

Preface to the 2025 edition of the ISTA Rules

Since 2014, the *International Rules for Seed Testing* (ISTA Rules) are primarily available in electronic format. The ISTA Rules can be downloaded as a complete PDF file or as individual chapters from:

www.ingentaconnect.com/content/ista/rules.

If required, users of the ISTA Rules can print their own copies. For further information on the ISTA Rules, see:

www.seedtest.org/en/publications/international-rules-seed-testing.html.

The electronic version includes the English, French, German and Spanish versions of the ISTA Rules. If there are any questions on interpretation of the ISTA Rules, the English version is the definitive version.

Seed health testing methods

Previously, the seed health testing methods were published as a separate Annexe to Chapter 7 of the ISTA Rules. They are now available as separate method sheets from the ISTA website at:

www.seedtest.org/en/international-rules-for-seed-testing/seed-health-methods-product-1054.html.

Details of changes

The 2025 changes are editorial corrections or Rules changes adopted at the Ordinary General Meeting held in Cambridge, United Kingdom in July 2024. Edits were made in Adobe InDesign by Vanessa Sutcliffe of HeartWood Editorial (www.heartwoodeditorial.co.uk).

The changes in the text content from the previous edition of the ISTA Rules are listed below. They can be displayed with yellow highlight boxes as a 'layer' over the English version within the electronic copy, with comments on what has changed.

Jodi Keeling, Current ISTA Rules Committee Chair

Ernest Allen, Past ISTA Rules Committee Chair

Susan Alvarez, ISTA Rules Committee Vice-Chair

ISTA Secretariat

Changes to the ISTA Rules for 2025

Introduction

I-2.2: Revision of Table 2C to merge all three parts of table into one, with species listed in alphabetical order. New column added to show minimum submitted sample weights for moisture testing. Cross references to former Table 2C Part 1 updated throughout ISTA Rules. Proposal approved by majority vote of Bulking & Sampling TCOM, with agreement of Tetrazolium and Moisture TCOMs.

Chapter 1

1.5.2.3: Editorial change for consistency in guidance between 1.5.2.3 and other sections, regarding reporting calculated totals to 100.0 %. Proposal submitted by an ISTA member laboratory and approved by ISTA Rules TCOM.

Chapter 2

2.5.2.1, 2.8, Table 2C: Revision of Table 2C to merge all three parts of table into one, with species listed in alphabetical order. New column added to show minimum submitted sample weights for moisture testing. Cross references to former Table 2C Part 1 updated throughout ISTA Rules. Proposal approved by majority vote of Bulking & Sampling TCOM, with agreement of Tetrazolium and Moisture TCOMs.

2.5.4.5: Revision of paragraph regarding minimum submitted sample weights for moisture testing, due to cross-reference from 9.2.5.1. Proposal approved by majority vote of Bulking & Sampling TCOM, with agreement of Moisture TCOM.

Chapter 4

4.5.1, 4.5.3.2: Revision of Table 2C to merge all three parts of table into one, with species listed in alphabetical order. New column added to show minimum submitted sample weights for moisture testing. Cross references to former Table 2C Part 1 updated throughout ISTA Rules. Proposal approved by majority vote of Bulking & Sampling TCOM, with agreement of Tetrazolium and Moisture TCOMs.

Chapter 5

5.2.10.1: Expansion of list of families with hard seeds, including some families that do not exhibit hard seeds. Proposal harmonises with AOSA Rules, and was developed within and supported by Germination TCOM.

5.4.1: Section revised to clarify use of paper growing media in germination testing. Raised by a member and supported by Germination TCOM.

5.4.3.1: Consequential change due to revision of 5.4.1 to clarify use of paper growing media in germination testing. Raised by a member and supported by Germination TCOM.

5.4.5: Wording updated for clarification that information in the *ISTA Handbook on Seedling Evaluation* is a guide and is not the ISTA Rules. Requested by ISTA Accreditation & Technical Department and supported by Germination TCOM.

5.6.2.1.2: Editorial correction for clarification that top of sand (TS) and top of organic growing medium (TO) cannot be used if not prescribed in Table 5A. Result of discussion between ISTA Accreditation & Technical Department and Germination TCOM; supported by Germination TCOM.

5.6.3.3, Table 5A Part 1: Addition of presoaking method for *Beta vulgaris* to remove inhibitory substances before germinating, with reduced amount of water required. Proposal harmonises with AOSA Rules and is supported by Germination TCOM and a Method Validation Study.

5.6.5.3: Consequential change due to merger of Table 5A Parts 1 and 3, being renamed Table 5A Part 1. Table 5A Part 2 remains unchanged. Proposal from discussion during ISTA Annual Meeting 2023 in Verona, supported by Germination TCOM.

5.6.5.3: Editorial change for clarification when information is requested on other categories of ungerminated seeds. Proposed by an ISTA member and supported by Germination TCOM.

Table 5A Part 1: Additional advice for testing *Spinacia oleracea* due to water sensitivity. Low moisture level recommended following report published in *Seed Testing International* 167 (April 2024). Proposal harmonises with AOSA Rules, and was developed within and supported by Germination TCOM.

Table 5A Part 1: Merger of Table 5A Parts 1 and 3, being renamed Table 5A Part 1. Table 5A Part 2 remains unchanged. Proposal from discussion during ISTA Annual Meeting 2023 in Verona, supported by Germination TCOM.

Chapter 6

- 6.5.2.1.2, 6.5.4, 6.7:** Consequential changes due to expansion of list of families with hard seeds in 5.2.10.1. Proposal harmonises with AOSA Rules, and was developed within and supported by Germination TCOM.
- 6.8:** Revision of Table 2C to merge all three parts of table into one, with species listed in alphabetical order. New column added to show minimum submitted sample weights for moisture testing. Cross references to former Table 2C Part 1 updated throughout ISTA Rules. Proposal approved by majority vote of Bulking & Sampling TCOM, with agreement of Tetrazolium and Moisture TCOMs.

Chapter 7

- Method 7-001a, 7-001b, 7-002a, 7-002b, 7-004, 7-005, 7-013a, 7-016, 7-019a, 7-019b, 7-020, 7-021, 7-023, 7-024, 7-026, 7-029:** Editorial changes to update species names and processes for several seed health methods, approved by majority vote of Seed Health TCOM.
- Method 7-033:** New method including process to detect and identify *Ascochyta rabiei* and optional test to confirm pathogenicity of isolates. Proposal submitted by Seed Health TCOM and supported by method validation study.

Chapter 9

- 9.2.5.1:** Revision of cross reference to 2.5.4.5 and Table 2C regarding minimum submitted sample weights for moisture testing. Proposal approved by majority vote

of Bulking & Sampling TCOM, with agreement of Moisture TCOM.

Table 9A: *Carica papaya* omitted from merger (due to changes in crop groups) of Table 9A Parts 1 and 2 for ISTA Rules 2024. Added by Moisture TCOM.

Table 9A: Clarification on moisture testing of ISTA recognised *Lupinus* species, including flower and other species which may have smaller seeds than those intended for current coarse grinding method for *Lupinus* spp. Each individual *Lupinus* species appropriate for coarse grinding named to avoid confusion and testing error. Proposal approved by majority vote within Moisture TCOM.

Chapter 15

15.8.4.4.2: Clarification that radicle emergence testing at two temperatures will result in same vigour ranking of seed lots, with differences in final radicle emergence percentages. Proposal accepted unanimously by Vigour TCOM.

Table 15B: Addition of *Glycine max* as a species to which radicle emergence test can be applied. Proposal approved by Vigour TCOM.

Chapter 17

17.7: Revision of Table 2C to merge all three parts of table into one, with species listed in alphabetical order. New column added to show minimum submitted sample weights for moisture testing. Cross references to former Table 2C Part 1 updated throughout ISTA Rules. Proposal approved by majority vote of Bulking & Sampling TCOM, with agreement of Tetrazolium and Moisture TCOMs.

