

Submitted Comments on the 2024 ISTA Rules proposals

Consolidated by: Ernest Allen, Rules Chair & Sue Alvarez, Vice Chair

Comments on Editorial corrections

General comment: N/A

- TCOM committee response: N/A

Comments on Proposals

C.1.1 Revision of maximum lot size allowance for *Solanum lycopersicum* L.

General comment:

- This comment is related to section 1.3 (i) of the proposal. Why should an exception be specified here only for *Solanum lycopersicum*?
- In the German expert group meeting Autumn 2022, we had pointed out to the representative of the B&S TCOM that it is also customary in the case of cereals to certify and trade sublots with less than 20% of the total lot quantity. In our opinion, it should be possible to extend the amendment of the subplot regulation to other species as well. Has this request reached the B&S TCOM?
- What is the current status here? Is there a review of the 20% rule that has applied so far?
 - **Rules/ VSI/STAT committee response:** A concern about current ISTA rules lot size requirements, specifically for tomato, was brought to the attention of the ECOM by the vegetable seed industry as being a major issue due to the difference in the way tomato seeds are generally shipped for trade and the high cost for certain varieties. After several meetings and a thorough discussion with members of the ECOM, VSI, and Rules committee, it was decided that this type of exception would only be considered if it is based on a documented validation study with statistical analysis. The VSI conducted a study, the ISTA Statistics committee agreed that the data backed the newly proposed lot size, and the ECOM agreed to allow the proposal to move forward. Additional species may be considered if they follow this process.

C.1.2 Reporting the subplot weight on an ISTA Certificate

General comment: CFIA is in favor of this proposal, i.e. allowing the weight of the original seed lot and the weight of the sub-lot to be recorded in the same place on the ISTA certificate, in the area that records the information as supplied by the applicant. The only question we have is does that mean applicant is obligated to provide sub-lot information? If applicant is not required to provide the sub-lot information then this proposal would result in the customer not having the information about whether the lot is a sub-lot?

- **BSC/ECOM/Rules committee response:**
 - It is possible that the deletion of text could cause issues from a seed control prospective.

- The laboratory will know the weight of the original seed lot and the weight of the sub-lots as the laboratory needs to confirm they do not issue more than 5 (all species) or 20 (new proposal tomato) subplot certificates, or certificates with less than 20% (all species) or 5% (new proposal tomato) of the original seed lot.

Although the laboratory will already know the weight of the lot and sub-lot, could the applicant request that this information is not included in the "As stated by applicant box"? If the applicant is allowed to do this, keeping the proposed deleted text would give more transparency to the buyer and the membership may want to keep the sentence rather than delete it.

At some future time perhaps the OIC could be improved to require the seed lot and subplot weight to be reported in a mandatory box on the OIC.

C.2.1. Revision of the method to add working and OSD weights to Table 2C

General comment: The Acronym "OSD" and its meaning (Other Seed Determination) are used too many times in this proposal and is not necessary.

PUR Response: Agreed. We have asked the Rules Chair to edit the proposal to reduce the number of times this acronym and its explanation are used.

C.2.2. Revision of maximum lot size allowance for *Solanum lycopersicum* L.

General comment: CFIA is not in favor of this proposal for the following two reasons:

1. We are questioning whether survey result would be enough to support the proposed change;
2. We also thought unnecessary to revise the weight when the maximum is just that, a maximum, and seed lots can be traded below the maximum.

BSC Response: This is related to the other proposal about sublots where 20% is sizeable. Experiments were done on small seed lots; there is a limit to prove homogeneity, or else will have to prove homogeneity on larger seed lots. That is a reason to lower the max seed lot size.

General comment:

Here we also have our concerns (analogous to the second half of the concern noted in the gray box.).

This could result in an annual effort to make changes if lot sizes are to be changed for additional species. ISTA should stick to the existing specifications of 10 000 kg and not change them unnecessarily.

Are there tomato seed lots being traded above 200 kg?

BSC/ECOM/Rules committee response: Some people have more than 1000 kg of open pollinated tomato seeds but they did not have a problem to reduce the lot size to 200 kg.

ISTA Rules TCOM is not proposing an on-going review of the maximum seed lot sizes listed in Table 2C and only progressed this one as it was related to the tomato sub-lot work with the Vegetable Seed Industry and was therefore no extra work for the TCOMs.

C.3.3. Revision to clarify C.3.5.2.4 regarding the identification of indistinguishable species.

General comment: Explain the “proficient evidence” noted in the grey box.

PUR Response:

A discussion was held on what a lab can claim as proficiency, and whether people can or cannot accurately identify some species. If a lab is not able to identify to species level, they are able to report to genus level. However, it is the lab’s decision, not the analyst’s decision. If a laboratory claims to be able to identify to species, they should be able to demonstrate this in a proficiency test or by other means.

C.5.1 Revision of retesting when fresh seed is present

General comment: CFIA agrees with the proposer’s statement, i.e. for wild and native species, seed lots containing species with fresh seeds is considered desirable and not “unsatisfactory”. However, the purpose of a germination test is to determine the germination potential of a seed lot. Instead of recording “fresh” seed percentage for all species as suggested by this proposal, maybe another way around is better. E.g., With applicant request, dormant /hard seeds can be reported with no treatment for dormancy breaking measures. This would add flexibility to native and wild species tests, but at the same time not affecting germination test principle to achieve the germination potential for other species, e.g. crop species. Fuller assessment should be a regular practice to obtain the best potential of germination, current additional wording, separating “dormancy may or may not know” and “dormancy is suspected” is confusion for reporting. Current ISTA rules are well used for normal situations to achieve maximum germination, no need to be amended for consistency among labs.

GERM response:

- In the Germ TCOM it was discussed that it is common for labs to run parallel tests if a species is known to have dormancy (run one test with and one test without dormancy breaking methods). It is a disservice to require a retest automatically. Germination potential versus viability are two separate issues, we should allow an option to report dormancy.

General Comment: Should we still allow labs not to report dormancy? Never break dormancy and always report fresh seed?

Germ Response: The Rules require a retest right now. This proposal allows another option.

General Comment: What about Wild Species? Is there an exception?

Germ Response: Section 5.2.1 germination – agrees with the suggestion that there should be an exception for wild species, not all species.

General Comment: When is a retest triggered?

Germ Response: The Wild Species Working group commented that in excess of 5% ungerminated seeds, it is required to assess viability. The main premise of the proposal is not to require a retest. The purpose of the proposal is to allow the use of dormancy breaking methods in initial testing.

General Comment: Question about harmonisation with AOSA?

GERM Response: AOSA is not required to do a retest but can run parallel tests at the start of testing to ensure that there is not a delay in getting results to the customer. The current ISTA Rules is a disservice to the industry.

C.9.1 Specifying oven temperatures and tolerances

General Comment: Why were only two laboratories used in the validation study? Only two laboratories.

MOI committee response: Kirk and Jean-Louis Chair and Vice-Chair of STAT TCOM performed a method validation study; the third lab results came late but were also in line with the two labs. Kirk suggested to do it this way (Peer Validation). It was not necessary to have more.

C.9.2 Reporting moisture content in seed mixtures

General comment: The intent for this change is clear, however there does not seem to be a study done on how several species being tested together could effect each the outcome of the test. There could also be a risk misrepresenting one species for the other, even more so than in other tests because the moisture result would be fully homogenous between the species of the mix, with no possible way of seeing abnormal behavior within the lot (e.g. one species is lower than it should be and the other higher, but added together they are both fine as a mixture).

Would adding a Validation study for this proposal be appropriate?

- **MOI committee response:** You can test everything separately, but you cannot always get the same result. The idea is to use the same method on each species in a mixture, so that they are all treated the same way. The original question leading to this proposal came from an ISTA audit.

C.9.4 Merging Parts 1 and 2 of Table 9A

General comment: The update is to be welcomed especially for the trees/shrubs but why should all agricultural and forestry species now suddenly be shown in one table? Chapters 2, 4, 5 and 6 clearly separate agricultural species/vegetables, trees/shrubs and flower/spice/herb and medicinal species. Only chapter 3 combines the genera in one table...which also makes sense for the pure seed definition.

Since species are probably only rarely moved back and forth between the different groups, the argument for this amendment does not really hold water...

The previous separation into the different groups is clearer.

MOI response: Go back to the grey box for the full explanation. An example for the need for a merger can be seen in *Malva* spp. There is no flower table for *Malva*; also, it is not always clear if a species is agricultural or non-agricultural. This strategy might be a better way forward in the future. It will make it easier to add new species.

General Comment: We might want to wait and do all the chapters at the same time. How often do species move from one group to another?

MOI Response: This was discussed and feedback was requested in the TCOMs. We tried to take into account all the arguments. Could we wait? It is not possible to do all chapters right now, but it is good to do this with the Moisture chapter first, to get experience and start small.

General Comment: This is a good proposal. Other TCOMs, like Sampling and Germination committee working with the Rules Chair could look at this as well.

C.9.5 Clarifying the wording “initial moisture content”

General Comment: What is the intent of this proposal? The first test versus the following test?

MOI response: The word “initial” in this section of the Rules does not belong and can be misleading. The intent of this section of the chapter is to specify the testing laboratories test results.

General Comment: 9.2.6.2 is referring to seed “size” rather than “weight” but then references TSW in table 9B. The wording should be corrected to “weight” to line up with the rest of the rules.