

2021 Rule Change Proposal 3 (Renumbered)

Purpose of Proposal: To add a procedure to Volume 1, Section 3.8.g for verification of the kind and/or cultivar under consideration when seeds are contained in seed mats or seed tapes and to add requirements to Section 15 for reporting results when verification of kind and/or cultivar examinations are conducted on coated seed, seed tapes, and seed mats. *This proposal will only be considered if the proposed definitions for seed mats and seed tapes is adopted by the AOSA/SCST membership.*

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

3.8 Pelleted, coated or encrusted seed purity procedures

- g. **Identification and cultivar determination when method under 3.8 d is applied:** Verification of the kind of seed under consideration shall be made on 100 coated units taken from the pure coated unit component of the purity separation. Before examination, the coating material shall be removed by washing or other appropriate method. The name and number of each kind found shall be reported under other determinations on the report of analysis. If requested for cultivar determination, a minimum of 400 coated units shall be examined as above and results reported under other determinations on the report of analysis.

Identification and cultivar determination for seed tapes and seed mats: Verification of the kind of seed under consideration shall be made on 100 seed units taken from the working sample of seed tape or seed mat. Before examination, the seed units are removed from the seed tape or seed mat. Methods of removal may include stripping away the tape or mat material to free the seed units, or if necessary, moistening or washing off the tape or mat material with an appropriate solvent [refer to 3.8.e(2)]. Moistened seed units should be allowed to dry prior to examination. The name and number of each kind found shall be reported under other determinations on the report of analysis. If requested for cultivar determination, a minimum of 400 seed units shall be examined as above and results reported under other determinations on the report of analysis.

SECTION 15: REPORT OF ANALYSIS (ROA)

Laboratory reports of analysis that indicate laboratory testing was performed in accordance to the AOSA Rules for Testing Seeds are required to include, but not be limited to, the following information:

- g. When the submitted sample is treated seed, inoculated seed, film-coated seed, coated or encrusted seed, ~~or~~ pelleted seed, seed mat, or seed tape, this must be indicated.
- v. When verification of the kind under consideration is conducted on coated seed units, seed tapes, or seed mats, the name and number of each kind found shall be reported under other

determinations. When a cultivar determination is conducted on coated seed units, seed tapes or seed mats, the cultivar test results are reported under other determinations.

Harmonization and Impact Statement:

The Federal Seed Act and the Canadian Methods and Procedures for Seed Testing do not have specific methods for verification of kind and/or cultivar of seeds in seed mats or seed tapes. The proposed kind verification method is similar to that used by the ISTA Rules (2020) (see supporting evidence) for seed mats and seed tapes and is similar to the method required in the current AOSA Rules, Section 3.8.g for coated seeds.

Supporting Evidence:

Seed mats and seed tapes are available in the marketplace and yet the AOSA Rules do not recognize these seed formats nor provide methods for testing such products. The purpose of this proposal is to provide a standard method for verification of the kind of seed under consideration when the seed units are contained in seed tapes or seed mats. Below are the instructions for species verification found in the ISTA Rules (2020) that were used as a guide for developing this rule proposal.

ISTA (2020) method for verification of species for seeds found in seed mats and seed tapes (portions related to seed tapes and seed mats are highlighted in yellow):

Chapter 11: Testing coated seeds

11.1 Object

The object is to gain reproducible information as to the planting value of seeds coated in non-seed materials which have been applied in a way which makes positive identification of all individual seeds and inert matter as described in Chapter 3 impracticable without destroying the structure(s) presented for testing. For this purpose, techniques and definitions are prescribed where those described in the appropriate chapter are not directly applicable. A wide range of materials may be used to coat seeds as individuals in discrete units as in pellets or spaced in strips or sheets. However, treated seeds are not covered and should be tested according to the methods prescribed in other chapters. When specific instructions are not given, those in the appropriate chapter must be followed. Where reference is made to seed pellets the rules also apply to encrusted seed and seed granules, and where to seed tapes, to seed mats.

11.3 Purity analysis

11.3.1 Object

A purity analysis in the strict sense (i.e. of the seeds inside the pellets and tapes) is not obligatory though, if requested by the applicant, a purity analysis on depelleted seeds or seed removed from tape may be carried out in accordance with Chapter 3 of the International Rules for Seed Testing (see also 11.3.5.3). Separations for pelleted seed are defined in 11.3.2 but for taped seed no separation is made.

11.3.4 Verification of species

In order to check that the seed in the pellets is largely of the species stated by the applicant, it is obligatory to remove the pelleting material from 100 pellets taken from the pure pellet fraction of the purity test and determine the species of each seed. The pelleting material may be washed off or removed in the dry state. Similarly 100 seeds must be removed from tapes and the identity of each seed determined. For taped seed, depending on the material the tape is made of, strip off

or dissolve away the tape so that 100 seeds can be examined. When the seeds in the tape are also pelleted, remove the pelleting material as indicated above.

11.3.7 Reporting results

The result of a purity test on coated seeds must be reported as follows:

- Following the species name, the words 'seed pellets', 'encrusted seeds', 'seed granules', 'seed tapes' or 'seed mats', as applicable, must be clearly entered.
- The results must be reported to one decimal place, and the percentage of all components must total 100 %. Components amounting to less than 0.05 % must be reported as 'Trace' or 'TR' (for 'Trace').
- In the case of pelleted seeds only, the percentages of pure pelleted seeds, inert matter and unpelleted seeds must be reported in the spaces provided for 'Pure seeds', 'Inert matter', and 'Other seeds', respectively.
- The name and number of the seeds of each species found in the examination of the 100 seeds removed from the pellets or tapes must be reported under 'Other determinations.'

Reference

ISTA. 2020. International Rules for Testing Seeds. International Seed Testing Association.

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