

Changes to the AOSA Rules for Testing Seeds

The *AOSA Rules for Testing Seeds* is a set of dynamic, continually evolving documents that reflect current research in seed testing. Information contained therein is based on collaboration and research-based scientific methods. Using clearly stated, standardized test methods, seed laboratory test results are reliable and reproducible within and across laboratories.

This document was prepared by the AOSA Rules Committee and has been endorsed by the AOSA and SCST Executive Boards. It contains guidelines for any amendments and changes, including addition of new species or test methods, proposed to the *AOSA Rules for Testing Seeds* that includes Volume 1, Principles and Procedures; Volume 2, Uniform Blowing Procedure; Volume 3, Uniform Classification of Weed and Crop Seeds; and Volume 4, Seedling Evaluation.

Guidelines for Submitting an AOSA Rules Proposal:

The following guidelines shall be followed when preparing a proposed change to the AOSA Rules for Testing Seeds. All rule change proposal forms must be submitted to the AOSA Rules Chair by October 15 for review by the Rules Committee. In general, proposals should have one technical topic. Proposals must be concise (no more than 3 pages, exclusive of the Rules text), accurate and in the format described below. Additional information or supporting data (i.e. complete referee or experimental results) can be included as appendices to the proposal. To maintain consistency, proposals must use appropriate terminology and it is the author's responsibility to ensure accurate terminology. Following committee review, the proposal will be accepted for publication, returned to the author for amendment/clarification, or rejected. Confirmation of proposal status will be sent to the author(s). Proposals for consideration must be in final form by January 15 and will be published in the February *Seed Technologist* newsletter and posted online. Proposals and any respective amendments will be openly discussed at the annual meeting in advance of the voting by the AOSA and SCST memberships. Comments from any sector of the seed industry regarding published proposals are welcome and must be submitted to the Rules Chair in advance of the annual meeting. All comments received prior to the annual meeting will be noted in the discussion of the respective proposal.

What is the Purpose for Rule Change Proposals?

Rule change proposals are required for changes to be made to the *AOSA Rules for Testing Seeds* that includes Volume 1, Principles and Procedures; Volume 2, Uniform Blowing Procedure; Volume 3, Uniform Classification of Weed and Crop Seeds; and Volume 4, Seedling Evaluation. Changes to other documents are handled at the respective committee level. When preparing a proposed change to the AOSA Rules, the following

criteria must be met:

- The proposed method is equal to or better than one currently in the AOSA Rules.
- The proposed method is repeatable within a laboratory and among laboratories.
- The proposed method is necessary to meet the needs of seed analysts or the seed industry or regulatory agencies. Supporting data shall be used to determine that the above criteria have been met.

Who May Submit A Rule Change Proposal?

Rule change proposals must be sponsored by an AOSA Laboratory, AOSA Committee, AOSA Subcommittee, or SCST Registered Member. Collaborations are strongly encouraged.

How to Complete the AOSA Rule Change Proposal Form:

1. **PURPOSE OF PROPOSAL:** Please give a concise reason for submitting the rule proposal. If appropriate, include a financial impact statement if known (i.e. who and what will be affected by the proposal).
2. **PRESENT RULE:** If the rule proposal is to change or amend a present rule, provide the wording of the present rule as it appears in the current AOSA Rules. If the proposal is a new rule, state "New Rule."
3. **PROPOSED RULE:** Provide your proposed rule change as you would like to see it worded in the AOSA Rules.
4. **HARMONIZATION AND IMPACT STATEMENT:** Does this proposal harmonize with the Federal Seed Act, Canadian Methods & Procedures, and the ISTA Rules? If not, please explain the differences and rationale. State how this change will impact the seed industry and respective state regulatory officials. Demonstrate communication and collaboration with potentially affected groups. Maintain consistency between publications and state how the proposal will impact other documents and publications (e.g., other Rules volumes, TZ handbook). For example, if the proposal is to add a purity testing method, the author should also submit a proposal for a germination testing method for the kind (or provide clear documentation on the impact of the purity change on the germination test). The same is true for adding a germination method for a new species; all publications must be uniformly addressed.
5. **SUPPORTING EVIDENCE:** Please provide the following information as appropriate:
 - A. If proposing a change to a current rule, the author must provide data that substantiates the change. This may include, but is not limited to:
 - 1) Experimental data to support a change of test duration, temperature requirements, substrate or dormancy breaking

methods.

2) GRIN or other noted authority for common name changes.

3) Survey of laboratories and/or referee results.

4) Citation of related scientific publications, books, websites, etc., relevant to proposal, if any.

5) Experimental data supporting a change in test procedures to include appropriate experimental design with proper number of treatments, replications and sample sizes. A minimum of six collaborating laboratories should be included. A minimum of six seed lots representing different years, growing conditions, and/or quality levels (i.e., high, medium and low) should be used as appropriate. If the kind of seed is marketed under different varieties, an adequate number of samples from a representative number of varieties should be included in the study.

6) Supporting data must be submitted with the proposal, with raw and analyzed data included as appendices to the proposal. Raw data will be kept at the committee level; analyzed data may be published as part of the proposal, when appropriate. Data analysis should be reviewed by the statistics committee in advance of proposal submission. Additional anecdotal or unpublished evidence or information can be presented at the annual meeting in the form of an oral presentation, poster, demonstration or at the respective technical committee meeting.

7) Coordination with Germination, Purity or other technical subcommittees is strongly encouraged. A statement from the respective subcommittee chair(s) can be submitted as an appendix to the proposal, but will not be published as part of the proposal.

Communication with outside laboratory personnel having expertise with the species under investigation is encouraged.

8) Photographs or diagrams are encouraged, when appropriate.

B. If a new kind or species is being proposed, the following types of supporting evidence must accompany the proposal in addition to the criteria identified previously:

1) Seed counts in accordance with Appendix 3 in the AOSA Rules Volume 1 are required for adding new species to Table 2A.

2) Pure seed unit (PSU; Table 3A, Volume 1) classification for kinds being added to purity or germination.

3) AOSA Rules Volume 3 classification scheme for new kinds being added for purity or germination methods.

4) Comparative germination data for new species should include the following:

- A minimum of six lots; however, additional lots may be appropriate with non-uniform kinds; fewer lots may be appropriate with kinds that are not readily available. Seed lots of varying quality (e.g., high and low vigor, recently harvested and stored) should be included.

- Dormancy breaking methods for fresh seed, where appropriate.
- Alternating temperatures compared to constant temperatures.
- Light vs. dark requirements.
- Comparison of germination substrata.
- Seedling evaluation guidelines.
- Photographs or diagrams, as appropriate.

Data collected can be completed within a laboratory or in cooperation with other laboratories. Referee projects are acceptable and encouraged and, in the case of germination proposals, required. If a referee was not conducted, an explanation as to why the proposal should be accepted without having gone through the referee process must be included with the proposal.

6. **SUBMITTED BY:** Name(s) of individual(s) submitting the proposal or committee name and contact person, address, phone, fax and email address.

7. **DATE SUBMITTED:** The date of submission to the Rules Committee. If revised, the revision date must also be stated.

How to submit an AOSA Rules Change Proposal:

Rule change proposals must be submitted in electronic format (WordPerfect or MS Word) via e-mail or CD to the AOSA Rules Chair. Supporting evidence should also be submitted in an electronic format (WordPerfect, MS Word or MS Excel). The deadline

for submission of proposals is **October 15**. Proposals received after this date will not be considered.

Please note: Proposals must be complete at the time of submission (i.e. handbooks must be in final form, calibration samples available, special equipment commercially available). Proposals received without following these guidelines will be returned to the author and will not be considered by the Rules Committee. Submit proposals to the Rules Committee Chairperson:

Mike Stahr, Chair
Iowa State University Seed Laboratory
109 Seed Science Center
Ames, Iowa 50011-3228
Phone: (515) 294-6826
Fax: (515) 294-8303
Email: mgstahr@iastate.edu