

“Further strengthening of capacities of phytosanitary sector in the fields of plant protection products, plant health and seeds and seedlings, including phytosanitary laboratories and phytosanitary inspections”

(TWINNING BA/12/IB/AG 01)

Component 3: Seeds and propagation materials

ISTA

The International Seed Testing Association

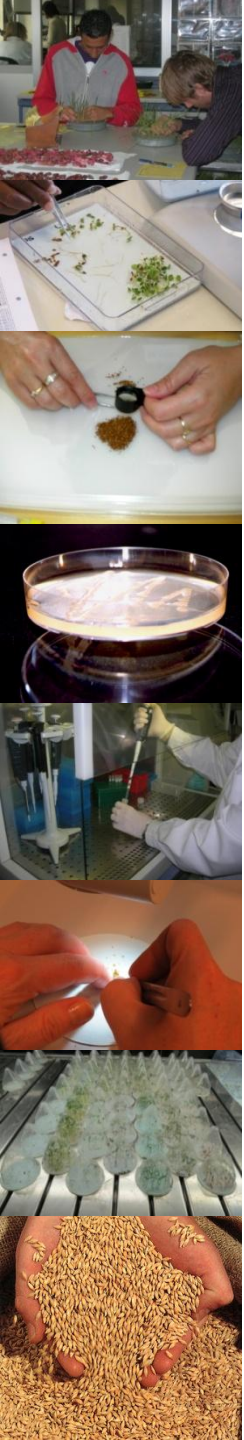


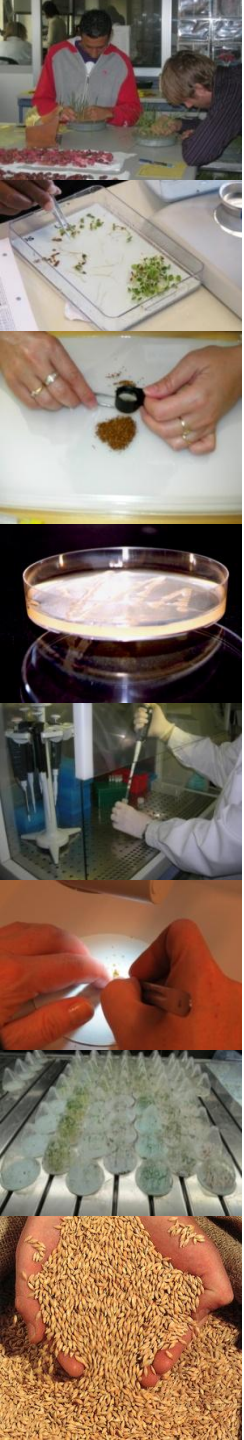
Rita Zecchinelli

What is ISTA ?

ISTA

**is an international, non-profit association
of public and private seed testing
laboratories and persons
under the Governance of the
Government of member countries and
distinct economies**



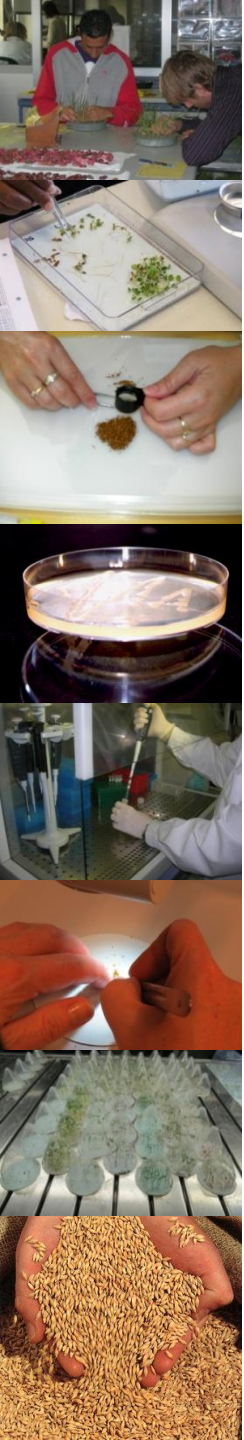
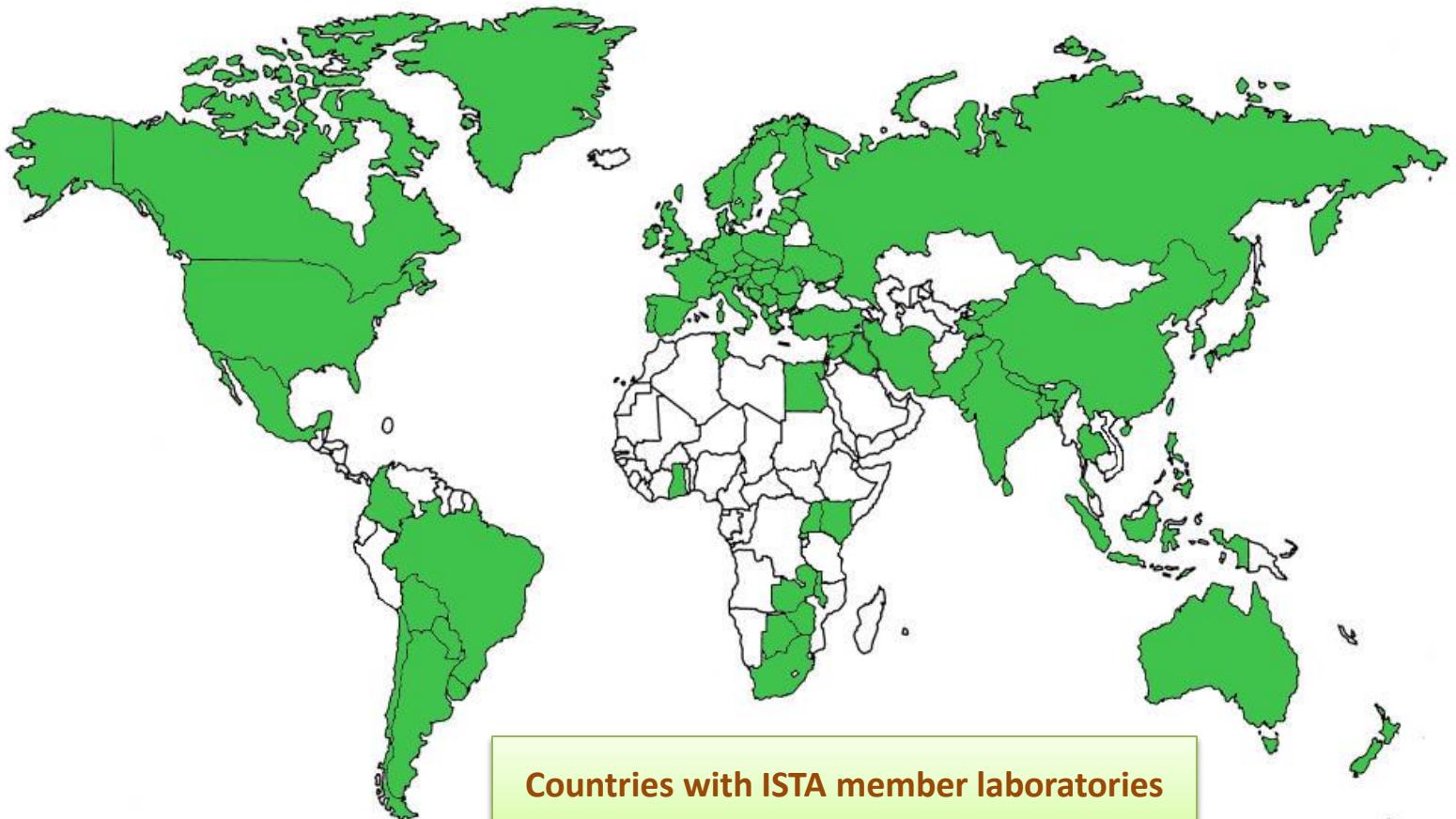


Why is ISTA relevant to seed stakeholders?

- The vision of ISTA:

**Uniformity in
Seed Quality Evaluation
Worldwide**

ISTA in the world



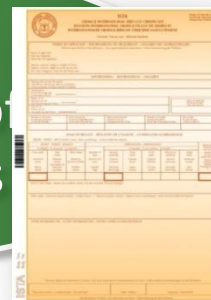


ISTA in the world

	2014
Member Laboratories	218
Accredited Laboratories	135
Countries/Distinct Economies with a minimum of one accredited laboratory	60



International
standardization of
reporting results



International
exchange of
scientific results



International
standardization of
methodologies



International
standardization of
laboratory performance

Since 1933, ISTA publishes international rules for seed testing

International
standardization
of methodologies



ELECTRONIC FORMAT
TODAY AVAILABLE

Table 2A Part 1 Agricultural and vegetable seeds

Species	Maximum weight of lot	Minimum sample weights		
		Submitted sample	Working sample for purity analysis	Working sample for count of other species
	Chapter 2 (kg)	Chapter 2 (g)	Chapter 3 (g)	Chapter 4 (g)
<i>Abelmoschus esculentus</i> (L.) Moench	20 000	1 000	140	1 000
<i>Achillea millefolium</i> L.	10 000	25	0.5	5
<i>Aeschynomene americana</i> L.	10 000	120	12	120
<i>Agropyron cristatum</i> (L.) Gaertn.	10 000	40	4	40
<i>Agropyron desertorum</i> (Fisch. ex Link) Schult.	10 000	60	6	60
<i>Agrostis canina</i> L.	10 000	25	0.25	2.5
<i>Agrostis capillaris</i> L.	10 000	25	0.25	2.5
<i>Agrostis gigantea</i> Roth	10 000	25	0.25	2.5
<i>Agrostis stolonifera</i> L. (includes <i>A. palustris</i> Hudson)	10 000	25	0.25	2.5
<i>Allium cepa</i> L.	10 000	80	8	80
<i>Allium fistulosum</i> L.	10 000	50	5	50
<i>Allium porrum</i> L.	10 000	70	7	70
<i>Allium schoenoprasum</i> L.	10 000	30	3	30



The ISTA Rules can be modified and amended annually:

Proposals to modify or amend the current ISTA International Rules for Seed Testing can be made by members or non-members, public or private laboratories or persons working in the area of seed science and technology.

How to modify the ISTA International Rules for Seed Testing



Method proposal

Species proposal

Submission and Information to ISTA Technical Committee

Method Validation Study

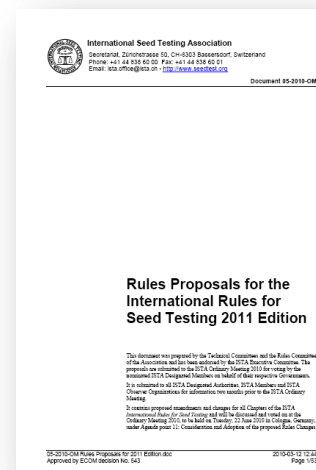
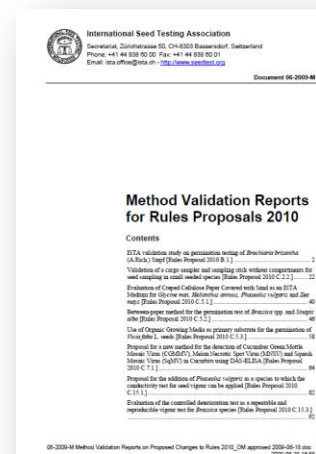
Evaluation and Approval by ISTA Technical Committee

ISTA Rules proposal

Approval by ISTA Executive Committee

Approval by ISTA Ordinary Meeting

New ISTA Rule





Ordinary Meeting

Voting delegates from 72 Member Governments

Executive Committee

11 Members from all Continents of the
World nominated by Governments

Secretariat

11 professional employees

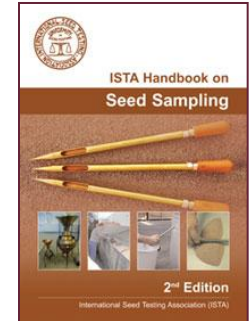
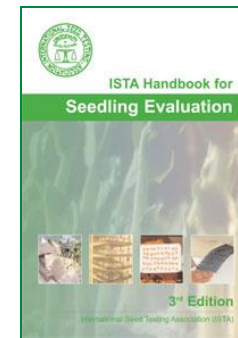
18 Technical Committees and Boards

Over 200 experts from all over the world working voluntarily in the
Technical Committees

Experts are coming from the public and the private sector, from
member laboratories and non-member laboratories

ISTA Technical Committees

- ADVANCED TECHNOLOGIES COMMITTEE
- BULKING AND SAMPLING COMMITTEE
- FLOWER SEED 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)





INTERNATIONAL SEED TESTING ASSOCIATION (ISTA)
Secretariat: Zülpfortstrasse 66, 50823 Köln, Germany
Phone: +49 221 4834 41-45, Fax: +49 221 4834 41-11, Email: ista@ista-seed.net, <http://www.ista-seed.net>



ISTA Accreditation Standard for Seed Testing and Seed Sampling

Note: Any electronic or hard copies of this document are uncontrolled copies / Confirm validity before use

Effective as of 01.01.2015
ISTA Accreditation Standard

Version 6.0
Status: Final

Page 1 of 8
Print Date: 27.07.2015

International standardization of laboratory performance

The ISTA Accreditation Programme



**Seed
Testing
Laboratory**

ISTA Membership

ISTA Rules

ISTA Accreditation Programme

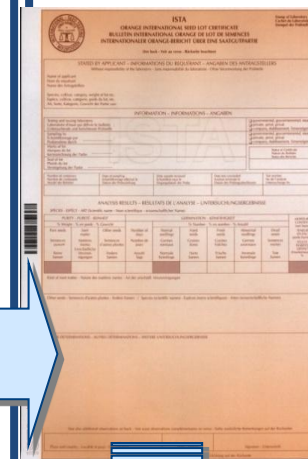
Q-Audit

- Quality assurance system according to the ISTA Accreditation Standard
- ISTA audit every three years
- Audit by two ISTA auditors

Proficiency

- 120 participating laboratories world wide
- The laboratory's performance is directly linked to its accreditation status
- Three test rounds per year

**ISTA
Certificate**



**SEED
TRADE**





The ISTA Accreditation Programme:

is open for Seed Testing Laboratories from the public and the private sector

the official language is English

all relevant documents can be downloaded from the ISTA website at www.seedtest.org

Monitoring of laboratory performance:

ISTA PT Programme Plan 2014-2016

PTround	Date	Species	Test leader
14-1	01.02.14	<i>Pisum sativum</i>	Mari Jürmann
14-1	01.02.14	<i>Pisum sativum</i>	Gillian McLaren
14-2	01.06.14	<i>Callistephus chinensis</i>	Zita Ripka
14-2	01.06.14	<i>Triticum aestivum</i>	Gisela Wustmann
14-3	01.10.14	<i>Poa pratensis</i>	Ruojing Wang
14-3	01.10.14	<i>Poa pratensis</i>	Günter Müller
15-1	01.02.15	<i>Fagus sylvatica</i>	Fabio Gorian
15-1	01.02.15	<i>Glycine max</i>	Laura Carlson
15-2	01.06.15	<i>Trifolium pratense</i>	Sinikka Köylijärvi
15-3	01.10.15	<i>Oryza sativa</i>	Rita Zecchinelli
15-3	01.10.15	<i>Oryza sativa</i>	Günter Müller
16-1	01.02.16	<i>Helianthus annuus</i>	Didier Demilly
16-2	01.06.16	<i>Brachiaria brizantha</i>	Benno Voit
16-3	01.10.16	<i>Allium cepa</i>	Sharon Davidson
16-3	01.10.16	<i>Allium cepa</i>	Günter Müller

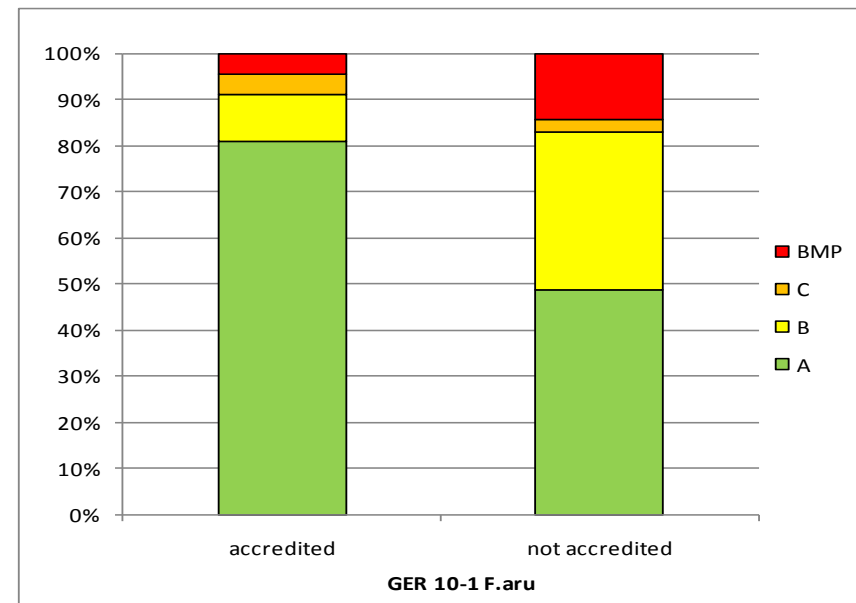
ISTA Proficiency Test Programme

- Proficiency Test fee is covered in yearly Membership fee
- Participation is mandatory for accredited laboratories, for the tests/crop group/events they are accredited for
- Voluntary participation possible for all member laboratories, regardless if accredited or not:
 - Gain experience with other species
 - Compare laboratory's testing performance with the performance of accredited laboratories
- Non members are welcome to participate (service will be charged)

Goal: measure and monitor laboratory's proficiency

ISTA Proficiency Test Programme

- ✓ Testing of samples in accordance with determined methods
- ✓ Statistical evaluation
- ✓ Evaluation of the laboratory's proficiency
- ✓ Detection of systematic errors
- ✓ Detection of trends in performance
- ✓ Results influence the accreditation status



ISTA Audit Programme

Within the ISTA Accreditation Programme Laboratories need to establish a quality assurance system following the requirements of the ISTA Accreditation Standard.



INTERNATIONAL SEED TESTING ASSOCIATION (ISTA)
Hohenheim, D-70599 Stuttgart, Germany
Phone: +49-7141-833-60 00, Fax: +49-7141-833-60 01, Email: info@seedtest.org, <http://www.seedtest.org>



ISTA Accreditation Standard for Seed
Testing and Seed Sampling

Note: Any electronic or hard copies of this document are uncontrolled copies / Confirm validity before use

The standard can be downloaded free of charge
from the ISTA webpage www.seedtest.org

Effective as of 01.05.2015
ISTA Accreditation Standard

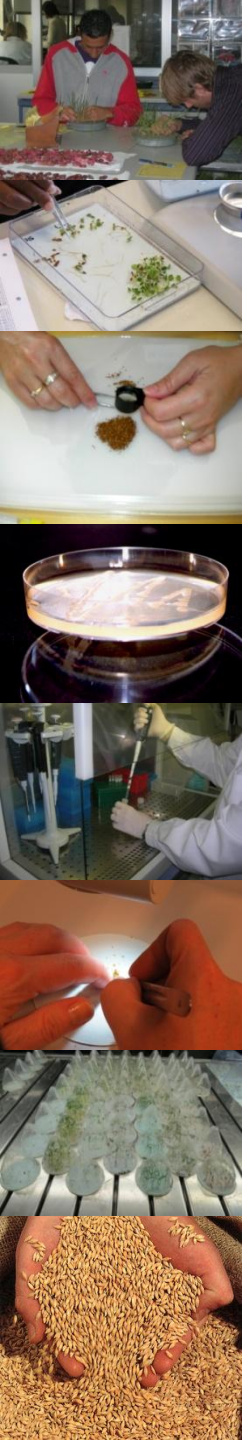
Version 5.0
Status: Final

Page 1 of 9
Print Date: 27.07.2015



ISTA Audit Programme

- small audit team guarantees uniformity of the audit process worldwide
- outstanding experience of ISTA technical auditors guarantees the high quality level of ISTA audits
- ISTA Accreditation and Audit programme is globally accepted and used worldwide



International Standardization of Reporting Results

Facilitation of International Seed Trade – The ISTA Certificates

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

(See back - Voir au verso - Rückseite beachten)

STATED BY APPLICANT – INFORMATIONS DU RÉQUÉRANT – ANGABEN DES ANTRAGSTELLERS
Without responsibility of the laboratory - Sans responsabilité du 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, Gewichte der Partie usw.

INFORMATION – INFORMATIONS – ANGABEN

Testing and issuing laboratory
Laboratoire d'essai qui délivre le bulletin :
Untersuchende und berechnende Prüfstelle

Sampling by
Echantillonnage par
Prélèvement par

Marks of lot
Marques du lot
Kennzeichnung der Partie

Seal of lot
Plomb du lot
Versiegelung der Partie

Status of Certificate
Nature du Bulletin
Status des Berichts

Number of containers
Nombre de contenants
Anzahl der Behälter

Date of sampling
Date de prélèvement
Datum der Probenziehung

Date sample received
Date échantillon reçu
Empfangdatum der Probe

Date test concluded
Analyse terminée le
Datum des Prüfungsergebnisses

Test number
No de l'analyse
Untersuchungs-Nr.

ANALYSIS RESULTS – RÉSULTATS DE L'ANALYSE – UNTERSUCHUNGSERGEBNISSE

SPECIES - ESPÈCE - ART (Scientific name - Nom scientifique - wissenschaftlicher Name):

PURITY - PURETÉ - REINHIT			GERMINATION - KEIMFÄHIGKEIT						MOISTURE CONTENT (wet basis)	
% Weight - % en poids - % Gewicht			Number of days		% Number - % en nombre - % Anzahl				TENEUR EN EAU (sur base humide)	
Pure seeds	Inert matter	Other seeds	Normal seedlings	Hard seeds	Fresh seeds	Abnormal seedlings	Dead seeds			
Semences pures	Matières inertes	Semences d'autres plantes	Normale Keimlinge	Harte Samen	Frische Samen	Anormale Keimlinge	Tote Samen			

Kind of inert matter - Nature des matières inertes - Art der unschlüß. Verunreinigungen

Other seeds - Semences d'autres plantes - Andere Samen / Species (scientific names) - Espèces (noms scientifiques) - Arten (wissenschaftliche Namen)

OTHER DETERMINATIONS – AUTRES DÉTERMINATIONS – WEITERE UNTERSUCHUNGSERGEBNISSE

(See also additional observations on back - Voir aussi observations complémentaires au verso - Siehe zusätzliche Bemerkungen auf der Rückseite)

Place and country - Localité et pays - Ort und Staat

Date - Datum

Signature - Unterschrift

See declaration on back - Voir déclaration au verso - Siehe Erklärung auf der Rückseite

Reg. No. 00708700
Reg.-Nr.

ISTA
BLUE INTERNATIONAL SEED SAMPLE CERTIFICATE
BULLETIN INTERNATIONAL BLEU D'ÉCHANTILLON DE SEMENCES
INTERNATIONALER BLEU-BERICHT ÜBER EINE SAATGUTPROBE

(See back - Voir au verso - Rückseite beachten)

STATED BY APPLICANT – INFORMATIONS DU RÉQUÉRANT – ANGABEN DES ANTRAGSTELLERS
Without responsibility of the laboratory - Sans responsabilité du 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, Gewichte der Partie usw.

INFORMATION – INFORMATIONS – ANGABEN

Testing Laboratory
Laboratoire qui délivre le bulletin
Untersuchende Prüfstelle

Sampling by
Echantillonnage par

Marks of lot
Marques du lot
Kennzeichnung der Partie

Seal of lot
Plomb du lot
Versiegelung der Partie

Status of Certificate
Nature du Bulletin
Status des Berichts

Number of containers
Nombre de contenants
Anzahl der Behälter

Date of sampling
Date de prélèvement
Datum der Probenziehung

Date sample received
Date échantillon reçu
Empfangdatum der Probe

Date test concluded
Analyse terminée le
Datum des Prüfungsergebnisses

Test number
No de l'analyse
Untersuchungs-Nr.

ANALYSIS RESULTS – RÉSULTATS DE L'ANALYSE – UNTERSUCHUNGSERGEBNISSE

SPECIES - ESPÈCE - ART (Scientific name - Nom scientifique - wissenschaftlicher Name):

PURITY - PURETÉ - REINHIT			GERMINATION - KEIMFÄHIGKEIT						MOISTURE CONTENT (wet basis)	
% Weight - % en poids - % Gewicht			Number of days		% Number - % en nombre - % Anzahl				TENEUR EN EAU (sur base humide)	
Pure seeds	Inert matter	Other seeds	Normal seedlings	Hard seeds	Fresh seeds	Abnormal seedlings	Dead seeds			
Semences pures	Matières inertes	Semences d'autres plantes	Normale Keimlinge	Harte Samen	Frische Samen	Anormale Keimlinge	Tote Samen			

Kind of inert matter - Nature des matières inertes - Art der unschlüß. Verunreinigungen

Other seeds - Semences d'autres plantes - Andere Samen / Species (scientific names) - Espèces (noms scientifiques) - Arten (wissenschaftliche Namen)

OTHER DETERMINATIONS – AUTRES DÉTERMINATIONS – WEITERE UNTERSUCHUNGSERGEBNISSE

(See also additional observations on back - Voir aussi observations complémentaires au verso - Siehe zusätzliche Bemerkungen auf der Rückseite)

Place and country - Localité et pays - Ort und Staat

Date - Datum

Signature - Unterschrift

See declaration on back - Voir déclaration au verso - Siehe Erklärung auf der Rückseite

Reg. No. 00635700
Reg.-Nr.

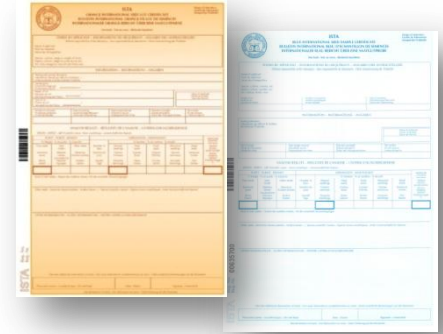
Only ISTA accredited laboratories issue ISTA Certificates

- ISTA Certificates can be issued by private and public accredited laboratories.
- ISTA Certificates are accepted by all countries in the world.
- ISTA Certificates are mandatory for seed imports in a number of countries.



Issuance of ISTA Certificates

- ISTA Certificates are recommended under the ISF trade rules.
- ISTA Certificates are recommended under the OECD Seed Schemes.




International Seed Federation

Rules and Usages
for the Trade in Seeds for Sowing Purposes

July 2009

NOTE:
These ISF Rules and Usages for the Trade in Seeds for Sowing Purposes were adopted by the General Assembly in Antalya, Turkey, on 27 May 2009. They become effective on 1 July 2009 and replace all previous ISF Trade Rules and Usages.
In case of disagreement as to the interpretation the English text is considered the original.



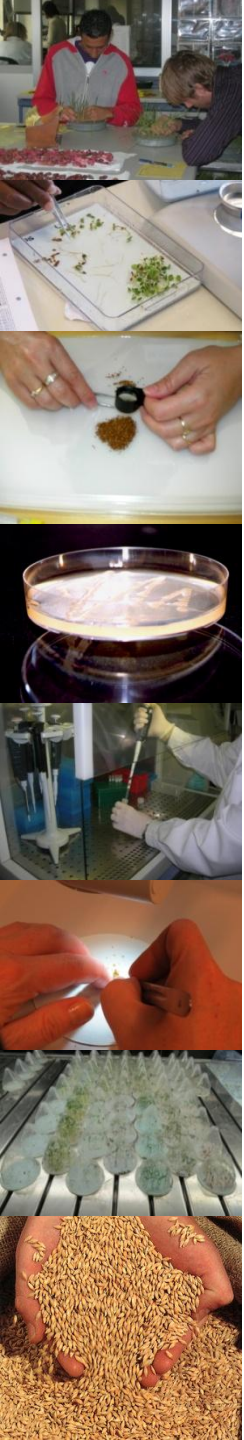
OECD Schemes
for the Varietal Certification or the Control of Seed
Moving in International Trade

OECD SEED SCHEMES
“2010”

as revised by the OECD Council
on 28 September 2000
[C(2000)149/FIN/4/L]

and subsequently amended
[C(2007)122, C(2007)123, C(2007)124,
C(2008)158, C(2008)151, C(2008)152, C(2008)153 and C(2009)153]

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT
PARIS 2010



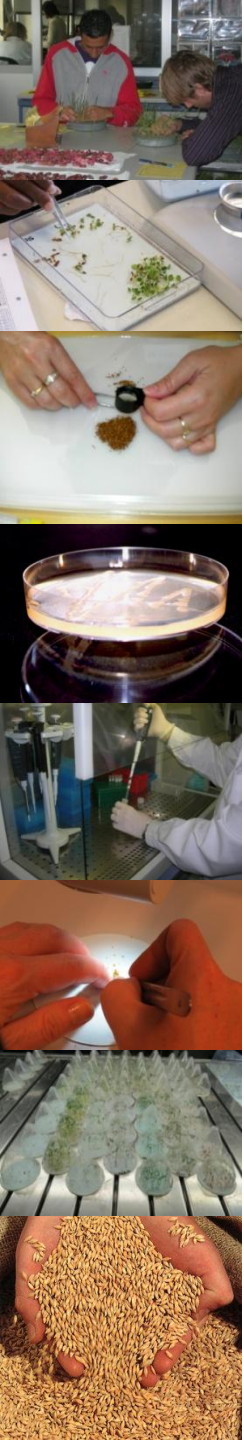
International exchange of scientific results

International exchange of scientific results:

- Editing and issuing the Scientific Journal: Seed Science and Technology
- Organising Seed Symposium as part of the tri-annual ISTA Seed Congress
- Organising other events (e.g. workshops, training courses)
- Establishing a Seed Science Advisory Group, supporting the technical committees, evaluating new technologies.

In conclusion:

- ISTA is offering unique tools to achieve a uniform and reliable seed quality determination on a high level.
- ISTA is making it possible to evaluate and compare the performance of the seed production internationally on a company level and country level.
- ISTA is facilitating the international trade of seed.





ISTA Executive Committee 2013-2016:

President Joël Léchappé, France



Vice President Craig McGill, New Zealand



9 Members-at-Large

Mable Simwanza, Zambia



Steve Jones, Canada



Alexander Malko, Russia



Berta Killerman, Germany



Masatoshi Sato, Japan



Grethe Tarp, Denmark



Margus Friedenthal, Estonia

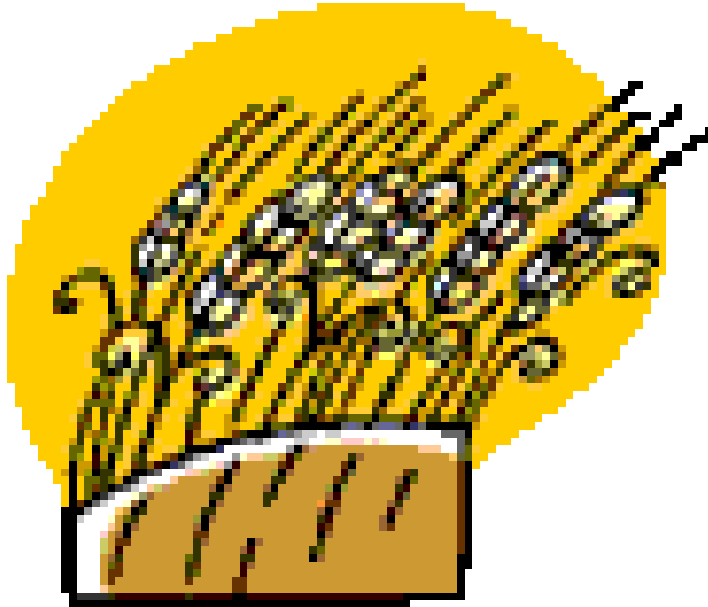
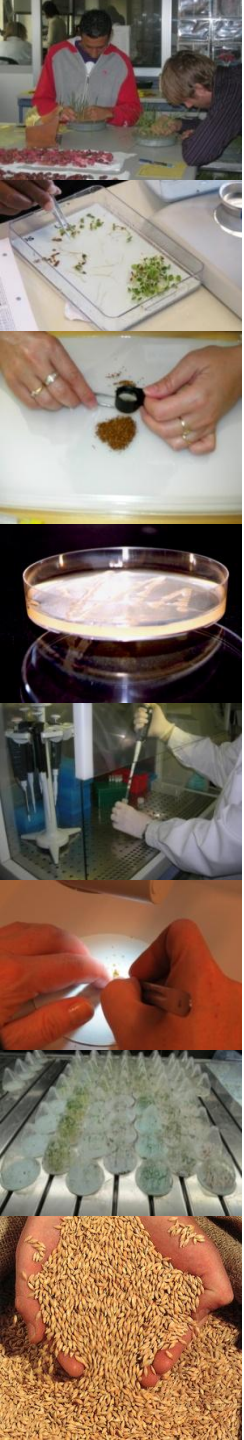


Rita Zecchinelli, Italy



Cecilia Jones, Uruguay





Questions ?