



24th ISTA GMO Proficiency Test on Maize (*Zea mays*) Announcement

1. AIM

The aim of this proficiency test is to evaluate the ability of individual laboratories in assessing the presence and estimating the level of GM seeds in samples of conventional maize (*Zea mays*) seed.

Since GMO testing has been included in the ISTA Accreditation Programme, participation in the ISTA Proficiency Tests on GMO is compulsory for those laboratories in the process of accreditation or already accredited for GM seed testing in Maize.

This proficiency test round will include an exercise to report GM results on ISTA Certificates. All ISTA Laboratories accredited for GMO Testing are strongly recommended to participate in this exercise.

2. SAMPLE DESCRIPTION

Each participating laboratory will receive 8 numbered maize seed samples. Each sample contains 1500 seeds. Samples may be positive (i.e. contain GM seeds) or negative (i.e. contain no GM seeds). The positive samples are spiked with defined quantities of seeds of the following event: T25 (ACS-ZMØØ3-2).

Samples will be shipped from Sweden and the origin of the seeds is Puerto Rico.

3. ASSESSMENT OF PRESENCE OF GM SEEDS

At least a qualitative result, i.e. the detection of GM seeds, is required. This can be derived either from a qualitative or from a quantitative test on the sample.

4. ESTIMATION OF LEVEL OF GM SEEDS

Participants are required to provide an estimate of the content of GM seeds in the positive samples **either by** the use of a qualitative test on seed groups ('sub-sampling quantification' or 'group testing') **or** by the use of a quantitative test (seed bulk testing).

The choice of either approach is left at the laboratory's discretion.

| Sub-sampling quantification (group testing) | Quantitative test |
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| The laboratory shall report the number of groups tested, the size of the groups (in number of seeds) and the number of positive groups. The laboratory shall report the percentage of GM seeds in the sample. | The laboratory shall report the number of flour samples and the number of measurements per flour sample. The laboratory shall report the GM content in the sample in percent mass or DNA copy number . |

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| Seedcalc8, available on the ISTA Website, can perform the necessary computations: Statistical Tools for Seed Testing - International Seed Testing Association | For more information see the clarification document on units and standards available at the ISTA GM information platform: GMO PT Clarificationpaper-Unitsandstandards |
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The laboratory is free of choosing among the analytical methods for which it seeks accreditation, or for which is already accredited.

5. PARTICIPATION FEE

For the 24th ISTA GMO Proficiency Test non-members of ISTA will pay a participation fee of 1000 CHF. The fee covers costs for seed material, GMO purity checks and phytosanitary tests, sample preparation, packaging and shipping.

There is no participation fee for ISTA Member Laboratories. They must identify themselves on the registration form by referring to their ISTA member code.

6. REGISTRATION

Please send your registration form published on the ISTA website ([GMO Proficiency Test - International Seed Testing Association](#)) by email to the ISTA Secretariat.

7. MATERIAL TRANSFER AGREEMENT (MTA)

Participating laboratories must accept the terms and conditions established in the Material Transfer Agreement (MTA). The signed MTA must be submitted by e-mail to the ISTA Secretariat. Samples will only be dispatched after the signed MTA has been received by the ISTA Secretariat.

The MTA form will be sent to you upon registration for the proficiency test. You are kindly requested to check for correctness of the name and address of the person responsible for the MTA and inform the ISTA Secretariat if changes are necessary.

8. SHIPPING

The dispatch of the samples to the laboratories will start presumably by 2 June 2025.

The package will contain 8 samples, each of 1500 maize seeds, in total about 2800 g (net weight). The seeds have not been treated. The samples are packed in hermetically sealed foil bags and the consignment will be labelled 'seeds for scientific propose only'. If necessary, a phytosanitary certificate will be enclosed. **If there are special requirements for shipping samples into your country, please let us know indicating them in the Application form.**

Due to legal restrictions or other circumstances, it might not be possible to ship samples to a laboratory. Therefore, ISTA reserves the right to cancel a registration at any time.

9. REPORTING RESULTS

Results are expected to be reported to the ISTA Secretariat by **15 August 2025** at the latest.

Please use the result sheets to submit the results together with the information requested either by email.

A laboratory may submit more than one set of result sheets for different test methods but must clearly indicate which set of results should be evaluated. Only one set of result sheets per laboratory is accepted for the evaluation.

Laboratories encountering difficulties to report on time have to inform the ISTA Secretariat before the deadline stating the reasons for the delay and providing an indication when results will be reported. It will be decided on a case by case basis whether delayed results can be accepted or not.

Participants who have sent in their results, will receive a preliminary and a final result report containing the following:

- the results submitted by the laboratory for the assessment of presence
- the results submitted by the laboratory for the estimation of level
- the true positive and negative samples
- the true spiking level of each sample

For each laboratory, the final results report will include a rating for the assessment of presence and for the estimation of level, as appropriate.

A summary of the results reported by all laboratories participating in this proficiency test round will be sent to the laboratories and published on the ISTA Website.

10. TIME SCHEDULE

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| 1. Registration of laboratories interested in participation | 15 Oct – 15 Nov 2024 |
| 2. MTA for signing and directions of payment sent to participant | upon receipt of registration |
| 3. Submission of the signed MTA and payment of participation fee | 30 Nov 2024 |
| 4. Deadline for sending the import permit, if required | 30 Nov 2024 |
| 5. Sample shipment (tentative) | starting 2 June 2025 |
| 6. Submission of test results to the ISTA Secretariat (tentative) | before 15 Aug 2025 |
| 7. Reporting of preliminary performance results by the Secretariat (tentative) | 1 Oct 2025 |

Yours sincerely,

Nadine Ettel

TCOM Manager
ISTA Secretariat