

# Guide to ISTA *Association Overview*



International Seed Testing Association (ISTA)

# ISTA is truly an

Founded in 1924, the International Seed Testing Association (ISTA) is inextricably linked with the history of seed testing. With member laboratories in over 75 countries worldwide, ISTA Membership is truly a global network.

## Objectives of the Association

Following the ISTA Constitution:

The primary purpose of the Association is to **develop, adopt and publish standard procedures** for sampling and testing seeds, and to **promote uniform application** of these procedures for evaluation of seeds moving in international trade.

The secondary purposes of the Association are to **actively promote research** in all areas of seed science and technology, including sampling, testing, storing, processing and distributing seeds, to **encourage variety (cultivar) certification**, to **participate in conferences and training courses** aimed at furthering these objectives, and to establish and maintain liaison with other organisations having common or related interests in seed.

## Who we are

- We are an Association of Seed Testing Laboratories, Personal Members and Technical Committee Members who pursue the objectives laid out in the ISTA Constitution.
- ISTA is an independent association and acts free from economic interest and political influence, it is unbiased, non-profit, objective and fair.
- The International Seed Testing Association was founded during the 4th International Seed Testing Congress held in Cambridge, United Kingdom in 1924.
- The ISTA Membership consists of over 250 personal members, over 30 associate members and almost 200 member laboratories, of which over 100 laboratories are ISTA Accredited. The membership is a collaboration of seed scientists and seed analysts from universities, research centres and governmental, private and company seed testing laboratories around the world. ISTA values and promotes the diversity of membership, this being the basis for its independence from economic and political influence.

## What we do

As an authority in seed science and technology, ISTA continues its role as the developer of seed testing methods. Its major achievements to date are briefly the following:

- The **ISTA International Rules for Seed Testing**, providing annually updated and worldwide uniform seed testing methods
- The **ISTA Accreditation Programme including the Accreditation Standard, Proficiency Testing and Auditing**, guaranteeing worldwide harmonised seed testing results
- The **ISTA International Seed Analysis Certificates** issued exclusively by ISTA Accredited Laboratories, truly reflecting the quality of a seed lot
- The **promotion of research, training, publishing and information** in all areas of seed science and technology and cooperation with related organisations

## Seed Testing Milestones - ISTA for the Future

**1876** Friedrich Nobbe published his famous Handbook of Seed Science, and the Motto of the Meeting held in Hamburg that year was "uniformity in seed testing", later becoming the ISTA logo

**1924** 26 countries participated in the meeting held in Cambridge, and the International Seed Testing Association was founded

**1931** At the request of FIS (ISF), ISTA adopted the first 'International Rules for Seed Testing', as well as establishing the ISTA Certificates Scheme

**1950** The ISTA Congress was held in Washington DC, the first outside of Europe, and demonstrated that, after 13 years of interruption by World War II, ISTA was indispensable to seed business

**1995** During the ISTA Congress held in Copenhagen, ISTA Membership was opened to private laboratories and private seed companies

**1996** To ensure harmonised seed testing worldwide, ISTA initiated the Quality Assurance Programme to accredit seed testing laboratories. The first ISTA Member Laboratory was audited under the new set-up in this year

**2004** During the ISTA Congress held in Budapest, it was agreed to consider accreditation as a purely technical task, and the responsibility to give authorisation to issue ISTA International Seed Analysis Certificates was given to the ISTA Executive Committee

# effective international collaboration

## Management of the Association



ISTA is managed and directed by the ISTA Executive Committee, comprising of a President, a Vice President, and 9 Members-at-Large. All Executive Committee members are Designated Members of ISTA.

All proposals including changes to the ISTA International Rules for Seed Testing put forward by the ISTA Technical Committees, and changes to the ISTA Constitution are decided on and voted for during the ISTA Ordinary Meeting. The voting rights of the Association lies in the hands of the governments or distinct economies as recognised by international fora, and is executed by Designated Members. One government or distinct economy has one vote. [ISTA Constitution, Article IV]

The finances and administration of the Association are managed by the ISTA Secretariat, based in Switzerland and under the responsibility of the Secretary General.

## International Co-operation

ISTA as a worldwide association works in close co-operation with many regional and international organizations such as:

AFSTA	African Seed Trade Association
AOSA	Association of Official Seed Analysts of North America
APSA	Asia and Pacific Seed Association
ASTA	American Seed Trade Association
EC	European Commission
ESA	European Seed Association
FAO	Food and Agriculture Organization of the United Nations
FELAS	Federacion Latinoamericana de Asociaciones de Semillas
ICARDA	International Center for Agricultural Research in Dry Areas
ILAC	International Laboratory Accreditation Cooperation
ISF	International Seed Federation
ISO	International Organization for Standardization
OECD	Organization for Economic Co-operation and Development
UPOV	International Union for the Protection of New Varieties of Plants
WTO	World Trade Organisation

# Achieve the highest Quality

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## ISTA Membership

The International Seed Testing Association is an association of persons and laboratories. A member of ISTA supports the Association and its objectives and is admitted by the Association.

## Membership Benefits

- **Receive the International Rules for Seed Testing and Updates free of charge**  
The Rules contain standardised methods and techniques to be used in seed testing, which are internationally harmonised and constantly reviewed by the ISTA Technical Committees.
- **Get valuable information through ISTA publications**  
ISTA regularly publishes a range of technical Handbooks, the scientific journal 'Seed Science and Technology' (SST), the news bulletin 'Seed Testing International' as well as different proceedings from the ISTA events. ISTA Members get a 50% discount on all purchased ISTA publications and a free online subscription to the SST journal.
- **Be involved in the seed testing methodology development**  
ISTA Members are part of an international network of seed professionals and represent the expertise in seed science and technology. ISTA Members can become directly involved in ISTA Technical Committee work, having contact to leading seed experts worldwide.
- **Participate in the ISTA Proficiency Test Programme**  
ISTA Member Laboratories are eligible to participate in the ISTA Proficiency Test Programme at no additional cost. The Proficiency Test provides an opportunity for ISTA members to assess their technical performance and to benchmark themselves with the worldwide ISTA laboratory community.
- **Become accredited and issue ISTA International Certificates**  
Member Laboratories can become accredited by ISTA. Accredited laboratories have proven their technical competence in carrying out seed testing in accordance with the ISTA Rules, and operate an effective quality management system. They are authorised to issue ISTA International Seed Analysis Certificates.
- **Participate in the ISTA decision making process**  
ISTA Personal Members may be appointed as Designated Members and obtain authorisation to vote at ISTA Ordinary Meetings on behalf of the government concerned.
- **Participate in ISTA events**  
Special reduced prices for all ISTA events and prioritised registration to any ISTA event of interest applies for all ISTA members.



ISTA Membership application forms and further membership information are available on the ISTA Website [www.seedtest.org/member-docs](http://www.seedtest.org/member-docs)

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# Assurance levels in today's business environment with ISTA Accreditation

## ISTA Accreditation

The aim of ISTA Accreditation is to verify if a seed testing laboratory is technically competent to carry out seed testing procedures in accordance with the ISTA International Rules for Seed Testing. Accredited laboratories must show that they run a quality assurance system fulfilling the requirements of the ISTA Accreditation Standard. **Only laboratories accredited by ISTA are authorised to issue ISTA International Seed Analysis Certificates.**

By reporting seed test results on ISTA International Seed Analysis Certificates, the issuing laboratory assures that the sampling and testing has been carried out in accordance with the ISTA Rules. ISTA International Seed Analyst Certificates are accepted by many authorities and consumers as assuring reproducible and true results representing the quality of seed.

There are two types of ISTA certificates. The **Orange International Seed Lot Certificate** refer to a seed lot, and sampling and testing are carried out under the responsibility of an ISTA Accredited Seed Testing Laboratory. On **Blue International Seed Sample Certificates**, a laboratory reports test results referring to a seed sample as it was submitted by the applicant.

### Benefits of ISTA Accreditation

**For the seed seller** - Using an ISTA accredited laboratory for testing of seed helps to increase acceptance of seed lots and thus reduces costs. In some countries import of seed is only permitted if the seed lot is accompanied by an ISTA International Seed Analysis Certificate.

**For the seed buyer** - Test reports, e.g. ISTA International Seed Analysis Certificates issued by ISTA accredited laboratories provide the seed buyer with confidence that the results on the test report correspond to the quality of the seed lot.

**For the laboratory** - Through the independent technical evaluation of a laboratory's performance, the laboratory receives formal recognition and assurance that it performs its work correctly and appropriately.

## The Accreditation Procedure

Only Member Laboratories of ISTA may become accredited. Prior to accreditation, applicants have to demonstrate their ability to carry out seed testing in accordance with the ISTA Rules through participation in the **Proficiency Test Programme**.

Accredited laboratories-to-be are required to establish a **quality assurance system** which complies with ISTA's requirements. Criteria for becoming accredited are formulated in the ISTA Accreditation Standard which is based on the internationally agreed generic accreditation standard for testing and calibration laboratories ISO/IEC 17025.

Part of the accreditation is the **on-site assessment**. An experienced audit team verifies the laboratory's compliance with relevant criteria. Accredited laboratories are re-audited in regular intervals to examine if they continuously abide to the ISTA accreditation requirements.

Once the laboratory is accredited, it is **authorised to issue ISTA International Seed Analysis Certificates** for methods and species covered by its scope of accreditation.

**If you want to find out if a seed testing laboratory is accredited by ISTA, visit the directory of accredited laboratories on the ISTA Website [www.seedtest.org/labs](http://www.seedtest.org/labs). Details on their services accredited and addresses are provided as well.**

## The ISTA Proficiency Test Programme

All ISTA member laboratories are eligible to **participate in all test rounds of the ISTA Proficiency Test Programme**. It is mandatory for ISTA accredited member laboratories and voluntary for non-accredited laboratories who want to bench mark themselves with accredited laboratories and prepare themselves for accreditation.

Three times a year, seed samples are dispatched to laboratories participating in the ISTA Proficiency Test Programme, the goal of which is to identify that all laboratories meet the minimum standard of performance that is reasonable to be expected from an ISTA accredited laboratory.

**Laboratories who are not members of ISTA but who want to participate in the ISTA Proficiency Test Programme may contact the ISTA Secretariat for further details.**

# “ISTA, providing methods &

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## ISTA Technical Committees

### Objective

The principle objective of ISTA Technical Committees is to **develop, standardise and validate methods for sampling and testing** of seed quality, using the best scientific knowledge available.

These tasks are subject-focused in Technical Committees and Task Forces where scientists, technicians and specialists from all over the world work closely together for the enhancement of seed testing methodologies. The Technical Committees perform **comparative studies and surveys** in different research fields. They **develop and enhance** the ISTA International Rules for Seed Testing and ISTA Handbooks on seed methods including sampling, testing and processing seeds, and are responsible for the organisation of Symposia, Seminars and Workshops.

ISTA Technical Committees regularly hold workshops which provide a **platform for the exchange of information, experience and ideas**.

### Who can become a Technical Committee Member?

Seed scientists and technicians of different research fields of seed science, and specialists in seed testing from seed testing laboratories, universities, research institutes and companies from all over the world are welcome to actively participate in the ISTA Technical Committees:

ATC	Advanced Technologies Committee
BSC	Bulking and Sampling Committee
FST	Flower Seed Testing Committee
FTS	Forest Tree and Shrub Seed Committee
GER	Germination Committee
MOI	Moisture Committee
NOM	Nomenclature Committee
PTC	Proficiency Test Committee
PUR	Purity Committee
RUL	Rules Committee
SAT	Seed Analyst Training Committee
SHC	Seed Health Committee
STA	Statistics Committee
STO	Seed Storage Committee
TEZ	Tetrazolium Committee
VAR	Variety Committee
VIG	Vigour Committee
GMO	GMO Committee

Forms to apply for ISTA Technical Committee Membership can be found on the ISTA Website [www.seedtest.org/tcom](http://www.seedtest.org/tcom)

## The International Rules for Seed Testing

- ISTA's primary instrument in promoting uniformity in seed testing is the ISTA International Rules for Seed Testing, which lays
- down standard methods and procedures for seed sampling and testing. The publication includes 16 Chapters and Appendices describing principles and definitions in detail.

- The ISTA 'International Rules for Seed Testing' are designed for numerous agricultural crop, flower, tree, shrub, medical and
- herbage species of the world.

- The ISTA 'International Rules for Seed Testing' are approved and amended at ISTA Ordinary Meetings on the basis of advice
- tendered by the ISTA Technical Committees.

# facilitates for the testing of seed moving in international trade”

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## Training and Educational Workshops

One of the important pillars assuring the uniform application of seed testing methods is the aspect of training and education. For this purpose, workshops, held on the various aspects of seed testing all over the world, in which ISTA has experience of several decades, are considered to be an excellent tool.

ISTA also collaborates with various organisations, such as the Food and Agriculture Organisation of the United Nations (FAO) and the Asia and Pacific Seed Association (APSA), who provide additional support towards workshops.

Experts within ISTA are sources of competence and additionally offer workshops on different aspects of seed testing for training purposes. The lecturers are experienced seed scientists and technicians actively involved within ISTA and considered as experts in their fields.

## Handbooks

ISTA provides a wide range of handbooks including detailed techniques on all relevant topics in seed sampling and testing methodology. The handbooks are elaborated by ISTA Technical Committees and are excellent tools to improve knowledge and train laboratory staff in different technical areas, and facilitates the daily technical work in seed sampling and testing.

## Seed Science and Technology (SST)

Seed Science and Technology publishes original papers in all areas of seed quality and physiology as related to seed production, harvest, processing, sampling, storage, distribution and testing. The journal is an important tool to promote research in seed science and technology, and is a prime source of information for seed scientists and technologists involved in the improvement of seed quality and seed quality control.

The journal was launched in 1973 as a replacement of the Proceedings of the International Seed Testing Association, which was first issued in 1921.

SST is edited by the ISTA Editorial Board, and published by ISTA in three issues per volume and year.

## Seed Symposia

ISTA holds a Seed Symposium at every ISTA Congress. The main purpose of the Seed Symposium is to provide a platform for the presentation and discussion of the latest developments in applied seed science in the form of oral and poster papers contributed by seed scientists and technologists.

The scientists contributing these papers come from diverse locations including universities, government departments, research institutes and ISTA Member Laboratories. The Seed Symposium also provides the opportunity for discussion on directions that seed technology may take in the future.

**The ISTA Seed Symposium is “the largest international gathering of scientists from applied seed science and a unique forum for the interchange of ideas between seed scientists and technicians”**

A quote from the International Society of Seed Science (ISSS)



Membership application information, membership list  
and publication details are available online at:

**[www.seedtest.org](http://www.seedtest.org)**

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