblets classed as inert matter, refer to section 3.5 b (5).

Harmonization Statement: Under sec. 201.50(a) of the Federal Seed Act Regulations (FSA), individual weed seeds are treated in a similar manner as under the AOSA Rules. The ISTA Rules have similar definitions to AOSA; however, multiple units of contaminating grasses are to be separated. This proposal would better align the AOSA Rules with the ISTA Rules to account for the number of weedy grass propagules. Currently, Sec. 3.2.6.b. of the Canadian Methods and Procedures (M&P) is similar in treatment of weed seeds for non-grass species with certain exceptions applying to Juncus spp. The M&P does not clearly state multiple seed units of weedy grass species are to be separated into individual florets, although according to sec.3.9.2, the name and number of each impurity found is to be reported implying individual seeds and seed-like structures are counted.

Supporting Evidence: The Purity Subcommittee received questions regarding how to properly account weed seeds of grasses with multi-seeded structures. Based on the questions submitted, it became apparent the intention of sec. 3.4a was not clear for application to weedy grasses. The proposed text should clarify the original intent of section 3.4a, which is to count individual weed seeds that have potential to produce plants in the field.

Under sec. 201.50(a) of the Federal Seed Act Regulations (FSA), individual weed 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. The term “such as” that is used in the instructions in the FSA and AOSA is not limited to the examples given, rather it
leaves open the possibility to include the separation of grass spikelets into individual florets containing caryopses to be counted as weed seeds and removal of the other structures as inert matter.

Under the ISTA Rules, the only the name of each contaminating species is required to be reported under the purity analysis (refer to ISTA Rules sec. 1.5.2.2); however, according to sec. 3.2.2, multiple seed units of certain grasses must be separated into single units, schizocarps must be separated into individual mericarps, and multiple structures, capsules, and pods are opened and the seeds are removed and non-seed material is classified as inert matter. For the ISTA determination of other seeds by number exam (similar to the AOSA bulk exam) the name and number of seeds of each species found must be reported (refer to sec. 1.5.2.4).

Currently, Sec. 3.2.6.b. of the Canadian Methods and Procedures (M&P) is similar to the AOSA Rules in the treatment of weed seeds for non-grass species (with certain exceptions applying to Juncus spp.). The M&P does not clearly state that multiple seed units of weedy grass species are to be separated into individual florets, but the instructions given under sec. 3.2.6.a. are more specific for certain grasses with respect to removal of sterile florets and basally attached appendages. Under M&P sec.3.9.2, the name and number of each impurity found is to be reported implying individual seeds and seed-like structures are counted.

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Date Submitted: October 1, 2018