

Why ISTA membership and accreditation benefits the seed industry

Steve Jones, ISTA Immediate Past President (2022-2025)

standard methods

OIC

competence

CONFIDENCE



food security

export markets

credibility

Quality Control

**INTERNATIONAL
assured quality**

PROFESSIONAL

ISTA

QC

FARMERS

Proficiency Tested

PT

BREEDERS

pride

added value

support to industry

QA

QUALITY ASSURED

support

import monitoring

RECOGNITION

farmer's needs traceability

TRANSPARENCY

BIC



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ISTA Rules from 1931

➤ No standards in the ISTA Rules but internationally agreed methods for seed quality assurance, government/distinct economies designated members vote on the Rules

➤ ISTA = uniformity in seed testing **since 1924**

➤ ISTA Accreditation Standard for Laboratories and Sampling Entities

Accredited laboratories **perform more consistently** than non-accredited laboratories. Accredited laboratories are **audited** every 3-years with annual compulsory proficiency testing (**PTs**)

➤ Accreditation is an insurance policy for all users to know the quality of seed being planted, e.g. **does it have the potential to germinate when sown and achieve high field performance?**



Why become ISTA Accredited?



Accreditation Benefits - International Seed Testing Association

<https://www.seedtest.org/en/accreditation/accreditation-benefits-1109.htm>

ISTA 100 YEARS
A CENTURY OF PROGRESS IN SEED QUALITY ASSURANCE

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Accreditation Membership Technical Committees Proficiency Tests Publications Events Bookstore

Accreditation Benefits on FAQs

Become Accredited

Accreditation Process

ISTA Certificates

Accreditation FAQs

Frequently Asked Questions

1. What are the required qualifications of personnel and the laboratory staff of the ISTA accredited laboratories?

2. Are the conditions for accreditation the same for a government institution, a private independent or a company laboratory?

3. How can the results of Seed Health Tests be reported, as the ISTA Certificates do not have a column for this kind of results?

4. What does the Blue ISTA Certificate cover?



ISTA Accreditation Programme Benefits (youtube.com)

<https://www.youtube.com/watch?v=EZSNg6p-Skg&t=96s>



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Why become ISTA Accredited?

What is unique about ISTA accreditation?

- internationally **accepted methods** for seed quality assurance
- methods and accreditation system **approved by Governments** – facilitates unimpeded movement of seed
- mandatory** external and internal proficiency testing (**PTs**)
- laboratories testing seed to a recognised standard and competence is **benchmarked globally** through comparison with other accredited laboratories
- risk** of poor quality seedlots (e.g. poor germination, pest contaminants) is **greatly mitigated**

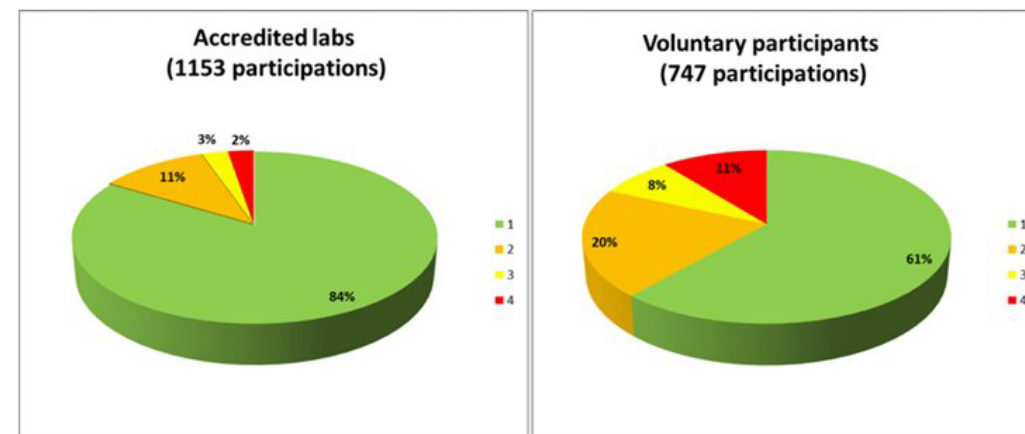


Figure 1: Laboratories rating for the year 2023 for all tests and all participants on PT22-3, PT23-1, PT23-2. Comparison between accredited and voluntary participating laboratories.

Why become ISTA Accredited?



Other advantages:

- **risks minimised** working within an internationally recognised accreditation system
- potential to **identify problems** with seed lots **early** in the seed value chain
- enhanced **customer confidence** in the seed quality information from the **company**
- more **cost effective** than using external laboratories for seed testing
- an ISTA member can **input** into and **influence ISTA strategy and policies** e.g., introduction of new cost-efficient technologies



Case study examples



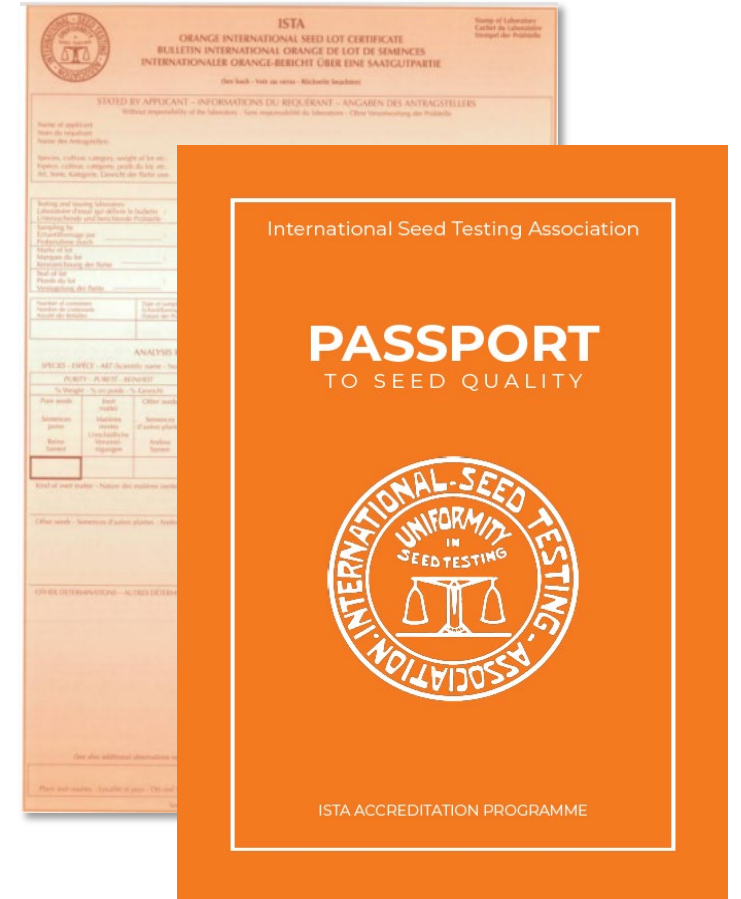
What is the **cost and the benefit?**

Perhaps you can use the idea that if a **crop fails** any compensation is often linked to **%germination test** values

For example:
In some countries compensation to farmers involves repayment of original seed lot cost plus any loss in income

Information on original seed lot %germination is essential in the **calculations**

Such compensation could be **equivalent to the annual income** for a small farmer

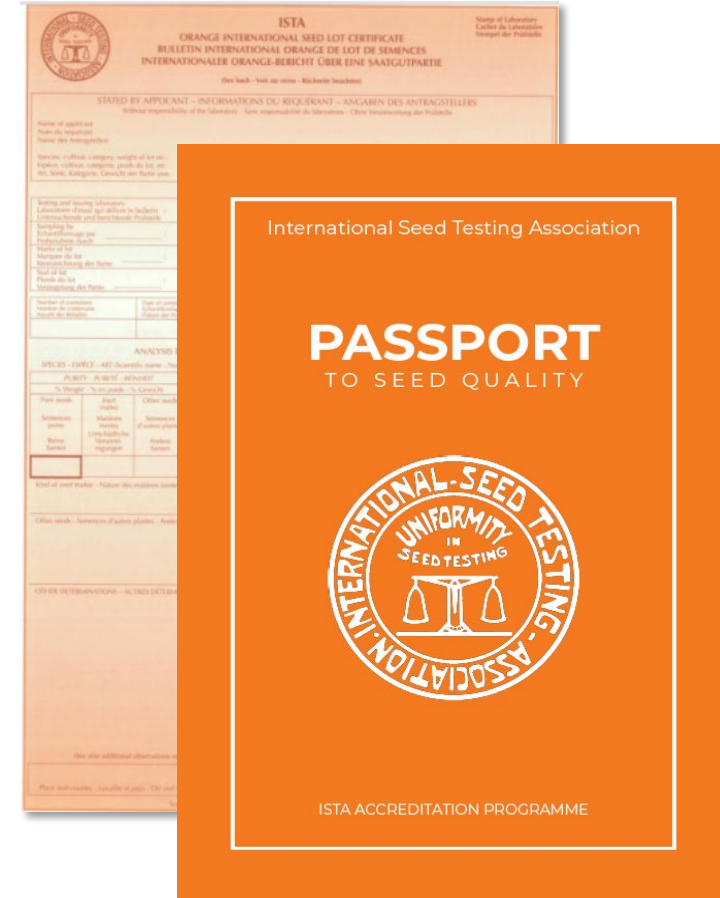


Case study examples



Other examples:

- In some countries **finances can be levied** on seed suppliers, if labelled quality standards are not met
- In other situations, there are **private settlement payments** made between suppliers and farmers due to crop failures
- This can involve **large amounts of money** and could be based on problems with %germination, varietal purity or other reasons. All needing **reliable test results**
- **ISF contract mediation** can involve using **ISTA accredited laboratories**



Cost linked to accreditation?



Having decided to “build” your own seed sampling and testing laboratory

- Can you buy one “off the shelf”?
- Import expertise from another country?
- Or build your own?
- Train your own staff?

- It will all **cost time and money**, especially with any kind of accreditation, be it ISO-17025 or ISTA Accreditation
- Can you convince people to spend the money you need?
- You will need a good business case. What is the cost and the benefit?



Cost of being accredited

ISTA has **156** accredited laboratories/sampling entities **worldwide (163? by 2025)**

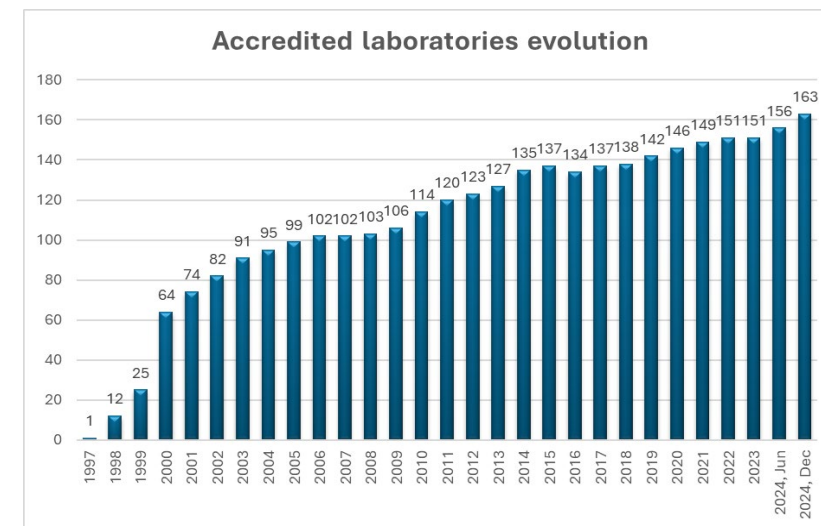
- Accredited laboratories that have achieved the **ISTA “badge” of quality** can sample, test and issue the ISTA the OIC
- Accredited sampling entities can sample for an ISTA OIC

No other laboratories/sampling entities can do that

The annual cost is the same in all countries

It costs **10768 CHF per year to be an ISTA accredited member** and includes the audit fee on an annual basis

(11000 CHF = US\$ 12250 = 11332 Euro)



Cost of being accredited



Membership fees alone are **10768 CHF per year** to be an ISTA accredited laboratory/sampling entity (this is including the audit fee on an annual basis)

If a laboratory charges **110 CHF** for the test results issued on an ISTA Certificate, then it must test **100 samples per year** to recover that cost ($100 \times 110 = 11000$)

In some countries they cannot justify charging customers 220 CHF for their testing services and results on an ISTA Certificate

Perhaps they can only charge **22 CHF**, then they need to test **500 samples** ($500 \times 22 = 11000$) to cover that cost

(11000 CHF = US\$ 12250 = 11332 Euro)



Cost of being accredited



- The cost does not stop with the cost of ISTA accredited membership/audit fees

On-going costs of running a business and a seed sampling and testing laboratory all apply

For example, the time spent on:

creating and maintaining the **quality management system**, staff **training**, maintenance of staff **competence**, **calibration and verification** to ensure equipment is reliable

- Next what are the **benefits of being accredited?**



Benefits of being accredited

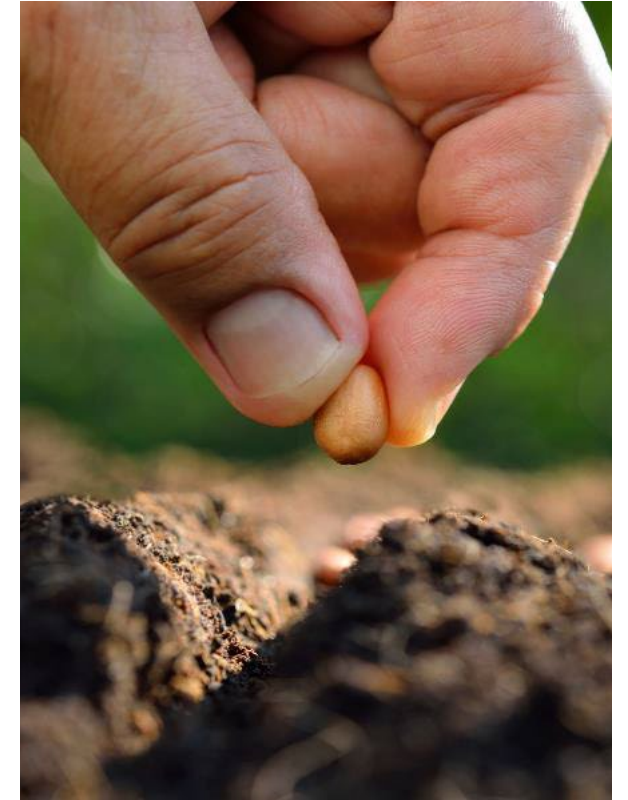


Benefits to laboratories:

- **enhanced reputation** worldwide
- **reliable** and repeatable test **results**
- easily available **in-country sampling and testing**
- part of **ISTA's Proficiency Test (PT) system**

And to end-users:

- more **secured seed** supply
- seed of **known quality** for planting
- **avoid crop failure** due to poor seed quality
- improved global **food security**



Conclusions



1. The **decision** is there for the country / company **to make**
2. The decision can be **based on a number of factors** as discussed
3. The reasons **may not just be economic** but could also be based on other factors

But poor performing seedlots cost everyone (farmer, seed merchant, end-user) and reduce food security and replanting schemes globally



Consider joining ISTA



Join as an ISTA member laboratory/sampling entity then become accredited see

How to become ISTA accredited video

<https://www.youtube.com/watch?v=VIUYifLQycU>

and **make use of the ISTA Rules**

<https://www.seedtest.org/en/publications/international-rules-seed-testing.html>

Help maintain uniformity in seed testing worldwide



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Thanks to everyone

who has contributed to ISTA **in the past**

who contributes **now**

and who will contribute **in the future**

THANK YOU !!

THANK YOU !!

THANK YOU !!

THANK YOU !!

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