



# ISTA

**ISTA-ISF Forum**

JULY 05, 2024

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## Historical Progress and Vision for the Future

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**Keshavulu Kunusoth**

*ISTA President*



Welcome!



**ISTA**  
**100 YEARS**  
A CENTURY OF PROGRESS IN SEED QUALITY ASSURANCE



“*Today's forum celebrates our century-long collaboration, reinforcing our commitment to global food security. By uniting efforts, **ISTA AND ISF WILL ENSURE HIGH-QUALITY SEEDS THAT SUPPORT RESILIENT, EFFECTIVE AND SUSTAINABLE FOOD SYSTEMS.***”

100

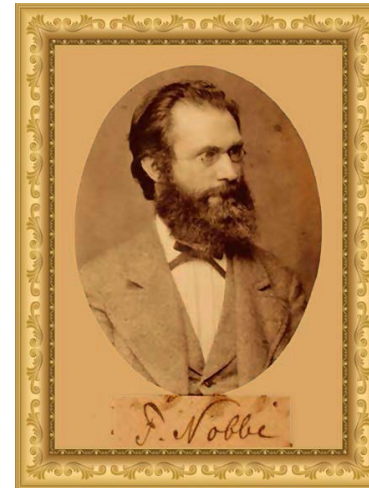


# Background

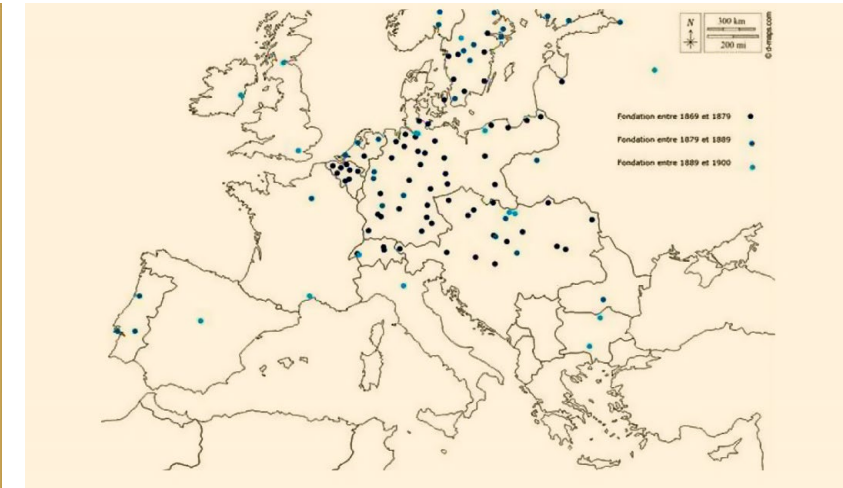


## During the 19th century:

- Sale and trade of seeds had become an established practice
- Lack of knowledge on quality of seeds and absence of standardized methods.
- First seed testing station Prof. Friedrich Nobbe in 1869 at Tharandt, Saxony
- “Handbook on Seed Testing” in 1876.
- Benchmark seed testing stations in the early 20th century: Copenhagen, Zurich, and Wageningen
- Rapid expansion of seed testing - absence of international associations - isolated approaches, non-uniformity, reproducibility and reliability of the methodologies



Prof. Friedrich Nobbe



Map of seed testing stations established in Europe in 1900, most of them located in Central and Northern Europe



Handbook of Seed Testing



3<sup>rd</sup> Intl. Seed Testing Congress meeting in Copenhagen, Denmark



Danish seed control commission, 1920, Wilhelm Johannsen (center) as president and alongside Knud Dorph-Petersen, first President of ISTA



# Birth of ISTA



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4<sup>th</sup> Intl. Seed Testing Congress meeting in Cambridge, the UK

- **First International Seed Testing Congress in Hamburg, Germany in 1906, 2<sup>nd</sup> in Wageningen, 1910 and 3<sup>rd</sup> in Copenhagen, 1921**
- **Fourth International Seed Testing Congress in Cambridge, UK in 1924**
- **Foundation of the “International Seed Testing Association” on July 10, 1924.**
- **27 countries (24 countries in Europe and 2 from the America: Argentina and Canada, and 1 African country, Egypt).**
- **Primary goal was to advance the study of all matters concerning the analysis and evaluation of seeds.**

## Aims:

- **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,  
1<sup>st</sup> President of ISTA



# ISTA Historical Progress: Early Years (1924-1940)

- Primary focus: Basic methods for seed testing - **germination** and **purity**
- Challenges: **lack of uniformity, standardisation** and **coordinated approach**.
- Adoption of “**International Rules of Seed Testing**”, and the **ISTA Certificates Scheme**.
- Establishing international collaboration during interwar period!!!



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**ISTA**  
**100 YEARS**  
A CENTURY OF PROGRESS IN SEED QUALITY ASSURANCE



- Since 1931
- Standardized rules
- Annually updated
- 19 chapters
- Technical Advice
- ISTA *Online*

**1954**

Tree and shrub species

**2002**

Vigour chapter

**2012**

Seed mixtures analysis chapter

**2014**

Testing for seeds of GMO chapter

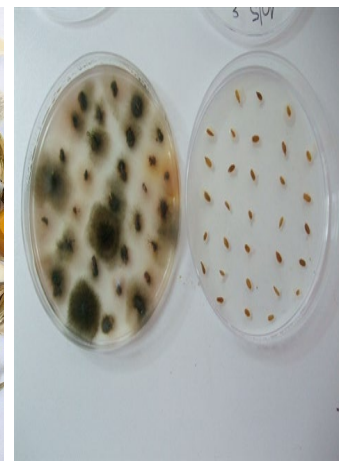
**PUBLISHED IN 4 LANGUAGES:**

- English - French
- English - Spanish
- English - German

## International Rules for Seed Testing

INTERNATIONAL SEED TESTING ASSOCIATION

**Methodology for over 1000 SPECIES**



# ISTA Historical Progress: Late Century Advancements (1970-2000) (Contd...)

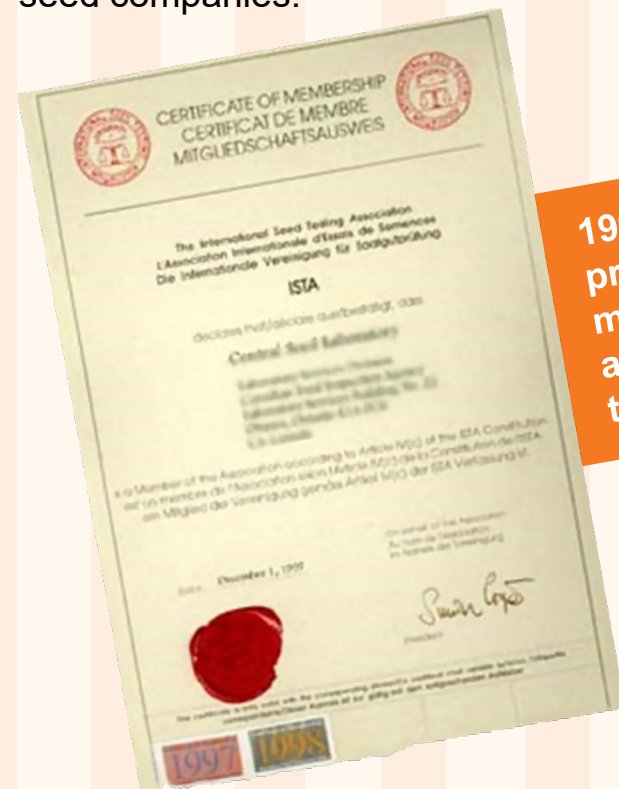


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**1995**

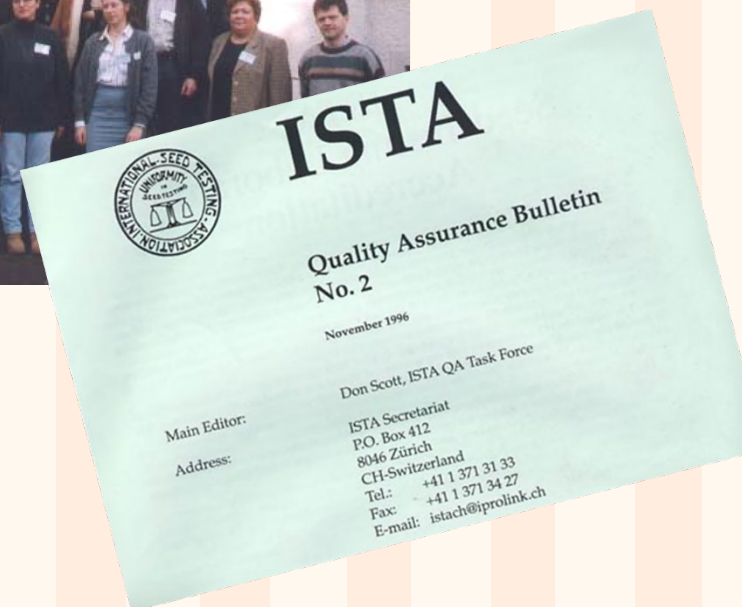
During the ISTA Congress held in Copenhagen, **ISTA Membership** was opened to private laboratories and private seed companies.



**1996** First private members admitted to ISTA

**1996**

ISTA initiated the **Quality Assurance Programme** to accredit seed testing laboratories. **The first ISTA member Laboratory** was audited under the new set-up that year.



**1998**

ISTA Website launched.

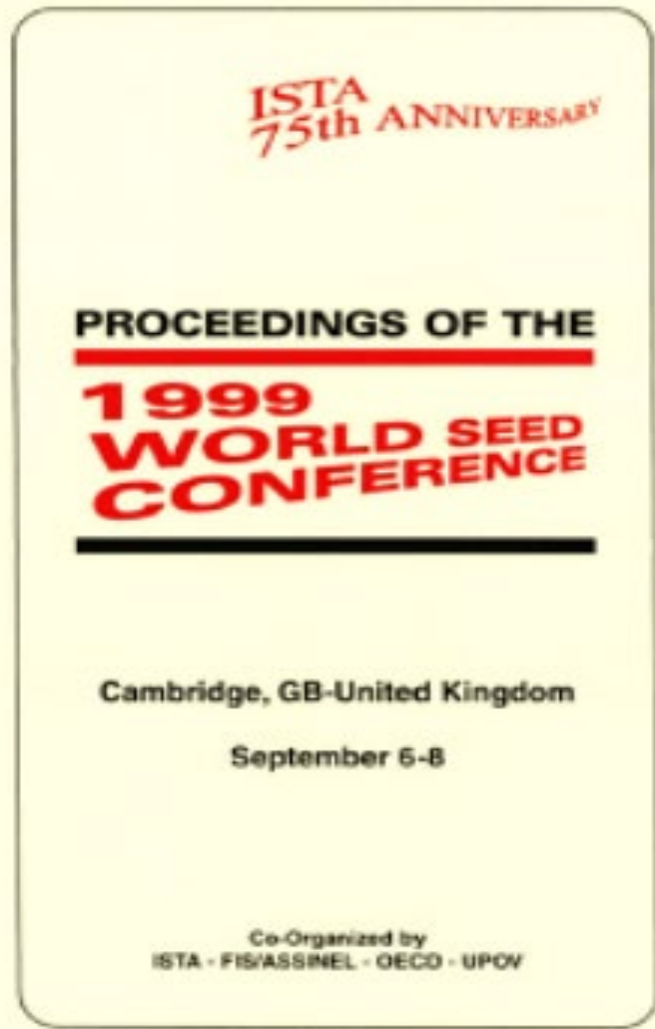


Visit us on the web at: <http://www.seedtest.org>

# 75<sup>th</sup> Anniversary Celebrations



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ISTA celebrates its 75th Anniversary at the First World Seed Conference held in Cambridge, UK.



# ISTA: Present Day



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“ **VISION:**  
*Uniformity in Seed Quality  
Evaluation Worldwide* ”

## **MISSION:**

Produce internationally agreed rules for seed sampling and testing, accredits laboratories, promotes research, provides international seed analysis certificates and training, and disseminates knowledge in seed science and technology.



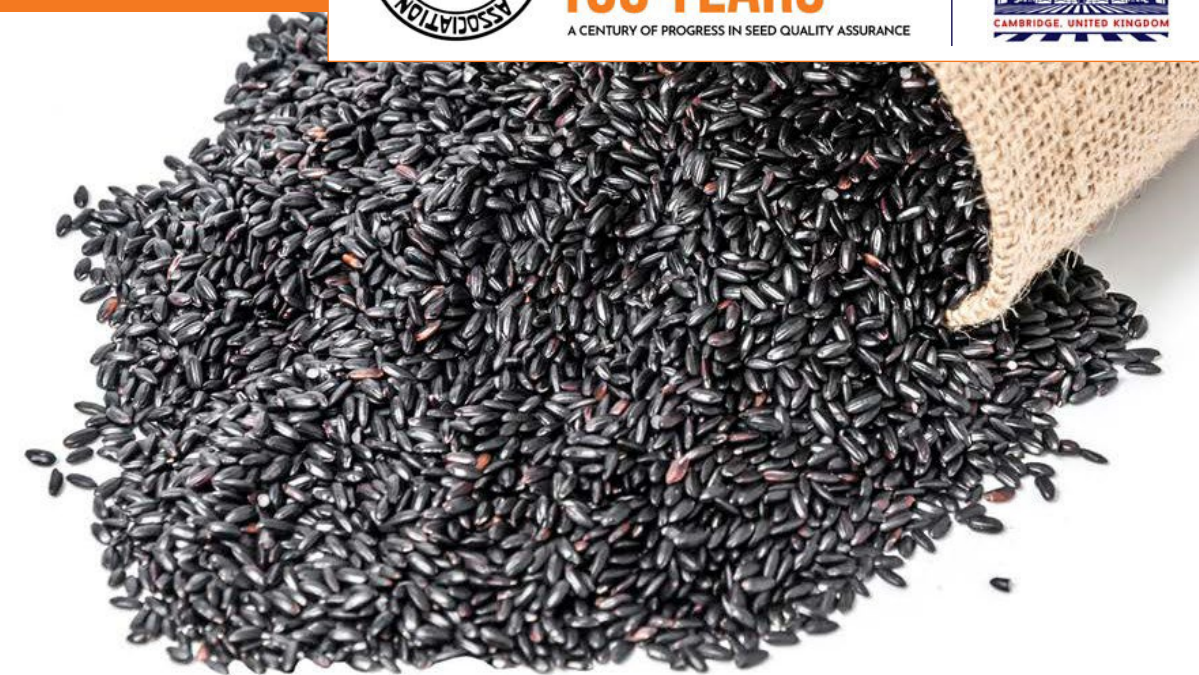
## **OBJECTIVE:**

- 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.

# ISTA: Structure



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## MEMBERS



## EXECUTIVE COMMITTEE

- President
- Vice-President
- Intermediate Past President
- Members-at-Large



## SECRETARY GENERAL



20 TECHNICAL COMMITTEES

SECRETARIAT



**KESHAVULU KUNUSOTH**  
President  
India



**ERNEST ALLEN**  
Vice - President  
United States



**STEVE JONES**  
Immediate Past President  
Canada

### MEMBERS AT LARGE



**IGNACIO ARANCIAGA**  
Argentina



**SERGIO PASQUINI**  
Italy



**SYLVIE DUCOURNAU**  
France



**RUEL GESMUNDO**  
Philippines



**ANDREAS WAIS**  
Secretary General



**FLORINA PALADA**  
Head of Accreditation & Technical Department



**AGNES HEGEDUES**  
Finance, Sales & HR Management



**ANDREEA PINAR**  
TCOM Administrator



**BRANISLAVA OPRA**  
System Auditor, Quality Management & Standard PT Coordinator



**BEATA HUBNEROVA**  
Administration Assistant



**KAREN DE LA ROSA**  
Marketing & Communications Assistant



**BERTA KILLERMANN**  
Germany



**CLAID MUJAJU**  
Zimbabwe



**CRAIG MCGILL**  
New Zealand



**VANESSA SOSA**  
Uruguay



**NADINE ETEL**  
TCOM Manager



**NEELAM OEK**  
Audit, Accreditation & PT Administrator  
On Maternity Leave



**OLGA STOECKLI**  
Events, Membership & Documentation Manager



**SEJAL PATEL**  
IT Business Solutions Manager



**STELLA MARCU**  
System Auditor & PT Administrator



**YOANA UZUNOVA**  
Marketing and Communications Manager

# Global Membership



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**68** Designated Authorities  
**37** Personal Members

**59** Associate Members  
**247** Laboratory Members



# 20 Technical Committees

- Advanced Technologies Committee
- Bulking and Sampling Committee
- Flower Seed Testing Committee
- Forest Tree and Shrub Seed Committee
- Germination Committee
- GMO Committee
- Moisture Committee
- Nomenclature Committee
- Proficiency Test Committee
- Purity Committee

- Rules Committee
- Seed Health Committee
- Statistics Committee
- Seed Storage Committee
- Tetrazolium Committee
- Variety Committee
- Vigour Committee
- Editorial Board (SST)
- Seed Science Advisory Group
- Wild Species Committee



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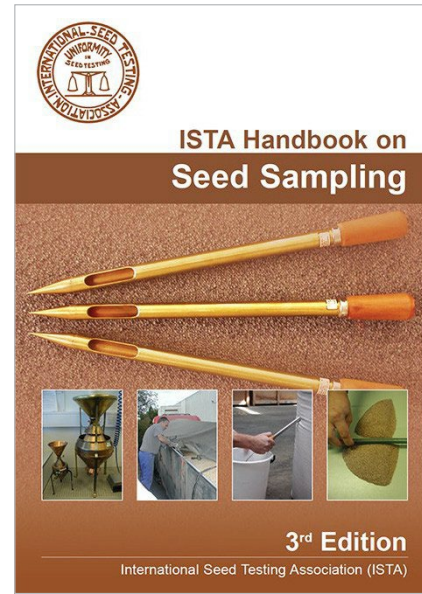
**ABOUT 274**  
Technologists  
and Scientists  
around the  
Globe

**OVER 50**  
Seed professionals  
receive training  
yearly in ISTA  
workshops

# ISTA Publications



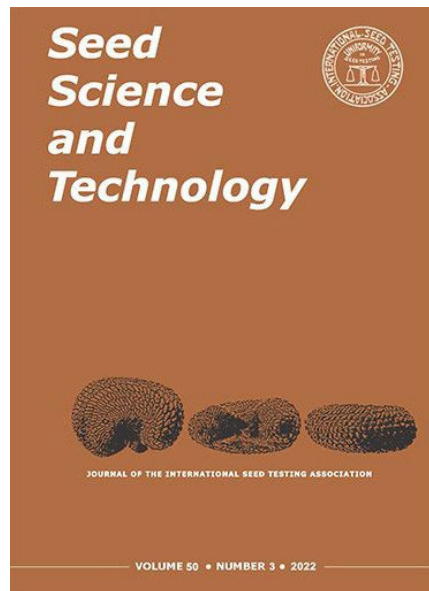
**4 LANGUAGES:**  
The International Rules for Seed Testing are published online in English, French, German and Spanish



**14 HANDBOOKS**  
All new editions published online



**2 TIMES PER YEAR**  
Seed Testing International (STI) ISTA bi-annual news bulletin published as hard copy and online



**800 PAGES**  
of Seed Science and Technology (SST) published as open access online



**ISTA METHOD VALIDATION**  
is coordinated by ISTA Technical Committees for most of the test methods before being included to the Rules Reports: issued annually



**CONTINUOUSLY UPDATED**  
ISTA Reference Pest List  
Currently: 10 Crops  
Published online (seedtest.org)

# More than 150 ISTA Accredited Laboratories Worldwide



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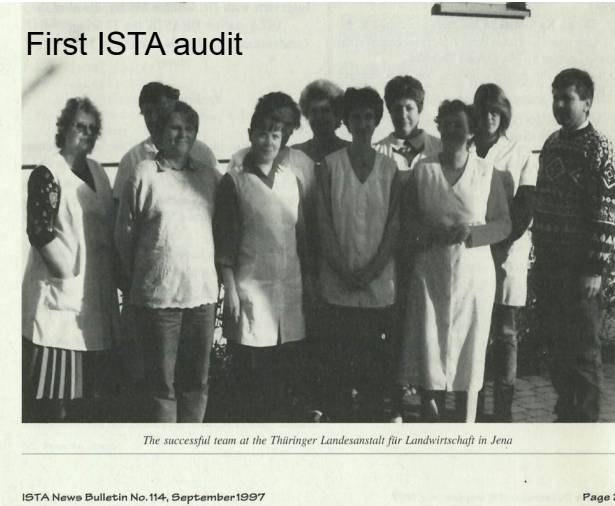


# 1996

The Quality Assurance Programme was first introduced to accredit seed testing laboratories\*

# Every 3 Years

ISTA Accredited Laboratories are audited in order to maintain accreditation **About 50 ISTA Audits each year**



**First ISTA Repeat Audit**  
By: Heinz Schmid, ISTA System Auditor

NB readers may remember that three years ago the NB reported that Dr. G. Müller's laboratory in Jena, Germany, had successfully accomplished the first ISTA re-accreditation audit.

Now it is again Dr. Müller and his team which completed the first ISTA repeat audit in December 1999.

The auditor team was the same as in 1996: Prof. Dr. Norbert Leist and Heinz Schmid. This made it possible to directly compare the situation of the laboratory with the one they audited three years ago.

What a difference! Both auditors were astonished by the progress the laboratory has made. Compared to 1996 the 1999 quality management system at Jena is now fully integrated into routine work and part of the working culture. The staff uses 'their' system in daily life to help them perform better. The self-evidence with which the staff uses the quality system is one of the most striking improvements since 1996. Based on their self-confidence the staff members took the repeat audit with quite some ease compared to the previous one.

The quality system itself has become more pragmatic and more adapted to routine work and less paper focused.

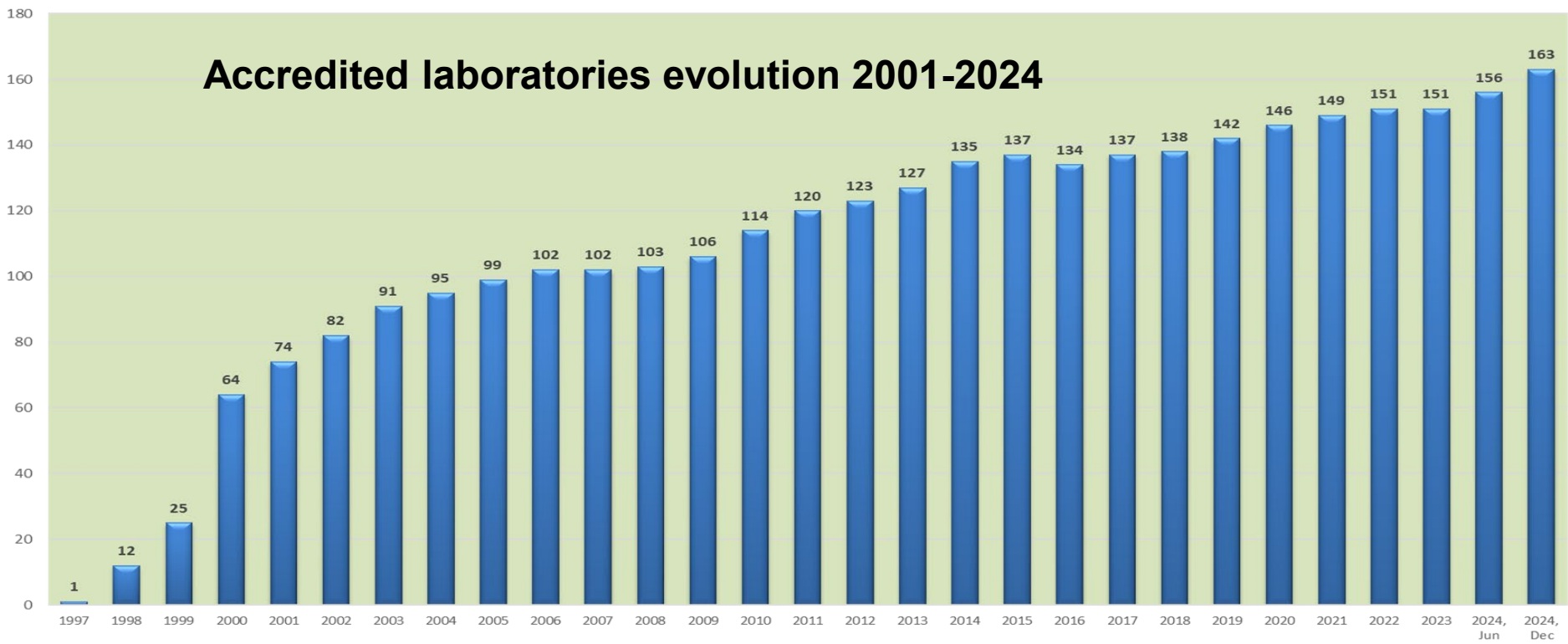
Due to the fact that this audit was a repeat and not a re-accreditation audit, the auditors examined the whole quality system but focused on weaknesses revealed during the 1996 audit. The auditors found that all these weaknesses had been removed, but, as usual, discovered some other minor items which could be improved further.

The repeat audit was considered very rewarding by the auditors, because they could see how much progress had been possible. The same is true for the laboratory since they had their progresses confirmed by persons from the outside.

In addition, ISTA as an organisation can claim that its quality assurance programme works fine and helps to greatly improve the laboratories' performance.

Sincere congratulations to Dr. Müller and his team!

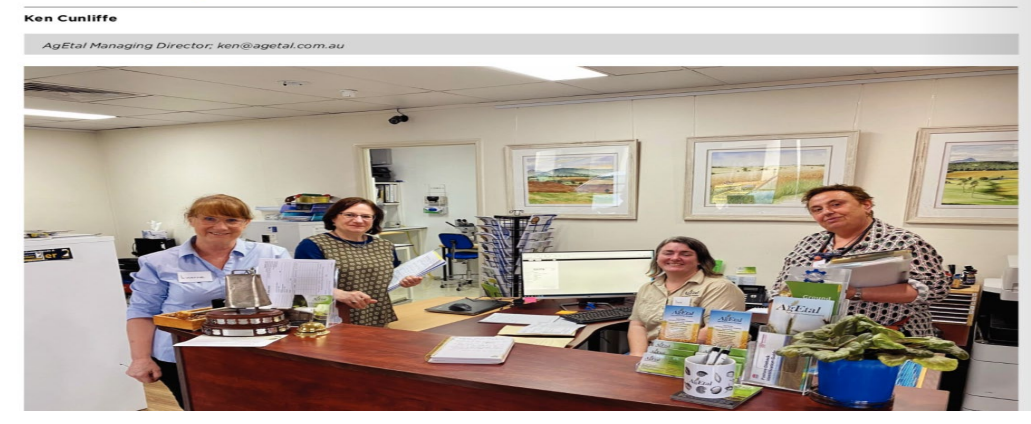
In addition the laboratory has had the possibility to invest in hardware like new equipment or working places for treated seed and has improved the seed collection.



**1<sup>st</sup> ISTA Workshop on Statistical Aspects of GMO Detection - Europe**  
Toulouse, France, April 1 - 2, 2004  
By Sylvain Grégoire, ISTA Statistics Committee Chair  
GIVEX, France, e-mail: sylvain.gregoire@givex.fr



**AgEtal in Australia Becomes ISTA's 150th Accredited Laboratory**



# ISTA: Covid Pandemic Period



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**Opening remarks**

**ISTA Membership Virtual Meeting**

**28 May 2020**

Presenters: Steve Jones, ISTA President  
Location: Virtual meeting  
Date: 28 May 2020

## Restarting ISTA Accreditation Audits During COVID-19 Times

**ANDREAS WALZ**  
ISTA Secretary General

**IN MARCH THIS YEAR, WHEN INTERNATIONAL TRAVEL STOPPED AND MOST ECONOMIES WENT INTO A LOCKDOWN,** the ISTA accreditation program was also affected. Physical audits were no longer possible and the ISTA Executive Committee decided that audits could be postponed by a maximum of a year, with the accredited laboratories and sampling entities not losing their accreditation status.

As the COVID-19 situation improved a little in some areas, and travelling was deemed safer without major restrictions by governments, ISTA restarted the accreditation program. The first two audits took place in Greece in the beginning of July and were very successful. Our special thanks go to Christine Herzog and Dr. Joël Lechappe.

The situation is still very fragile, but ISTA would like to perform as many audits as soon as possible to reduce the backlog, when travel is safe and not restricted. This is an enormous task to organise for the ISTA Audit, Accreditation and Proficiency Test Administrator, Neelam Lagah, together with the ISTA travel agent. The auditors are of different nationalities, travelling from various locations to the audits, and back to their home bases. This task is difficult to handle under regular conditions, but is almost impossible with flights being cancelled within hours and immigration restrictions that might change by the day. Thanks to Dr. Florina Palada (in the Secretariat and Head of the voluntary auditors) and her whole team, for taking this burden.

As Secretary General, I took part in the first audit visit to Greece. My participation was scheduled long before the COVID-19 situation came up, as discussions with the ISTA Designated Authorities were planned. The talks, on how the collaboration could be closer between ISTA and the Hellenic Ministry of Rural Development and Food, were very successful for both parties. The Deputy Head of the Directorate of Propagating Material of Cultivated Plants and Plant Genetic Resources, Dr. Sotiris Kosmas, also spent the whole day at the official Greek seed testing laboratory in Athens, the Testing Station of Vegetative Propagating Material and Seeds, during their audit.

As the first person travelling from the ISTA Secretariat after the lockdown, I became aware of the difficulties that can occur and which safety measures are needed during these times, to protect people travelling on an ISTA mission. These measures have now been implemented by the ISTA Secretariat and will be made available to all travellers, when applying for a travel permit.



## Remote auditing

### ISTA Accreditation for the TSSOCA Seed Testing Laboratory

Rohini Gunti<sup>1</sup>, Pradeep Korishettar<sup>2</sup> and Keshavulu Kunusoth<sup>2</sup>

<sup>1</sup>rohinigunti@gmail.com  
<sup>2</sup>kpradeep5061@gmail.com  
<sup>2</sup>keshava\_72@yahoo.com

**THE SEED TESTING LABORATORY, TELANGANA STATE SEED AND ORGANIC CERTIFICATION AUTHORITY (TSSOCA)** was established in Rajendranagar, Hyderabad, India in 1989 and is recognised by the Government of India with a capacity of testing 40 000 seed samples per annum. The laboratory analyses seed samples as per the Indian Seeds Act for purity, other seed determination (OSD), other distinguishable varieties (ODV), germination and moisture assessments of different crop species, mainly cereals, pulses, oilseeds, fibre and vegetable crops.

Seed samples pertaining to our national agriculture system, including state agricultural universities, Indian Council of Agricultural Research (ICAR) institutes for different crops, seed certification agencies, seed development corporations (public sector), Department of Agriculture and farmers, are evaluated in the laboratory. In addition, seed samples from private seed companies, ranging from national to multinational companies, are also analysed in the laboratory.

Telangana State is evolving into the 'seed bowl of India' and becoming a global seed hub due to its prevailing environs and logistic facilities in and around Hyderabad and in neighbouring states. The Government of Telangana has been strengthening seed sector development to make quality seed available to farmers as well as export to other states and other countries, and has been supporting world class facilities in all the seed testing laboratories in and around Hyderabad.

Some of the seed companies involved in seed exports that are located in the vicinity of Hyderabad have become the compass for the Seed Testing Laboratory to acquire ISTA accreditation, in order to provide these companies with timely quality services following international standards. To

to us, and we finally achieved this objective successfully.

- We were then asked to submit the accreditation documentation which was the toughest part of all the tasks. We strived very hard and finally the documents were approved and the preparation for audit commenced.

- Our audit would have been completed in June 2020, but was postponed due to the dreadful pandemic. Finally it was intimated in June 2021 that the audit would be conducted during October of the same year. After getting the confirmation date, our whole team strived hard to submit all the required documents within the specified time limit and we are thankful to the system and technical auditors for the patience they exhibited towards us and for their excellent guidance.

- Finally, at the time of audit, every one of us was prepared to meet the tasks and felt the physical presence of the auditors in spite of the remote mode used. During those two and a half days of audit, we felt privileged to be with the auditors for the way they encouraged us; they were like a 'shot in the arm' that enlivened us in those tense moments.

- From the outset, the non-conformities were addressed properly to help the laboratory perform more perfectly by avoiding errors as far as possible. On 4 February 2022 we received the delightful message from ISTA that we were accredited. After waiting and working out for the past three years this filled us with inexpressible joy.

- Our laboratory became accredited for seed sampling, physical purity analysis, other seed determination, germination testing and moisture determination for cereals, pulses, vegetables, spices, herbs and medicinal species. We are also participating in other tests, including viability, vigour, seed health and thousand-seed weight (TSW) in the upcoming PT rounds as we are aspiring to include them in our scope.

We as a government organisation are committed to providing precise seed testing



Dr Keshavulu Kunusoth, Director of the Telangana State Seed and Organic Certification Authority



Closing meeting of the TSSOCA Seed Testing Laboratory (IN39) audit in October 2021



Staff of the TSSOCA Seed Testing Laboratory (IN39)



“ For ISTA as a global association, restrictions on international travel mean that meetings... all need to be reconsidered and we must be ready with a 'Plan B'. ”

# ISTA: Seed Health Initiatives



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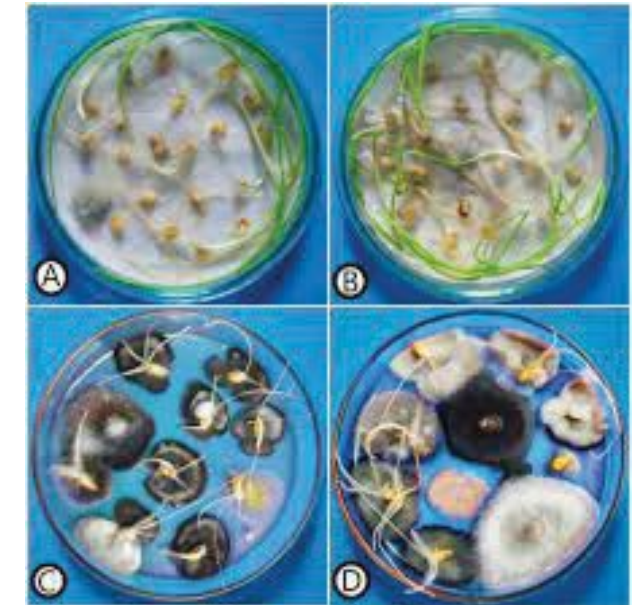
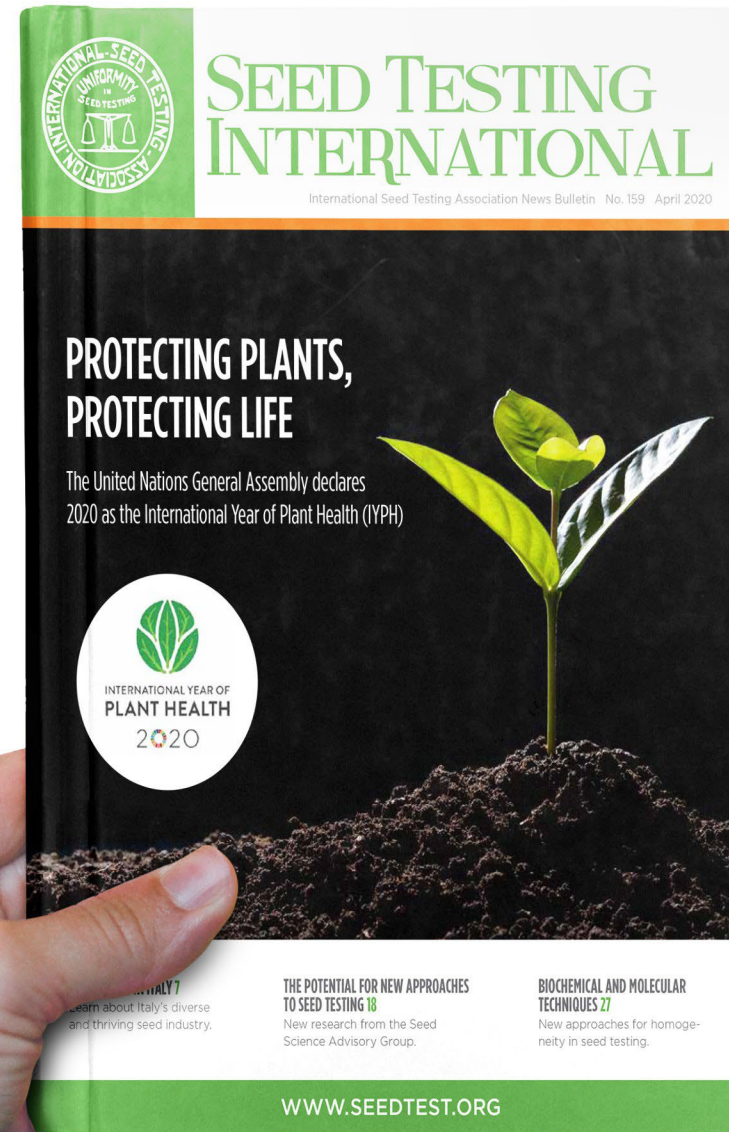


seed health is one of the key determinants of seed quality

Increasing resources to the ISTA Seed Health Technical Committee to foster new methods

Strengthening Seed Health Quality assessment capacity and capability through laboratory and method development with organisations such as IPPC and RPPO's

Investigating, where seed could be a pathway for diseases (ISTA Reference Pest List)



International Rules for Seed Testing Chapter 7, 1-7-8 (14)  
<https://doi.org/10.15258/ista/rules.2023.07>



## International Rules for Seed Testing 2024

Chapter 7: Seed health testing

Including changes and editorial corrections adopted at the Ordinary General Meeting 2023 in Verona, Italy  
Effective from 1 January 2024



# Wild Species in to the Rules

- Increasing interest in the use of wild species for both amenity planting and habitat restoration
- ISTA Flower Seed Committee and Forest Tree and Shrub Seed Committee have extended its scope to the wild species and working to develop methodologies,
- Began with the collection of existing methods used by seed analysis laboratories and seed banks
- Working group comprised of representatives from ISTA, AOSA, SCST and the Royal Botanic Gardens, Kew



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# Attraction of New Generation: YOUNG@ISTA



## AIM:

Promote a young generation of seed professionals to be part of ISTA.

Empower seed professionals to lead innovative solutions for seed science and testing.

Facilitate an ongoing contribution of seed professionals within ISTA, including emerging scientists engaged in SST, research and education, and seed analysts and technologists in laboratories.

## SUCCESS TO DATE

- Supported professionals joined ISTA TCOMs
- Seed analysts supported to attend an ISTA Workshop may become an ISTA auditor.
- Seed laboratory leaders supported to attend the workshop may join an ISTA Technical Committee.



## Fresh in the Field — #Young@ISTA

ISTA introduces you to a new generation of seed scientists, who are enthusiastic, eager to learn and talented



**BIO:**  
**Chiara Sabattini**  
 LaRAS (Laboratorio di Ricerca e Analisi Sementi - Seed Research and Analysis Laboratory), Bologna Researcher  
 Age: 33  
 Italy

Chiara was born and raised in Castel San Pietro Terme, Italy. During her university years, she performed an internship at LaRAS as part of her studies. After achieving her Master's degree in Agricultural Science and Technologies, she started a collaboration with LaRAS in 2015 as a non-permanent member of staff. Her field of activity is seed purity and other seeds determination.



## Young@ISTA

ISTA introduces you to a new generation of seed scientists, who are enthusiastic, eager to learn and talented



**BIO:**  
**Yulia Stepanenko**  
 Ukraine  
 Quality System Manager

Yulia Stepanenko graduated in 2008 from the National University of Bioresources and Nature Management of Ukraine and received a Masters degree in "Breeding and Genetics of Agricultural Crops". Since 2009 she has worked in a testing laboratory as a seed moisture analyst, becoming a quality system manager in 2012 and Head of the Seed Research Department in 2019. She currently works as a quality system manager.

### 1. How and when did you first learn about ISTA?

I learned about the Association for the first time while studying at university during lectures on seed science.

### 2. How does ISTA help you in your daily job?

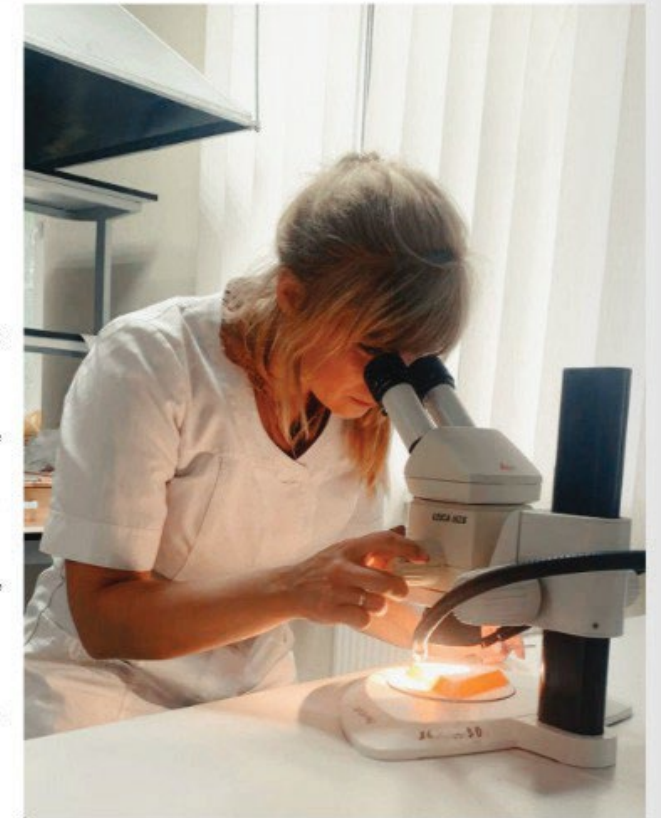
Daily use of ISTA handbooks and contacting the Technical Committees of the Association for help or advice. The existence of ISTA is necessary to determine the rules of seed testing, to implement programmes aimed at the development of quality assurance systems.

### 3. How do you keep in touch with ISTA's work and its community?

Communication is mainly maintained by correspondence (email).

### 4. Have you participated in any ISTA events/workshops? Which and why?

In 2018, specialist analysts of my laboratory took part in training on the topic "Determination of purity of seeds and the content of other types of plants, as well as determination of seed germination". In 2021



2022

14 applications

2023 2024

16 applications 11 applications

# ISTA eCertificates



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## AIM:

Speed the process of delivery Certificates and preventing fraud.

## PROCESS TO ACCESS FOR SEED LOT OWNERS:

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

*“Introduced just a day ago”*



**ISTA**  
ORANGE INTERNATIONAL SEED LOT CERTIFICATE  
BULLETIN INTERNATIONAL ORANGE DE LOT DE SEMENCES  
INTERNATIONALE ORANGE-BERICHT ÜBER EINE SAATGUTPARTIE

Stamp of Laboratory  
Cachet du Laboratoire  
Stempel der Prüfstelle

STATED BY APPLICANT - INFORMATIONS DU REQUÉRANT - ANGABEN DES ANTRAGSTELLERS  
Without responsibility of the laboratory - Sans responsabilité de laboratoire - Ohne Verantwortung der Prüfstelle

NAME OF APPLICANT  
Nom du requérant  
Name des Antragstellers

SPECIES, CULTIVAR, CATEGORY, WEIGHT OF LOT ETC.  
Espèce, cultivar, catégorie, poids du lot, etc.  
Art, Sorte, Kategorie, Gewicht der Partie usw.

INFORMATION - INFORMATIONS - ANGABEN

Seeding and testing laboratory  
Laboratoire et atelier qui délivre le bulletin  
Laboratorium für Saatgutprüfung

Stamp of lot  
Marquage du lot  
Kennzeichnung der Partie

Stamp of lot  
Marquage du lot  
Kennzeichnung der Partie

ANALYSIS RESULTS - RÉSULTATS DE L'ANALYSE - UNTERSUCHUNGSERGEBNISSE

PURITY - PURITÉ - REINHEIT				GERMINATION - KEIMFÄHIGKEIT				INSTITUTIONAL CERTIFICATE DÉCRET ZERTIFIKAT ZERTIFIKAT ZERTIFIKAT
% Weight - % en poids - % Gewicht				% Number - % en nombre - % Anzahl				
Pure seeds Semences pures Reine Samen	Other seeds Autres semences Andere Samen	Number of seeds Nombre de grains Anzahl Körner	Normal seeds Grains normaux Normale Körner	Hard seeds Grains durs Harte Samen	Fresh seeds Grains frais Frische Samen	Abnormal seeds Grains anormaux Anormale Körner	Dead seeds Grains morts Tote Samen	

OTHER DETERMINATIONS - AUTRES DÉTERMINATIONS - WEITERE UNTERSUCHUNGSERGEBNISSE

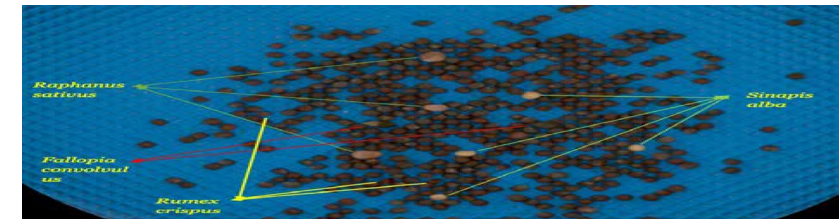
Place and country - Localité et pays - Ort und Staat  
Date - Datum  
Signature - Unterschrift



# ISTA: New Technologies into rules

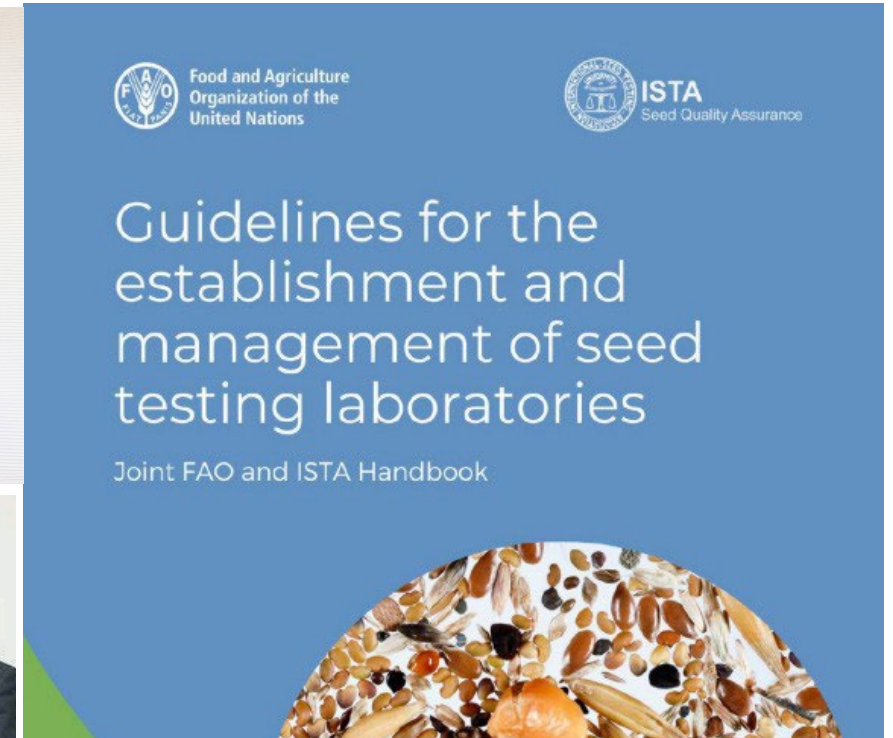


- ISTA has been working to ensure that new methods based on both traditional and advanced technologies are developed evidence-based and fit for purpose.
- Introduced New Technologies Equivalent to the Human Analyst for Seed Analysis.
- ISTA has been discussing the possibilities for the use of new technologies (digital X-ray images of seeds and 3-D X-ray imaging) in seed quality assurance.



# ISTA-FAO Collaborations

- Key partner in the domain of seed systems and quality assurance.
- Joint handbook on “Guidelines for establishment and management of seed testing laboratories”,
- Focusing on the strengthening of capacity and capability building in seed testing as a part of FAO strategic framework 2022-31 Agenda
- Joint initiatives on cooperation in capacity building, transfer of technologies and exchange of information on all aspects of seed quality assurance
- Organised a Joint Webinar of FAO/ISTA on “New Technologies in Seed Testing”



2023

# ISTA Collaborations



**ISTA**  
**100 YEARS**  
A CENTURY OF PROGRESS IN SEED QUALITY ASSURANCE



## OECD Seed Schemes Annual Meeting – Türkiye 2023

Andreas Wais

ISTA Secretary General



Field trip to the Official Seed Station in Antalya, Türkiye during the 2023 OECD Seed Schemes Annual Meeting

## ISTA Participation in 2023 AFSTA Congress

Claud Mujaju<sup>1</sup> and Florina Palada<sup>2</sup>

<sup>1</sup>ISTA Executive Committee member  
<sup>2</sup>Head of ISTA Accreditation and Technical Department



Claud Mujaju and Florina Palada representing ISTA at the 2023 AFSTA Congress in Dakar, Senegal



Florina Palada (ISTA) and Kent Nwadozie (FAO/ITPGRFA)

## World Seed Congress – South Africa 2023

Andreas Wais

ISTA Secretary General



David Malan, Chair of the 2023 World Seed Congress Organising Committee, at the opening ceremony in Cape Town, South Africa



Youth representative at the 2023 World Seed Congress opening ceremony

## African Seed Trade Association Meeting – Zambia 2020

Andreas Wais

ISTA Secretary General



Meeting with the Zambian ISTA Designated Authorities (second from right: Mable Simwaza, former Member of the ISTA Executive Committee, and middle: Dr. Andreas Wais, ISTA Secretary General)



Members of the AFSTA board (from left: Justin Rakotoarisoa, Secretary General, Riadh Gabri, Past President, and Azariah Sol, President)



Joint board of the International Seed Federation (ISF) and ISTA to promote their activities in Africa

## World Seed Partnership

Florina Palada (ISTA) and Benjamin Rivoire (UPOV)



## Bulking and Sampling Committee – Auditors Meeting AOSA/SCST/ISTA Meeting Denver 2017

Eddie Goltshang  
Chair of ISTA Bulking and Sampling Technical Committee  
South African National Seed Organization, South Africa  
seedco@anso.co.za

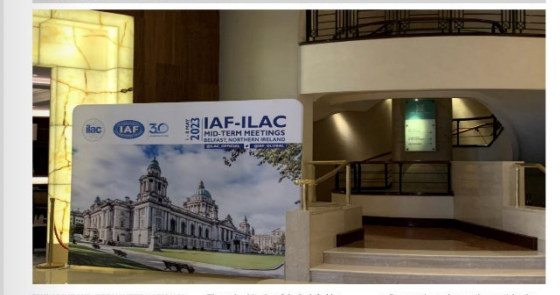
Florina Palada  
Head of Accreditation and Technical Department  
ISTA Secretariat, Bassersdorf, Switzerland  
ista.office@ista.ch



## ISTA Participates in the 2023 IAF-ILAC Meeting

Florina Palada<sup>1</sup> and Jeff Gust<sup>2</sup>

<sup>1</sup>Head of ISTA Accreditation and Technical Department  
<sup>2</sup>ICAF Corporate Metrologist, Fluoro, NZIA, International

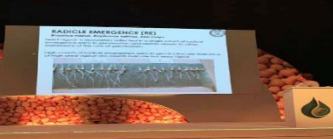


## ISTA Participation to ABRATES Congress, 2017

Florina Palada

Head of Accreditation and Technical Department  
ISTA Secretariat, Bassersdorf, Switzerland

**THE 11th BRAZILIAN SEED CONGRESS**  
The 11th Brazilian Seed Congress was held in Curitiba, Brazil, from 14 to 16 June 2017. The congress was organized by the Brazilian Seed Association (ABRATES) and the National Seed Laboratory (LNS). The congress was a significant event for the seed industry in Brazil and provided an opportunity for ISTA to promote its activities in the region.



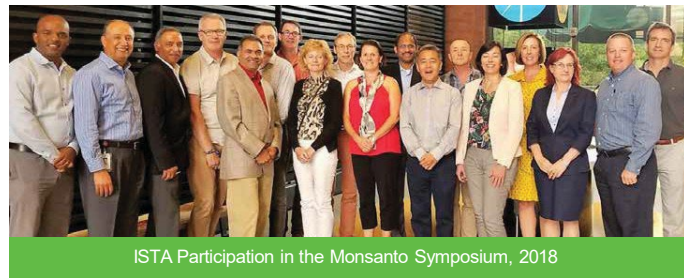
# Enhanced Global Presence



## GROWING IN AREAS, WHERE ISTA IS STILL UNDERREPRESENTED:

- Collaborating with local, regional and international partners/stakeholders (like Seed Associations, FAO, OECD)
- Working with globally active Partners with the World Seed Partnership
- Introducing a ISTA advocates as regional representative to enable direct activities in the areas
- Reached 83 countries from 26 countries

## SECURING FOOD (SDG #2: ZERO HUNGER)



# ISTA Memories



**ISTA**  
**100 YEARS**  
A CENTURY OF PROGRESS IN SEED QUALITY ASSURANCE





# ISTA 100 Years: Key Developments



**ISTA**  
**100 YEARS**  
A CENTURY OF PROGRESS IN SEED QUALITY ASSURANCE



**“Standardization of basic methods of seed sampling and testing”:**

**Science Based and Robust Rules and Methods:** Seed Trade, Nationally and Internationally

**“Uniformity in Seed Quality Evaluation”:**  
Standardized rules for seed sampling and testing

**International Seed Analysis Certificates:**  
Passports of Seeds

**Global Quality Assurance Programme:**  
Consistent and reliable testing across laboratories worldwide

**ISTA Publications:** Global ready reckoners for seed quality assurance



**Advance tests protocols** for Vigour, Viability, Health, BMTs, GMOs etc.

**Innovations, Digitalization, New Technologies, Social Media** out reach

**Capacity and Capability Buildup:** Seminars / Workshops / Webinars / Congresses / Young@ISTA

**Global partnerships and collaborations:**  
FAO, ISF, OECD, ASTA, APSA, AOSA-SCST, ISSS, IPPC etc.

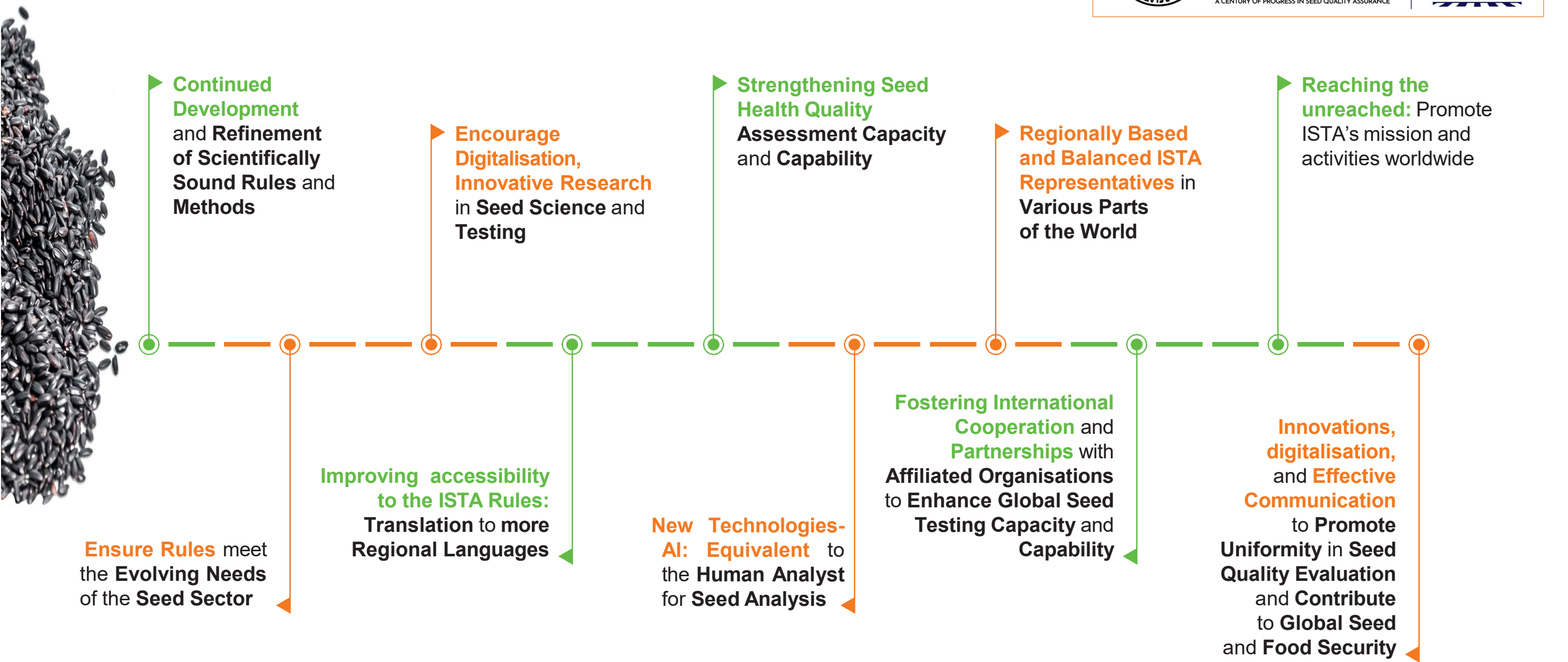
**Enhanced Global Presence:**  
From 26 to 83 Countries / Economies

Contributions to the advancement of  
**Global Agriculture, Food Security**  
and **Sustainable Development**

# ISTA: Vision for the 2<sup>nd</sup> Century



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# ISTA 100 Years Journey



**ISTA**  
**100 YEARS**  
A CENTURY OF PROGRESS IN SEED QUALITY ASSURANCE



**Knud Dorph-Petersen**  
President of ISTA, 1924



**Keshavulu Kunusoth**  
President of ISTA, 2024

“

*ISTA has made tremendous progress in the field of seed science and technology in the past 100 years, playing a crucial role in global seed and food security over the past century. Heartfelt thanks to founders, visionaries, all predecessors, researchers, and contributors.*

”

# ISTA Vision



**ISTA**  
**100 YEARS**  
A CENTURY OF PROGRESS IN SEED QUALITY ASSURANCE



“ ISTA’s vision is the application of internationally agreed and validated methods for seed quality assurance to increase and sustain agricultural productivity, food security, and nutrition for all. ”



Follow us on Social Media:



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THANK YOU!