



APPROVED WORKING PROGRAMME AND MEMBERSHIP OF ISTA COMMITTEES 2019-2022

VERSION 1.0

The enclosed document is circulated to the Members of the Executive Committee by email for their approval.



The aim of this document is to approve the Working Programme and changes in the Compositions of the Technical Committees for the next triennium (2019 - 2022).

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ATC – Advanced Technology Committee

COMMITTEE MEMBERSHIP LIST				
			Country	Active since
1	CHAIR: Bert van Duijn		Netherlands	2007
2	VICE-CHAIR: Francisco G. Gomes Jr.		Brazil	2016
3	Birte Boelt		Denmark	2011
4	Kent Bradford		United States	2007
5	Mailén Ariela Martínez		Argentina	2016
6	Henry Bruggink		Netherlands	2014
7	Aurélie Charrier		France	2018
8	Devaraja Achar		India	2016
9	Nikolay S. Priyatkin		Russia	2016
10	Zhujun Zhu		China	2008
11	Giovanny Lopez		Netherlands	2019
12	Mieczyslaw Grzesik		Poland	2012
13	Tomoko Sakata		Japan	2017
14	Sebastian Bobber		Germany	2016
15	Brigitte Hamman		South Africa	2007
B3. Scientific information publications				
	Publication title		proposed finalisation	collaboration
1	ATC Web-pages		N.A.	
2	Overview of all image forming technologies and their application to seeds		N.A.	
3	Info paper on nanotechnology		2020	
4	Inventory of mathematical models in seed testing		2021	
5	Special feature issues of X-ray in seeds		2021	
6	Chapter X-ray imaging in "Handbook of Tree and Shrub seed testing"		2021	FTC
7	Advances in multi spectral seed imaging		2020	
C. WORKSHOPS AND SEMINARS				
C1. Training and education workshops				
	workshop subject location		proposed finalisation	collaboration
1	Seed Image analysis workshop (Italy)		2020	
2	Seed image analysis workshop (t.b.d.)		2022	
C2. Seminars				
	Seminar subject location		proposed finalisation	collaboration
1	Advances in Seed testing (seminar) (China)		2020	
2	Advances in seed testing (seminar) (Russia)		2021/2022	
F. SPECIAL PROJECTS				
	project title / subject collaborating committees		proposed finalisation	collaboration
1	New Technologies for Other Seeds Determination		2021	PUR
2	Assessment on available technologies of imaging and image analysis for other seeds determination (OSD), purity analysis and germination.		2021	PUR, GER
3	New methods for insect detection in seeds (to be applied for)		2022 (?)	SHC



BSC – Bulking and Sampling Committee

COMMITTEE MEMBERSHIP LIST		
	Country	Active since
1 CHAIR: Eddie Goldschagg	South Africa	2001
2 INTERIM VICE-CHAIR: Leena Pietilä	Finland	2005
3 Ignacio Aranciaga	Argentina	2016
4 Lotta Claesson	Sweden	2008
5 Corinne Guimier	France	2019
6 Gerry Hall	United Kingdom	2001
7 David Johnston	United States	2016
8 Birte Krogh	Denmark	2019
9 Michael Kruse	Germany	1995
10 José Maurício Pereira	Brazil	2013
11 Cza Realubit	The Philippines	2019
12 Evans Tembo	Zambia	2019
13 Ad Toussaint	Netherlands	2013
14 Kevin Zaychuk	Canada	2019
A. RULES DEVELOPMENT		
<u>A1. Introduction of New Methods</u>		
Method name subject	proposed finalisation	collaboration
1 Sampling of Seed Mixtures	2020	PUR
2 Sampling for <i>Orobanche</i> and Similar Species	2021	PUR
3 Use of Tube Trier	2021	
<u>A3. Introduction of Rules Changes</u>		
Subject	proposed finalisation	collaboration
1 Number of Sub-Lot Certificates	2021	ISF Veg WG, STA
2 Size of submitted and Working Samples for Vegetable Seed	2021	ISF Veg WG, STA
3 Check sampling for automatic samplers	2021	STA, Accr
4 Seeds retained for ID after testing	2021	PUR
5 Soil & Boerner divider minimum channels	2021	
B. PUBLICATIONS		
<u>B1. Publications to accompany the Rules</u>		
Publication title	proposed finalisation	collaboration
1 ISTA Handbook on Seed Sampling	2020	Accreditation
C. WORKSHOPS AND SEMINARS		
<u>C1. Training and education workshops</u>		
workshop subject location	proposed finalisation	collaboration
1 ISTA Workshop on Sampling, Purity, Germination & Moisture, Hyderabad, India	Jul 2019	PUR; GER; MOI
2 ISTA Workshop on Seed Sampling and Quality Assurance in Sampling	2021	DLF; DK



F. SPECIAL PROJECTS			
	project title / subject collaborating committees	proposed finalisation	collaboration
1	Further Development of Training Videos	2022	MOI
2	Development of Mobile Application for Seed Sampling Calculations	2020	



FSC – Flower Seed Committee

COMMITTEE MEMBERSHIP LIST		
	Country	Active since
1 Rita Zecchinelli (Chair)	Italy	2001
2 Sarah Dammen (Vice Chair)	USA	2019
3 Rachael Davies	United Kingdom	2016
4 Meriam Dekalo Karen	Israel	2001
5 Alice Di Sacco	United Kingdom	2016
6 Sylvie Ducournau	France	1998
7 Erik van Egmond	Netherlands	2019
8 Stefanie Kramer	Germany	
9 Maria Marin	Croatia	2016
10 Lucele Pretorius	South Africa	2017
11 Zita Ripka	Hungary	
12 Soo-Young KIM	South Korea	2016
13 Shizka Takeuchi	Japan	2019
A. RULES DEVELOPMENT		
<u>A1. Introduction of New Methods</u>		
Method name	proposed	collaboration
subject	finalisation	
1 <i>Eustoma exaltatum</i> : new germination method	2020	GER
<u>A2. Introduction of New Species</u>		
Species and test	proposed	collaboration
	finalisation	
1 <i>Passiflora edulis</i>	2021	GER
<u>A3. Introduction of Rules Changes</u>		
Subject	proposed	collaboration
	finalisation	
1 Sample size for flower species (Table 2A part 3)	2021	BSC
2 Clarification about OSD for species listed in Table 2A, part 3	2020	BSC
B. PUBLICATIONS		
<u>B1. Publications to accompany the Rules</u>		
Publication title	proposed	collaboration
	finalisation	
1 ISTA Handbook on Flower Seed Testing: new sheets		
<u>B2. Training publications on specific seed testing topics</u>		
Publication title	proposed	collaboration
	finalisation	
1 Collaboration in the project of the website TSWS (Testing Seeds of Wild Species): wild flower species		WS
C. WORKSHOPS AND SEMINARS		
<u>C1. Training and education workshops</u>		
workshop subject	proposed	collaboration
location	finalisation	
1 Looking for laboratories willing to candidate as organizers		
D. Proficiency Tests		



	Proficiency Test Subject	proposed finalisation	collaboration
1	ISTA PT 20-3 <i>Felicia heterophylla</i>	2020	PTC
F. SPECIAL PROJECTS			
	project title / subject collaborating committees	proposed finalisation	collaboration
1	Participation in the preparation of the exercise on seed mixture (distribute with PT samples)	2019-22	PUR -PTC
2	Collaboration with AOSA: comparison of species listed in AOSA and ISTA Rules	2021	AOSA
3	Collection of information about Flower seed Testing by ISTA laboratories	2022	
4	Inventory of TZ methods used by the laboratory for flower species	2022	TEZ



FTS – Forest Tree and Shrubs Seed Committee

COMMITTEE MEMBERSHIP LIST			
		Country	Active since
1	Elisa Vieira	Brazil	2015
2	Lena Bezdecková	Czech Republic	2016
3	Valerie Blouin	France	2013
4	Marija Gradecki-Postenjak	Croatia	2010
5	Dave Kolotelo	Canada	2004
6	Isolde Dorothea Kossmann Ferraz	Brazil	2004
7	Stefanie Kramer	Germany	2007
8	Beti Piotto	Italy	2010
9	Heidi Rosok Bye	Norway	2007
10	Victor Vankus	United States	2019
11	Edoardo Vicenti	United Kingdom	2017
12	Chandrashekara Vokkaliga Devegowda	India	????
A. RULES DEVELOPMENT			
<u>A1. Introduction of New Methods</u>			
	Method name subject	proposed finalisation	collaboration
1	Introduction of agar substrate for <i>Pinus sylvestris</i> (David Johnston)	2021	GER
<u>A2. Introduction of New Species</u>			
	Species and test	proposed finalisation	collaboration
1	Introduction of a germination method for <i>Jatropha curcas</i> (Elisa Vieira, Brazil)	2020	GER



GER – Germination Committee

COMMITTEE MEMBERSHIP LIST			Country	Active since
1	CHAIR: Gillian Musgrove		United Kingdom	2004
2	VICE-CHAIR: David Johnston		USA	2013
3	Pernilla Andersson		Sweden	2016
4	Ignacio Aranciaga		Argentina	
5	Sarah Dammen		USA	2013
6	Lucile Daron		France	2017
7	Meriam Dekalo Keren		Israel	2016
8	Sylvie Ducournau		France	2004
9	Hortense Faucher		France	2018
10	Lesly Gonzalez Galaz		Chile	2016
11	Aidin Hamidi		Iran	2016
12	Andrea Jonitz		Germany	2010
13	Augusto Martinelli		Argentina	2007
14	Rita Zecchinelli		Italy	2010
15	Forest Tree & Shrub Committee Member (TBC)			2019
A. RULES DEVELOPMENT				
<u>A1. Introduction of New Methods</u>				
	Method name subject		proposed finalisation	collaboration
1	Introduction of agar substrate for <i>Pinus</i> spp. The study was on standby in 2017 due to financial concern for sample supply. A laboratory has been established, which can provide samples for the validation study. The test plan has been prepared and validated.		2020	FTS
2	Addition of 20°C for <i>Anethum graveolens</i> germination The work is not yet started. It is planned to be carried out by Valerie Blouin (GEVES-SNES, France).		2020	
3	Temperature for <i>Brassica napus</i> germination The work is carried out by Ruoqing Wang (CFIA Canada). The method validation is being reviewed by technical reviewers.		2019	
4	Using BP instead of TP for the germination of <i>Spartium junceum</i> . The work is carried out by David Johnston. The objective is to propose the BP substrate for the germination of <i>Spartium junceum</i> , instead of TP.		2020	FTS
5	Addition of CCP for Glycine max The work is carried out by Sarah Dammen and David Johnston. The objective is to propose CCP as a method for testing <i>Glycine max</i> .		2019	
6	Addition of 20°C for <i>Eustoma exaltum</i> germination The work is ongoing within the FSC.		2020	FSC



<u>A2. Introduction of New Species</u>			
	Species and test	proposed finalisation	collaboration
1	Introduction of a germination method for <i>Chenopodium quinoa</i> The working group leaders were Lesly Gonzalez Galaz (Chile) and Ignacio Aranciaga (Argentina) who carried out work but the study could not be validated. A new validation study is ongoing.	2020	STA, BSC, PUR
2	Introduction of a germination method for <i>Jatropha curcas</i> The study will be carried out by Elisa Vieira, Brazil from FTS committee.	2020	FTS
3	Introduction of a germination method for <i>Cleome gynandra</i> The working group leaders are Lea Mazor and Meriam Dekalo-Keren. No work has started on the study. There is a germination method already for <i>Cleome hassleriana</i> so it may be possible to have a peer validation study performed.	TBD	STA, BSC, PUR
4	Introduction of a germination method for Dwarf Saltwort (<i>Salicornia bigelovii</i> Torr. and <i>Salicornia persicum</i>) The study is carried out by Aidin Hamidi.	2020	STA, BSC, PUR
5	Introduction of a germination method for <i>Azadirachta indica</i> The study is carried out by FTS.	TBD	FTS
<u>A3. Introduction of Rules Changes</u>			
	Subject	proposed finalisation	collaboration
1	AOSA / ISTA harmonisation: "leaf extending less than halfway up into the coleoptile" Hortense Faucher is taking this work forward.	2020	RUL STA
2	Precision of light for germination tests This proposal was withdrawn by the Germination Committee at the 2019 meeting. More information is required regarding what measurement of light to use and also think about the wording in the AOSA Rules regarding how to deal with harmonisation.	2020	RUL
3	Pre-washing of <i>Beta</i> seeds This proposal was withdrawn by the Germination Committee at the 2019 meeting. Further evidence is required to show that either method is comparable. Sarah Dammen may have data that can be used. A validation study should be performed by the Germination Committee.	2020	PROF RUL



B. PUBLICATIONS			
B1. Publications to accompany the Rules			
Publication title	proposed finalisation	collaboration	
1 Tree Seed Handbook This work is carried out by FTS and is a joint project between ISTA and OECD www.treeseedhandbook.info	TBC	FTS	
C. WORKSHOPS AND SEMINARS			
C1. Training and education workshops			
workshop subject location	proposed finalisation	collaboration	
1 ISTA Seminar or Workshop - Ukraine	2019	PUR	
2 ISTA Workshop on Germination & Tetrazolium New Zealand	2020	TZ	
3 ISTA Workshop on Germination, Tetrazolium & Vigour – Turkey, March 2020	2020	TZ, VIG	
D. Proficiency Tests			
Proficiency Test Subject	proposed finalisation	collaboration	
1 19-1 Galega orientalis (completed)	2019		
2 19-2 Brassica napus (in progress)	2019		
3 19-3 Hordeum vulgare	2020		
F. SPECIAL PROJECTS			
project title / subject collaborating committees	proposed finalisation	collaboration	
Maize root system evaluation – Study of the definition of the minimum number of secondary roots necessary to compensate a defective primary root This study is carried out by Aidin Hamidi. The objective is to evaluate the influence of the secondary roots (number and development) on the normal Maize seedling evaluation 1 The proposed experiment is: - The selection of seed samples from various varieties - The germination of the seeds in laboratory and, at the end of the test, the selection of seedlings with 1) well developed primary root, 2) defective primary root with different numbers and development of secondary roots - The transplanting of the developed seedlings into the field to evaluate the plant growth under crop conditions	2020		
Helianthus annuus root system evaluation – Change from A2111 to A2112 2 The work is carried out by Takayuki Okuda from Japan. The objective is to change the Seedling Evaluation Criteria of Helianthus root system.	2020		
3 Assessment on available technologies of imaging and image analysis for other seeds determination (OSD), purity analysis and germination.		ATC, PUR	
4 Development of rapid tests to predict germination and vigour and their potential for automation using image analysis.		VIG	
5 Comparison of the temperature regimes for the germination of Beta vulgaris (pelleted and non-pelleted). This work is carried out by Sylvie Ducournau.			



GMO – Committee

COMMITTEE MEMBERSHIP LIST		
	Country	Active since
1	Enrico Noli	Italy
2	René Mathis	France
3	Elizabeth Bates	Belgium
4	Sofia Ben Tahar	France
5	Tajinder Grewal	Canada
6	Lutz Grohmann	Germany
7	Andrea Jonitz	Germany
8	Jean-Louis Laffont	France
9	Marco Mazzara	Italy
10	Dwarkesh Parihar	India
11	Elena Perri	Italy
12	Kirk Remund	U.S.A.
13	Ray Shillito	U.S.A.
14	Ana Laura Vicario	Argentina
15	Bruno Zaccomer	France
16	Dabing Zhang	China
A. RULES DEVELOPMENT		
<u>A1. Introduction of New Methods</u>		
	Method name	proposed
	subject	finalisation
1	No introduction of new methods in Chapter 19 planned	collaboration
<u>A2. Introduction of New Species</u>		
	Species and test	proposed
		finalisation
1	No introduction of new species in Chapter 19 planned	collaboration
<u>A3. Introduction of Rules Changes</u>		
	Subject	proposed
		finalisation
1	Editorial changes to Chapter 1 (Certificates) reflecting text in Chapter 19 (Testing for Seeds of GMOs)	2020
2	Changes reflecting new definitions currently being introduced in the Handbook on GMO testing	2020
B. PUBLICATIONS		
<u>B1. Publications to accompany the Rules</u>		
	Publication title	proposed
		finalisation
1	Handbook on GMO testing	2020
		STA, Secretariat
<u>B2. Training publications on specific seed testing topics</u>		
	Publication title	proposed
		finalisation
1	New documents related to GMO accreditation (Performance Data Evaluation for Adventitious Presence as well as for Trait Purity)	2020
		STA, Secretariat



C. WORKSHOPS AND SEMINARS			
C1. Training and education workshops			
	workshop subject location	proposed finalisation	collaboration
1	No specific workshops are planned at the moment, but availability for them upon request		
D. Proficiency Tests			
	Proficiency Test Subject	proposed finalisation	collaboration
1	Soybean	2020	
2	Alfalfa (tentative)		
3	Corn (tentative)		
F. SPECIAL PROJECTS			
	project title / subject collaborating committees	proposed finalisation	collaboration
1	Standardization of terms used in GMO testing	2020	Audit Team, Secretariat
2	Collaboration with ISO SC 16/WG 9 "Horizontal methods for molecular biomarker analysis" on "Seed and grain subsampling"	2020	
3	Collaboration on SCST on PT organisation		
4.	Updating information on website (maintenance)		Secretariat



MOI – Moisture Committee

COMMITTEE MEMBERSHIP LIST			
		Country	Active since
1	CHAIR: Laura Bowden	UK	2013
2	VICE-CHAIR: Axel Goeritz	Germany	2015
3	Jette Nydam Hansen	Sweden	2001
4	Gerarda de Boer Raatgever	Netherlands	2007
5	Sergio Pasquini	Italy	2007
6	Susan Alvarez	USA	2015
7	Baymolo Goma	Zambia	2015
8	Wen-Ju Yang	Separate Customs Territory of Taiwan	2015
9	Céline Herbert	France	2016
10	Fiona Hay	Denmark	2019
11	Tanja Petrovic	Serbia	2019
A. RULES DEVELOPMENT			
<u>A1. Introduction of New Methods</u>			
	Method name	proposed	collaboration
	subject	finalisation	
1	Use of equilibrium Relative Humidity (eRH) as an alternative method of testing seed moisture status.		
<u>A2. Introduction of New Species</u>			
	Species and test	proposed	collaboration
		finalisation	
1	<i>Carica papaya</i> Method Validation Report has been produced and is currently under review.	2020	
2	<i>xFestulolium</i> Report produced several years ago. Data to be re-analysed to investigate whether we can introduce a new rule.		
<u>A3. Introduction of Rules Changes</u>			
	Subject	proposed	collaboration
		finalisation	
1	Checking the need for grinding of <i>Gleditsia triacanthos</i> , <i>Albizia julibrissin</i> , <i>Medicago sativa</i> , <i>Lotus pedunculatus</i> , <i>Lotus corniculatus</i> , <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Vigna radiata</i>	2020	
B. PUBLICATIONS			
<u>B1. Publications to accompany the Rules</u>			
	Publication title	proposed	collaboration
		finalisation	
1	Review and update Handbook on Moisture Determination		



<u>B2. Training publications on specific seed testing topics</u>			
	Publication title	proposed finalisation	collaboration
1	Excel tool for calculation of moisture test results	2020	
2	List of equipment that is suitable for moisture testing – grinders, moisture meters, ovens, etc	2021	
C. WORKSHOPS AND SEMINARS			
<u>C1. Training and education workshops</u>			
	workshop subject location	proposed finalisation	collaboration
1	Workshop in Verona, May 2020. Workshop to include using eRH as a measure of seed moisture in tree species.	2020	



NOM – Nomenclature Committee

COMMITTEE MEMBERSHIP LIST		
	Country	Active since
1	Melanie Schori	USA 2017
2	Ernest Leonard Allen	USA
3	Susan Alvarez	USA
4	Bernard Baum	Canada
5	Michel Chauvet	France
6	Axel Diederichsen	Canada
7	Marco Hoffman	Netherlands
8	Tamara N. Smekalova	Russia
9	John H. Wiersema	USA
A. RULES DEVELOPMENT		
<u>A1. Introduction of New Methods</u>		
Method name subject	Proposed finalisation	collaboration
<u>A2. Introduction of New Species</u>		
Species and test	Proposed finalisation	collaboration
<u>A3. Introduction of Rules Changes</u>		
Subject	Proposed finalisation	collaboration
B. PUBLICATIONS		
<u>B1. Publications to accompany the Rules</u>		
Publication title	Proposed finalisation	collaboration
1	ISTA List of Stabilized Plant Names, 7 th edition	12/2019
<u>B2. Training publications on specific seed testing topics</u>		
Publication title	Proposed finalisation	collaboration
<u>B3. Scientific information publications</u>		
Publication title	Proposed finalisation	collaboration
C. WORKSHOPS AND SEMINARS		
<u>C1. Training and education workshops</u>		
workshop subject location	Proposed finalisation	collaboration
<u>C2. Seminars</u>		
Seminar subject location	Proposed finalisation	collaboration
D. Proficiency Tests		
Proficiency Test Subject	Proposed finalisation	collaboration
F. SPECIAL PROJECTS		
project title / subject collaborating committees	Proposed finalisation	collaboration



PUR – Purity Committee

COMMITTEE MEMBERSHIP LIST			
		Country	Active since
1	CHAIR: Ruoqing Wang	Canada	2009
2	VICE CHAIR: Andrea Jonitz	Germany	
3	Augusto Martinelli	Argentina	2007
4	Aurelie Charrier	France	2018
5	Axel Goeritz	Germany	2017
6	Carrie Lewis	United States	2016
7	Charan Jeet Mehta	India	
8	Deborah Meyer	United States	1995
9	Dot Vittrup Pedersen	Denmark	2013
10	Kepha Oganda	Kenya	
11	Maria Duter	New Zealand	2011
12	Selma Kurt	Turkey	2016
13	Sue Cousins	New-Zealand	2017
A. RULES DEVELOPMENT			
<u>A1. Introduction of New Methods</u>			
Method name		proposed	collaboration
subject		finalisation	
1	Chapter 14 x-ray	2022	ATC
<u>A2. Introduction of New Species</u>			
Species and test		Proposed	collaboration



finalisation			
1	A guide for adding new species	2021	GRE, BSC
2	<i>Chenopodium quinoa</i> , TSW data completed, PSD 2 not chaffy, submitted sample 100g, purity = 10g, OSD = 100g	2020	GER, BSC
3	<i>Salvia hispanica</i> , TSW data was collected pending to GER and BSC for a proposal, PSD needs to be determined	2021	GER, BSC
<u>A3. Introduction of Rules Changes</u>			
Subject		proposed	collaboration
finalisation			
1	Clarification and revision based on demands for Chapters 2, 3, 4, 10, 11, 14, 18	TBD	RUL, BSC, STA
2	Revision of Chapter 11, Look at new ways to do the verification of species, on how to remove coating	2021	RUL, TEZ
3	Revision of Chapter 14 possible to use other machines to do this test	2022	FTS
B. PUBLICATIONS			
<u>B1. Publications to accompany the Rules</u>			
Publication title		proposed	collaboration
finalisation			
1	PSD handbook, revision	2022	GER
2	Seed descriptions and pictures of the tropical species that are made available	2021	External collaborators Dr. Doris Groth, Myriam Alvisi



<u>B2. Training publications on specific seed testing topics</u>			
Publication title		proposed	collaboration
		finalisation	
1	Standardize and update Purity (Purity analysis and PSD) training presentation and handouts	2021	
2	Standardize and update Seed ID training presentation and handouts	2022	
3	Revise and update Seed ID training for the Universal list	2022	
<u>B3. Scientific information publications</u>			
Publication title		proposed	collaboration
		finalisation	
C. WORKSHOPS AND SEMINARS			
<u>C1. Training and education workshops</u>			
workshop subject		proposed	collaboration
location		finalisation	
1	Seed ID Training WS	2020	Uruguay /Ukraine
2	Purity Analysis and Seed ID Training	2021	Denmark
3	Purity Analysis and Seed ID Training	2022	Africa
4	PUR will consider multiple training means, such as using webinars for training 2022 set up the system for webinar training, delivery of trial training webinars in 2021	on-going	online
<u>C2. Seminars</u>			
Seminar subject		proposed	collaboration
location		finalisation	
1	Seminar celebrate "International Plant Health Year 2020"	2020	SHC
2	Seminar on seed botany and morphology	2021	



D. Proficiency Tests			
Proficiency Test Subject		proposed	collaboration
		finalisation	
1	Seed Mixture Round 9	2020	PTC, Axel
2	Seed Mixture Round 10	2021	
3	Seed Mixture Round 11	2022	
F. SPECIAL PROJECTS			
project title / subject		proposed	collaboration
collaborating committees		finalisation	
1	New technologies in purity testing (eg Image analysis) and how to validate them for doing purity analysis	2022	Project members
2	Publish FAQ on web-site for people/members to look into to learn from each other	2021	ISTA Secretariat



SHC – Seed Health Committee

COMMITTEE MEMBERSHIP LIST		
	Country	Active since
1 CHAIR: Valerie Grimault	France	
2 VICE-CHAIR: Terry Aveling	South Africa	
3 Ilaria Alberti	Italy	
4 Rouke Baker	New Zealand	
5 Stephan Briere	Canada	Since June 2018
6 Mark Buimer	Netherlands	
7 Gary Munkvold	United States	
8 Rosa Piña González	Chile	Since June 2016
9 Dorota Szopinska	Poland	
10 Xiulan Xu	China	Since June 2017
11 Wen-Hsin Chung	Taiwan	Since June 2018
12 Isabelle Serandat	France	2019
13 Marian Mc Ewan	United Kingdom	2019
14 Kohei Osaki	Japan	2019
15 Ruud Barnhorn	Netherland	2019
A. RULES DEVELOPMENT		
<u>A1. Introduction of New Methods</u>		
Method name subject	proposed finalisation	collaboration
1 <i>Fusarium graminearum</i> , <i>F. langsethiae</i> , <i>F. culmorum</i> and <i>F. poae</i> on cereals – new method	2013-2022	Nibio Norway, CREA, SASA, GEVES
2 <i>Fusarium oxysporum</i> f.sp. <i>lycopersici</i> on tomato – new method	2013-2022	Naktuinbouw, GEVES, Microlab
3 SHC.64: Detection of <i>X. oryzae</i> pathovars on rice seeds	2013-2022	IIRI
4 <i>Ascochyta rabiei</i> on chickpea	2013-2022	Icarda at the beginning, new project GEVES
5 <i>Tilletia species</i> on wheat	2018-2022	GEVES, other to identify
6 <i>Pseudomonas syringae</i> pv. <i>glycinea</i> on soybean	2018-2022	USDA
7 <i>Botrytis</i> on hemp	2019-2022	CREA
<u>A2. Introduction of New Species</u>		
Species and test	proposed finalisation	collaboration
<u>A3. Introduction of Rules Changes</u>		
Subject	proposed finalisation	collaboration
1 Pea, <i>Pisum sativum</i> 7-005, add pathogens and option with NUV light	2013-2022	ISHI
2 SHC XX: <i>U. nuda/Hordeum vulgare</i> , staining	2016-2020	SASA
3 All protocols containing electroforesis add option to use other staining dyes as GelRed instead of EthBr	2019-2022	SHC



4	Revision of Sample and Subsample size wording described in the SH-Testing methods	2019-2020	SHC
5	Revision of hypochlorite pretreatment wording in the SH-Testing methods	2019-2020	SHC
B. PUBLICATIONS			
<u>B1. Publications to accompany the Rules</u>			
Publication title		proposed finalisation	collaboration
<u>B2. Training publications on specific seed testing topics</u>			
Publication title		proposed finalisation	collaboration
1	Seed Health Handbook	2013-2022	
<u>B3. Scientific information publications</u>			
Publication title		proposed finalisation	collaboration
C. WORKSHOPS AND SEMINARS			
<u>C1. Training and education workshops</u>			
workshop subject location		proposed finalisation	collaboration
1	SH methods, South Africa	2020	Univ Pretoria, GEVES, Starke Ayres
2	<i>Leptosphaeria maculans</i> , <i>P biglobosus</i> , Canada	2021	Canadian Food Inspection Agency
<u>C2. Seminars</u>			
Seminar subject location		proposed finalisation	collaboration
1	Seed Health Symposium, Canada, date to be determined	2021	Canadian Food Inspection Agency
2	Plant health Seminar (International Year of Plant Health 2020) ISTA congress Verona, May 2020	2020	CREA
D. Proficiency Tests			
Proficiency Test Subject		proposed finalisation	collaboration
1	7-007 Three pathogens on <i>Linum</i>	2016-2019	GEVES
2	7-014 <i>Parastagonospora nodorum</i>	2019-2022	CREA?
3	7-022 <i>Microdochium nivale</i>	2019-2022	SASA
4	7-028 Tobamoviruses	2019-2022	GEVES
5	7-031 <i>Ditylenchus dipsaci</i>	2019-2022	GEVES
6	7-024 or 7-029 or 7-030 (to be determined)	2019-2022	Naktuinbouw
F. SPECIAL PROJECTS			
project title / subject collaborating committees		proposed finalisation	collaboration
1	ISTA Reference Pest List: seed as a pathway to be checked based on scientific analysis of literature obtained and expert advice, 2 sets of lists	2019 and 2022	GEVES

SSAG – Seed Science Advisory Group

COMMITTEE MEMBERSHIP LIST			
		Country	Active since
1	Alison Powell (Chair)	United Kingdom	
2	Brigitte Hamman (Vice-Chair)	South Africa	
3	Birte Boelt	Denmark	
4	Francoise Corbineau	France	
5	Fiona Hay	Denmark	
6	Stan Matthews	United Kingdom	
7	Manuela Nagel*	Germany	
8	Alan Taylor	United States	
9	Jane Thomas	United Kingdom	
10	Adel Zayed	United States	

*As the current Seed Symposium Convenor, Manuela Nagel has replaced Laura Bowden on the SSAG

The Working Programme is presented below in relation to the Terms of Reference (TOR) of the SSAG

TOR 1:

Extension of the project on prediction of normal germination on the basis of a single early count of radicle emergence (RE) to other crop groups. This will be conducted in collaboration with the Germination Committee and other experienced ISTA laboratories

Use of RE to predict germination after commercial storage and possibly within seed banks. A potential project will be discussed with the Chair of the Storage Committee

Use of tetrazolium staining to rapidly predict germination of wild species. The use of this approach for wildflower species will be discussed with the Chair of the FSC and the scientist who developed this approach.

Preparation of a featured article for STI by January 2020 to explain the project in terms of proof of concept, its final purpose and the range of species chosen.

The members of the SSAG will continue to monitor a wide range of scientific journals for research that has potential for application in seed testing.

TOR 2:

The SSAG was approached during the ISTA Congress with a question regarding Seed-X which uses 'unique machine vision technology and customized deep learning algorithms' (quote from their website) to achieve aspects of seed quality analysis including detection of genetic purity and germination with a 'Seed by Seed sorting mechanism'. This will be followed up with an enquiry to the company regarding the evidential basis of their claims. The response received will determine whether any further work on this will be carried out

The SSAG will respond to any other queries from ISTA members regarding the efficacy of new equipment that claims to be useful for seed testing.

TOR 3:

Position of ISTA regarding evaluation of seeds given biocontrol or bio-stimulant treatments: A position paper will be prepared for the ECOM in consultation with the appropriate TCOM(s) e.g. SHC.

The assessment of insect infestation of seed lots as a possible future topic for the Association and the use of X-rays to identify insect presence / damage. Collaboration with the ATC will initially help to establish the potential tools available for this

STA – Statistic Committee

COMMITTEE MEMBERSHIP LIST			
		Country	Active since
1	Chair: Jean-Louis Laffont	France	
2	Vice-Chair: Kirk Remund	United States	
3	Gabriel Carré	France	
4	Mustapha El Yakhlifi	France	
5	Zhou Fang	United States	
6	Bonnie Hong	United States	
7	Winfried Jackisch	Germany	
8	Zivan Karaman	France	
9	Bo-Jein Kuo	Separate Custom Territory of Taiwan, Penghu, Kinmen and Matsu	
10	Ray Shillito	United States	
A. RULES DEVELOPMENT			
- <u>A1. Introduction of New Methods</u>			
Method name		proposed	collaboration
subject		finalisation	
1	Statistical reviews of Test Plans and Validation Reports	On-going	Any TCOM
2	Contribution to the analysis of some Validation Studies	On-going	Any TCOM
- <u>A2. Introduction of New Species</u>			
Species and test		proposed	collaboration
		finalisation	
1	Statistical reviews of Test Plans and Validation Reports	On-going	Any TCOM
2	Contribution to the analysis of some Validation Studies	On-going	Any TCOM
- <u>A3. Introduction of Rules Changes</u>			
Subject		proposed	collaboration
		finalisation	
1	Contribution to the writing of the GMO Testing Handbook	2020	GMOC
B. PUBLICATIONS			
- <u>B1. Publications to accompany the Rules</u>			
Publication title		proposed	collaboration
		finalisation	
1	Tool for rating GMO PT quantitative results in R	2020	GMOC, ISTA Secretariat
2	Review ISTA heterogeneity tests	2021	BSC
3	Review minimum sampling intensity for seed lots in containers	2021	BSC
- <u>B2. Training publications on specific seed testing topics</u>			



	Publication title	proposed finalisation	collaboration
-	<u>B3. Scientific information publications</u>		
	Publication title	proposed finalisation	collaboration
	C. WORKSHOPS AND SEMINARS		
-	<u>C1. Training and education workshops</u>		
	workshop subject	proposed finalisation	collaboration
	location		
1	Upon request, workshops on GMO Testing and on statistical methods supporting ISTA Rules		Any TCOM
-	<u>C2. Seminars</u>		
	Seminar subject	proposed finalisation	collaboration
	location		
	D. Proficiency Tests		
	Proficiency Test Subject	proposed finalisation	collaboration
	E. Questions to the Committee		
	Proficiency Test Subject	Date	From (Country)
	F. SPECIAL PROJECTS		
	project title / subject	proposed finalisation	collaboration
	collaborating committees		
1	Maintain R Shiny package ISTAgermMV	On-going	GERC
2	Contributions to the work of the ISO TC 34/SC 16, WG 9 on Group testing for Adventitious Presence testing	2020	GMOC
3	Contributions to the work of the Vegetables Seed Industry Working group (VSI WG)	On-going	BSC
4	Work on group testing estimator bias	2020	GMOC



STO – Storage Committee

COMMITTEE MEMBERSHIP LIST			
		Country	Active since
1	Chair: Jayanthi Nadarajan	New Zealand	New 2019
2	Vice-Chair: David Mycock	RSA	
3	Cathy Offord	Australia	
4	Joseph Asomaning	Ghana	
5	Andreas Börner	Germany	
6	Isolde Dorothea Kossmann Ferraz	Brazil	
7	Steven Groot	Netherlands	
8	Frank Lanfermeijer	Netherlands	
9	Moctar Sacandé	Italy	
10	Sershen Naidoo	RSA	
11	Christina Walters	USA	
12	Xiang-Yun Yang	China	
13	Hugh W. Pritchard	UK	
14	G V Jagadish	India	New 2019
15	Radha Narayanaywamy	India	New 2019
	ECOM Liaison officer: Keshavulu Kunusoth		
A. RULES DEVELOPMENT			
A1. Introduction of new methods (innovation in seed storage)			
A1.1. Combination of vacuum infiltration and droplet vitrification cryopreservation for recalcitrant seeds			
A1.2.			
A1.3.			
B. PUBLICATIONS			
<u>B1. Publications of the seed storage handbook</u>			
		proposed finalisation	collaboration
	Handbook on Seed Storage	2022	
<u>B2. Scientific information publications</u>			
	Publication title	proposed finalisation	collaboration
	Target 20 scientific publications (book chapters and journal articles, including in SS&T) on seed storage.	2022	
C. SEMINARS			



Seminar subject	proposed finalisation	collaboration
1 13 th Triennial International Conference of the International Society for Seed Science: Seed Innovation Systems for the 21st Century, 9-13 August 2021, University of Sussex Brighton, UK. Organisation: Dr Louis Colville & Professor Hugh Pritchard (Kew) supported by a Local Organising Committee and International Programme Committee Target: ISTA session, one invited lecture and at least two oral presentations from the committee	2020	
2 Australasian Seed Science Conference, 5-9 September 2021, Australian National Botanic Gardens, Canberra, ACT, Australia Target: one invited lecture and at least two oral presentation from the committee		
3 ICAR-IISS, Mau, India organising a webinar' on seed quality assurance and scientific storage aspects. 10th September 2020 (online event) Target: Jayanthi Nadarajan will give an invited talk		
4 ISTA Annual meeting. 31 May-03 June 2021, Cairo, Egypt Target: at least two oral presentation from the committee		
<u>D. WORKSHOPS</u>		
	proposed finalisation	collaboration
A seed storage workshop in collaboration with Seed Moisture Committee during the ISTA Annual meeting. 31 May-03 June 2021, Cairo, Egypt	2021	MOI
<u>E. SPECIAL PROJECTS</u>		
project title / subject	proposed finalisation	collaboration
collaborating committees		
1 Vertically transmitted endophytes in Myrtaceae species – implications for seedling establishment and seed banking (Led by Jayanthi Nadarajan)	2022	
2 Post-storage reinvigoration/seed priming and storage for 24 months on Hybrid Sweet Corn, Onion and Hybrid Cabbage seed lots (Led by G.V. Jagadish & Sershen)	2022	
3 The role of oxygen in seed storage (Led by Steven Groot)	2022	



TEZ – Tetrazolium Committee

COMMITTEE MEMBERSHIP LIST			
1	CHAIR: Steffi Krämer	Germany	
2	VICE-CHAIR: Sergio Pasquini	Italy	
3	Ignacio Aranciaga	Argentina	
4	Maria Aranguren	Argentina	
5	Alessandra Arioli	Italy	
6	Sunita, BH	India	
7	Valerie Blouin	France	
8	Gary Duffy	Ireland	
9	Soo-Yuong Kim	Korea	
10	Linda Maile	United Kingdom	
11	Augusto Martinelli	Argentina	
12	Jose Franca-Neto	Brazil	
13	Eunhee Soh	Korea	
14	Parvez, Tauhid	Canada	
	Sharon Davidson	United States	Retired 2019
A. RULES DEVELOPMENT			
<u>A2. Introduction of New Species</u>			
	Species and test	Proposed finalisation	collaboration
1	Tetrazolium test on Larix	unknown	FTS
2	Tetrazolium test on Picea	unknown	FTS
3	Tetrazolium test on Glycine max	unknown	
4	Tetrazolium test on Pennisetum	unknown	
5	Tetrazolium test on Ulmus sp.	2020	
<u>A3. Introduction of Rules Changes</u>			
B. PUBLICATIONS			
<u>B2. Training publications on specific seed testing topics</u>			
	Publication title	Proposed finalisation	collaboration
1	Reorganise Handbook Tetrazolium	unknown	
2	Revision of the TEZ working sheets	January 2020	
3	Continue TEZ Working sheets	ongoing	
C. Workshop			
	ISTA Workshop on Tetrazolium Testing and Equilibrium relative humidity (ERH) determination for Wild Species and Flowers Workshop in Verona	May 2020	FTS, MOI
	TEZ, GER, VIG in Turkey	March 2020	GER, VIG
	TEZ Workshop in Canada	open	



D. PROFICIENCY TESTS			
	Proficiency test subject	proposed	collaboration
	location	finalisation	
1	Allium poroum (PT 20-3)	2020	PTC
2	Medicago melilotus (PT 21-2)	2021	PTC
3	Lolium perenne (PT 22-1)	2022	
F. SPECIAL PROJECTS			
E. QUESTIONS TO THE COMMITTEE			

VAR – Variety Committee

COMMITTEE MEMBERSHIP LIST			
		Country	Active since
1	Ana Laura Vicario	Argentina	2007
2	Daniel Perry	Canada	2007
3	Chiara Delogu	Italy	2007
4	Anne Bernole	France	2015
5	Kae-Kang Hwu	Taiwan	2007
6	Kunusoth Keshavulu	India	2007
7	Ksenija Taski-Ajdukovic	Serbia	2007
8	Hedwich Teunissen	Netherlands	2007
9	Elisa Vieira	Brazil	2007
10	Ksenia Markovic	Serbia	2007
11	Verena Peterseil	Austria	2015
12	Marie-Josè Cotè	Canada	2016
13	Berta Killermann	Germany	2007
A. RULES DEVELOPMENT			
<u>A1. Introduction of New Methods</u>			
	Method name	proposed	collaboration
	subject	finalisation	
1	DNA-based method for PEA	2021	STA
2	DNA-based method for BARLEY	2021	STA
3	DNA-based methods for OAT	2021	STA
4	DNA-based methods for SOYBEAN	2021	STA
5	PCR validation to differentiate lolium perenne from lolium multiflorum. Continue the work with a new validation.	2021	STA
<u>A2. Introduction of New Species</u>			
	Species and test	proposed	collaboration
		finalisation	
1	DNA-based test for soybean		
<u>A3. Introduction of Rules Changes</u>			
	Subject	proposed	collaboration
		finalisation	
1	Global revision of chapter 8	2021	editorial
B. PUBLICATIONS			
<u>B1. Publications to accompany the Rules</u>			
	Publication title	proposed	collaboration
		finalisation	
1	DNA based methods handbook	2022	GMO, STA, Accreditation and PT
<u>B2. Training publications on specific seed testing topics</u>			
	Publication title	proposed	collaboration
		finalisation	



<u>B3. Scientific information publications</u>		-	-
Publication title		proposed finalisation	collaboration
C. WORKSHOPS AND SEMINARS			
<u>C1. Training and education workshops</u>			
workshop subject location		proposed finalisation	collaboration
1	Workshop on variety and GMO testing in India	2020	
<u>C2. Seminars</u>			
Seminar subject location		proposed finalisation	collaboration
D. Proficiency Tests			
Proficiency Test Subject		proposed finalisation	collaboration
1	Proficiency test on wheat by DNA-based methods	2021	STA
F. SPECIAL PROJECTS			
project title / subject collaborating committees		proposed finalisation	collaboration
1	Work closer to GMOCOM to face some common problems like: GMO trait as an identification trait, define a pure sample as reference material for DNA, statistics for DNA-based methods as in chapter 19, how to handle DNA profile modification through years.	2022	GMO, STA, PT, Accreditation.
2	There is the need to rate protein-based methods and other methods in chapter 8. Look for a way to face that issue since there are no members or people interested in organizing a PT for those methods.	2020	
3	Work in a joint document with UPOV and OECD, that explores where we can work together. Prepare a new survey for ISTA labs, as UPOV and OECD prepared to collect information about the use of DNA-based methods.	2022	Secretariat.

VIG – Seed Vigour Committee

COMMITTEE MEMBERSHIP LIST		
	Country	Active since
1 Alison Powell (Chair)	UK	1995
2 Hulya Ilbi (Vice Chair)	Turkey	2007
I-Chen Cheng	Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu	2019
3 Ibrahim Demir	Turkey	2007
5 Carina Gallo	Argentina	2010
6 Simon Goertz	Germany	2014
7 G.V. Jagadish	India	2015
8 Mohammad Khajeh Hosseini	Iran	2004
9 Tim Loeffler	USA	2007
10 Stan Matthews	UK	2004
11 Carey Matthiessen	Canada	2013
12 Gillian McLaren	UK	2004
13 Takashi Shinohara	Japan	2019
14 Marie-Hélène Wagner	France	2004
15 Yan Rong Wang	China	1992
A. RULES DEVELOPMENT		
<u>A1. Introduction of New Methods</u>		
Method name	proposed	collaboration
subject	finalisation	
<u>A2. Introduction of New Species</u>		
Species and test	proposed	collaboration
	finalisation	
1 <i>Allium cepa</i> (Onion): Radicle emergence test	2020	
2 <i>Glycine max</i> (Soyabean): Radicle emergence test	2020-21	
3 <i>Lycopersicon esculentum</i> (Tomato): Radicle emergence test	2020-21	
4 <i>Capsicum annuum</i> (Sweet pepper): Radicle emergence test	2021	
5 Brassica spp. : Radicle emergence test	2020-21	
6 <i>Oryza sativa</i> (Rice): Radicle emergence test	2022	
7 <i>Avena sativa</i> and <i>Elymus nutans</i> : Radicle emergence test	2020-21	
8 Brassica spp.: Electrical conductivity test	2020-21	
9 <i>Avena sativa</i> and <i>Elymus nutans</i> : Electrical conductivity test	2022	



A3. Introduction of Rules Changes		
Subject	proposed finalisation	collaboration
1	Addition of <i>Allium cepa</i> to Radicle emergence test	2020-21
2	Addition of <i>Glycine max</i> to Radicle emergence test	2020-21
3	Addition of <i>Lycopersicon esculentum</i> to Radicle emergence test	2020-21
4	Addition of <i>Capsicum annuum</i> to Radicle emergence test	2020-21
5	Addition of Brassica spp. to Radicle emergence test	2020-21
6	Addition of <i>Avena sativa</i> and <i>Elymus nutans</i> to Radicle emergence test	2020-21
7	Addition of Brassica spp. to Electrical conductivity test	2020-21
8.	Addition of <i>Oryza sativa</i> to Radicle emergence test	2022
9	Addition of <i>Avena sativa</i> and <i>Elymus nutans</i> to EC test	2022
B. PUBLICATIONS		
<u>B1. Publications to accompany the Rules</u>		
Publication title	proposed finalisation	collaboration
1	Revised Vigour Test Handbook	2022
<u>B2. Training publications on specific seed testing topics</u>		
Publication title	proposed finalisation	collaboration
<u>B3. Scientific information publications</u>		
Publication title	proposed finalisation	collaboration
C. WORKSHOPS AND SEMINARS		
<u>C1. Training and education workshops</u>		
workshop subject location	proposed finalisation	collaboration
1	Three day workshop on Seed Vigour Testing for Asia and Pacific Seed Association., Bangkok, Thailand	19-21 February 2020 APSA
2	Workshop on germination, tetrazolium and vigour testing, Seed Technology Centre, Ege University, Turkey	March 2020 GER, TZ



C2. Seminars			
	Seminar subject location	proposed finalisation	collaboration
1	Two day seminar on Seed Vigour Testing for Asia and Pacific Seed Association, Bangkok, Thailand	17-18 February 2020	APSA
D. Proficiency Tests			
	Proficiency Test Subject	proposed finalisation	collaboration
1	Electrical conductivity test for <i>Phaseolus vulgaris</i>	2020	PTC
2	Radicle emergence test for <i>Zea mays</i>	2021	PTC
F. SPECIAL PROJECTS			
	project title / subject collaborating committees	proposed finalisation	collaboration
1	Examination of the potential for application of the RE test to a range of other species	N/A	
2	Prediction of longevity in pepper by the radicle emergence test	N/A	
3	Joint project with Germination Committee: Development of rapid tests to predict germination and vigour and their potential for automation using image analysis	2021	GER
4	Examination of the potential of image analysis to assess RE in <i>Oryza sativa</i>	2022	
5	Investigation of the possibility of producing YouTube video (s) to illustrate vigour test methods	2022	

WSWG – Wild Species Working Group

COMMITTEE MEMBERSHIP LIST		Country	Active since
1	Gil Waibel	USA	
2	Ruojing Wang	Canada	
3	Riad Z. Baalbaki	USA	
4	Laura Bowden	United Kingdom	
5	Ted Chapman	USA	
6	Rachael Davies	United Kingdom	
7	Stefanie Krämer	Germany	
8	Heidi Larson	USA	
9	Sergio Pasquini	Italy	
10	Alison A. Powell	United Kingdom	
11	Victor Vankus	USA	
12	Rita Zecchinelli	Italy	
13	ECOM Liaison Officer: Craig R. McGill	New Zealand	

Develop digital platform with computer programming for website, which will serve as the venue for presenting methodology chapters and recommended protocols for wild species with no rules. Goal is to have website draft by the end of the year 2019, so we can work with it and see where we might improve. Targeted to have the website to be launched by the end of the year 2020.

Give authors time to write chapters on topics pertaining to wild species such as: Germination and dormancy, Purity, TZ testing, x-ray, moisture testing, micro-cleaning, etc. Goal Spring 2020.

Enter as many priority species as possible in the first year. May be limited if adequate data is not available to make recommendations. Goal Fall 2020. As priority list is nearing completion, begin adding new species as they are needed.

Begin developing priority lists for other areas of the world if a coordinator is identified to coordinate specified regions. Goal – begin Summer of 2020. Keep searching for coordinators until all needs are met in the world. No time limit.

Gil Waibel – Chair

Ruojing Wang – Vice chair

EB-SST – Editorial Board of Seed Science and Technology

COMMITTEE MEMBERSHIP LIST			
		Country	Active since
1	Irfan Afzal	Pakistan	2019
2	Christophe Bailly	France	At least 2010
3	Laura Bowden	UK	2013
4	Ibrahim Demir	Turkey	2019
5	Fabio Gresta	Italy	2013
6	Valerie Grimault	France	2013
7	Steven Groot	Netherlands	2015
8	Brigitte Hamman	South Africa	At least 2010
9	Fiona Hay	Denmark	At least 2010
10	Julio Marcos Filho	Brazil	At least 2010
11	Andrea Mondoni	Italy	2015
12	David Mycock	South Africa	At least 2010
13	Daniel Perry	Canada	2013
14	Shyam Phartyal	India	2015
15	Alison Powell	UK	At least 2010
16	Sergey Rosbakh	Germany	2019
17	Moctar Sacande	Italy	At least 2010
18	Uma Rani Sinniah	Malaysia	2013
19	Michael Sussman	USA	At least 2010
20	Alan Taylor	USA	2013
21	Christopher Wood	UK	At least 2010

The task of the editorial board is to edit the ISTA scientific journal „Seed Science and Technology“.

Seed Science and Technology (SST) is one of the leading international journals featuring original papers and review articles in all areas of seed quality and physiology as related to seed production, harvest, processing, sampling, storage, genetic conservation, habitat regeneration, distribution and testing.

SST is published in three issues per volume and year with approximately 600 pages.

RUL – Rules Committee

COMMITTEE MEMBERSHIP LIST		Country
1	Ernest Allen (chair)	United States
2	Susan Alvarez (vice-chair)	United States
3	Enrico Noli (GMO)	Italy
4	Gillian Musgrove (GER)	United Kingdom
5	Eddie Goldschagg (BSC)	South Africa
6	Elisa Vieira (FTS)	Brazil
7	Valerie Grimault (SHC)	France
8	Fiona Hay (EDI)	Denmark
9	Stefanie Krämer (TEZ)	Germany
10	Jean-Louis Laffont (STA)	France
11	Attilio Lovato (Honorary President)	Italy
12	Didier Demilly (PTC)	France
13	Laura Bowden (MOI)	United Kingdom
14	Alison A. Powell (VIG)	United Kingdom
15	Hugh W. Pritchard (STO)	United Kingdom
16	Ruojing Wang (PUR)	Canada
17	Bert van Duijn (ATC)	Netherlands
18	Ana Laura Vicario (VAR)	Argentina
19	Melanie Schori (NOM)	United States
20	Rita Zecchinelli (FSC)	Italy
21	Randy Crawl (AOSA)	United States
22	Desirae Jones (SCST)	United States

The Rules Committee is made up of the Chairs of the Technical Committees (TCOMs), Chair of the SST Editorial Board, Chair and Co-Chair of the AOSA Rules Committee, and the Honorary President. The main responsibility of the Rules Committee is to update and maintain the ISTA Rules.

One of the main tasks is to work with the Publications Unit and the TCOM Coordinator of ISTA to produce the annual Rules proposal document which collates any editorial changes with rules proposals from the Technical Committees. The Committee also decides whether the proposals are technically sound and discusses any issues, especially when proposals affect more than one Technical Committee. The Committee votes on the proposals and makes a recommendation to the Executive Committee for submission of the proposal document for voting by the voting members at the annual meeting.

The Chair of the Rules Committee presents the Rules proposals during the annual voting meetings to the ISTA Membership and the voting members.

PTC – Proficiency Test Committee

COMMITTEE MEMBERSHIP LIST		Country	Active since
1	Didier Demilly	France	
2	Suzanne Andersen	Denmark	2019
3	Pernilla Andersson	Sweden	2019
4	Christian Boehm	Denmark	
5	Sarah Dammen	United States	
6	Sharon Davidson	United States	
7	Monika Holubicová	Slovakia	2019
8	Gillian Musgrove	United Kingdom	
9	Sergio Pasquini	Italy	
10	Zita Ripka	Hungary	
11	Ruojing Wang	Canada	
12	Rita Zecchinelli	Italy	
13	Branislava Opra (Observer)		

The task of the Proficiency test committee is to manage the ISTA proficiency test being relevant for the accreditation to the ISTA member laboratories in all aspects and in supporting single committees by setting up proficiency test in their areas on a non-regular basis.

Standard Proficiency Test Programme Plan 2020-2022

Round	Species	Test round scope	Crop group	Size	Crop group	PT Leader
PT20-1	<i>Phaseolus vulgaris</i>	GER, VIG (conductivity), MOI	4	B	Pulses	G. Musgrove
PT20-2	<i>Allium porrum</i>	PUR, OSD, GER, TZ, TSW	6	B	Vegetables	S. Dammen
PT20-3	<i>Festuca pratensis</i>	PUR, OSD, GER, OIC	1	C	Grasses	S. Andersen
PT20-3	<i>Felicia</i> sp.	GER	8	-	Flowers	Z. Ripka
PT21-1	<i>Zea mays</i>	GER, VIG (radicle emergence), MOI	2	B	Cereals	D. Demilly
PT21-1	<i>Ulmus</i> sp.	GER, TZ	7	-	Forest	S. Pasquini
PT21-2	<i>Medicago sativa</i>	PUR, OSD, GER, TZ, OIC, TSW	3	A	Small legumes	R. Wang
PT21-3	<i>Fagopyrum esculentum</i>	PUR, OSD, GER	5	B	Other agricultural species	M. Holubicová
PT22-1	<i>Glycine max</i>	GER	4	C	pulses	R. Zecchinelli
PT22-2	<i>Spinacia oleracea</i>	PUR, OSD, GER	6	B	vegetables	P. Andersson
PT22-3	<i>Lolium perenne</i>	PUR, OSD, GER, MOI, TZ, OIC	1	C	grasses	C. Boehm

Sharon Davidson - Test leader in reserve

**Legend:**

P_OSD = Purity including Other Seed Determination

G = Germination

M = Moisture

TZ = Tetrazolium test

TSW = Thousand seed weight

V = Vigour test

OIC = reporting on an ISTA Orange International Seed Lot Certificate (voluntary exercise only, not rated)

Samples distribution time:

Rounds	20-1 21-1 22-1	20-2 21-2 22-2	20-3 21-3 22-3
Shipment date of the respective year	1 st April	1 st August	1 st December