



ISTA Ordinary General Meeting



Roll Call 34 Voting Delegate



Austria
Belgium
Brazil
Canada
Croatia
Czech Republic
Denmark
Estonia
Finland
France
Germany
India
Ireland
Italy
Japan
Jordan
Kenya
Luxembourg

Netherlands
New Zealand
Norway
Philippines
Poland
Republic of Korea
Rwanda
S.C.T. of Taiwan, Penghu, Kinmen and Matsu
Slovak Republic
Spain
Switzerland
Sweden
United Kingdom
United States of America
Uruguay
Zimbabwe





Acceptance Minutes

ISTA Ordinary General Meeting 2023



International Seed Testing Association (ISTA)

Report of the Executive Committee - 2023

Keshavulu Kunusoth
ISTA President

Contributions:

Ernest Allen (USA), Steve Jones (Canada), Craig McGill (New Zealand), Claid Mujaju (Zimbabwe), Sylvie Ducournau (France), Ignacio Aranciaga (Argentina), Berta Killermann (Germany), Ruel Gesmundo (Philippines), Sergio Pasquini (Italy), Vanessa Sosa (Uruguay)

Formation of ISTA

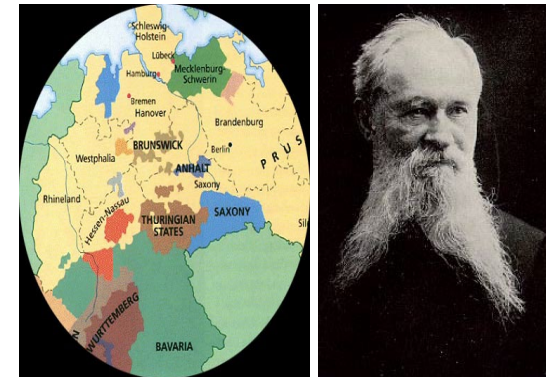


The 19th and 20th centuries:

- In latter half of the 19th century an agricultural renaissance was taking place in Europe and the rest of the world
- Sale and trade of seeds was common practice, lack of knowledge on quality of seeds and absence of standardised methods.
- Rapid expansion of seed testing, isolated approaches, non-uniformity, unethical practice and reliability of the methodologies
- 1924: ISTA was founded (4th International Seed Testing Congress) in Cambridge, UK

Objectives:

- Comparative tests and other research directed to achieving more accurate and uniform results
- The formulation of uniform methods and uniformity in seed testing



Knud Dorph-Petersen
First ISTA President

1924-2024: ISTA 100 Years !!!



- 1924: Focus was on establishing basic methods
- 1931: Rules for seed testing and the ISTA Certificates
- 1950: ISTA Congress outside Europe
- 1978: ISTA Headquarters moves to Switzerland
- 1995: ISTA membership open to private labs/companies
- 1996: ISTA Quality Assurance Programme
- 1999: 75th Anniversary celebrations in Cambridge, UK
- 2002: Seed vigour testing chapter to ISTA Rules
- 2012: Testing of seed mixture
- 2014: GMO testing chapter
- 2016: Variety testing: DNA methods

Recent Developments

- Virtual meetings and Remote Audits
- Young@ISTA
- Initiatives on tropical and subtropical spp.
- Seed health a focus-increased collaborations with affiliated org
- ISTA-FAO joint handbook
- New technologies into Rules
- Expansion of ISTA
- ISTA eCertificates



“ISTA's role and priorities have evolved significantly in past century to adapt to the changing needs and challenges of the global seed industry, as well as developments in the agriculture sector worldwide”





VISION:

*Uniformity in Seed Quality
Evaluation Worldwide*

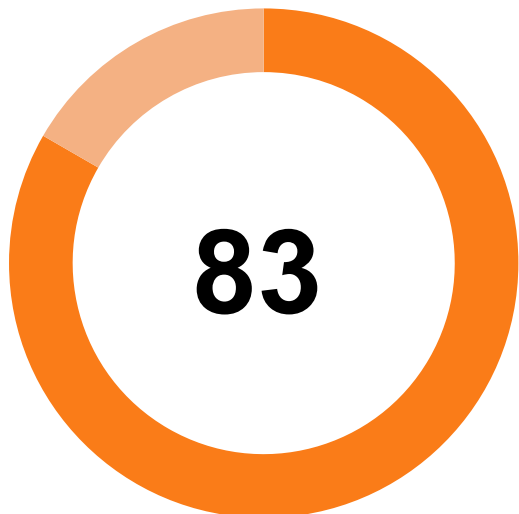


OBJECTIVE:

- Develop, adopt, and publish **Standard Procedures for Sampling and testing seeds** and promote uniform application of these procedures, for evaluation of seeds moving in international trade.
- **Promote Research** in all areas of seed science and technology.



Global Membership



COUNTRIES

- 68** Designated Authorities
- 43** Personal Members
- 59** Associate Members
- 247** Laboratory Members
- 157 ISTA Accredited laboratory





Executive Committee Members 2022-2025



ISTA Strategy for May 2022 - June 2025



OGM22-25 ISTA Strategy 2022-25

<https://www.seedtest.org/api/rm/HB99UT9RPNPN4F9/ogm22-07-strategy-2022-2025-1.pdf>

- Develop scientifically sound rules and methods that meet the needs of the seed sector
- Contribute and develop collaborations to increase capacity and capability worldwide
- Strengthen the accreditation system to ensure it meets the needs of the seed industry
- Strengthen the science and technology underpinning ISTA to develop innovative research to meet the seed sector's needs
- Seek the needs of members and stakeholders
- Manage ISTA affairs



ISTA
Seed Quality Assurance

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Phone: +41 44 838 60 00 | Fax: +41 44 838 60 01
Email: ista.office@ista.ch
www.seedtest.org

Document OGM22-07

Strategic plan for the International Seed Testing Association 2022-2025

This document was prepared by the Executive Committee of the Association and is endorsed for discussion and consideration at the upcoming Ordinary General Meeting of the Association.

It is submitted to all ISTA Designated Authorities, ISTA Members and ISTA Observer Organisations for information prior to the ISTA Ordinary Meeting 2022.

It will be discussed and voted on at the Ordinary Meeting 2022, to be held on Wednesday, May 11, 2022 in Cairo, Egypt.



ISTA
100 YEARS
A CENTURY OF PROGRESS IN SEED QUALITY ASSURANCE

Verona, Italy, 02 June 2023

- New initiative on seed health
- Planning for meetings and events, Expansion and Collaborations: MOUs
- Discussion on new technologies, CHF 100'000 projects and sub-tropical and tropical species post ECOM-TCOM meeting

Virtual Meeting, 09 January 2024

- Launching of ISTA 100th anniversary celebrations logo webinar
- Preparation for Annual Meeting and 100 years celebrations
- Review Projects and Strategic initiative projects

Buenos Aires, Argentina, 17-26 February 2024 and June 28-30, Cambridge, UK

- Meeting with South-American Affiliated Organizations/Governments
- Support for expanding seed quality assurance practices
- collaborations and expansion of ISTA into new regions/ new species into the ISTA rules
- Proposal for the appointment of ISTA Advocates globally
- Status of eCertificates implementation and prep. for Centenary ISTA AM 2024 and 2025 ISTA Congress
- Review of Wild species WG and seed health initiatives
- New technologies: Developing Imaging technologies

Meetings of ECOM WGs

- ECOM WGs meet regularly (aim is monthly) based on the needs of the ISTA objectives
- (11) ECOM working groups and two projects: eCertificates and Young@ISTA
- The ECOM has taken important initiatives based on the ISTA strategy 2022-25 to facilitate seed trade nationally and internationally



Aim: To support the work of the Technical Committees by identifying ways in which the Committees can operate more effectively

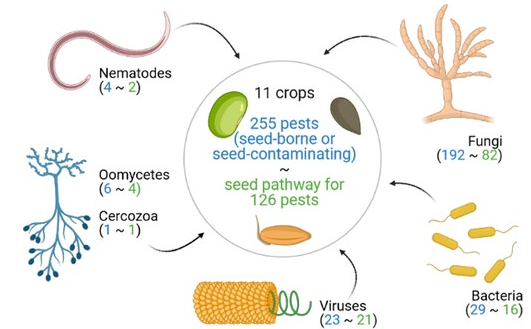
- Developed the policy on new technologies equivalent to the human analyst
- Review of the CHF 100,000 project funding to determine its effectiveness and strategic initiative guidelines
 - Reviewed the project on collection of seed images for seed health.
 - Revision of TCOM Responsibilities Document
 - Reviewed on applying statistical/mathematical methodologies to improve the ISTA Rules and validation processes
 - Rules proposals and introduction of more sub-tropical and tropical species
 - Planned and implemented ECOM-TCOM Meeting meetings

Two projects approved in the last year:

Seed Health:

Preparation of a web-based library for Pathogen Identification Image Collection

This library will serve as a reference illustration for seed-borne pathogens in the ISTA seed health validated methods and ISTA Reference Pest List, linked to the ISTA web site



Statistics:

Applying Statistical/Mathematical methodologies to improve the ISTA Rules and validation processes like Sampling Theory for Seed Testing, Proficiency Test (PT) Rating, Tolerance Tables for Wild Species Testing, GMO Testing, Method Validation & Training

Accreditation Working Group

Chair: Sylvie Ducournau



Accreditation and accredited laboratory evaluation

Revision of the ISTA Accreditation Standards
Directive revision and follow up action

Policy for a change of Non-Substantial non-conformities

Extension of the accreditation scope – to develop a
detailed procedure

Revision of information documents on the ISTA website

Proficiency tests

ISTA auditors (recruitments)

Supporting eCertificate implementation and Questions
(accredited laboratories and stakeholders)

Support the other ECOM Working Groups to achieve
their objectives

**A
triennium
plan was
established
to cover
several
areas**

Contribution to;

Audits (40) and Accreditation including one (6)
and 2024 : 62 audits

Auditors Meeting in December 2023, Poznan

Implementation: revised policy for the non-
conformities

Implementation: ISTA Ac standard Ver. 7.0
Initiated develop Risk Assessment Guidelines

First audit of 2 laboratories with sampling units

Revision of GMO Accr. scope with GMO TCOM

Crop groups revision: crop group 7 trees and shrubs
of *Leucaena* (small legumes-3) and *Grevillea* (flowers-8)

Quality Assurance workshops: 4

Seed Health Working Group

Chair: Craig McGill



Seed Health Strategy: Seed Health is one of the key determinants of seed quality and a biosecurity issue with seeds (movement of pests)

Aim to;

- (i) assess ISTA's current and future role in seed health and
 - (ii) develop policy proposals, including resources needed, for discussion and validation studies.
- Funding to enable the ISTA Reference Pest List to continue developing for the next 2 years
 - The WG focused on progress in seed health method development
 - Seed pests are also a phytosanitary issue exploring collaboration with the International Plant Protection Convention (IPPC) and the National Plant Protection Organisations (NPPO's)
 - Planned a capacity building Seed Health workshop in 2024
 - Planned a joint ISTA-ISF seminar on "Addressing the Importance of Seed Quality and Testing in Global Seed Health Conference in Nov/Dec 2024?"

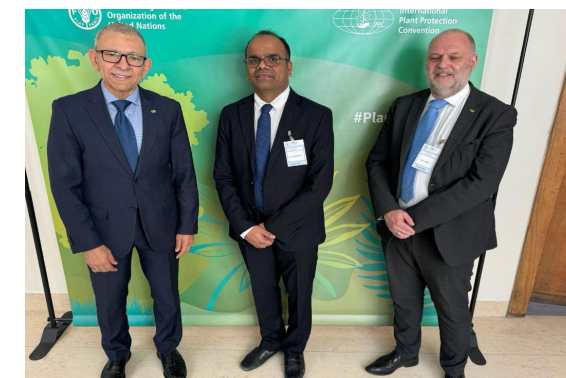


International Rules for Seed Testing 2023

Validated Seed Health Testing Methods

7-001a: Detection of *Alternaria dauci* in *Daucus carota* (carrot) seed by blotter method

Including changes and editorial corrections adopted at the Ordinary General Meeting 2022, Cairo, Egypt
Effective from 1 January 2023



Key areas of activity:

- Meetings with the ISTA Designated Authorities
- Collaboration and / or exchange of information with regulatory organisations such as OECD, FAO, UPOV and IPPC (Observer status)
- Collaboration and exchange of information with the seed trade at the international (ISF) and regional (AFSTA, APSA, ASTA, Euroseeds and SSA) levels
- Interaction with scientific organisations (ISSS) and technical collaboration with AOSA and SCST, ABRATES and ISHI (through ISF) to harmonise seed testing methods
- Interactions with organisations (ILAC and EA) related to the accreditation work of ISTA

Contributions:

- Publication of the joint FAO-ISTA handbook on “Guidelines for the establishment and management of seed testing laboratories”
- Participation in ILAC meetings
- Two ISTA-ISSS joint webinars: 393 audience
- Technical collaboration with other organisations (AOSA/SCST) to harmonise seed testing methods worldwide
- Participation in FAO, AFTSA, APSA, ASTA, ISF, Euroseeds and SAA meetings
- Activities related to World Seed Partnership, a collaboration between ISF, ISTA, OECD, UPOV, WFO
- Regular ISSS-ISTA webinar series delivers two webinars per year
- On going discussion on oneCGIAR collaborations !



ISTA: Introduction of New technologies into the Rules



- ISTA working to ensure that new methods based on both traditional and advanced technologies and evidence-based, fit for purpose and cost-effective.
- Advanced technologies are a key and to translate the possibilities offered by the new technologies into accurate and repeatable tests in seed laboratories
- Developing methods based on the requirements of the seed industry and regions
- Introducing New Technologies Equivalent to the Human Analyst for Seed Analysis
- The policy document for introducing new technologies that are equivalent to the human analyst
- ISTA has been discussing the possibilities for the use of new technologies (digital X-ray images of seeds and 3-D X-ray imaging) in seed quality assurance



Key areas of activity:

Collaborating organisations: ISTA, AOSA, SCST, and Kew, are working to create guidelines for the emerging wild species seed

1. To develop a list of priority species and the tests needed for each of these species.
2. To collect existing methods used by labs
3. To collate the guidelines for wild species.
4. To provide recognition for the guidelines when used to assess seed quality

Contributions:

- The Wild Species Working Group (2014) is under review as its Terms of Reference have expired
- Options for the future are being explored with the original partner organisations
- The existing database continues to be funded
- Although the database is accessible it is due for a significant update with new data, images and author submission protocols.
- ECOM has approved the WSWG to become an ISTA Technical Committee



Events Working Group

Chair: Berta Killermann



Oversees
planning for
Congresses and
Annual Meetings
and supports to
local organisers
and Secretariat

- 2024 Annual Meeting and 100 years celebrations
 - July 01: Opening Ceremony & Seminar
 - July 02-03 : ISTA TCOM meetings
 - July 04 (morning): OGM
 - July 04 (afternoon): Ministerial Session
 - July 05: ISTA-ISF Joint Forum
- 2025 Congress in New Zealand– Seed Symposium and 34th Congress
- Propose the structure and content of meetings

Contribution of Secretariat event organiser (Olga Stöckli)



Publication and Marketing Working Group:

Chair: Ignacio Aranciaga



Define Marketing and Publications policy

- Support the action plan of Secretariat approved by the Executive Committee

Action plan & implementation by the Secretariat

Digital Marketing Initiatives

- LinkedIn: **11292** followers
- Twitter: **2500** followers
- YouTube: **1690** subscribers and **13** videos including on seed sampling
- Webinars: **4 No.** (ISSS & IICA)

Consistent External Image

- defining ISTA colours
- marketing material in Spanish (ISTA and Accreditation; How to become a Technical Committee Member)
- format changes to ISTA Rules

Other activities

- Website upgrade
- Identification of ISTA-relevant events in Latin America
- Promotion of the availability of the Rules in Spanish
- Promotion of single chapters of the Rules



Vegetable Seed Industry Group

Chair: Berta Killerman



Key objectives:

Identify existing options, challenges and opportunities and alternatives to current vegetable seed sampling and testing methodologies

Define the questions from, and priorities of the VSI

Propose solutions for vegetable seed industry needs

Contributions:

- Statistics TCOM of ISTA has developed testing protocols for determination of heterogeneity in vegetable seed lots to support further possible changes to the number of sublots that can be taken from vegetable seed lots
- Going back to the 10 000 kg maximum seed lot size for tomato seed is under discussion when the 20 sub-lots option is not used
- Generic principles supported by experimental data are being developed to apply to groups of vegetable species that have seed harvested and processed in a similar way
- Industry experiments are on-going and should lead to new Rules proposal to be voted on at the 2025 ISTA meeting.
- Any proposed changes will be supported by validation studies and analysis by the ISTA Statistics TCOM

High priority Species & Common Name

Moringa oleifera (Drum Stick Tree)^{2,3} (~ 3 tons traded)

Allium sativum (Garlic)¹

Amaranthus viridis (Amaranthus)

Benincasa hispida (wax or ash gourd) (~ 0.3 tons traded)

Guizotia abyssinica (Nyger)² (~ 400 tons traded)

Hibiscus sabdariffa (Roselle)

¹Some *Allium* species in the current ISTA Rules

²Some quality assessment information known

³Seed available and validation protocols: Germination Method Validation Study for Moringa. The study will be prepared and the seed sent out by Sue Cousins, NZ

Launched the Young@ISTA program in 2022

2022		2023	
Approved applications	14	Approved applications	16
Workshops	8	Workshops	6
Training	1	Training	2
Events	5	Events	1
SST	0	SST	6
Asia & Pacific	9	Asia & Pacific	8
Africa	3	Africa	4
Europe	1	Europe	1
South America	1	South America	3



“Young@ISTA exist in LinkedIn and is very active with 500 members”

Expansion of Seed Testing Worldwide

Working Group *Chair: Ignacio Aranciaga*



- Facilitating the expansion of the involvement of ISTA into new regions and countries where it is not yet present or is underrepresented
- Encouraging (membership) participation from new regions and countries
- Facilitating the inclusion of new species, especially tropical and sub-tropical species, into the Rules
- Improving presence through partnerships and collaborations with international organisations/ regional association
- Facilitating the development of tests and methods
- ISTA Regional representative initiatives

South America:

- Meeting with South American Affiliated Organisations (SAA, IICA, ASA, SENAVE (Paraguay), and INASE (Argentina and Uruguay)
- Support for increasing number of ISTA accredited laboratories South American countries ? ISTA advocates
- ISTA's support for capacity building
- MOU with ISTA/SAA/IICA for initiatives in the region
- **Focussed countries:** Colombia , Paraguay

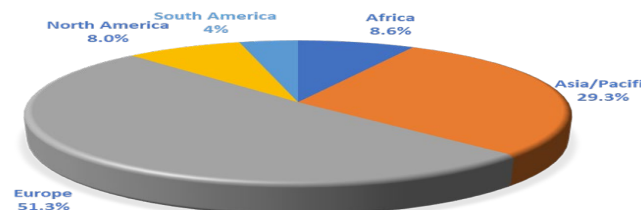
Africa:

- ISTA and Ministry of Agriculture, Zambia, hosted a Workshop on Germination in April 2023.
- ISTA hosted Workshop on QA in South Africa J2024.
- QA WS in French in cooperation with FAO (March 2025), Sampling, Other Seed Determination
- National Seed Association of Rwanda (NSAR): ISTA & NSAR signed Letter of Cooperation
- **Focused Countries:** Burkina Faso, Ethiopia, Morocco, Mozambique, Rwanda

Asia:

- The first accredited seed testing lab (BD02)
- In 2023, the first ISTA basic course on sampling and testing for seed quality assurance will be available
- The Bangladesh seed sector is looking to grow and continue to improve the quality of its seed!
- Focusing on improvement in seed quality!
- **Focused countries:** Bangladesh, Vietnam, Cambodia, China, Laos

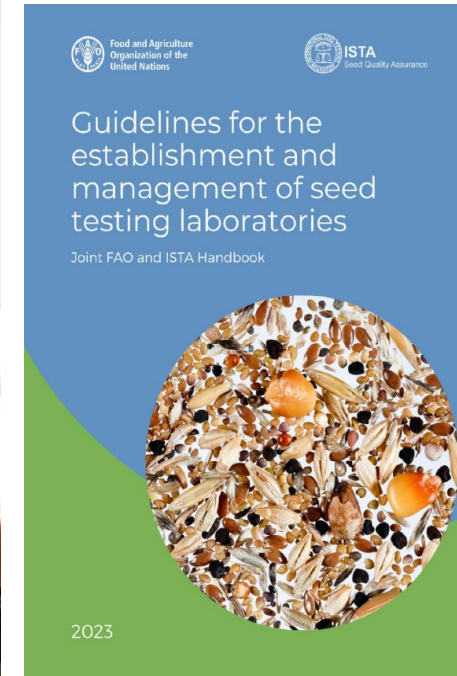
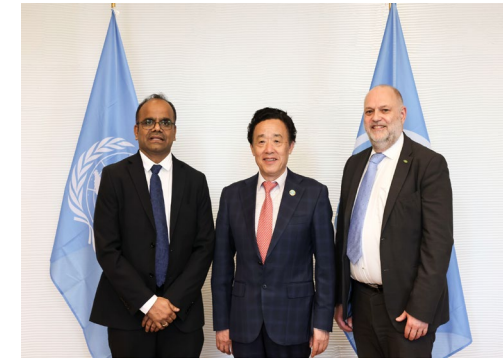
Continent	Number of accredited labs	%
Africa	13	8.6
Asia/Pacific	44	29.3
Europe	77	51.3
North America	12	8.0
South America	6	4.0
Total number of accredited labs	150	



ISTA -FAO Collaborations



- ISTA & FAO key partners in the domain of seed systems and quality assurance for ensuring quality seed supply to the farming community worldwide
- Joint publication: Guidelines for the establishment and management of seed testing laboratories
- Joint FAO/ISTA Webinar on New Technologies in Seed Testing
- FAO/ISTA joint initiatives on cooperation in capacity building, transfer of technologies and exchange of information on all aspects of seed quality assurance towards the developing sustainable crop production systems for a hunger free world



ISTA eCertificates



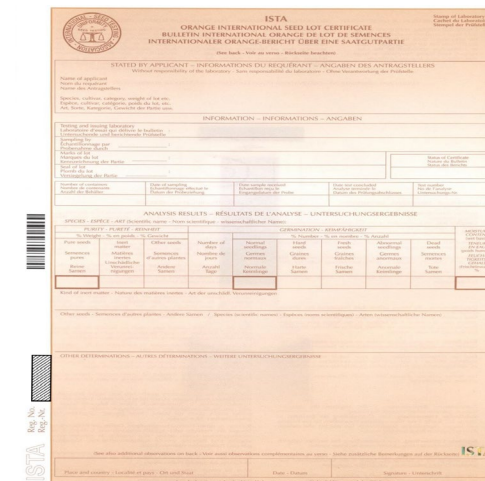
Aim:

- Speeding up the process of delivery ISTA Certificates and preventing fraud

Process to access for seed lot owners:

- The final eCertificates (Provisional and Original) directly available to the owner of seed lot
- eCertificates will be displayed as PDFs
- Verification access for end users via ISTA Website (PDFs will have the access information)
- Only on-line eCertificate is the valid document
- Print-out for filing purposes possible
- Provisional Certificates will change to Originals automatically (no Duplicates required)

Membership voting soon !



ISTA
ORANGE INTERNATIONAL SEED LOT CERTIFICATE
BULLETIN INTERNATIONAL ORANGE DE LOT DE SEMENCES
INTERNATIONALES ORANGE BERICHT ÜBER EINE SAATGUTPARTIE

STATED BY APPLICANT - INFORMATIONS DU REQUÉRANT - ANGABEN DES ANTRAGSTELLERS

INFORMATION - INFORMATIONS - ANGABEN

ANALYSIS RESULTS - RÉSULTATS DE L'ANALYSE - UNTERSUCHUNGSERGEBNISSE

PURITY		GERMINATION		MOISTURE		ADULT PLANT STANDARDS		OTHER TESTS	
Number of seeds	Percentage	Number of seeds	Percentage	Number of seeds	Percentage	Number of seeds	Percentage	Number of seeds	Percentage
1000	100.0	1000	100.0	1000	100.0	1000	100.0	1000	100.0
999	99.9	999	99.9	999	99.9	999	99.9	999	99.9
998	99.8	998	99.8	998	99.8	998	99.8	998	99.8
997	99.7	997	99.7	997	99.7	997	99.7	997	99.7
996	99.6	996	99.6	996	99.6	996	99.6	996	99.6
995	99.5	995	99.5	995	99.5	995	99.5	995	99.5
994	99.4	994	99.4	994	99.4	994	99.4	994	99.4
993	99.3	993	99.3	993	99.3	993	99.3	993	99.3
992	99.2	992	99.2	992	99.2	992	99.2	992	99.2
991	99.1	991	99.1	991	99.1	991	99.1	991	99.1
990	99.0	990	99.0	990	99.0	990	99.0	990	99.0
989	98.9	989	98.9	989	98.9	989	98.9	989	98.9
988	98.8	988	98.8	988	98.8	988	98.8	988	98.8
987	98.7	987	98.7	987	98.7	987	98.7	987	98.7
986	98.6	986	98.6	986	98.6	986	98.6	986	98.6
985	98.5	985	98.5	985	98.5	985	98.5	985	98.5
984	98.4	984	98.4	984	98.4	984	98.4	984	98.4
983	98.3	983	98.3	983	98.3	983	98.3	983	98.3
982	98.2	982	98.2	982	98.2	982	98.2	982	98.2
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979	97.9	979	97.9	979	97.9	979	97.9	979	97.9
978	97.8	978	97.8	978	97.8	978	97.8	978	97.8
977	97.7	977	97.7	977	97.7	977	97.7	977	97.7
976	97.6	976	97.6	976	97.6	976	97.6	976	97.6
975	97.5	975	97.5	975	97.5	975	97.5	975	97.5
974	97.4	974	97.4	974	97.4	974	97.4	974	97.4
973	97.3	973	97.3	973	97.3	973	97.3	973	97.3
972	97.2	972	97.2	972	97.2	972	97.2	972	97.2
971	97.1	971	97.1	971	97.1	971	97.1	971	97.1
970	97.0	970	97.0	970	97.0	970	97.0	970	97.0
969	96.9	969	96.9	969	96.9	969	96.9	969	96.9
968	96.8	968	96.8	968	96.8	968	96.8	968	96.8
967	96.7	967	96.7	967	96.7	967	96.7	967	96.7
966	96.6	966	96.6	966	96.6	966	96.6	966	96.6
965	96.5	965	96.5	965	96.5	965	96.5	965	96.5
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961	96.1	961	96.1	961	96.1	961	96.1	961	96.1
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954	95.4	954	95.4	954	95.4	954	95.4	954	95.4
953	95.3	953	95.3	953	95.3	953	95.3	953	95.3
952	95.2	952	95.2	952	95.2	952	95.2	952	95.2
951	95.1	951	95.1	951	95.1	951	95.1	951	95.1
950	95.0	950	95.0	950	95.0	950	95.0	950	95.0
949	94.9	949	94.9	949	94.9	949	94.9	949	94.9
948	94.8	948	94.8	948	94.8	948	94.8	948	94.8
947	94.7	947	94.7	947	94.7	947	94.7	947	94.7
946	94.6	946	94.6	946	94.6	946	94.6	946	94.6
945	94.5	945	94.5	945	94.5	945	94.5	945	94.5
944	94.4	944	94.4	944	94.4	944	94.4	944	94.4
943	94.3	943	94.3	943	94.3	943	94.3	943	94.3
942	94.2	942	94.2	942	94.2	942	94.2	942	94.2
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940	94.0	940	94.0	940	94.0	940	94.0	940	94.0
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938	93.8	938	93.8	938	93.8	938	93.8	938	93.8
937	93.7	937	93.7	937	93.7	937	93.7	937	93.7
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932	93.2	932	93.2	932	93.2	932	93.2	932	93.2
931	93.1	931	93.1	931	93.1	931	93.1	931	93.1
930	93.0	930	93.0	930	93.0	930	93.0	930	93.0
929	92.9	929	92.9	929	92.9	929	92.9	929	92.9
928	92.8	928	92.8	928	92.8	928	92.8	928	92.8
927	92.7	927	92.7	927	92.7	927	92.7	927	92.7
926	92.6	926	92.6	926	92.6	926	92.6	926	92.6
925	92.5	925	92.5	925	92.5	925	92.5	925	92.5
924	92.4	924	92.4	924	92.4	924	92.4	924	92.4
923	92.3	923	92.3	923	92.3	923	92.3	923	92.3
922	92.2	922	92.2	922	92.2	922	92.2	922	92.2
921	92.1	921	92.1	921	92.1	921	92.1	921	92.1
920	92.0	920	92.0	920	92.0	920	92.0	920	92.0
919	91.9	919	91.9	919	91.9	919	91.9	919	91.9
918	91.8	918	91.8	918	91.8	918	91.8	918	91.8
917	91.7	917	91.7	917	91.7	917	91.7	917	91.7
916	91.6	916	91.6	916	91.6	916	91.6	916	91.6
915	91.5	915	91.5	915	91.5	915	91.5	915	91.5
914	91.4	914	91.4	914	91.4	914	91.4	914	91.4
913	91.3	913	91.3	913	91.3	913	91.3	913	91.3
912	91.2	912	91.2	912	91.2	912	91.2	912	91.2
911	91.1	911	91.1	911	91.1	911	91.1	911	91.1
910	91.0	910	91.0	910	91.0	910	91.0	910	91.0
909	90.9	909	90.9	909	90.9	909	90.9	909	90.9
908	90.8	908	90.8	908	90.8	908	90.8	908	90.8
907	90.7	907	90.7	907	90.7	907	90.7	907	90.7
906	90.6	906	90.6	906	90.6	906	90.6	906	90.6
905	90.5	905	90.5	905	90.5	905	90.5	905	90.5
904	90.4	904	90.4	904	90.4	904	90.4	904	90.4
903	90.3	903	90.3	903	90.3	903	90.3	903	90.3
902	90.2	902	90.2	902	90.2	902	90.2	902	90.2
901	90.1	901	90.1	901	90.1	901	90.1	901	90.1
900	90.0	900	90.0	900	90.0	900	90.0	900	90.0
899	89.9	899	89.9	899	89.9	899	89.9	899	89.9
898	89.8	898	89.8	898	89.8	898	89.8	898	89.8
897	89.7	897	89.7	897	89.7	897	89.7	897	89.7
896	89.6	896	89.6	896	89.6	896	89.6	896	89.6
895	89.5	895	89.5	895	89.5	895	89.5	895	89.5
894	89.4	894	89.4	894	89.4	894	89.4	894	89.4
893	89.3	893	89.3	893	89.3	893	89.3	893	89.3
892	89.2	892	89.2	892	89.2	892	89.2	892	89.2
891	89.1	891	89.1	891	89.1	891	89.1	891	89.1
890	89.0	890	89.0	890	89.0	890	89.0	890	89.0
889	88.9	889	88.9	889	88.9	889	88.9	889	88.9
888	88.8	88							

Budget Highlights



- Budget 2024 is about 3.2 million CHF covering all cost for projects from the cash flow
- Total turnover 2023 was higher than compared to previous year (+199'689 CHF)
- The turnover increased to a total of 3'039'201 CHF for 2023, which is significantly higher than the 2022 budget (2'989'456 CHF)
- Membership subscription increased by 4'125 CHF as compared to previous year
- ISTA Rules sales decreased marginally by 5'284 CHF as compared to previous year
- Higher income on accreditation audits by 26'429 CHF, due to more first-time audits of ISTA member laboratories than budgeted before
- Expenditure in some cases increased in 2023 compared to previous years, due to taking up in person Meetings internally and with affiliated organisations after COVID-19 again.
- The balance of 1'821 CHF was reached by taking 270'000 CHF from the reserves, which is significantly lower than budgeted (445'000 CHF)
- Financial reserves shown for the year 2023 as negative, mainly due to FEX at the end of 2023, where the CHF got massively stronger to other currencies, which therefore effected the ISTA funds of the reserves.



June 2023 – May 2024 Progress Highlights



- Approved project on Collection of Seed Images for Seed Health
- Approved project: Applying Statistical/Mathematical methodologies to improve the ISTA Rules
- Approved the policy document for introducing new technologies that are equivalent to the human analyst
- addition to the crop group 7 of *Leucaena and Grevillea* and approval of the Risk assessment Guideline
- Testing protocols for determination of heterogeneity in vegetable seed lots
- New Species in to the Rules, Moringa, Allium, Amaranthus, Benincasa, Guizotia, Hibiscus
- Approved 16 and 11 applications under Young @ ISTA
- ISTA-FAO Joint publication: Guidelines for the establishment and management of STL
- Progress: ISTA Expansion in South-America, Asia, and Africa
- ISTA Regional representative initiatives: ISTA Advocates
- WSWG: become technical committees of ISTA
- Implementation: e-Certificates testing (will go live shortly)

ISTA's vision is the application of internationally agreed and validated methods in seed quality assurance to increase and sustain agricultural productivity, food security, and nutrition for all !

Thank you!

Follow us on social media:



International Seed Testing Association (ISTA)

Update on Technical Committees

Craig McGill

Chair ECOM Working Group for the Technical
Committees

Working Group Members:

Keshavulu Kunusoth (India), Claid Mujaju (Zimbabwe), Ruel Gesmundo (Philippines), Sergio Pasquini (Italy), Andreas Wais, Florina Palada, Nadine Ettel and Andreea-Nicoleta Pinar

ISTA TCOM Chairs



BERT VAN DUJN
Advanced Technologies Committee



CORINNE GUIMIER
Bulking and Sampling Committee



FIONA R. HAY
Editorial Board of Seed Science and Technology



SARAH DAMMEN
Flower Seed Testing Committee



ELISA VIEIRA
Forest Tree and Shrub Seed Committee



ENRICO NOLI
GMO Committee



GILLIAN MUSGROVE
Germination Committee



AXEL GOERITZ
Moisture Committee



MELANIE SCHORI
Nomenclature Committee



DIDIER DEMILLY
Proficiency Test Committee



RUOJING WANG
Purity Committee



ERNEST ALLEN
Rules Committee



RUUD BARNHOORN
Seed Health Committee



BRIGITTE HAMMAN
Seed Science Advisory Group



JAYANTHI NADARAJAN
Seed Storage Committee



KIRK REMUND
Statistics Committee



SERGIO PASQUINI
Tetrazolium Committee



ANA LAURA VICARIO
Variety Committee



ALISON A. POWELL
Vigour Committee



GIL WAIBEL
Wild Species Working Group

Technical Committees are vital to ISTA achieving its aims and strategy.

Aim: To support the Technical Committees in their work and work together on ways to help them operate more effectively and the means needed

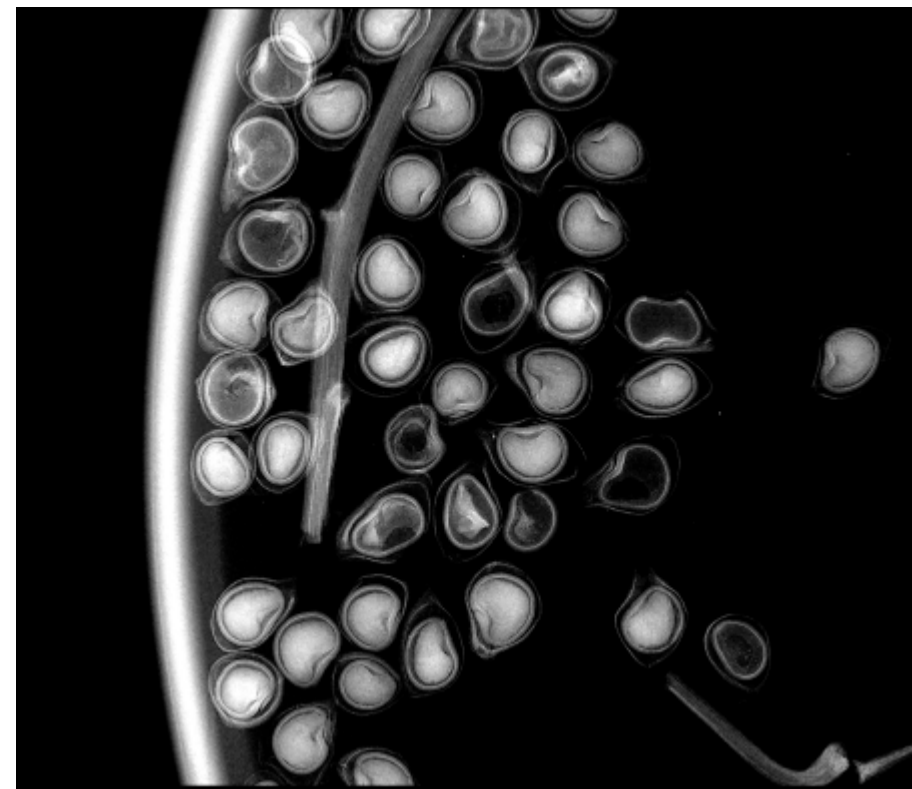
How: To support the Technical Committees in their work and work together on ways to help them operate more effectively and the means needed

Key Activities:

1. Review of CHF 100,000 Projects
2. Structure and Succession Planning

New Name: Strategic Initiative Fund

- Funding available will be determined annually
- Projects up to CHF 30000
- Applications will close 31 December
- Criteria for funding not changing



Why?

- Technical Committees are varied in what they do – structure / way of operating of Technical Committees is similar
- Expected route for succession planning is that the vice Chair will eventually take over as Chair



Thank you!

Follow us on social media:





ISTA Seed Expansion Strategy

Vanessa Sosa





BACKGROUND

ISTA has grown over the last century reaching over 80 countries/distinct economies, and over 400 competent and energetic seed scientists and analysts, in member laboratories and sampling entities, and individually as personal members, and associate members.

Numerous new species have been added to the ISTA Rules over time in response to requests from the seed industry, ISTA Designated Authorities and the membership.

ISTA is continuing its work of developing standard seed testing methods to facilitate the seed trade and make a valuable contribution to food security worldwide.



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However, **ISTA's presence needs to be expanded** in new regions and countries where it is not yet present or is underrepresented

and

It is also important to further **add new species to the seed testing rules**, like tropical and sub-tropical species, that are moving into international trade and/or may become more important as climate becomes warmer and drier.

ECOM WG

Expansion of Seed Testing worldwide



Members:

Vanessa Sosa (Uruguay)

Sergio Pasquini (Italy)

Craig McGill (New Zealand)

Ruel Gesmundo (Philippines)

Claid Mujaju (Zimbabwe)

Chair: Ignacio Aranciaga (Argentina)



The Aims of this ECOM Working Group:

1. **Facilitating the expansion** of the involvement of ISTA into new regions and countries where it is not yet present or is underrepresented.
2. **Encouraging (membership) participation** from new regions and countries where ISTA is not yet present or is underrepresented also to attract members.
3. **Improving presence through partnerships and collaborations with international organisations** like FAO, OECD, ISF, regional seed associations, etc. and the seed industry to build seed capacity and capabilities.
4. **Facilitating the inclusion of new species**, especially tropical and sub-tropical species, into the ISTA Rules.
5. **Facilitating the development of tests and methods**, especially for purity, other seed determination, moisture, germination, and viability of tropical and sub-tropical species through TCOMs to subsequently introduce to the ISTA Rules.



Developing of the objectives 1, 2 and 3



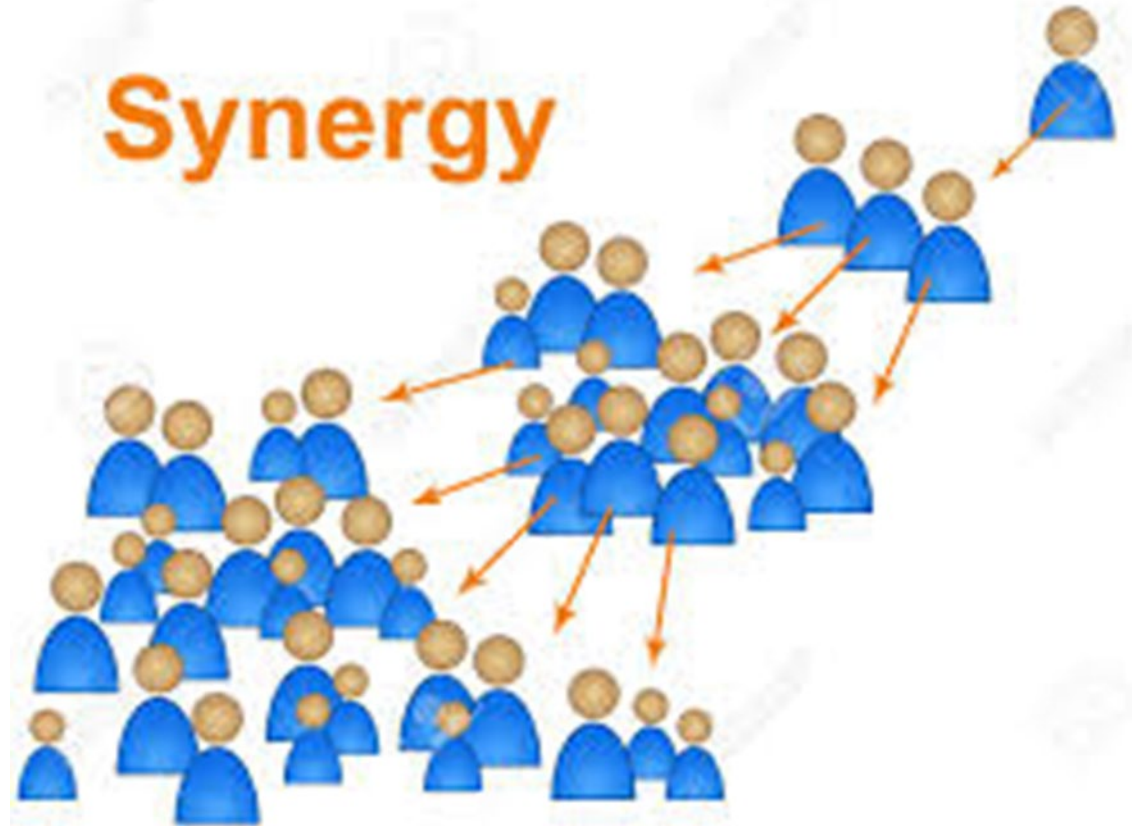


The collaborative work with colleagues and/or interested parties (national/regional), where ISTA it is not yet present or is underrepresented.



Building together the way to grow and build capacity and capabilities in seed testing, use of the ISTA Rules and laboratory/sampling entities accreditation.

The opportunity



ISTA Seed Expansion: ISTA Advocates

This will be a voluntary role and will be given by decision of the ECOM to a selected key person in a country/region where ISTA has special focus to grow.

The ISTA Advocate must:

- **have a strong working knowledge of ISTA** (aims, structure and how ISTA delivers services and support to its membership and other stakeholders).
- **have an understanding of the seed trade**, formal seed systems and seed quality assurance.
- **have established contacts within the region**, for example within the country or regional seed industry, and/or seed laboratories.
- **be willing and available to undertake advocacy tasks within the country**, for example visiting seed laboratories, presenting with seed sector fora and meeting with government and industry representatives.

ISTA Seed Expansion: ISTA Advocates

Role of the Advocate in countries/regions where ISTA has special focus to grow and attract members:

- 1. Identifying and facilitating to attract potential collaborators.**
- 2. Expanding marketing and promotion strategies into regions to attract new members** (with support of the Marketing and Publication Team in the ISTA Secretariat and through the Young@ISTA initiative), e.g.
 - Initiating the expansion of the involvement of ISTA into the country/region
 - Encouraging (membership) participation where ISTA has special focus to grow and attract members.
- 3. Improving presence** through national government, national and/or regional seed associations, universities and/or the seed industry to build seed capacities and capabilities; and, on request of the ISTA Executive Committee, representing ISTA in national conferences/meetings.
- 4. Promoting ISTA activities** like workshops, webinars, etc.

ISTA Seed Expansion: ISTA Advocates



In recognition of this task ISTA will give:

- Free participation in the ISTA events in their country/region.
- Member prices to participate in the ISTA events in other regions.
- Member prices for ISTA publications.



Registration List TEZ Montevideo July 31 to Aug 02

Name	Company	Membersh	Country
Magda Birck Garcia	Ministry Agriculture - Brazil	ISTA Member	Brazil
Anibal Alejandro Kiese Berni	barrio Santo Domingo	ISTA Member	Paraguay
Eliza Adriana Rolón Sánchez	San Blás	ISTA Member	Paraguay
Cynthia Raquel Garcete Rios	Yataity	ISTA Member	Paraguay
SANTIAGO VERGARA	CALVASE	ISTA Member	Uruguay
Santiago Pereyra	INSTITUTO NACIONAL DE SEMILLAS	ISTA Member	Uruguay
Marisa Mazzarini	PGG WRIGHTSON SEEDS ARGENT	Nonmember	Argentina
Fabricia Cristina dos Reis	LSM/CATI	Nonmember	Brazil
Bianca Bom Gomes Santos	LSM/CATI	Nonmember	Brazil
Nelly Donoso	Antufen Seeds Ltda	Nonmember	Chile
María Paz Quezada Vilches	Sumitomo Chemical Chile S.A	Nonmember	Chile
Alvaro Della Bernarda	Barraca Erro	Nonmember	Uruguay
Federico Báez	Laboratorio de semillas N°1	Nonmember	Uruguay
Alejandro Pereyra	Copagran	Nonmember	Uruguay
Shirley Lespada	Copagran	Nonmember	Uruguay
Mariana Camaño	PGG Wrightson Seeds	Nonmember	Uruguay
Mathias Aranda	DLF Seeds Uruguay S.A	Nonmember	Uruguay
Valeria Giorgio	Laboratorio Analítico de Semillas- Uru	Nonmember	Uruguay
MARIA JESICA FERREIRA GR	CALMER	Nonmember	Uruguay
Blanca Delgado	Asociación Rural de Florida	Nonmember	Uruguay
Valentina Pazos	INIA	Nonmember	Uruguay
Enrique Machado	CADOL	Nonmember	Uruguay
Sebastian Castro	CADOL	Nonmember	Uruguay
Mauricio Pereyra	Union Rural de Flores	Nonmember	Uruguay
Carolina Techera Iriarte	Coopar S.A.	Nonmember	Uruguay
Virginia Rodríguez	Coopar S.A.	Nonmember	Uruguay

ISTA Workshop in Uruguay

Tetrazolium test in
different crop
groups: A hands-on
workshop.

**Lecturer: Sergio
Pasquini**

July 2024

In Spanish!



The goal



Build together the way for the Expansion of Seed Testing in the Worldwide.

(“Uniformity in seed quality evaluation worldwide” – ISTA’s Vision)



 **ISTA ANNUAL MEETING 2024**



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Developing of the objectives 4 and 5

Tropical and subtropical species
(*Moringa*, *Guizotia*, others)



Thank you

 **ISTA ANNUAL MEETING 2024**  **01-04 JULY CAMBRIDGE, UNITED KINGDOM**





ISTA Membership

Sylvie Ducournau



Membership over the past 100 years

IN 1924

- ✓ **26 countries represented**
- Members from governmental / official seed testing laboratories (equivalent to DAs)
- Mainly in Europe, but also in South America, Asia and Africa

IN 1931

- ✓ **39 countries/distinct economies represented; 25 countries entitled to vote**
- Some countries no longer in ISTA (Siam, San Marino, Guatemala, Haiti, Cuba)

IN 1995

- ✓ **57 countries represented**
- First private members admitted to ISTA (private persons and private membership)

Overview of ISTA Membership

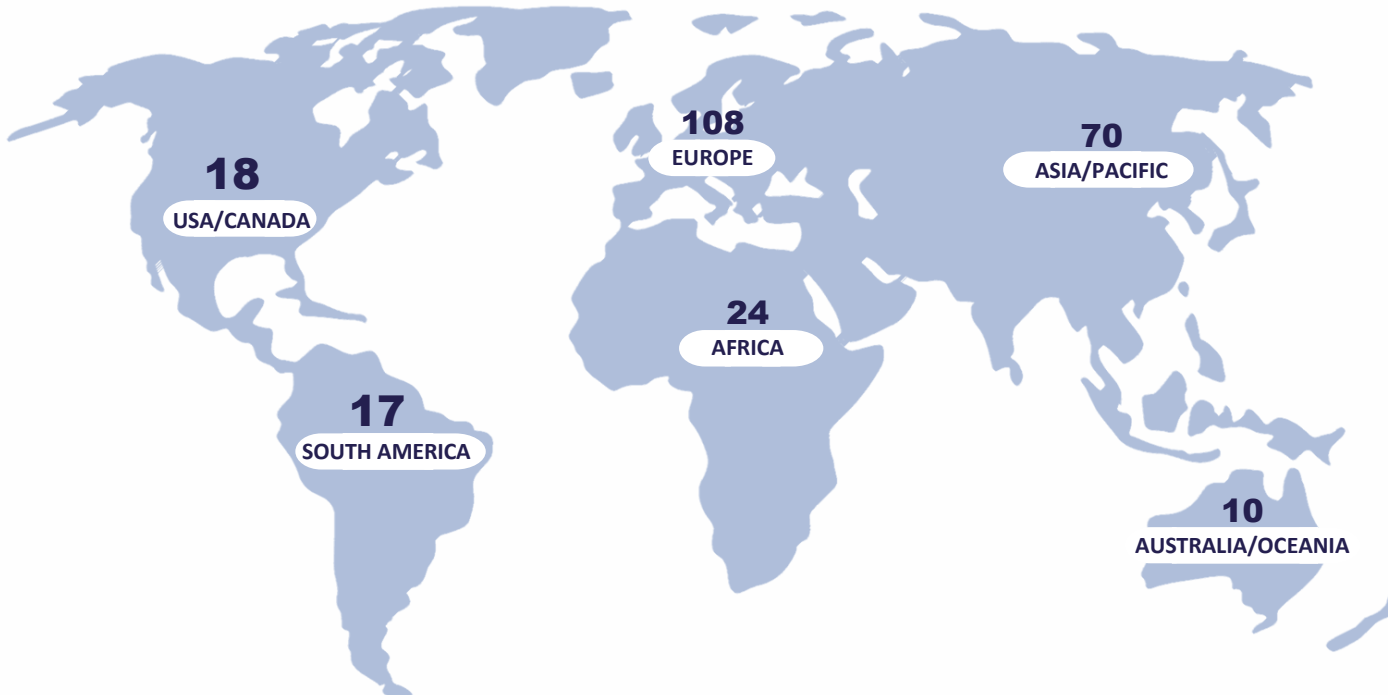
Figures at the end of 2023



83 COUNTRIES

COUNTING AT LEAST ONE ACTIVE ISTA MEMBER

247 LABORATORY MEMBERS
58 ASSOCIATE MEMBERS
40 PERSONAL MEMBERS



- 3 membership categories

- Laboratory members
- Personal members
- Associate members

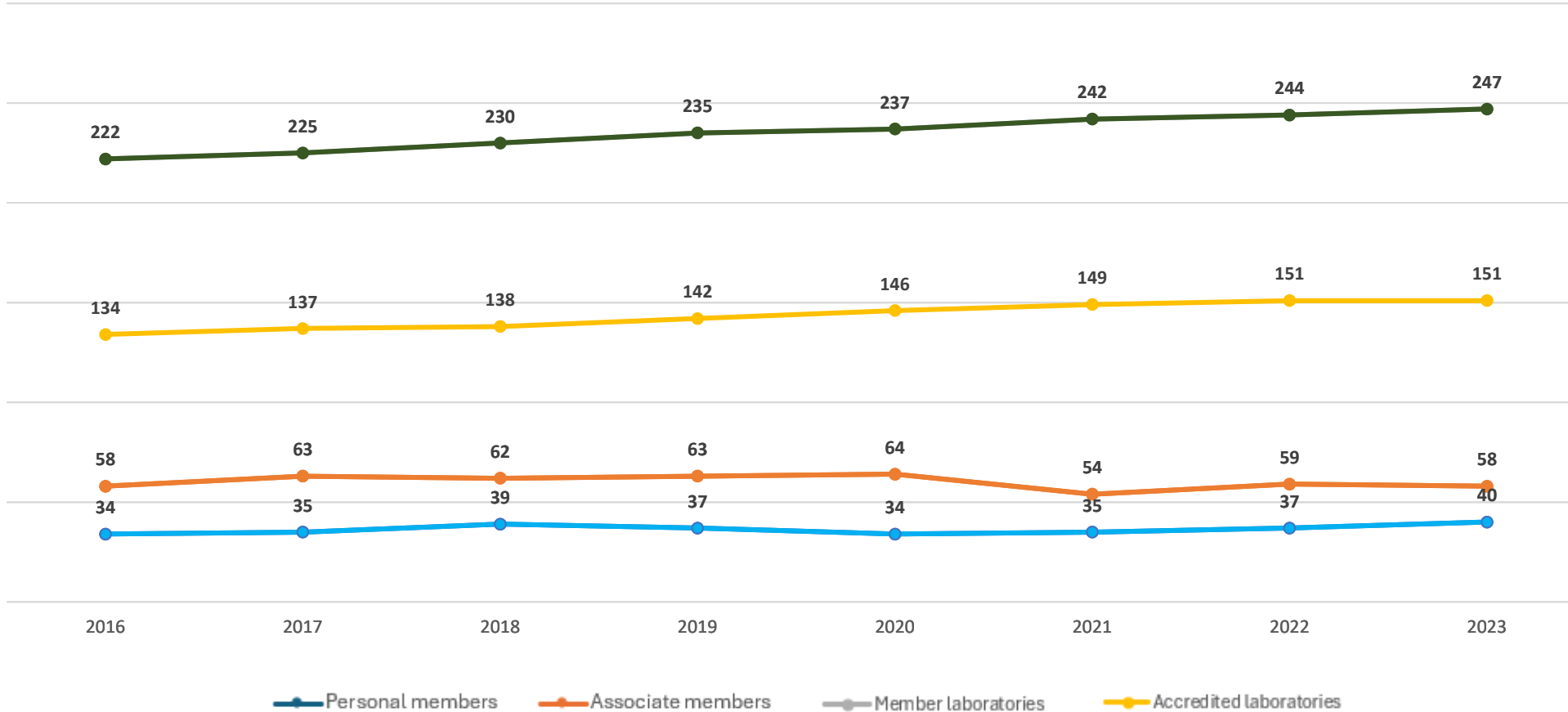
A collaboration of seed scientists and analysts from universities, research centers, and seed testing laboratories around the world.

- Designated members

- **85** Designated Members from
59 Designated Authorities



Recent evolution / Membership and accredited laboratories



Increased number of member laboratories linked to the number of accredited laboratories



Accredited laboratory / sampling entities

- ✓ 156 at the end of June 2024
- > 160 at the of 2024

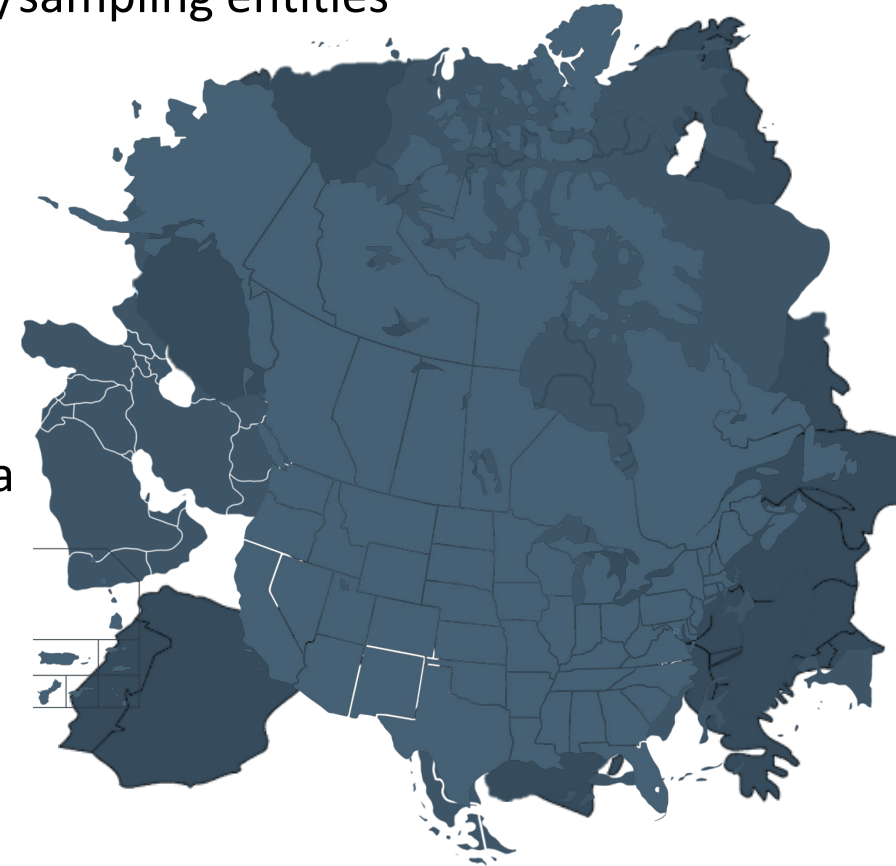
60.3% governmental accredited members

32% company accredited members

7.7% private accredited members

Accredited laboratory/sampling entities per region:

- 76 in Europe
- 47 in Asia/Pacific
- 14 in Africa
- 6 in South America
- 13 in North America



Projection for the future?



- ISTA membership is probably going to increase
 - Several countries are still under-represented and the Expansion WG is working to reach new members
 - The success of the Young@ISTA programme brings new seed professionals to ISTA's activities (new members?)
 - ISTA/ISSS webinars give more visibility to ISTA's work on seed testing research and technology (new members?)
- ISTA accredited laboratories (so laboratory members) are presumably going to increase
 - More seed company laboratories wanting to be able to issue their own certificates
 - More seed sampling units





Many thanks to Steve Jones, Florina Palada, Olga Stöckli and Yoana Uzunova

Thank you

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eCertificates Up-date

Andreas Wais

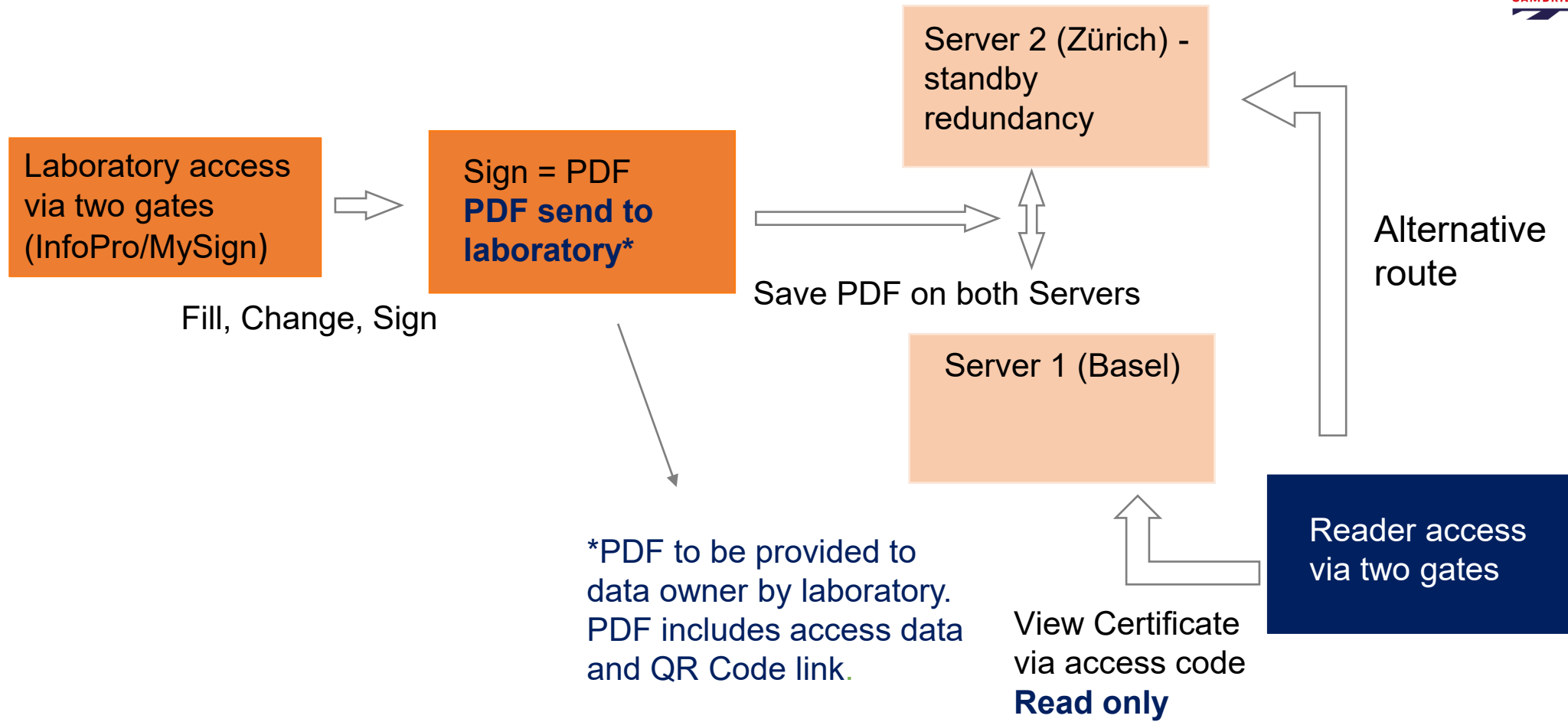
Benefits



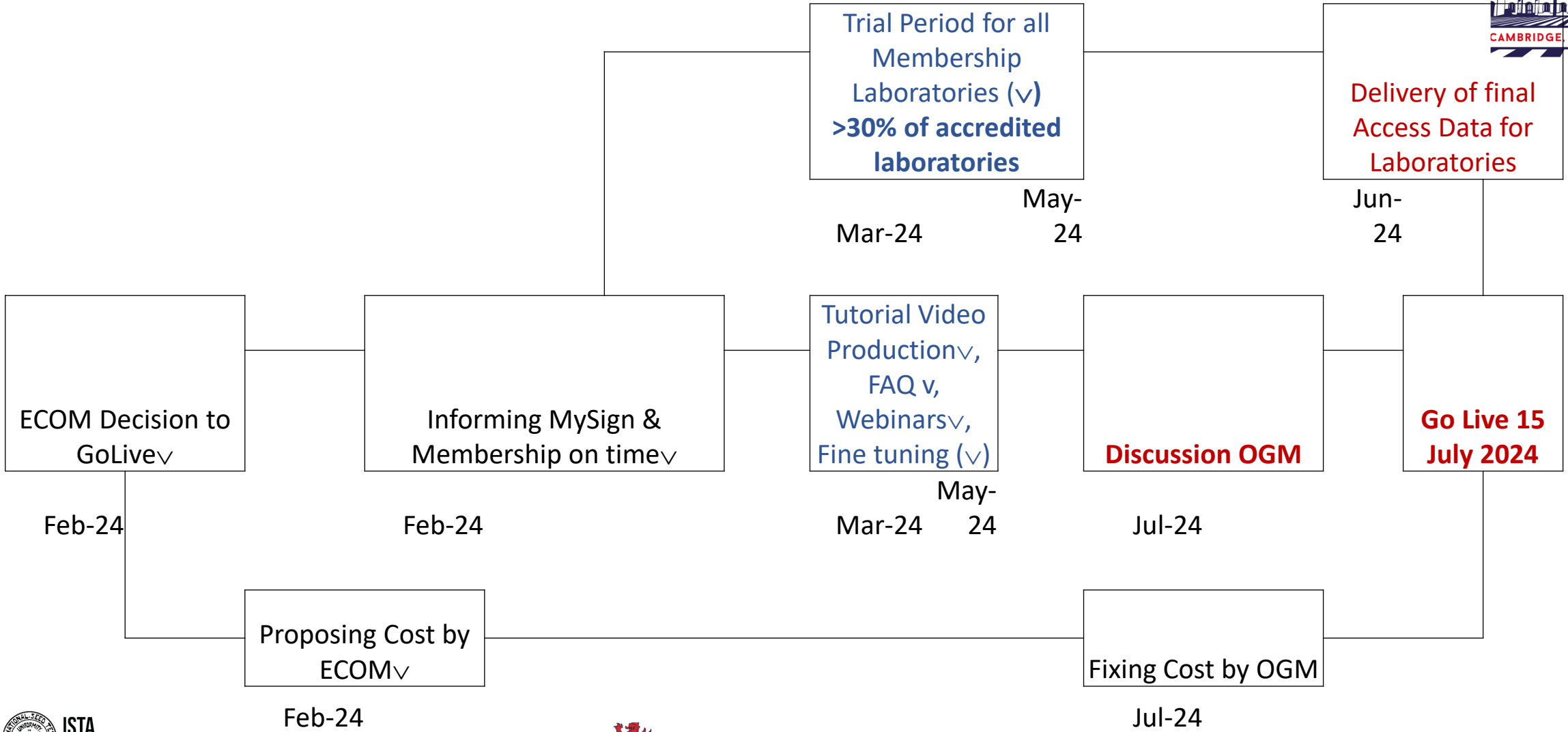
- eCertificates may be E-mailed directly after signature to the data owner by the laboratory or supplied via the laboratories' client portals – **No Delays, No Shipment Cost**
- eCertificates (PDFs) include access data via the ISTA website to **verify the data** for all interested parties using the read access (Originals keep the same access code, if before a Provisional eCertificate was issued) – **Read-only-area**



How they Operate



Go Live Schedule



Next Steps

- API Webinar: July 10, 2024 (2 webinars)
- Information to stakeholders through DAs and Laboratories: Mid July 2024





Thank you

 **ISTA ANNUAL MEETING 2024**  **01-04 JULY CAMBRIDGE, UNITED KINGDOM**





ISTA Annual Meeting 2024

Secretary General: Annual Report 2023

Andreas Wais & Florina Palada



Background Information

Selected highlights from: “Reports of the Secretary General, Proficiency Test Committee, Rules Committee and Editorial Board” detailed in the Activity Report of the ISTA Committees 2022.

The Activity Report in its entirety can be found at:

<https://www.seedtest.org/api/rm/X7X55EW9A9KMPD2/ogm24-03-activity-report-of-the-ista-committees-20-3.pdf>



Outline

- ISTA Secretariat
- ISTA Membership
- Accreditation Programme (Florina Palada)
- ISTA Training and Education Programme
- ISTA Publications and Products
- Highlights and Achievements
- ISTA Finances



ISTA Secretariat



Position

Name

Secretary General
Head of Accreditation & Technical Dep.
System Auditor, Quality Management &
Standard PT Coordinator
System Auditor
Audit, Accreditation & PT Administrator
Audit, Accreditation & PT Administrator
TCOM Manager
TCOM Administration
Marketing and Communication Manager
Marketing and Communication Expert
Finance, Sales & HR
Manager IT Business Solutions
Events & Membership Manager
Temporary Staff

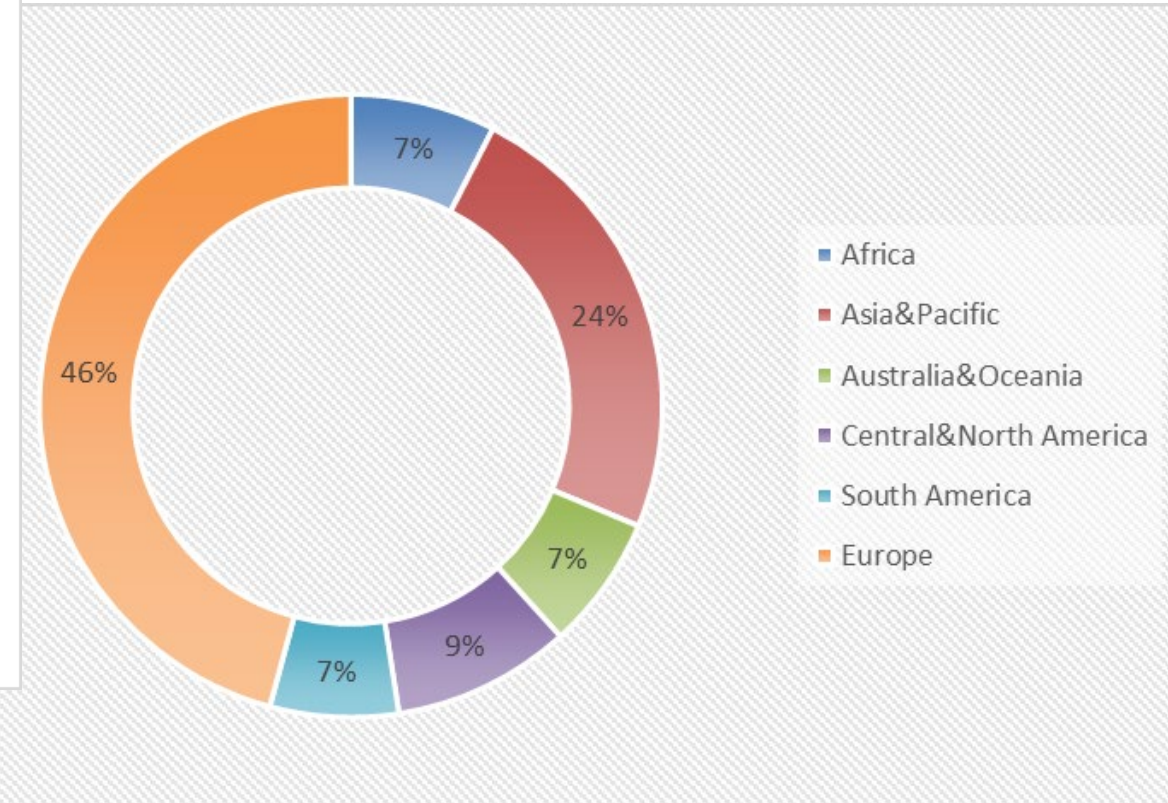
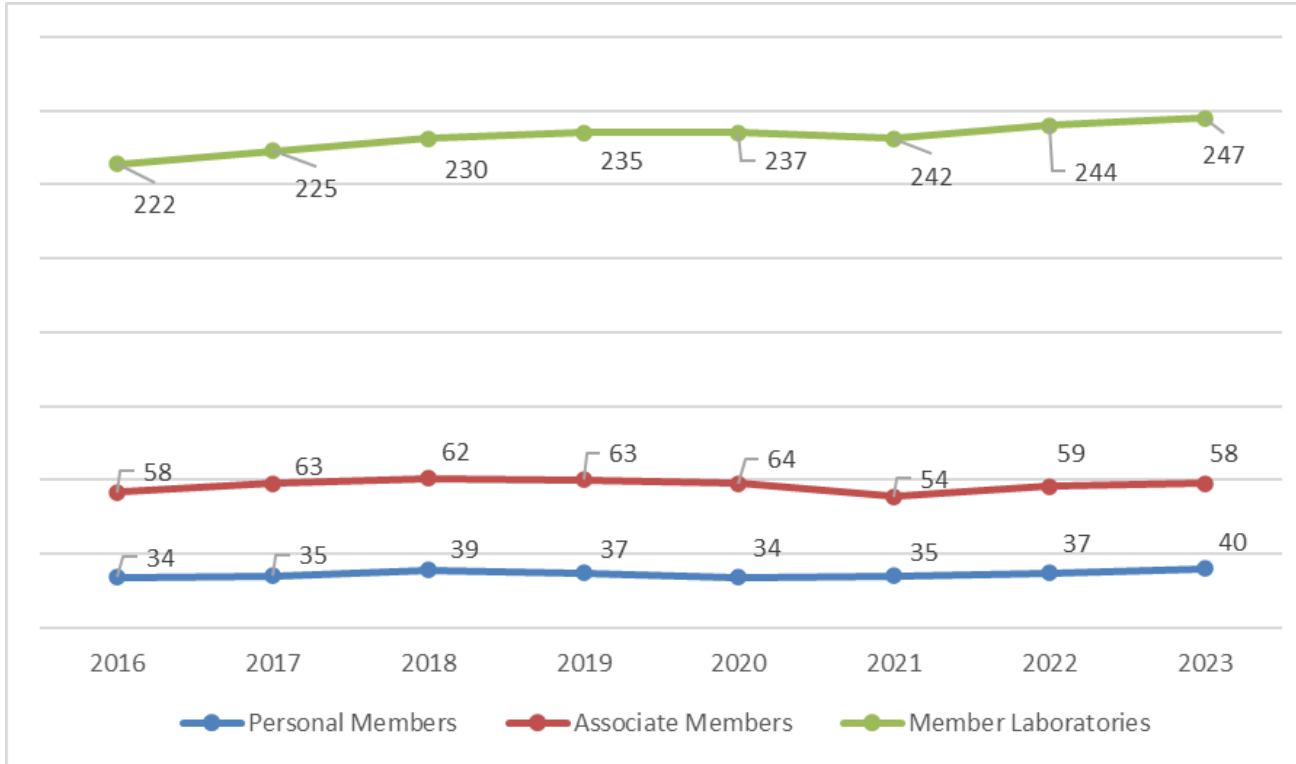
Andreas Wais
Florina Palada

Branislava Opra
Stella Marcu
Neelam Ok
Beata Hübnerova
Nadine Ettel
Andreea Pinar
Yoana Uzunova
Karen De La Rosa
Agnes Hegedüs
Sejal Patel
Olga Stöckli
Ana Maria Ferreira

10.8 FTE



ISTA Membership



- ISTA has at least one member in 83 countries or distinct economies

ISTA Annual Meeting 2024

Agenda item: Accreditation OGM

Sylvie Ducournau, AWG chair

Florina Palada, HoAT Department

Today's topics



- Department staff
- Audits: Overview 2023 and estimation for 2024
- Contracted auditors
- Feedback after audits
- Changes in NC policy and ISTA crop groups - update
- Revision of the Accreditation standard – update
- Challenges and achievements



Department staff

2023 and 2024

Head of Accreditation & Technical Department
System Auditor, Quality Management & Standard PT Coordinator
System Auditor & PT Administrator
Audit, Accreditation & PT Administrator

Florina
Branka
Stella
Neelam, Beata



Audits - Overview 2023

- 46* Audits in total
- **40** re-accreditation audits including
 - 2 laboratories with sampling units
 - 1 sampling entity
- **6** accreditation audits, including 1 sampling entity

1 partially remote
1 completely remote
44 on-site assesment

***The process is finalised for 45 members**



Audits - Overview 2024

- 62* Audits in total
- 55 Re-accreditation audits
- 7 Accreditation audits, including 1 sampling entity

Estimation

4 completely remote
58 on-site assesment

***27 audits performed (43.5%)**



Accredited laboratories and audits evolution

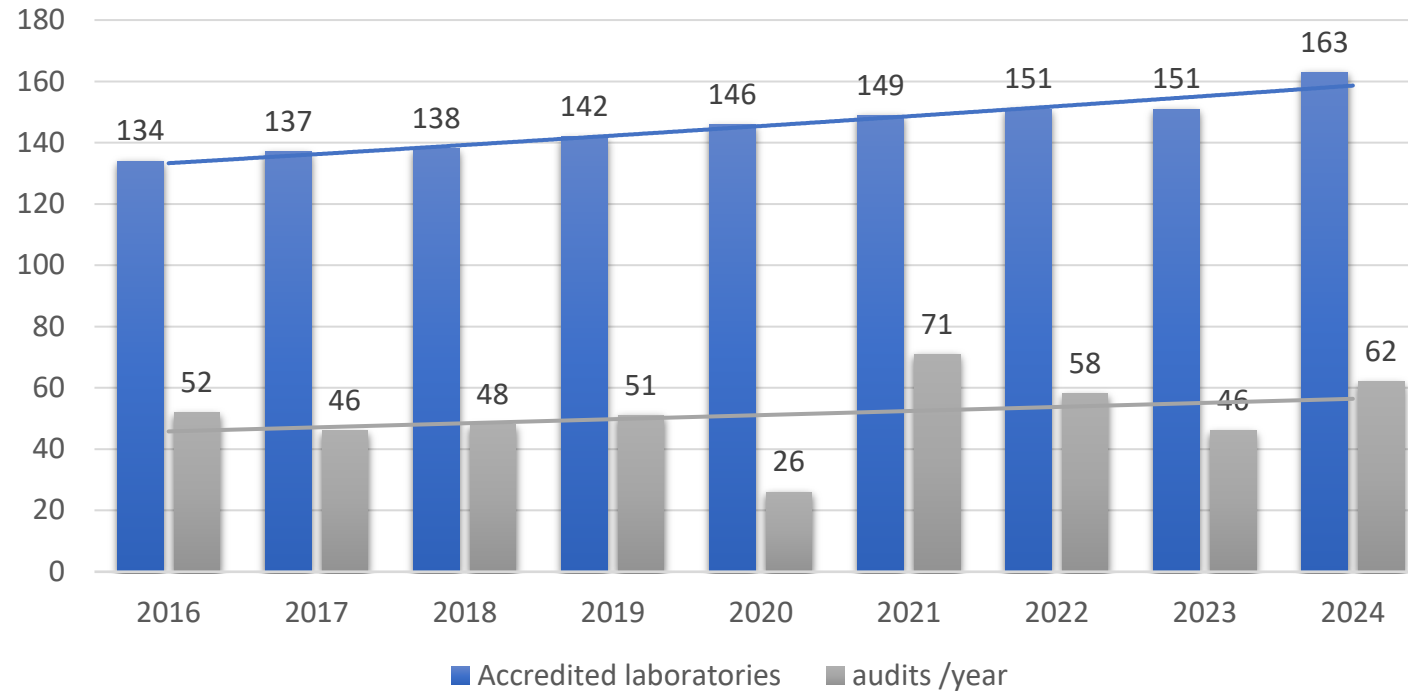


2024 December estimated 163

2023, 1 laboratory accreditation was terminated based on the ECOM Decision

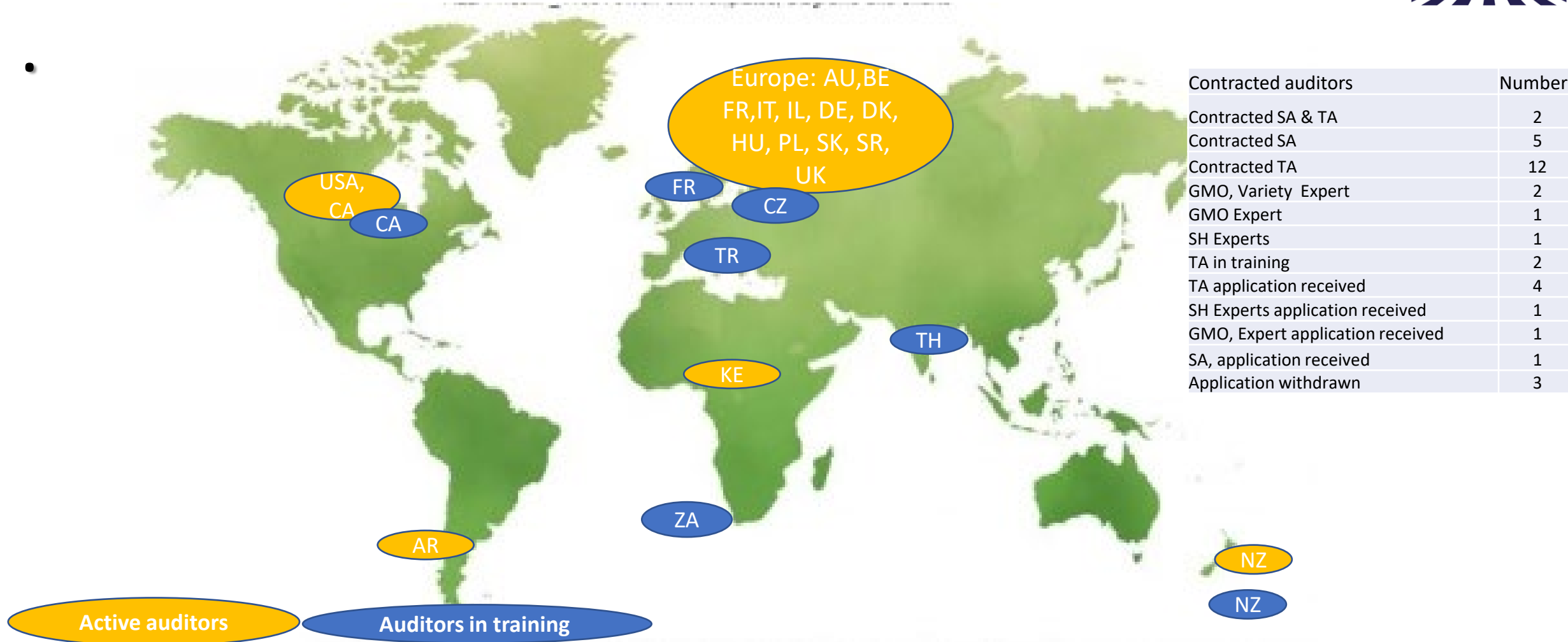
2024, 1 laboratory voluntary terminated its accreditation

Accredited laboratories and audits 2016-2024



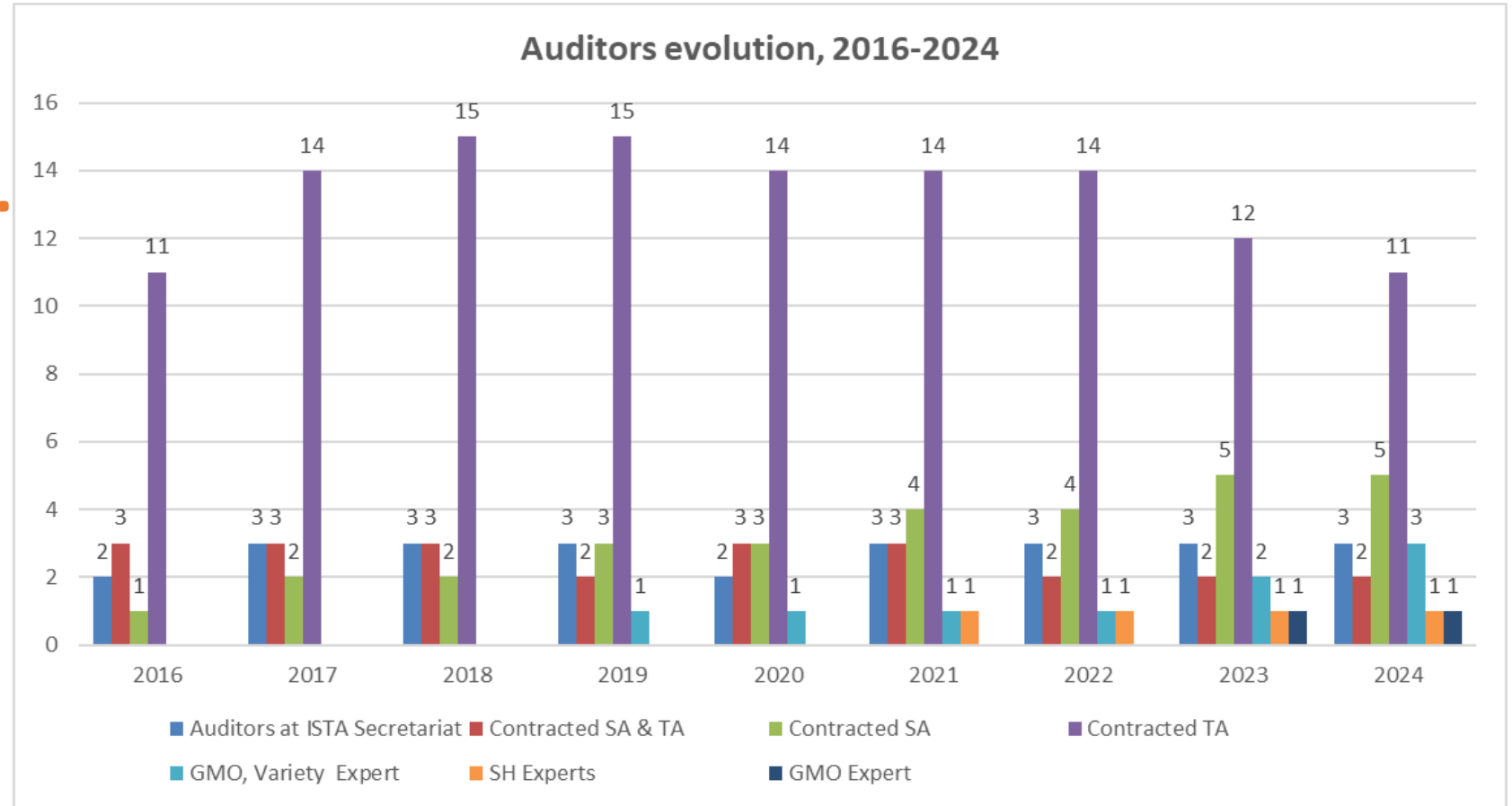
Auditors' regional distribution (2023)

Contracted auditors

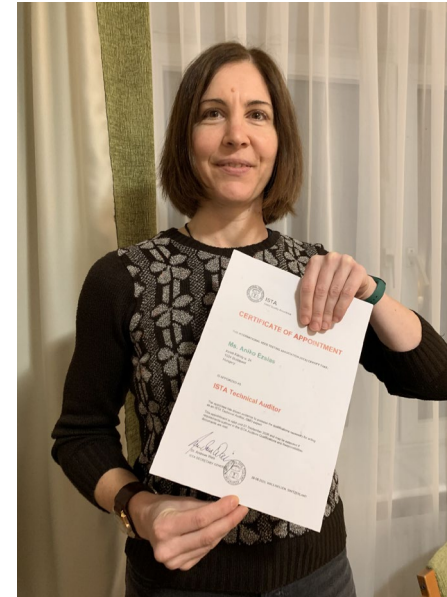


Auditors' evolution 2016-2024

- 2024 - 26 total (3 at ISTA Secretariat)
- 2016 - 17 total (2 at ISTA Secretariat)
- 10 auditors from 2016 still in the team
- New categories of Technical auditors
Experts in a certain field
- GMO and Variety - 3
- GMO - 1
- Seed Health -1
- In training different stages
- 5 TA
- 2 SA



Newly approved 2023 and 2024

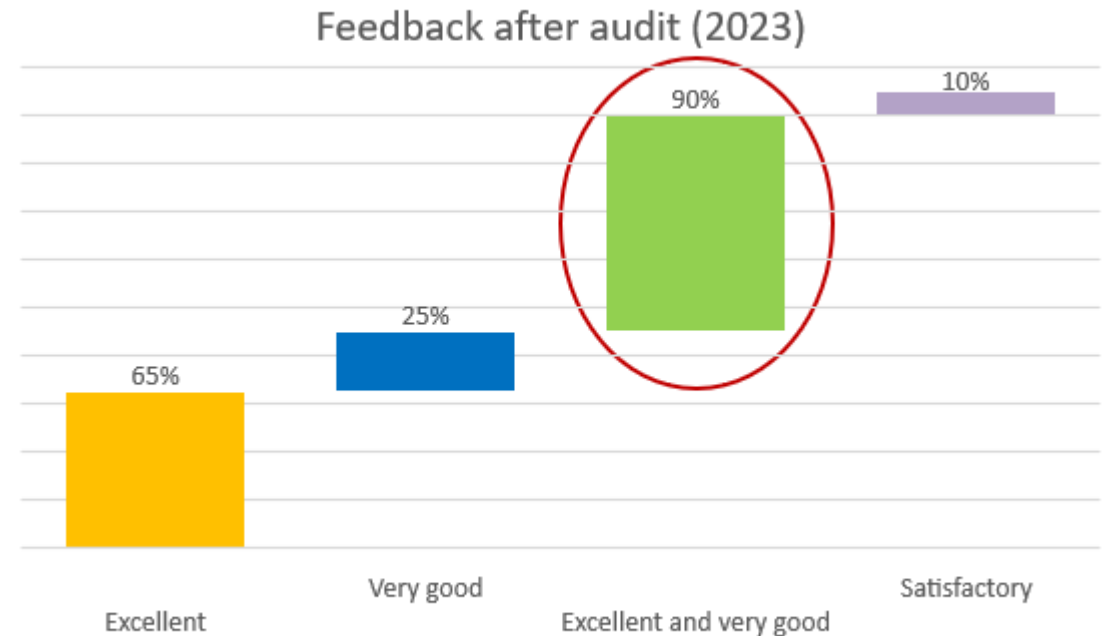


Feedback after audits

KPIs: $\geq 90\%$ Excellent and Very good; 0 Unsatisfactory

- 40 answers out of 45 laboratories approved
 - 26 - Excellent
 - 10 - Very good
 - 4 - Satisfactory
 - 0 - Unsatisfactory

- Excellent and very good -90%
- Satisfactory -10%



Non-conformities policy - update

ECOM decision February 2023



The ISTA (re)accreditation will be granted only if all Substantial non-conformities identified during an ISTA audit are addressed not later than 6 months after the audit date and all Non-substantial non-conformities are addressed not later than 9 months after the audit date.

For the Non-substantial non-conformities if more than 9 months is necessary to complete the necessary work then clear evidence that the planned corrective actions have started to be implemented must be provided.

The decision is effective from 16 February 2023

**The implementation was smooth – the audited laboratories complied with.
Few questions on how to proceed now when the due dates are different for S and NS.**



ISTA crop groups revision 2024/2025 - update

ECOM decision



valid since 1 January 2024

Ricinus in 2 crop groups : Other agricultural crops (5) and Vegetables, spices, herbs, and medicinal species (6)

5 (Other agricultural species)	<i>Beta, Brassica, Cannabis, Carthamus, Chenopodium, Crambe, Cucurbita, Dichondra, Fagopyrum, Gossypium, Helianthus, Hibiscus, Linum, Nicotiana, Phacelia, Plantago, Raphanus, Ricinus, Salvia, Sinapis, Spergula</i>
6 (Vegetables, spices, herbs, and medicinal species)	<i>Abelmoschus, Achillea, Allium, Amaranthus, Anethum, Anthriscus, Apium, Arctium, Asparagus, Atriplex, Atropa, Beta, Borago, Brassica, Cameline, Campanula, Cannabis, Capsicum, Carum, Chenopodium, Chrysanthemum, Cichorium, Citrullus, Claytonia, Corchorus, Coriandrum, Cucumis, Cucurbita, Cuminum, Cynara, Datura, Daucus, Eruca, Fragaria, Foeniculum, Gossypium, Glebionis, Ipomoea, Lactuca, Lagenaria, Lepidium, Levisticum, Luffa, Malva, Marrubium, Matricaria, Melissa, Mentha, Momordica, Nasturtium, Nicotiana, Ocimum, Oenothera, Origanum, Papaver, Pastinaca, Petroselinum, Phacelia, Physalis, Pimpinella, Portulaca, Raphanus, Rheum, Ricinus, Rosmarinus, Rumex, Salvia, Sanguisorba, Satureja, Scorzonera, Sesamum, Silybum, Solanum, Spinacia, Stylosanthes, Taraxacum, Tetragonia, Thymus, Tragopogon, Valerianella, Valeriana, Verbena</i>

valid starting 1 January 2025

Grevillea and *Leucaena* which are shrubs or trees in 2 crop groups: *Leucaena leucocephala* (3, Small legumes) and *Grevillea robusta* (8, Flowers) and both added in crop group 7

7 (Tree and shrub species)	<i>Abies, Acacia, Acer, Aesculus, Ailanthus, Alnus, Amorpha, Berberis, Betula, Calocedrus, Caragana, Carica, Carpinus, Castanea, Catalpa, Cedrela, Cedrus, Chamaecyparis, Cornus, Corylus, Corymbia, Cotoneaster, Crataegus, Cryptomeria, Cupressus, Cydonia, Cytisus, Elaeagnus, Eucalyptus, Euonymus, Fagus, Fraxinus, Ginkgo, Gleditsia, Grevillea, Ilex, Juniperus, Koelreuteria, Laburnum, Larix, Leucaena, Ligustrum, Liquidambar, Liriodendron, Malus, Morus, Nothofagus, Picea, Pinus, Platanus, Platycladus, Populus, Prunus, Pseudotsuga, Pyrus, Quercus, Robinia, Rosa, Salix, Senegalla, Sequoia, Sequoiadendron, Sorbus, Spartium, Styphnolobium, Syringa, Taxodium, Taxus, Tectona, Thuja, Tilia, Tsuga, Ulmus, Vachellia, Viburnum, Zelkova</i>
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Proficiency Tests

ISTA Standard Proficiency Test Programme Plan 2023-2025 (update 10 April 2024)



Round	Species	Test round scope	Crop group	Crop group
PT23-1	<i>Vicia villosa</i>	PUR, OSD, GER	4	Pulses
PT23-2	<i>Raphanus sativus</i> ***	PUR, OSD, GER, MOI, VIG (conductivity test), OIC	5 (and 6)*	Other agricultural crops and vegetable
PT23-3	<i>Trifolium hybridum</i>	PUR, OSD, GER, TSW	3	Small legumes
PT24-1	<i>Triticum aestivum</i> subsp. <i>aestivum</i> ***	PUR, OSD, GER, MOI, TZ, VIG (radicle emergence), TSW, OIC	2	Cereals
PT24-2	<i>Matthiola longipetala</i>	GER	8	Flowers
PT24-2	<i>Arachis hypogaea</i>	GER	4	Pulses
PT24-3	<i>Lactuca sativa</i>	PUR, OSD, GER	6	Vegetables
PT24-3	<i>Coriandrum sativum</i>	GER	6	Vegetables
PT25-1	<i>Beta vulgaris</i> ** (pelleted seeds)	GER, OIC	5	Other agricultural crops
PT25-1	<i>Festuca rubra</i>	PUR, OSD, GER, TZ	1	Grasses
PT25-2	<i>Oryza sativa</i> ***	PUR, OSD, GER, TZ, TSW OIC	2	Cereals
PT25-3	<i>Pinus sylvestris</i>	GER, MOI, TZ	7	Forest
PT25-3	<i>Chenopodium quinoa</i>	GER	5 (and 6)*	Other agricultural crops and vegetables

* laboratories accredited for each crop group will be considered as obligatory participants

** round on *Beta vulgaris* is confirmed; laboratories ISTA accredited both for crop group 5 and coated seed are considered as obligatory participants (accreditation for the crop group 5 only without accreditation for coated seed will for this round be considered as voluntary participation)

*** rounds PT23-2, PT24-1 and PT25-2 will also include a small seed mixture sample for the seed identification training exercise organised by the ISTA Purity Committee; the results are therefore not rated, and the participation is voluntary for all laboratories



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Stella Marcu

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Proficiency Tests– 2023

Information taken from the activity report prepared by Branka and Didier

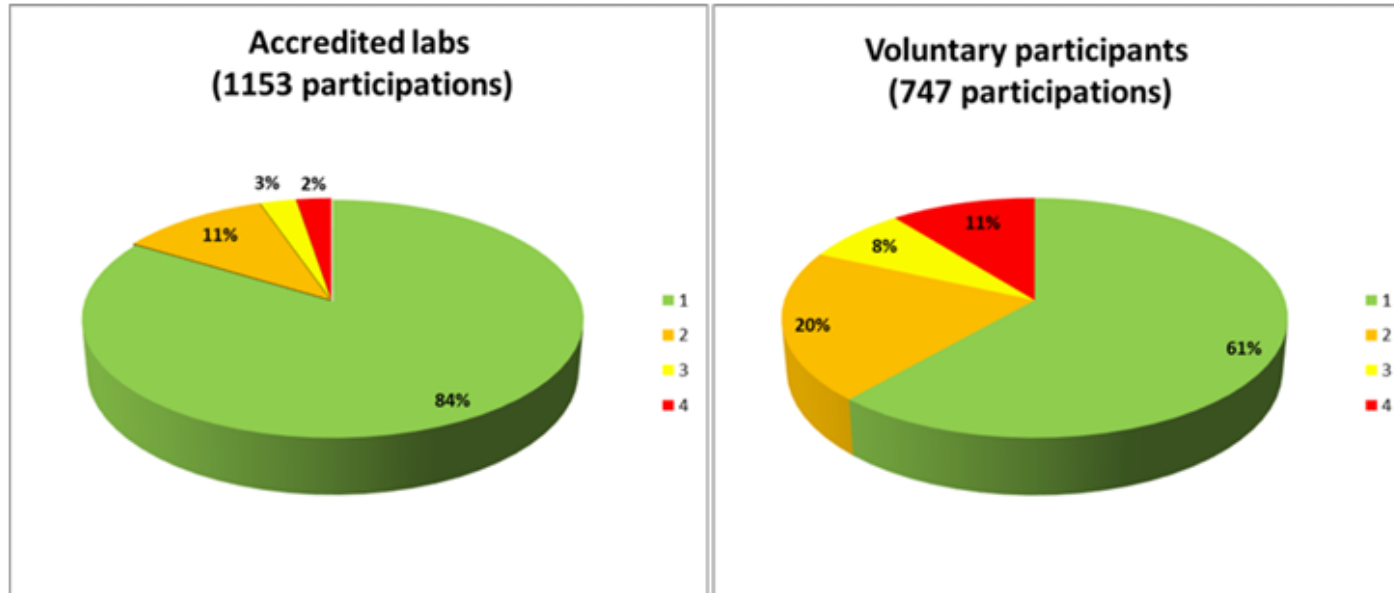


Figure 1: Laboratories rating for the year 2023 for all tests and all participants on PT22-3, PT23-1, PT23-2. Comparison between accredited and voluntary participating laboratories.

First Proficiency Tests for DNA based methods on Triticum– Round obligatory for 3 laboratories.



Actions after the PT results 2023

Total 21 Warning letters (WL)

- PT 23-1: 8 WL
- PT23-2: 7 WL
- PT 23-3: 6 WL

23-1, Vicia villosa	Overall C	OSD
23-1, Vicia villosa	Overall C	OSD
23-1, Vicia villosa	Not overall rated but BMP	OSD
23-1, Vicia villosa	NP-BMP	P, G, OSD
23-1, Vicia villosa	Overall C	G
23-1, Vicia villosa	Overall C	G
23-1, Vicia villosa	BMP and C for Pulses	G
23-1, Vicia villosa	Previous ratings G "A" only except the last 2 "C"	G
23-2, Raphanus sativus	a BMP even not yet overall rated	Germination
23-2, Raphanus sativus	2 C in a row	Germination
23-2, Raphanus sativus	Overall C	Germination
23-2, Raphanus sativus	Overall C	Germination
23-2, Raphanus sativus	Overall C	Germination
23-2, Raphanus sativus	Overall C	Germination
23-2, Raphanus sativus	Overall C	Moisture
23-3, Trifolium hybridum	Overall C	Germination
23-3, Trifolium hybridum	Overall C	Germination
23-3, Trifolium hybridum	Overall C	Purity
23-3, Trifolium hybridum	in-round rating BMP	TSW
23-3, Trifolium hybridum	in-round rating C	TSW
23-3 Trifolium hybridum	in-round rating, 2XBMP (AWG decision)	TSW

Quality Management System – ALL Audit documents

ISTA Logo -2024

Audit Report XXXX-YEAR, valid for 2024

Audit Detail Report XXXX-YEAR, valid for 2024

Audit Checklist XXXX-YEAR, valid for 2024

Audit Participants list XXXX-YEAR, valid for 2024

Audit timetable one day XXXX-YEAR, valid for 2024

Audit timetable two days XXXX-YEAR, valid for 2024

Audit timetable sampling entity XXXX-YEAR, valid for 2024

CA Report XXXX-YEAR, valid for 2024

Any other related document - 2024



ISTA
100 YEARS
A CENTURY OF PROGRESS IN SEED QUALITY ASSURANCE



 **ISTA ANNUAL MEETING 2024**



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ISTA Accreditation standard, version 7.0, 2024



- Posted on the ISTA website since 4th of September 2023 to allow all interested members to be informed in time.
- Discussed with the auditors in December 2023
- Published as valid on 4th of January 2024

ISTA Accreditation Standard for Seed Testing and Seed Sampling

Any hardcopy of this document is not controlled copy

Valid from: 01.01.2024 Version 7.0 Page 1 of 12
ISTA Accreditation Standard Print Date: 04.09.2023

Comes into effect as of January 1, 2024

ISTA Accreditation Standard for Seed Testing and Seed Sampling V7 0 September 2023 (PDF, 310.0 kB)

Accreditation Documents

ISTA Accreditation Standard for Seed Testing and Seed Sampling - English

ISTA Accreditation Standard for Seed Testing and Seed Sampling - French

ISTA Accreditation Standard for Seed Testing and Seed Sampling - German

ISTA Accreditation Standard for Seed Testing and Seed Sampling - Spanish

Available in French (FR02), Spanish (AR01, UY02) and German (DE05)



ISTA ANNUAL MEETING 2024



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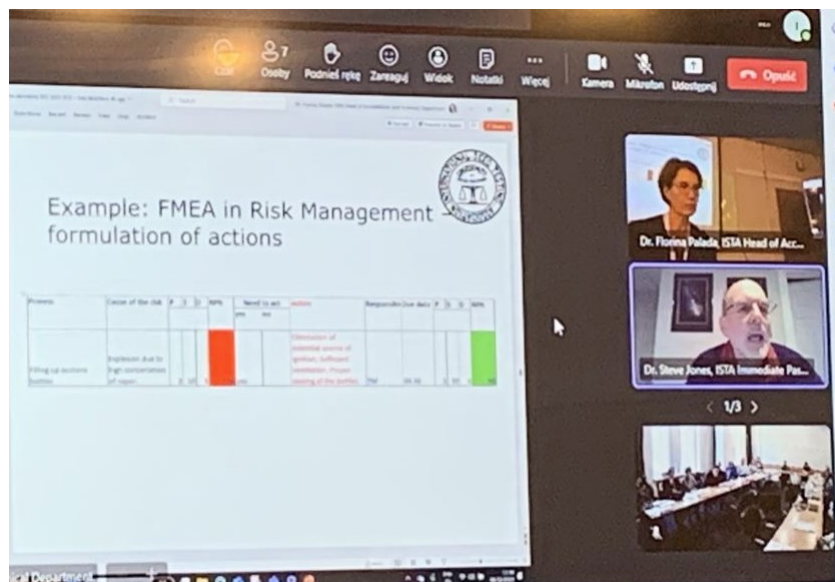
Auditors Workshop, Poznan (December 2023)



Outcome: 25 actions

- **ISTA accreditation standard v7.0**, discussions on requirements
- Risk assessment - **Guideline for the auditors and auditees** now as final draft for ECOM approval
- **Auditors Training** on risk assessment and equipment calibration, verification aspects
- Open **discussion on the audit practice** – increase the uniformity in performing audits
- **HB**, (Guideline) will be produced to help the audited laboratories to understand the **calibration requirements for different equipment – in progress**
- **A new KPI** was introduced for the timelines of evaluating the Corrective actions (in max 10 days from the receipt, the evaluation must be sent back to the laboratory for 90% of the laboratories) - **2 cases out of the due date (4.3%)**





Quality assurance



1 Webinar 2023 – *How to address a non-conformity identified at ISTA audit*

- 234 participants, ISTA and non-ISTA Members

A promotional banner for a webinar. The top section is orange with the text 'Upcoming Webinar' and the ISTA seal. Below this is a white box with the title 'How to address non-conformities identified at an ISTA audit'. Three speakers are listed with their photos: Florina Palada (Head of the Accreditation and Technical Department), Jodi Keeling (Technical auditor), and Rita Zecchinelli (Technical and system auditor). The bottom section is orange and contains the date '26.10.2023', time '15:00- 16:00 (CEST)', and website 'seedtest.org'.



2 Webinars for 2024

- ***ISTA Samplers monitoring*** – Florina, Corinne, Eddie – provided in March
 - 316 participants, ISTA and non-ISTA Members
- ***ISTA Analysts monitoring*** – Florina, Rasha planned for October



Quality assurance

Basic (Introductory) course for quality seed

10-12 October 2023, Dhaka, Bangladesh

Joël Léchappé, Craig McGill, Florina Palada



Quality assurance Workshop for beginners

15-17 October 2023, Hyderabad, India

(Indo –German Project)

Joël Léchappé, Craig McGill, Florina Palada



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Quality assurance

2024 Quality Assurance Workshops:

- 1 x *Quality assurance workshop for advanced level*, January 2024, Oudtshoorn, South Africa



- 2 x *Quality assurance workshops for advanced level* - Bucharest, Romania, October 2024

Trainers: Joël Léchappé , Eddie Goldshagg, Florina Palada

- In planning 1 *Quality assurance workshop for beginners* (on-line), December 2024

Trainers: Joël Léchappé , Branka Opra, Florina Palada

Challenges



- Align the related documents to the revised Accreditation standard v7.0
- New technologies, machineries replacing human analysts
 - Part of the team preparing the Guideline on New Technologies
- Prepare a Guideline for auditors and auditees for Risk and opportunities assessment
- Organise the audit for two laboratories with Sampling units in the scope
- Establish and implement the procedure on how to perform the audit for the laboratories with sampling units
 - *ACC-D-06B-Accreditation of laboratories with sampling units at multiple sites*
 - *Acc-P11-Auditing laboratories with sampling units*



Challenges

Accreditation scope for a laboratory with sampling units

Procedure and on-site assessment coordinated by Florina and the assigned auditors
Accreditation DB update and documents design coordinated by Branka



Scope of ISTA Accreditation

Annex to the Accreditation Certificate - ISTA Standard Methods

ISTA code	FR03		
Address	Quality Assurance Laboratory Bayer Seeds SAS Route de Pardies 1050 P.O. Box 21 40305 Peyrehorade Cedex France	Sampling unit(s)	S1 Bayer Seed SAS 30 rue du Cairat Haut, ZA du Cairat 11800 Trèbes France S2 Bayer - Crop Science Westeinde 161 1601 BN Enkhuizen Netherlands
Issued on	10.02.2024		
Valid to	17.09.2026		



Challenges

Redesign of the GMO accreditation scope



Branka's contribution must be commended:

- DB upgraded
- Laboratories with GMO in the scope contacted for the new scope conformity
- ISTA website updated to show GMO details for the accreditation scope
- GMO Application for (re)accreditation re-designed with a drop-down menu
- Changed design of the Application for (re)accreditation for standard methods

Testing for genetically modified organisms (GMO)

- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), ACS-BNØØ3-6
- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), ACS-BNØØ5-8
- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), CS-CP4epsps-RHIRD
- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), CS-nptII-ECOLX
- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), CS-pat-STRVR
- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), DP-Ø73496-4
- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), MON-883Ø2-9
- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), MON-89249-2
- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), MON-941ØØ-2
- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), MON-ØØØ73-7
- GMO: Brassica napus, Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), T-nos-RHIRD
- GMO: Glycine max, Adventitious Presence, ELISA, Qualitative, Seed bulk(s) or groups(s), CP4 EPSPS
- GMO: Gossypium spp., Adventitious Presence, epPCR, Qualitative, Seed bulk(s) or groups(s), ACS-GHØØ1-3



ISTA Secretariat activities, 2023-2024

- ISTA Secretariat re-certification audit and Internal audit
- eCertificates Project support
- ECOM-VSI WG participation
- STI contribution
- ISTA website update
- Support for the TCOMs
- Clarifications asked to TCOMs after audits
- Contribution to the ISTA Rules changes
- Collaboration with the Marketing and Communication colleagues (snapshots of an audit flow)

ACCREDITATION & AUDIT TEAM



Pre-Audit Meeting
ISTA Secretariat, 2024



Florina Palada
Head of Accreditation & Technical Department



Branislava Opra
System Auditor, Quality Management & Standard PT Coordinator



Stella Marcu
System Auditor & PT Administrator



Beata Hübnerova
Audit, Accreditation & PT Administrator



Neelam Oak
Audit, Accreditation & PT Administrator - on maternity leave



External Auditors
More than 70 System and Technical Auditors from around the world



International representation, 2023

- AFSTA Congress in Senegal
- AU Meeting in Senegal
- ILAC Meeting, North Ireland

Future Objectives

- **Feedback** from the audited laboratories
- **Audit report** to establish mandatory points to be considered
- **Implementation** of the guideline for risk assessment (Webinars, QA workshops)
- **Progress** for the HB for the calibration requirements
- **Change back the Logo** for the Audit document starting with 1 January 2025
- Increase the **auditors team**





Thank you!

ISTA Members
ISTA Accredited laboratories
ISTA ECOM
ECOM-Accreditation Working Group
ISTA Technical Committees
ISTA Secretary General and ISTA Secretariat Colleagues
ISTA contracted auditors and my Team

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ISTA Training and Education Programme



Country/Distinct Economy	Date	ISTA Event
Chillanga, Zambia	17–20 April 2023	Germination (24 participants)
Peri, Italy	24-25 May 2023	Tetrazolium Testing and Equilibrium Relative Humidity (eRH) Determination for Native Species (15 participants)
Peri, Italy	26-27 May 2023	Tetrazolium Testing and Equilibrium Relative Humidity (eRH) Determination for Native Species (19 participants)
Tavazzano, Italy	21-23 November	Statistical Approaches in GMO (14 participants)
Bucharest, Romania	4-7 September 2023	Germination (31 participants)
Dhaka, Bangladesh	10-12 October 2023	Quality Assurance (30 participants)

- ISTA Webinars and ISSS/ISTA Webinars



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ISTA Publications and Products

Sales of 'Seed Science and Technology' 2019- 2023

	2019	2020	2021	2022	2023
SST Print	0	0	0	0	0
SST Online Single	1	0	1	0	0
SST Print + Online single	0	0	0	0	0
SST Print + Online Multiple	0	0	0	0	0
SST Online Multiple	0	0	0	0	0
SST Back Issues, print	1	0	0	0	0
SST Download of Individual Chapters	9	13	11	10	3
SST Open Access Fee Full Length Paper	11	12	15	-	10
SST Open Access Fee Research Note	11	10	3	-	11
Total SST	33	35	30	10	24



ISTA Publications and Products

Total sales of ISTA publications 2019- 2023

Type/year	2019	2020	2021	2022	2023
Handbook on Seed Sampling	6	0	7	36	40
Handbook on Seedling Evaluation	54	40	55	42	42
Handbook on Pure Seed Definitions	12	5	5	16	11
Handbook on Moisture Determination	11	4	7	9	24
Handbook on Flower Seed Testing	3	12	22	9	8
ISTA Working Sheets on Tetrazolium Testing Vol. I	4	1	9	11	8
ISTA Working Sheets on Tetrazolium Testing Vol. II	6	3	5	3	5
Various Handbooks/Publications	44	15	29	79	46
Total Publications sold	140	80	139	205	184

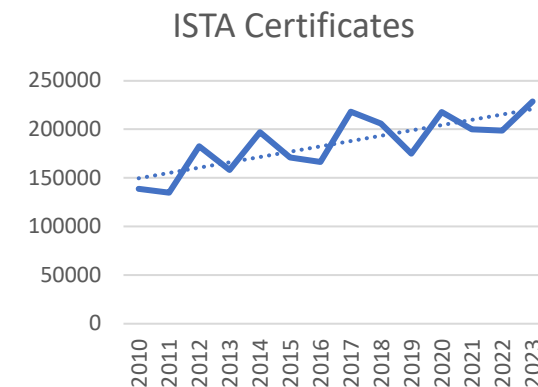


ISTA Publications and Products

Sales of ISTA Certificates 2019 - 2023



Type of ISTA Certificates	2019	2020	2021	2022	2022
Orange International Seed Lot Certificates	163'700	202'500	181'360	189'040	214'500
Blue International Seed Sample Certificates	11'400	15'400	18'600	9'500	14'100
Total	175'100	217'900	199'960	198'540	228'600



ISTA Finance



ISTA Budget 2024 & Proposed 2025	2022	2023	Budget 2024	Proposed 2025
INCOME	CHF	CHF	CHF	CHF
Subscriptions				
Annual Membership Subscription	1'249'610.80	1'253'735.68	1'258'414.58	1'265'000.00
Accreditation Subscription	170'136.00	171'861.31	179'144.64	180'000.00
Annual Meetings	66'638.85	105'416.23	164'700.00	145'000.00
Technical Committees WS	32'860.78	52'491.60	75'000.00	75'000.00
STI Advertisement	0.00	0.00	1'500.00	1'500.00
Subtotal	1'519'246.43	1'583'504.82	1'678'759.22	1'666'500.00
Service Centres				
ISTA Rules	49'172.85	43'888.91	55'000.00	55'000.00
Accreditation Audits	614'704.00	641'132.95	665'008.10	665'000.00
Proficiency Test incl. GMO	12'000.00	7'000.00	16'000.00	15'000.00
QA Workshops	0.00	0.00	8'000.00	5'000.00
Seed Science and Technology	237.28	19'699.43	15'000.00	15'000.00
Technical Publications and calibration samples	50'725.04	33'720.53	30'000.00	30'000.00
Certificates	629'850.00	742'950.00	800'000.00	800'000.00
Website	0.00	0.00	0.00	0.00
Subtotal	1'356'689.17	1'488'391.82	1'589'008.10	1'585'000.00
Losses in receivables	-36'424.00	-32'695.68	-15'642.00	-15'000.00
Total Income	2'839'511.60	3'039'200.96	3'252'125.32	3'236'500.00

ISTA Finance

ISTA Budget 2024 & Proposed 2025	2022	2023	Budget 2024	Proposed 2025
EXPENDITURE	CHF	CHF	CHF	CHF
Direct Costs				
Annual Meetings & Congresses	-129'644.28	-142'464.69	-190'875.00	-190'000.00
Executive Committee+President	-15'773.48	-64'408.68	-45'000.00	-45'000.00
Technical Committees WS and 3K grants	-114'500.03	-153'324.97	-206'500.00	-200'000.00
Seed Testing International	-30'520.57	-34'239.98	-33'000.00	-35'000.00
Subtotal	-290'438.36	-394'438.32	-475'375.00	-470'000.00
Service Centres				
ISTA Rules	-6'602.96	-7'472.89	-13'000.00	-15'000.00
Accreditation Audits	-387'723.18	-370'253.97	-441'792.45	-400'000.00
Proficiency Test incl. GMO	-39'547.22	-67'694.10	-36'700.00	-40'000.00
QA Workshops	-2'335.97	-1'134.81	-8'000.00	-10'000.00
Seed Science and Technology	-60'410.47	-57'222.76	-60'000.00	-57'500.00
Technical Publications and calibration samples	-39'599.33	-13'972.11	-25'000.00	-25'000.00
Certificates	-229'136.75	-274'088.60	-70'000.00	-130'000.00
Provisions for fluctuations	585'000.00	270'000.00	134'574.41	96'000.00
Subtotal	-180'355.88	-521'839.24	-519'918.04	-581'500.00
Personnel expenses				
Salaries	-1'215'118.25	-1'270'986.25	-1'282'178.67	-1'350'000.00
Social Security and insurances	-311'427.85	-334'416.20	-384'653.60	-405'000.00
Other personel expenses incl. Recruitments	-8'485.52	-7'841.60	-5'000.00	-5'000.00
Staff Training	-18'168.98	-29'601.87	-35'000.00	-35'000.00
Secretary General Cost	0.00	0.00	0.00	0.00
Subtotal	-1'553'200.60	-1'642'845.92	-1'706'832.27	-1'795'000.00



ISTA Finance

ISTA Budget 2024 & Proposed 2025	2022	2023	Budget 2024	Proposed 2025
EXPENDITURE	CHF	CHF	CHF	CHF
Operating Costs				
Office Costs	-245'001.12	-307'805.77	-270'000.00	-270'000.00
Travel Costs (International Representation)	-41'028.35	-41'381.66	-45'000.00	-45'000.00
Sponsoring Projects (Young@ISTA)	-21'188.11	-20'620.36	-25'000.00	-25'000.00
Marketing Costs	-3'802.96	-4'250.46	-25'000.00	-10'000.00
Website	-88'364.28	-70'488.53	-40'000.00	-40'000.00
Projects	0.00	0.00	-170'000.00	-20'000.00
Subtotal	-399'384.82	-444'546.78	-575'000.00	-410'000.00
Depreciation of tangible fixed assets	-15'900.00	-12'024.09	-10'000.00	-10'000.00
Financial costs	-541'505.80	-325'719.54	-55'000.00	-60'000.00
Financial income	75'836.79	215'313.42	90'000.00	90'000.00
Prior-period costs	-34'233.18	-24'179.46	0.00	0.00
Prior-period income	104'885.67	112'899.86	0.00	0.00
Total Expenses	-2'834'296.18	-3'037'380.07	-3'252'125.32	-3'236'500.00
Result	5'215.42	1'820.90	0.00	0.00



Budget Highlights, Questions & Approvals



- Highlights See “Report of the Executive Committee – 2023”
- Questions
- Approval of Year Closing 2023 as audited by BD
- Approval of Report of Secretary General
- Approval of Budget 2024 and Proposed 2025
- Approval of BDO as auditors for 2024 financial year





Thank you

 **ISTA ANNUAL MEETING 2024**



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ISTA Membership Fees

Ernest Allen



Current ISTA Membership Fees for 2024



Non-accredited Laboratory Membership/Sampling Entity	CHF 5214
Accredited Laboratory Membership/Sampling Entity	CHF 6438
Personal member	CHF 1049
Associate member	CHF 214



Proposed ISTA Membership Fees for 2025



Proposal: no change to the current fees

Continue with the 10% early payment discount





Thank you

 **ISTA ANNUAL MEETING 2024**  **01-04 JULY CAMBRIDGE, UNITED KINGDOM**



Consideration and Adoption of the proposed Rules Changes

Ernest Allen



Consideration and Adoption of Reports

Keshavulu Kunusoth



ISTA Technical Committee Chairs



BERT VAN DUIJN
Advanced Technologies Committee



CORINNE GUIMIER
Bulking and Sampling Committee



FIONA R. HAY
Editorial Board of Seed Science and Technology



SARAH DAMMEN
Flower Seed Testing Committee



ELISA VIEIRA
Forest Tree and Shrub Seed Committee



ENRICO NOLI
GMO Committee



GILLIAN MUSGROVE
Germination Committee



AXEL GOERITZ
Moisture Committee



MELANIE SCHORI
Nomenclature Committee



RUOJING WANG
Purity Committee



ERNEST ALLEN
Rules Committee



RUUD BARNHOORN
Seed Health Committee



BRIGITTE HAMMAN
Seed Science Advisory Group



JAYANTHI NADARAJAN
Seed Storage Committee



KIRK REMUND
Statistics Committee



SERGIO PASQUINI
Tetrazolium Committee



ANA LAURA VICARIO
Variety Committee



ALISON A. POWELL
Vigour Committee



GIL WAIBEL
Wild Species Working Group





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ISTA ANNUAL MEETING 2024



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 **ISTA ANNUAL MEETING 2024**



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Notice of Motion 2024

Ernest Allen

eCertificates Fee Proposal



eCertificates background and current proposal:

- ECOM has held several meetings on this topic to arrive at consensus on the proposed fee for eCerts (OGM24-07)
- Proposed fee is 10 Swiss Francs and covers—
 - Ongoing system maintenance costs
 - Fee recovery costs (reduction in paper certificate sales)
- Fee proposal will be voted during this OGM and the eCerts will be available beginning 15 July





Thank you

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