

2022 Rule Proposal #7

Purpose of Proposal: To clarify guidelines for the evaluation of borderline seedlings in germination testing.

Present Rule: New Rule

Proposed Rule: AOSA Rules Volume 1

6.5 Evaluation of seedlings

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d. Borderline seedlings. --- These are seedlings which are on the borderline between normal and abnormal. If there is only one such seedling, count it as normal. If there is an even number, count half of them as normal. If there is an odd number, count 2 out of 3, 3 out of 5, etc., as normal. As a guideline, the percentage of doubtful seedlings evaluated should be no more than 5%; if there are more than 5% borderline seedlings, a retest should be conducted.

Harmonization and Impact Statement: The Canadian M & P includes the following statement: *Canadian Methods and Procedures for Testing Seed (M&P) 2020*

4.10.5 Borderline Seedlings

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The ISTA Handbook on Seedling Evaluation (4th Ed. 2018) includes the following statement:

8.3 Stage of development for seedling evaluation and evaluation guidelines

(Footnote 9) As a guideline, the percentage of doubtful seedlings evaluated should be no more than 5%.

Supporting Evidence: The ASTA/AASCO Uniformity Study was conducted in 2019 and reported in 2020. The findings from this study included variation in germination and viability results from different laboratories testing the same lots of seeds. A Germination Uniformity Working Group was formed in 2020 following these findings as part of a task force working on addressing the uniformity issues. This proposal was put together as a part of the effort to reduce some of the variation when borderline seedlings are found in a germination test. The Working Group thought that some of the suggestions from the Canadian M & P and the ISTA Handbook on Seedling Evaluation should be added to the AOSA Rules.

Submitted by:

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