

行政院所屬各機關因公出國人員出國報告書

(出國類別：出席會議)

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出席國際種子檢查協會(ISTA)
第廿六次大會報告

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出
國
人
員
：
黃有才 行政院農業委員會 處長
黃子彬 行政院農業委員會 科長

出國地點：法國

出國時間：民國 90 年 6 月 11 日～90 年 6 月 24 日

報告日期：民國 90 年 10 月

行政院研考會/省(市)研考會 編號欄

公務出國報告提要

頁數：60 含附件：是

報告名稱：出席國際種子檢查協會(ISTA)第廿六次大會報告

主辦機關：行政院農業委員會

聯絡人/電話：蔡慶雄/23126988

出國人員：黃有才 行政院農業委員會 處長
黃子彬 行政院農業委員會 科長

出國類別：其他

出國地區：法國

出國期間：90年6月11日至6月24日

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分類號/目：FO/綜合(農業類)/

關鍵詞：國際種子檢查協會、種子生產、種子檢查、種子品質

內容摘要：

國際種子檢查協會每三年召開一次大會(Congress)，我國為該協會國家會員之一，本次大會在法國 Angers 舉開，我國派行政院農委會農糧處黃有才處長，園產科黃子彬科長及外交部國際組織司陳柏秀科長、駐法國代表處黃再求秘書等四人參加。除出席執行委員會、技術委員會、種子技術研討會外，主要為參加會員大會，討論議決各委員會報告、大會財務報告、協會組織章程修訂、種子檢查規則與標準修訂、授權發證實驗室與種子公司認證、會員年費標準修訂等事宜。悠關我國會籍存留與否之「政府」定義案，經投票以 37 票贊成，0 票反對、4 票棄權情況下獲得通過，我會籍得以繼續。

另改選執行委員、協會主席及決定下次大會主權國，選舉結果協會主席由德國籍 Dr. Norbert Leist 當選，第一、二副主席分別由荷蘭籍、匈牙利籍 Dr. Pieter Oosterveld 與 Dr. Ketsy 當選。加拿大、馬拉威、泰國、丹麥等四國原任執行委員獲選續任，下次(第廿七屆)大會訂於 2004 年 5 月 13 日至 25 日在匈牙利首都布達佩斯舉開。明年起每年將增加舉辦一次年會(Annual Ordinary Meeting)，明年年會暫訂六月舉開，確定日期及地點由執行委員會決定。

出席國際種子檢查協會(ISTA)
第廿六次大會報告

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出席國際種子檢查協會(ISTA)第廿六次大會報告

壹、前言

國際種子檢查協會(International Seed Testing Association, 簡稱 ISTA)為一非商業性的國際組織,其主要功能在建立世界一致性的種子檢查技術及標準,以利世界種子貿易順暢及加強種子檢查技術之研究與交流。目前全世界參與該協會計有 71 個國家, 158 個實驗室, 206 個個人會員及 94 個授權發證檢查室(詳如附件一)。我國自一九六二年即正式加入該協會為會員國之一,並以行政院農業委員會農糧處為授權國家代表(Designated Authority, 簡稱 DA),黃處長有才、陳技正嘉吉及林業試驗所林技正讚標為授權會員代表(Designated Member, 簡稱 DM),農委會中部辦公室第三科種子檢查室及林業試驗所林木種子研究室為授權發證檢查室(Designated Laboratory, 簡稱 DL)。

該協會每三年舉辦一次會員大會,歷次大會農委會均編列預算派員出席。中國大陸自一九九二年加入成為會員後即多方阻撓我國會員資格,最近一次會員大會(第二十五屆)於 1998 年 4 月 15 日至 24 日在南非普勒多利亞(Pretoria)舉開,中國大陸經私下多方運作,在一九九七年執行委員會中將憲章第四條所稱之「政府」(Government)定義為聯合國或其專門機構會員,並以普通多數決數通過剝奪我國家會員資格之決定。案經我外交部透過相關駐外館處多次進洽,並由我外交部、農委會、前台灣省政府農林廳(目前為農委會中部辦公室)、台灣大學及中興大學等機構派員組成代表團與會,積極透過正式管道以及國內相關學者專家與 ISTA 會員國專家間之私人情誼努力爭取,決定在「政府」乙詞之定義作出確切解釋前暫停執行執委會一九九七年剝奪我國家會員資格之決議。在我國會員資格未確定恢復之前,我國在 ISTA 之各項權益暫時凍結。本次會議有關「政府」一詞之定義關係我國

會員資格是否恢復，事關重大，爰由農委會、外交部及我國駐法國代表處派員與會，謹將出席會議經過及會議重要結論，提出摘要報告。

貳、出國日期

中華民國九十年六月十一日至二十四日，為期十四天。

參、出席會議人員

姓名	職稱	服務單位
黃有才	處長	行政院農業委員會農糧處
黃子彬	園產科科長	行政院農業委員會農糧處

肆、會議及活動行程

6月11日(星期一)

20:20 自中正機場啟程，經香港轉機
(中華航空 CI617 班及法國航空 AF185 班機)

6月12日(星期二)

06:30 抵達法國巴黎戴高樂機場
08:40 轉搭鐵路快速列車, 12:52 抵達會議地點
Angers, 宿 Blue Marine Hotel

6月13日(星期三)

9:30-12:30 出席執行委員會(Executive Committee)
及技術委員會(Technical Committee)
14:00-17:30 出席種子檢查規則討論會議

6月14日(星期四)

9:00-12:30 出席技術委員會，研討種子發芽、採樣

技術、花卉種子檢測等技術。

14:00-17:30 出席技術委員會，研討種子純度檢測、水份檢測、植物命名等事宜。

6月15日(星期五)

9:00-12:30 出席技術委員會，研討林木種子檢測、統計分析、植物病害、轉基因產品等技術事宜

14:00-17:30 出席技術委員會，討論作物品種、種子貯藏、種子活力檢測、刊物編審、種子品質管制等技術。

6月16日(星期六)

例假日 參觀法國西部果樹、蔬菜生產及釀酒產業

6月17日(星期日)

例假日 整理資料，拜訪相關國家委員、代表，爭取支持我國會籍立場，準備會員大會討論事項事宜

6月18日(星期一)

9:00-12:30 出席種子技術研討會 (Seed Symposium) 開幕典禮及第一節，討論生產高品質種子事宜

14:00-17:30 出席研討會第二節，討論種子採收後處理技術事宜。

6月19日(星期二)

8:30-12:30 出席研討會第三節，討論種子品質評估技術

14:00-18:30 出席研討會第四節，討論大批種子衛生維護事宜

6月20日(星期三)

- 8:30-12:30 出席研討會第五節，討論轉基因產品及種子生長發育與發芽生理
- 14:00-17:00 出席研討會第六節，討論種子損傷及自動修復機制生理。
- 17:00-17:30 研討會結論及閉幕

6月21日(星期四)

- 8:30-12:30 出席會員大會 (Ordinary Meeting)，由會長致詞進入議程，先確認上次會議記錄，然後進行各委員會報告、財務報告、ISTA 組織章程修訂討論。
- 14:18:00 繼續出席會員大會，討論組織章程修訂，授權發證實驗室及種子公司認證，政府定義 (Definition of Government

6月22日(星期五)

- 08:30-13:30 繼續出席會員大會，討論會員年費標準修訂，技術委員會建議事項與專有名詞修正補充事宜。
- 14:00-17:30 繼續出席會員大會，討論其他事宜及臨時動議，並改選執行委員，秘書處工作人員及投票表決下次大會舉辦國家與地點
- 17:30-18:00 閉幕典禮，由 ISTA 會長致詞及總結報告後宣佈散會。

6月23日(星期六)

- 9:00 自 Angers 啟程，搭乘快速火車 11:50 抵巴黎戴高樂機場
自巴黎戴高樂機場啟程，經香港轉機(法

國航空 AF188 班機及中華航空 CI614 班機)

6 月 24 日(星期日)

20:05 抵達中正機場

會議議程及會後參觀行程詳如附件二

伍、會議經過與記要

- 一、本次 ISTA 第廿六屆大會計有包括我國在內之七十四國出席，我國代表團由行政院農業委員會農糧處黃處長有才率該會黃科長子彬、我駐法代表處黃秘書再求及外交部國際組織司陳科長柏秀與會；另台灣大學農學院吳院長文希亦於六月十七日抵達出席「種子科技研討會」，並宣傳本年十二月在我國舉開之「種子健康檢測國際研討會」及邀請本屆大會各國學者、專家屆時來台與會。
- 二、我國於一九六二年加入 ISTA，中共較我國晚三十年，一九九二年入會，惟入會後即多方運作杯葛我會籍。一九九八年於南非舉開之第廿五屆大會時，中共於幕後策劃，由執行委員會通過排除我會籍案，提交大會表決，經我國代表團極力協商爭取，大會做成決議如下：
 - (一)排除我國會籍案暫緩執行。
 - (二)請執行委員會重新定義「政府」一詞，提交本次大會(第二十六屆)表決，我國如符合「政府」之要件則會籍繼續保持，如不符合「政府」之要件，則排除我國會籍案生效。
 - (三)在此期間(一九九八年第二十五屆大會至二〇〇一年第二十六屆大會)我國之會員權益亦暫時凍結。
- 三、本次大會六月十三日至十六日為執行委員會議，十八至二十日為學術研討會，二十一、二十二日為會員大會，與我國會籍有關之「政府」定義當代解釋案於二十一日下午討論。事

先我外交部已透過各駐外館處向各執行委員說明我國立場，並爭取支持。各執行委員亦普遍贊同 ISTA 為學術性機構，不宜有政治因素干預會員資格等，因此「政府」定義當代解釋案，除原有「必須是聯合國或其所屬機構之會員」外，另執行委員會草擬增加「或國際論壇所承認之個別經濟體(or Distinct Economies as recognized in international fora)」。原定義之下我國不符合政府要件，會員資格將被取消，新定義增加「個別經濟體」之下，我國會籍可維護確保。

四、鑑於執委會所草擬關於「政府」乙詞定義包括「個別經濟體」之「當代解釋」案能否獲大會通過攸關我國在 ISTA 之權益至鉅，外交部於會前即通電相關駐外館處向 ISTA 主席、副主席、執委會成員及相關國家說明爭取支持與協助，以便大會順利通過「當代解釋」案及繼續維持我會籍名稱為"Taiwan"，結果頗符合我國原先期望。大會於「政府定義」(Definition of Government) 議程中以三十七票贊成，○票反對，四票棄權通過憲章中「政府」乙詞之定義包括「個別經濟體」，我國將以「個別經濟體」資格繼續保留 ISTA 會籍。

五、會中美國代表美國農部研究輔導處專家 Dr. John Wiersema (Agriculture Resench Service, USDA) 曾發言申援我國，質問大會為何本次會議我國無投票表決權，經大會解釋，因上屆會議決議，暫停我會員權益，俟本次大會「政府」定義當代解釋案通過後，我國權益始可恢復。私下我國與會代表團亦向美國代表說明，並感謝其支持。

六、會議另達成下列幾項重要決議：

- (一)種子檢查規則修訂通過，詳如附件三。
- (二)通過修改憲章，修正重點如下(詳如附件四、五)：
 - 1.取消現行之「秘書—財務長」(Secretary-Treasurer)，設置「秘書長」(Secretary General)，由主席提名並經執行委員會同意任命之。
 - 2.執行委員會由主席、第一副主席、第二副主席(由下屆大

- 會主辦國籍人員出任)及八名執行委員組成(原包括「秘書長-財務長」,修改憲章後不包括「秘書長」。)
3. ISTA之「行政官員」(officers)為主席、第一副主席及第二副主席(原包括「秘書-財務長」,修改憲章後不包括「秘書長」。)
- (三)新任第一副主席由荷蘭籍 Pieter Oosterveld 當選,第二副主席由匈牙利籍 Katalin Ertsey 當選。現任主席德國籍 Dr. Leist 原為第一副主席,因原任主席提前退休而臨時接任,除補足原主席任期外,本屆依例接任另一任期(三年)。
- (四)新任執行委員八人,國別與姓名如下:加拿大籍 Doug Ashton,英國籍 Ronald Don,紐西蘭籍 John Hampton,法國籍 Joe Lechappe,馬拉威籍 Jeffrey Luhanga,阿根廷籍 Monica Moreno,泰國籍 Chulhathep Pongsroyech,丹麥籍 Grete Tarp,詳如附件六。
- (五)ISTA「大會」(Congress)維持每三年舉辦乙次(包括執行委員會、技術委員會、工作小組會議、種子科技研討會、學術壁報展示及兩天之會員大會),另每年將增加舉辦乙次為期兩天之「年會」(Annual Ordinary Meeting)。
- (六)下屆(第廿七屆)大會訂於二〇〇四年五月十三日至二十五日於匈牙利首都布達佩斯舉開。
- (七)明(二〇〇二)年「年會」暫訂於六月間舉行,地點將另定;至嗣後舉辦「年會」暨相關細節則由新選出之執行委員會研議,並於次年「年會」中提出報告。
- (八)嗣後 ISTA 將接受私人公司暨實驗室申請成為會員,並經各該國政府之同意由 ISTA 授予核發種子檢查認證之權力。

七、本屆大會中共計有四人與會,我代表團與會期間曾與渠等自然交談,惟鎖定農業發展、種子科技研發與實驗研究、種子貿易等議題,並推薦我國本年十二月在台主辦之「種子健康檢測國際研討會」。經我國代團之觀察,渠等並未獲中共官方之授權與會,亦未察覺議程中「政府定義」案之內涵。

陸、與會心得與建議

一、國際種子檢查協會成立於一九二四年，總部設於瑞士蘇黎士。我國自一九六二年起以"Republic of China"正式國名成為 ISTA 會員，惟自我退出聯合國後，ISTA 改以"Taiwan, Republic of China"稱我；一九九〇年 ISTA 片面改稱我 "Taiwan, Province of China"，經我國去函要求更正後，ISTA 於一九九二年乃改以"Taiwan"稱我。中共於一九九二年加入成為會員，一九九五年 ISTA 第二十四屆大會前中共向該組織施壓要求更改我會籍名稱為"Chinese Taipei"，經我多方努力，ISTA 執委會終決議仍維持以"Taiwan"稱我。

我國認為 ISTA 為學術性、技術性之國際機構，其宗旨與政治無關，故會員資格宜以一個政府能否對其所轄地區執行有效且排他之管轄，及有效履行 ISTA 憲章規定之義務來判斷，爰主張將「政府」定義模糊處理。案經密切溝通聯繫及爭取後 ISTA 終於在二〇〇〇年五月之執行委員會中同意以「個別經濟體」(Distinct Economies) 作為該組織憲章中「政府」乙詞之「當代解釋」(contemporary interpretation)，並提交本次第廿六屆大會確認。本次大會經我國出席人員事先與各國與會代表之溝通說明，以及會中之奔走協商，終於使「政府」定義修正案順利通過，我國會籍得以繼續，顯現事先溝通協調及相關準備工作之重要，外交部在此次大會中積極爭取維護我會籍努功不可沒，備受肯定。

二、本屆大會因我國事先部署得宜，且在低調行事下似未引起中共注意，故攸關我會籍權益之「政府定義」案得以由主席在短暫討論後迅即裁定表決，並獲通過，主席並在我代表要求下指示秘書處，就恢復我會籍確認我權益事宜另行正式致函告知我方。惟下年起 ISTA 將每年召開乙次年會，我國對中國大陸未來可能不利我之舉措仍應繼續保持警覺；另行政院農委會將與外交部就增進我與 ISTA 實質關係事宜進行研規劃，並適時邀請該組織重要人員來訪，以促使該組織更進一步瞭

解我國種子、種苗產業及種子檢查現況，從實質面加強鞏固我國在該組織之地位。

三、ISTA 為一國際性種子檢查組織，該協會所制定之國際種子檢查規則已成為世界共同遵循之檢查規則，農委會中部辦公室種子檢查室自一九六二年加入該協會後舉凡農作物良種繁殖田種子之檢查均按該規則嚴格執行，四十餘年來對國內作物種子品質改善貢獻卓著，每年並接受國內種苗業者委託核發國際種子檢驗證明文件，有助於我國種子之國際貿易。為提昇我國種子檢查技術水準以及與世界各國種子檢查單位之技術交流，今後應派員積極參與該協會所舉辦之各項活動，並儘量爭取加入成為該協會技術委員會之成員或參與其活動，以利於國際大會中發表與展示國內之種子種苗研究成果，擴展我國在該協會之活動空間，鞏固我國會員資格。

四、國際種子檢查協會為促進各國種子檢查人員對檢查規則及檢查技術之認知，不定期舉辦各項種子檢查技術研習活動。此外該協會為促進國際種子檢查技術進步及改善現有檢查技術規則，每三年一次之大會前亦同時舉辦技術委員會議，針對擬修正之規則或技術提出報告，經與會各委員及各國代表討論通過後提送大會表決，會中同時提出下一屆該技術委員會擬改善之目標。上述各項技術研習活動我國均應積極派員參加，以吸取最先進之種子種苗檢查檢驗技術。技術委員會修正制定之新技術準則及相關法規，我國亦應以會員身分儘速取得，以促使國內相關作業規範與世界各國一致，有助於未來國內種子產業之發展與產品之國際化。

五、加入植物新品種保護國際聯盟(The International Union for the Protection of New Varieties of Plants, 簡稱 UPOV) 向來即為我國努力之目標，期能推展我國植物新品種於國際舞台，促進國內種苗產業進步發展。據悉該聯盟考量國際政治現勢，目前未便同意我國入會。惟我國正積極爭取加入 WTO，未來若可成為 WTO 會員體，該身分將更有利於申請加

入 UPOV。目前當務之急應加速修訂符合其公約要求之新品種保護法規，以備未來適當時機申請加入時，我國相關法規、制度、檢驗作業準則等均已符合國際規範，可在短期間內順利加入成為會員。

六、近年來國內外種苗產業發展十分迅速，對於新品種權利之保護愈發重視，目前國內有 62 種作物已公告適用種苗法新品種登記制度，未來應加速擴大適用植物種苗法新品種登記制度之作物種類，並因應 UPOV 國際規範，修正現行種苗法因時空變遷執行有困難之法條，以使國內外新品種得相互認定及流通，激勵國內種苗業者研發新品種，順暢國際間對於新品種育成及貿易之需求。

附 件



INTERNATIONAL SEED TESTING ASSOCIATION

Secretariat: P.O. Box 308, 8303 Bassersdorf, CH-Switzerland
Telephone: +41 1 838 6000 Fax: +41 1 838 6001
E-mail address: ista.office@ista.ch Web-site: <http://www.seedtest.org>

The International Seed Testing Association (ISTA) is a worldwide, non-profit association whose main activity is to provide methods and services for the testing of seed moving in international trade.

You will find the following topics in this pamphlet:

1. Objectives of the Association
2. Membership
 - 2.1. Members wishing to issue certificates
 - 2.2. Members wishing to vote in the Ordinary meeting
3. Management of the Association
 - 3.1. The Executive Committee
 - 3.2. The Secretariat
 - 3.3. The Technical Committees
 - 3.4. Meetings
4. The International Rules for Seed Testing
5. ISTA Accreditation System for the issuance of ISTA certificates
 - 5.1. ISTA certificates
 - 5.2. Overview of the ISTA accreditation system
 - 5.3. ISTA Proficiency Testing Programme
 - 5.4. ISTA Audit
 - 5.5. ISTA Monitoring system
6. International Collaboration
7. ISTA Publications
 - 7.1. Seed Science and Technology
 - 7.2. ISTA handbooks

1. Objectives

Following the ISTA constitution the objectives of the association are:

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

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

2. ISTA Membership

Members are persons or seed testing laboratories who/which support the Association and its objects and are admitted by the association. To become a member the application Form C "Application for Membership with ISTA" has to be submitted. The membership benefit includes free new publications, 50% discount on ordering ISTA publication, access to the worldwide information net and participation in the ISTA Referee Test Programme.

ISTA Membership is a global network, at the beginning of 2001, ISTA had 206 designated and ordinary personal members representing 158 laboratories in 71 countries, of which 94 member laboratories were accredited.



71 countries

**158 Member Laboratories
206 Personal Members**

**94 Accredited
Laboratories**

2.1 Laboratories wishing to issue ISTA certificates

Laboratories wishing to issue ISTA certificates are expected to follow the ISTA Accreditation procedure, please refer to page 5 point 5.3 of this pamphlet for details.

2.2 ISTA Members wishing to have a voting right in the ordinary meeting

Only Designated Members are entitled to vote on the affairs of the association. Designated Members are persons/or laboratories engaged in the science or practice of seed testing or in the technical control of such activities, who are designated by their respective Designated Authority and admitted by the Association to participate in the affairs of the Association.

A Designated Authority is an authority designated by a government to act on its behalf in designating Designated Members. Therefore Designated members have the right to vote in the affairs of the association on behalf of their government.

To become a Designated member of ISTA applicants must complete the Application Form A *Application for Recognition of an ISTA Designated Authority* and Application Form B *Application for Recognition of an ISTA Designated Member*.

3. Management of the Association

3.1 Executive Committee

The Executive Committee, consisting of the President, the First Vice-President, the Second Vice-President and the Secretary-Treasurer, together with seven members-at-large who shall be Designated Members, manages the affairs of the Association.

3.2 The Secretariat

The headquarters of the Association is located in Switzerland. Staff of the Secretariat handles day-to-day financial, administration and other duties in support of the Association's programmes.

3.3 The Technical Committees

There are 18 Technical Committees, which perform comparative studies, conduct surveys and exchange information on specific issues. A committee may have several working groups, composed of seed specialists on particular subjects. These Committees are responsible for the maintenance of the International Rules, for example, sampling, purity and germination.

3.4 Meetings

ISTA holds a triennial two-week Congress in one of the members' country. The meeting includes three different parts, technical committee meetings, seed symposium and the Ordinary meeting.

The aim of the **Technical Committee and Task Force Meetings** is to discuss the scientific and technical work performed by each committee or task force during the past three years, with the Congress participants. These meetings are usually open to all interested participants.

The **Seed Symposium** is a scientific forum where scientists from all over the world present their work in the field of seed science and technology in the form of oral presentations and poster presentations.

New proposals and amendments to the Rules, election of the Executive Committee and officers are discussed and concluded in the **Ordinary Meeting**,

In addition, the technical committees of ISTA organise **Workshops, Seminars and Symposia**, in order to ensure the uniform application the Rules and also keep analysts in seed testing station informed of new methods and technologies in the area of seed science and technology.

4. The International Rules for Seed Testing

ISTA has published a detailed outline describing the procedures and techniques to be used in seed testing, known as the **ISTA Rules** since 1931. These Rules are internationally harmonised throughout the world.

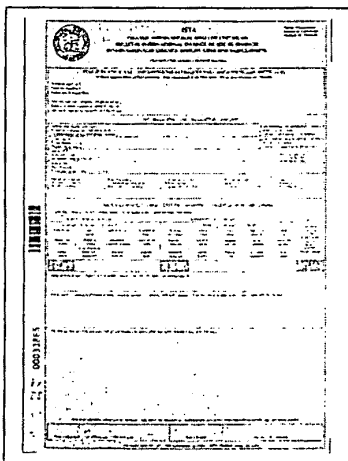
The Rules, are constantly revised by the Technical Committees and proposed amendments approved at the Ordinary Meeting. This publication is available in English; from time to time editions have been translated into Chinese, French, German, Spanish, Korean, Arabic, Czech, Portuguese, and Russian.

5. ISTA Accreditation System for the issuance of ISTA certificates

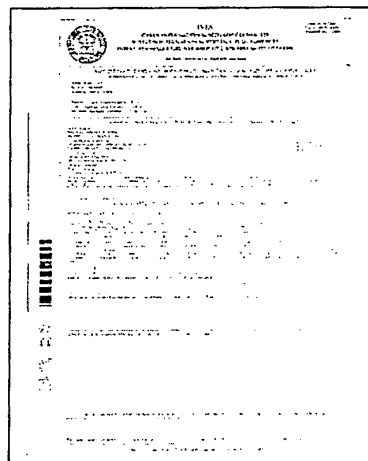
5.1 ISTA Certificates

ISTA member laboratories, accredited by ISTA and authorised by their respective governments, may issue the following certificates:

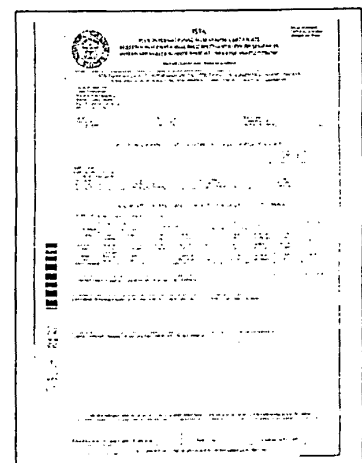
- **Orange International Seed Lot Certificates** (sampling and testing carried out by the same accredited member laboratory)
- **Green International Seed Lot Certificates** (sampling and testing are carried out by two different accredited member laboratories in different countries)
- **Blue International Seed Sample Certificates** (the issuing accredited member laboratory is only testing the sample as submitted)



Orange



Green



Blue

5.2 The Accreditation procedure – an overview in five steps

To ensure the high reliability of the results on an ISTA certificate, laboratories, wishing to issue ISTA certificates have to follow a strict quality assurance program. The accreditation procedure is shown in the following five steps:

1. *ISTA membership*



Laboratories wishing to become members are requested to contact the ISTA Secretariat for the necessary application forms. The ISTA Executive Committee will then decide about the application and grant membership.

2. *Participation in the ISTA proficiency testing programme*



All accredited laboratories must participate successfully at least three rounds in the ISTA inter-laboratory proficiency-testing programme.

3. *Establishment of a quality assurance programme*



Accredited laboratories are required to set up their own quality assurance programme including quality documentation following the ISTA Accreditation Standard and its bylaws. This standard is based on ISO 17025 guide, but has been especially amended to meet the needs of seed testing laboratories, e.g. sampling, as an important preliminary stage of testing, has been included and only those sampling and testing procedures as prescribed in the ISTA Rules are admitted

4. *ISTA Audit*



Prior to accreditation, and every three years thereafter, the laboratories are audited by two ISTA auditors (system and technical auditor), Based on the auditors' recommendation and the performance in the referee tests, re-accreditation may be granted.

5. *Authorisation to issue ISTA certificates*

After a successful audit, authorisation to issue ISTA certificates is obtained through agreement with the Designated Authority of the respective government.

5.3 ISTA Proficiency Testing Program

All ISTA Member Laboratories are entitled to participate in the ISTA Proficiency Testing Program. This is especially valuable for laboratories wishing to improve their performance by comparing their results with the results obtained from the worldwide ISTA membership. For Accredited Seed Laboratories participation in the Referee Test Program is obligatory. Three referee test rounds are performed a year.

5.4 ISTA Audit

Prior to accreditation, and every three years thereafter, the laboratories are audited by two ISTA auditors (system and technical auditor) and based on the auditors' recommendation and the performance in the referee tests, re-accreditation is granted. Laboratories are audited according to the ISTA accreditation standard, which is based on the international accepted ISO guide 17025, but especially adapted for seed testing stations. ISTA system auditors are employed by ISTA. The technical auditors normally are managers of a seed-testing laboratory

with a wide practical experience of the work in a seed testing laboratory. All ISTA technical auditors are trained and examined to work as auditors.

5.5 ISTA Monitoring system for the accreditation and authorisation of company laboratories

The ISTA Monitoring System assists in the worldwide harmonisation and uniform application of monitoring systems for seed company laboratories. This standard specifies the procedures and requirements for national monitoring bodies and seed company laboratories to obtain and maintain the status of ISTA accredited seed company laboratory and the corresponding authorisation to issue ISTA Certificates.

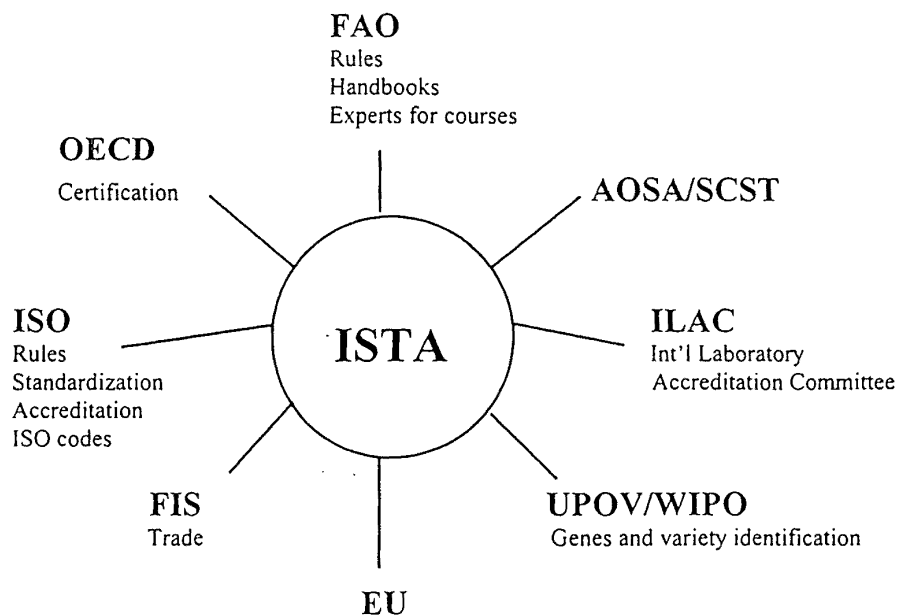
6. International Collaboration

ISTA is a worldwide association. ISTA works in close co-operation with several international organizations as follows:

- AOSA - Association of Official Seed Analysts of North America /
- SCST - Society of Commercial Seed Technologists
- EU - European Union
- FAO - Food and Agriculture Organization of the United Nations
- FIS - International Seed Trade Federation
- ISO - International Organization for Standardization
- OECD - Organization for Economic Co-operation and Development
- UPOV - International Union for the Protection of New Varieties of Plants others.

This combined co-operation prevents the duplication of work in seed control and facilitates a uniform approach in the field of seed quality evaluation with regard to the international trade of seed lots. The participation of the above organizations contributes to the global development and promotion of agricultural production worldwide.

ISTA and its relations



7. ISTA Publications

7.1 Seed Science and Technology

Seed Science and Technology (SST) is a scientific journal was launched in 1973, it is published in three (3) issues per year. The journal publishes original papers and review articles in all areas of science and technology, which may be applied to the production, sampling, testing, storing, processing and distribution of seed.

SST is designed to meet the needs of research workers, advisers and all those involved in the improvement and technical control of seed quality. It also records the proceedings of the Association's meetings and the International Rules for Seed Testing.

7.2 ISTA Handbooks

ISTA provides a wide range of handbooks including all relevant topics in seed technology. The handbooks are written by the technical committees and are excellent tools to improve the knowledge of different technical areas as well as training tools for the laboratory staff. Some recent Handbooks include:

International Rules for Seed Testing

Handbook on Seed Sampling

Survey of Equipment and Supplies for Seed Testing

Handbook for Homemade Equipment

Multilingual Glossary of Common Plant Names

An Annotated List of Seed-Borne Diseases

Handbook of Pure Seed Definitions

Cleaning of Agricultural and Horticultural Seed on Small-Scale Machines

Handbook of Tree and Shrub Seed Testing

Tropical and Sub-Tropical Tree and Shrub Seed Handbook

Handbook on Tetrazolium Testing

... and many more can be found in the current ISTA Publication & Products catalogue or online at: <http://www.seedtest.org> .

Membership application information, membership list and publication details are available at <http://www.seedtest.org> or contact ISTA Secretariat.



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FINAL PROGRAMME

COMMITTEE MEETINGS, SEED SYMPOSIUM & ORDINARY MEETING



**ISTA • 26 th Congress of the
International Seed Testing Association
June, 14 - 22 • 2001
Angers, France**

Committee Meetings Time Table

Time	Wednesday, June 13	Thursday, June 14	Friday, June 15	Saturday, June 16	Saturday, June 23
08:00 - 08:45	Executive Committee (closed meeting)	Executive Committee (closed meeting)	Executive Committee (closed meeting)	Executive Committee (closed meeting)	
09:00 - 09:45	Executive Committee (closed meeting)	Bulking and Sampling Committee meeting	Tetrazolium Committee meeting	Executive Committee (closed meeting)	Executive Committee (closed meeting)
10:00 - 10:45	Executive Committee (closed meeting)	Referee Committee meeting	Tree and Shrub Seed Committee meeting	Executive Committee (closed meeting)	Executive Committee (closed meeting)
11:00 - 11:45	Executive Committee (closed meeting)	Open Rules Committee meeting	Accreditation/Auditor's (closed meeting)	Executive Committee (closed meeting)	Executive Committee (closed meeting)
12:00 - 12:45	Executive Committee (closed meeting)	Plant Disease Committee meeting	GMO Task Force meeting	Accreditation/Auditor's open meeting	Executive Committee (closed meeting)
14:00 - 14:45	Joint Executive and Technical Committee (closed meeting)	Vigour Committee meeting	Executive Committee (closed meeting)	Statistics Committee meeting	Joint Executive and Technical Committee (closed meeting)
15:00 - 15:45	Joint Executive and Technical Committee (closed meeting)	Quality Assurance Task Force meeting	Executive Committee (closed meeting)	Variety Committee meeting	Joint Executive and Technical Committee (closed meeting)
16:00 - 16:45	Joint Executive and Technical Committee (closed meeting)	Executive Committee (closed meeting)	Executive Committee (closed meeting)	Flower Seed Committee meeting	Joint Executive and Technical Committee (closed meeting)
17:00 - 17:45	Joint Executive and Technical Committee (closed meeting)	Executive Committee (closed meeting)	Executive Committee (closed meeting)	Germination Committee meeting	Joint Executive and Technical Committee (closed meeting)
18:00			Buffet offered to all participants by GEVES at the National Seed Testing Station	Executive Committee (closed meeting)	

Opening Ceremony and Seed Symposium

Monday, 18 June 2001 - Wednesday, 20 June 2001

Time	Monday, June 18, 2001
09:00 - 10:30 09:00 09:15 09:30 10:00	<p>OPENING CEREMONY</p> <p>Official Address by the Representative of the French Minister of Agriculture and Fisheries Philippe Vinçon</p> <p>Opening by the ISTA President Norbert Leist</p> <p>Speech by the President of INRA Bertrand Hervieu</p> <p>Greetings by the Regional Council Roselyne Bachelot</p> <p>Greetings by the General Council André Lardeux</p> <p>Greetings by the Representative of Angers Daniel Raoul</p> <p>Welcoming Address by the Organisers Pierre-Louis Lefort</p> <p>Greetings from other organisations</p> <p>OECD Jean-Marie Debois, Secretary General</p> <p>FIS/ASSINSEL Bernard Le Buanec, Secretary General</p> <p>UPOV</p> <p>FAO Michael Larinde, Agricultural Officer Seed Production</p> <p>AOSA Deborah J. Meyer</p> <p>SCST Pat Brownfield, 1st Vice-President</p>
10:30 - 11:00	BREAK
11:00 - 11:30	<p>KEYNOTE <u>The French Seed Industry - An Overview</u> François Desprez, Vice President of GNIS, France</p>
11:30 - 12:30 11:30 O1/1 11:50 O1/2 12:10 O1/3	<p>SESSION 1 <u>Producing quality seed</u> Session Leader: Nelson M. de Carvalho, Brazil</p> <p>Production and distribution of quality palm (<i>Elaeis guineensis</i>) seeds B. Cochard, B. Adon, Ph. Amblard, R. Kouame, T. Durand-Gasselin</p> <p>Integrating seed age heterogeneity, desiccation rate and seed ageing rate for optimising both bean seed lot quality and seed yield F. Costa, Y. Crozat, F. Ladonne, M.-H. Wagner</p> <p>Effects of mother crop husbandry on establishment of oilseed rape (<i>Brassica napus</i> L.) G.D. Lunn, M. Bullard</p>
12:30 - 14:00	LUNCH
14:00 - 15:40 14:00 O1/4 14:20 O1/5 14:40 O1/6 15:00 O2/1 15:20 O2/2	<p>SESSION 1 continued</p> <p>Changes in corn (<i>Zea mays</i>, L.) seed freezing temperature during development using two different measurement techniques J.M. Woltz, D.M. Tekrony</p> <p>Nitrogen management strategies in seed production of spinach (<i>Spinacea oleracea</i> L.) L.C. Deleuran, B. Boelt</p> <p>Red Rice: a main constraint in rice seed production and certification R. Zecchinelli, L. Tamborini, A.M. Callegarin</p> <p>SESSION 2 <u>Post-harvest seed technology</u> Session Leader: Michael Kruse, Germany</p> <p>Cause of mechanical damage of rye (<i>Secale cereale</i> L.) seeds and effects on germination K.R. Nielsen, J. Nydam</p> <p>Analytical method for: detection and quantification of genetically modified organisms in grains and seeds based on PCR A.C. Tozzini, M.C. Martinez, S. Asurmendi, M.V. Lopez, H. Esteban</p>
15:40 - 16:10	BREAK
16:10 - 17:30 16:10 O2/3 16:30 O2/4 16:50 O2/5 17:10 O2/6	<p>SESSION 2 continued</p> <p>Conception of a new improved ISTA heterogeneity test, ISTA Rules Appendix D M. Kruse</p> <p>Prediction of cottonseed longevity R. Usberli, E.H. Roberts, R.H. Ellis</p> <p>Long term storage of prechilled and re-dried Douglas-fir seeds C. Muller, E. Laroppe, D.G.W. Edwards, M. Bonnet-Masimbert</p> <p>Paclitaxel soaked ornamental kale (<i>Brassica oleracea</i>) seeds produce shorter seedlings C.C. Pasan, M.A. Bennett</p>
17:30 - 18:30	BREAK
18:30	<p>RECEPTION by the Mayor of Angers at the Jean Lucrat Art Gallery</p>

Time	Tuesday, June 19, 2001	
08:30 - 09:00	KEYNOTE	<u>What is Seed Quality?</u> John G. Hampton, New Zealand
09:00 - 10:00	SESSION 3	<u>Assessing seed quality</u> Session Leader: Ronald Don, United Kingdom
09:00 O3/1		Presence of split coleoptiles in rye seedlings and their ability to germinate in soil J. Hydan, K.R. Nelson
09:20 O3/2		A combination of two vigour tests to predict the germination and vigour after storage without germinating seeds S. Matthews, A.A. Powell, L.J. Yule
09:40 O3/3		Proteome analysis during germination and priming K. Gallardo
10:00 - 10:30	BREAK	
10:30 - 11:30	SESSION 3	continued
10:30 O3/4		Comparative seed micromorphology of <i>Brassica L.</i> and <i>Sinapis L.</i> species growing in France C. Bernard, D. Damby, M. Mannino
10:50 O3/5		A system for automated seed vigour assessment Y. Sako, M.B. McDonald, K. Fujimura, A.F. Evans, M.A. Bennett
11:10 O3/6		PRECISION: An essential component in seed vigour testing D.M. Tekrony
11:30 - 12:30	POSTER SESSION 1	Session Leaders: Françoise Corbineau and Marie-Hélène Wagner
12:30 - 14:00	LUNCH	
14:00 - 15:20	SESSION 4	<u>Seed lot hygiene</u> Session Leader: Guro Brodal, Norway
14:00 O4/1		Effect of storage potential and seed coat pigmentation on susceptibility of cowpeas to pre-emergence damping-off T.A.S. Aveing, A.A. Powell
14:20 O4/2		Seedborne <i>Fusaria</i> from Douglas-fir and <i>Ponderosa</i> pine in Argentina C. Lori, M.I. Salemo
14:40 O4/3		Development of a PCR based diagnostic assay for detecting pathogenic <i>Alternaria</i> species in cruciferous seeds B. Iacomi-Vasilescu, D. Blancard, M. Guénard, V. Molinero-Damby, E. Laurent, Ph. Simoneau
15:00 O4/4		Productivity of toxins by <i>Alternaria alternata</i> and <i>A. radicina</i> and their effects on germination of carrot seeds K. Tytkowska, J. Grabarkiewicz-Szczesna, H. Iwanowska
15:20 - 15:50	BREAK	
15:50 - 16:50	SESSION 4	continued
15:50 O4/5		Analysis of <i>Fusarium</i> sp. and <i>Microdochium nivale</i> in wheat seed on agar medium D. Caron, V. Olivier, A. Faure
16:10 O4/6		Evolution of the incidence of <i>Neotyphodium coenophialum</i> infection on tall fescue seed market in Argentina. Period 1995 - 2000. J. Da Batista, A. Perotti, M. Sala, I. Schulz, M. Costa, V. Francomano, A. Salvat, J. Medvedigh, O. Bazzigatupi
16:30 O4/7		ISTA-PDC Method Validation Programme J.W. Sheppard
16:50 - 17:15	BREAK	
17:15 - 18:30	OPEN DISCUSSION	on harmonisation and globalisation - the role of ISTA Chairperson: Pierre-Louis Lefort, 2nd Vice-President of ISTA

Time	Wednesday, June 20, 2001	
08:30 - 09:00	KEYNOTE	Genetically Modified Crops - Implication for the Seed Industry Guy Riba, Scientific Director, INRA, France and Yvette Dattée, Director of GEVES, France
09:00 - 10:00	SESSION 5	Seed development and germination Session Leader: Daniel Côme, France
09:00 O5/1		Changes in seed quality during seed rape development and maturation M.-H. Wagner, G. Garallo, M.T. Le Page, A. Prèveaux, S. Ducourau, J. Léchappé
09:20 O5/2		Changes in oligosaccharide contents in developing and maturing pea and bean seeds as related to acquisition of drying tolerance F. Corbineau, Ch. Bailly, F. Ladonne, D. Côme
09:40 O5/3		Changes in alpha-galactosidase and beta-mannosidase activities and reserve mobilisation in the sugarpalm seed (<i>Arenga pinnata</i> M.) during germination and seedling development T.C.N. Haris, H.M. Ghazali
10:00 - 10:30	BREAK	
10:30 - 11:30	SESSION 5	continued
10:30 O5/4		Application of aerated hydration to <i>Brassica juncea</i> and <i>Brassica campestris</i> to alleviate response to stress V. Mehra, J. Tripathi, A.A. Powell
10:50 O5/5		Non-invasive detection of embryonic chlorophyll in single pepper (<i>Capsicum annuum</i> L.) seed during germination H. Jalink, R. van der Schoor, Y.R. Birnbaum, C. van Tongeren, R.J. Bino
11:10 O5/6		Glyoxylate cycle enzymes are active during maturation and prior to germination <i>sensu stricto</i> in soybean seeds A.T. Modi, J.-C. Jang, J.G. Struelens, M.B. McDonald
11:30 - 12:30	POSTER SESSION 2	Session Leaders: Françoise Corbineau and Marie-Hélène Wagner
12:30 - 14:00	LUNCH	
14:00 - 15:40	SESSION 6	Mechanisms of seed damage and repair Session Leader: Larry Copeland, United States
14:00 O6/1		Sunflower seed ageing as related to changes in lipid properties Ch. Bailly, F. Corbineau, Ch. Walters
14:20 O6/2		The interaction between salinity stress and seed vigour on the germination of soybean seeds M.K. Hosseini, A.A. Powell, I.J. Bingham
14:40 O6/3		Enzymatic changes in coffee (<i>Coffea arabica</i> L.) seeds induced by osmoconditioning J. Patel, D.C.F. Dias, L.A.S. Dias, E.M. Alvarenga, F.L. Finger
15:00 O6/4		Effect of midstorage seed treatments with some chemicals in minimizing the membrane damage and extending the period of viability of rice seeds (<i>Oryza sativa</i> L.) in different storage conditions M. Ray
15:20 O6/5		An evaluation of the effectiveness of botanicals in controlling rice weevil (<i>Sitophilus Oryzae</i>) during rice seed storage and their effect on seed viability A. Saribel, C. McGill, A. Carpenter, K. van Epenhuijsen, J. Koolgaard
15:40 - 16:10	BREAK	
16:10 - 16:50	SESSION 6	continued
16:10 O6/6		Application of microsatellite markers for the assessment of distinctness, uniformity and stability (DUS testing) of commercial soybean varieties and landraces A. Vicario, S. Giancola, M. Echaide, H.E. Hopp
16:30 O6/7		Seed density in relation to germination and seedling evaluation quality in cotton (<i>Gossypium parbadense</i> L.) F.M. Gadallan
16:50 - 17:30	SYMPOSIUM CONCLUSION	
19:30	Departure from Congress Center	
20:00	CONGRESS DINNER (details will be given in a separate invitation)	

Ordinary Meeting

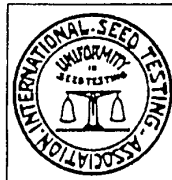
Thursday, 21 June 2001 - Friday, 22 June 2001

Time	Thursday, June 21, 2001
08:30 - 10:30	<ol style="list-style-type: none"> 1. Call to order 2. President's address 3. Roll call of Desiganted Members entitled to vote 4. Reading and acceptance of Minutes 5. Report of the Executive Committee (1998-2001) 6. Report of the Treasurer 7. Discharge of the Executive Committee
10:30 - 11:00	BREAK
11:00 - 12:30	<ol style="list-style-type: none"> 8. Strategic presentation of the President 9. Constitution Changes 10. Amendments to the Constitution
12:30 - 14:00	LUNCH
14:00 - 15:30	<ol style="list-style-type: none"> 9. Constitution Changes (continued) 10. Amendments to the Constitution (continued) 11. Experiment on the accreditation and authorisation of seed company laboratories
15:30 - 16:00	BREAK
16:00 - 18:00	<ol style="list-style-type: none"> 11. Experiment on the accreditation and authorisation of seed company laboratories (continued) 12. Definition of Government 13. Annual Ordinary Meetings

Time	Friday, June 22, 2001
08:30 - 19:30	<ol style="list-style-type: none"> 14. Fixation of annual subscription fee 15. Consideration and Adoption of reports of the Technical Committees; Terms of Reference for the coming period
10:30 - 11:00	BREAK
11:00 - 12:30	<ol style="list-style-type: none"> 15. Consideration and Adoption of reports of the Technical Committees; Terms of Reference for the coming period (continued)
12:30 - 14:00	LUNCH
14:00 - 15:30	<ol style="list-style-type: none"> 15. Consideration and Adoption of reports of the Technical Committees; Terms of Reference for the coming period (continued) 16. Any other business raised by a Member, of which notice in writing has been received by the Secretary Treasurer two month prior to the date f the meeting 17. Any other business raised by consent of the Executive Committee
15:30 - 16:00	BREAK
16:00 - 18:00	<ol style="list-style-type: none"> 18. Election of Officers and Members at large of the Executive Committee 19. Installation of new officers 20. Announcement of the location and date of the next Ordinary Meeting 21. President's closing address 22. Adjournment

**ALTERATIONS TO:
PROPOSED
RULES
CHANGES**

**TO BE VOTED ON AT THE
ORDINARY MEETING 2001**



**ISTA • 26 th Congress of the
International Seed Testing Association
June, 14 - 22 • 2001
Angers, France**

Changes to Rules proposals since printing

Please note that:

Items:

2d, 2e, 2j, 3a, 3d(NEW), 4a, 4c, 4h, 4j, 4l (NEW), 6, 8a, 8b, 8c, 8d, 8e (NEW), 9, 10a, 11 and 13a

are new items or have been revised following discussions in the Technical Committee Meetings.

For clarity these items are printed here in the proposed final form for voting on at the Ordinary Meeting on 21st-22nd June.

Dr Steve Jones
Chair ISTA Rules Committee

19th June 2001

Item 2d Sampling intensity

2.6.2. Sampling intensity

For seed lots in containers of 15 to 100 kg capacity (inclusively), the following intensity shall be regarded as the minimum requirement:

1 – 4 containers:	3 primary samples from each container
5 – 8 containers:	2 primary samples from each container
9 – 15 containers:	1 primary sample from each container
16 – 30 containers:	15 primary samples total
31 – 59 containers:	20 primary samples total
60 or more containers:	30 primary samples total

For seed lots in containers smaller than 15 kg capacity, containers shall be combined to sampling units not exceeding 100 kg and the sampling units shall be regarded as containers in the sampling scheme above.

When sampling seed in containers of more than 100 kg, or from streams of seed entering containers, the following shall be regarded as the minimum requirement:

...

Item 2e Submitted samples

2.6.7. Dispatch of the submitted sample

...

Samples shall be packed so as to prevent damage during transit. Submitted samples for moisture test and samples from seed lots which have been dried to low moisture content and are packed in moisture proof containers shall be packed in moisture proof containers. From these moisture proof containers as much air as possible shall be excluded. Submitted samples for germination test, viability test and health test may only be packed in moisture proof containers if suitable storage conditions can be assured.

Submitted samples shall be dispatched by the sampler to the seed testing laboratory without delay and shall never be left in the hands of persons not authorised by the sampling agency or by the seed testing laboratory unless they are sealed in such a way that they cannot be tampered with (see 2.6.7.A). Where the seed has been chemically treated the name of the treatment shall be given to the seed testing laboratory.

Item 2j Proposed additions to Table 2A

Table 2 A. Lot and sample weights

...

Part 1. Agricultural and vegetable seeds

<i>Solanum tuberosum</i> L.	10 000	25	10
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Item 3a Test for variation between whole purity samples

3.6.3.2. Test for variation between samples

....
 If the difference between the results exceeds the tolerance, analyse one or two more working samples until a pair is obtained which has its components within tolerance (not more than four samples in all). Report the weighted average of the samples for which the highest and lowest results do not differ by more than twice the tolerance (according to Rule 3.6.3.3.), unless it is apparent that one or more of these results are due to an error and not to random sample variation. In that case, discard the test(s) with errors.

If no pair of results are within tolerance, it is advisable to find the cause of the variation encountered (see 3.5.2.A.7).

NEW

Item 3d Change to Uniform blowing method for *Poa pratensis* varieties (p149)

Annexe 3.5.2.A.5. Uniform blowing method

This method is obligatory for *Poa pratensis*, *Poa trivialis* and *Dactylis glomerata*.

The working sample size is 1g for *Poa pratensis* and *Poa trivialis* and 3g for *Dactylis glomerata*. The blowing pressure is determined for *Dactylis glomerata* and for *Poa pratensis* (for varieties with an average thousand seed weight determination greater than 0.35g) by means of a calibration sample issued under the authority of the International Seed Testing Association. For varieties of *Poa pratensis* with an average thousand seed weight determination of less than or equal to 0.35g the blowing pressure is obtained by multiplying the blower setting for *Poa pratensis* by 0.9 (applies only for the General Seed Blowers). The blowing pressure for *Poa trivialis* is obtained by multiplying the blower setting for *Poa pratensis* by 0.82 (applies only for General Seed Blowers).

....

Items 4a Procuring subsamples for germination testing

5.3. General principles

Germination tests shall be made with pure seeds. The pure seed definition for the species in question shall be applied, except where testing of seed by weighted replicates is allowed.

The pure seeds can be taken:

- from either the pure seed fraction of a purity test carried out as prescribed in Chapter 3,
- or from a representative fraction of the submitted sample.

.....

Item 4c '0.0' indication of percentage of normal seedlings, abnormal seedlings, hard seeds, fresh seeds and dead seeds on ISTA certificates.

5.9. Reporting results

.... percentage of normal seedlings, abnormal seedlings, hard seeds, fresh seeds and dead seeds. If the result of any of these categories is found to be nil, it shall be entered as '0'.

Item 4h Introduce compost as an alternate substrate

5.4.A.4. Compost

General specifications

Composition: compost should be a good quality, well defined soil-less mix. The soil-less mix should contain organic matter (for example peat) plus (for example) 10% sand. Other components (for example perlite, vermiculite) may also be added.

Moisture capacity: when adjusted to the appropriate moisture content, compost moisture capacity should be checked regularly.

pH: pH has to be checked regularly. Evidence has to be shown that the pH has no negative influence on the germination tests results.

Disinfection: if needed, disinfection should be carried out in such a way that it has no negative influence on the germination results.

Re-use is not allowed.

5.4.A.5. Water

5.6.2.A.1. Substrates

...

Methods using soil, compost

Soil and compost are generally not recommended as a primary testing substrate. However, it may be necessary to use them, for example when seedlings show phytotoxic symptoms or if evaluation of seedlings is in doubt on paper or sand. Soil or compost is commonly used for comparative or investigative purposes.

Item 4j Additional text for checking pH.

5.4.A. Materials

5.4.A.1. Paper substrates

5.4.A.2. Sand

5.4.A.3. Soil

5.4.A.4. Water

pH: the pH value should be within the range 6.0 – 7.5.

Proposal : pH value should be within the range 6.0 – 7.5 when checked in the substrate, or evidence has to be made that there is no influence of a pH outside of this range of values on the germination tests results.

NEW

Item 4l Additional germination information for Table 5a on *Impatiens walleriana* (p196)

Table 5A. Germination methods

.....

<i>Impatiens walleriana</i>	TP;BP	20-30;20	4-7	21	Light; Prechill; KNO ₃
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ITEM 6 PROPOSAL FOR CHAPTER 7, SEED HEALTH

7. Seed Health Testing

7.1. Object

The object of a seed health test is to determine the health status of a seed sample, and by inference that of the seed lot.

Health testing of seed is important for four reasons:

1. Seed-borne inoculum may give rise to progressive disease development in the field and reduce the commercial value of the crop.
2. Imported seed lots may introduce diseases into new regions. Tests to meet quarantine requirements may therefore be necessary.
3. Seed health testing may elucidate seedling evaluation and causes of poor germination or field establishment and thus supplement germination testing.
4. Seed health test results can/may indicate the necessity to carry out/perform seed lot treatment(s) in order to eradicate seed-borne pathogens or to reduce the risk of disease transmission

7.2. Definitions

7.2.1. Seed Health

Health of seed refers primarily to the presence or absence of disease-causing organisms, such as fungi, bacteria and viruses, and animal pests, including nematodes and insects, but physiological conditions such as trace element deficiency may be involved.

7.2.2. Pretreatment

Any physical or chemical laboratory treatment of the working sample preceding incubation, given solely to facilitate testing.

7.2.3. Treatment

Any process, physical, biological or chemical, to which a seed lot is submitted.

7.2.4. ISTA Seed Health Method Validation Programme

Process for validation of seed health testing methods (new or equivalent). There are three validation procedures for methods which are outlined in table 7.2.4.A.1.

7.2.5. ISTA Handbook of Method Validation for the Detection of Seed-borne Pathogens

The handbook describes the principles and factors which should be considered in the validation of methods for the detection of seed-borne pathogens.

7.2.6. ISTA Rules (Manual of Seed Health Testing Methods)

A collection of validated methods for seed health approved by ISTA using the ISTA PDC Method Validation Programme (see Annexe 7.4.3.A).

7.3. General Principles

Seed health testing should be performed using methods and equipment which have been tested to ensure they are fit for purpose. Different methods of testing are available, varying in sensitivity and reproducibility and in the amount of training and equipment required. The method used will depend on the pathogen or condition to be investigated, the species of the seed, and the purpose of the test. Selection of the method and evaluation of the results requires knowledge and experience of the methods available. The presence or absence of disease organisms, pests and deleterious physiological conditions specified by the sender is estimated as accurately as the method used permits.

The determination may be influenced by treatment applied to the seed lot. Seed health tests on treated seeds will generally deliver unreliable test results caused by masking or inhibition of the growth of the target organism. The individual method sheet will determine whether the testing of treated seeds is acceptable.

7.4. Procedure

7.4.1. Working sample

The entire submitted sample, or a proportion of it, depending on the test method, may be used as a working sample. The sample should be packaged and submitted in a manner which will not alter its seed health status.

Exceptionally, a submitted sample larger than that prescribed in Rule 2.6.3 may be required and in such cases the sampler shall be instructed accordingly.

When a portion of the submitted sample is required as a working sample, the reduction shall be carried out in accordance with Rule 2.7.2, taking appropriate precautions to avoid cross-contamination.

Normally the working sample shall not be less than that specified in the method prescribed in the ISTA Rules (Manual of Seed Health Testing Methods).

Replicates containing a specified number of seeds, if required, shall be taken at random from a sub-sample after thorough mixing.

7.4.2. General directions

The microflora of seed, in the lot or the sample, may change considerably during storage in conditions in which seed viability is satisfactorily maintained. The selection of the appropriate storage conditions must take into account the optimal storage temperature and container in order to maintain sample integrity.

Abundant development of saprophytic moulds and 'storage fungi' in tests can be an indication that the seed is not of good quality due to unfavourable harvesting, processing or storage conditions, or to ageing. Some fungi (such as *Rhizopus* spp.) spread rapidly over tests on blotters and may rot originally healthy seedlings or may interfere with outgrowth of the pathogen from the plated infected seeds. Pretreatment as described in the specific method may be advisable.

7.4.3. Specific directions

Specific methods are described in the ISTA Rules (Manual of Seed Health Testing Methods). A list of the methods is found in the Annexe table 7.4.3.A.1.

7.5. Calculation and expression of results

Results are expressed either qualitatively or quantitatively as specified in the method prescribed in the ISTA Rules (Manual of Seed Health Testing Methods).

7.6. Reporting results

The result is reported on an International Seed Testing Association International Seed Analysis Certificate under 'Other Determinations' stating the scientific names of organisms.

The results must be accompanied by a statement of the test method used, including any pretreatment (7.2.2.) applied, and of the amount of the sample or fraction examined.

The absence of a statement concerning the health condition of the seed does not necessarily imply that the health condition is satisfactory.

Annexe to Chapter 7
SEED HEALTH TESTING

7.2.4.A *ISTA Seed Health Method Validation Programme*

The ISTA Seed Health Method Validation Program has been adopted to improve the ability of ISTA to respond rapidly to technological changes in seed health testing. The programme consists of three distinct categories of seed health test methods validated for use; Multi-laboratory Validated Methods, Peer Validated Methods and Performance Validated Methods. The characteristics of each category are more fully described in the handbook. The programme will continue to meet the goals of ISTA by providing a mechanism for validation, maintenance and publication of methods (new or equivalent). It will also provide encouragement and access to expertise for development of new tests for the determination of seed health.

Table 7.2.4.A.1 Categories of validated seed health testing methods

Programme Guidelines	Multi-laboratory Validated Methods	Peer Validated Methods	Performance Validated Methods
Objective	Multi-laboratory verification of method performance (6-8 collaborating laboratories)	Verification of method performance by one or more independent laboratories	Verification of performance claims of proprietary test kits by one or more independent laboratories
Information Reviewed	Information must include intra-laboratory (within) repeatability; inter-laboratory (between) reproducibility; and Comparison to existing methods where such methods exist. Other criteria which should be considered include where deemed necessary: Specificity; Sensitivity; false +/-'s limits of detection; precision; accuracy; ruggedness; recovery.	Information must include intra-laboratory repeatability; inter-laboratory reproducibility; and comparison to existing methods where such methods exist. Other criteria which should be considered include where deemed necessary: Specificity; sensitivity; false +/-'s limits of detection; precision; accuracy; ruggedness; recovery, historical use, etc.	Information must include intra-laboratory repeatability; inter-laboratory reproducibility; and comparison to existing methods where such methods exist. Other criteria which should be considered include where deemed necessary: Specificity; sensitivity; false +/-'s limits of detection; precision; accuracy; ruggedness; recovery; product stability; lot-to-lot consistency; package insert review; manufacturing QA review.
Status	(1) Accepted by PDC: <i>Approved Method.</i> (2) Accepted by ISTA Membership vote: <i>ISTA Official Method.</i>	(1) Accepted by PDC: <i>Approved Peer Validated Method.</i> (2) Accepted by ISTA Membership vote: <i>ISTA Official Method.</i>	(1) Accepted by PDC: <i>Approved Performance Validated Method</i> (2) Accepted by ISTA Membership vote: <i>ISTA Official Method.</i>

9.2.1.3. Principle

The methods described are designed for the comparison of the results from moisture meters, with those obtained by the oven method (see chapter 9.1.). All moisture meters can be used, as long as the calibration requirements and the requirements of the determination are fulfilled.

The calibration shall be repeated every one hundred determinations, or at least once every year.

A calibration report is required, for each species that is analysed by means of a moisture meter

9.2.1.4. Apparatus

The following apparatus is necessary, depending on the method used:

- Moisture meter.
- Containers, airtight.
- Sieves appropriate for the species in question, to remove impurities from the check sample that might interfere with the measurement.
- Grinder: where required, grinding shall be carried out according to 9.1.5.4.
- Balance appropriate for the meter in question (see chapter 3.5.1A).
- See chapter 9.1.4. for apparatus needed for the reference oven method.

9.2.1.5. Procedure

9.2.1.5.1. Precautions

The calibration of moisture meters may be affected by many variables, including species, variety, ripeness, humidity, temperature, and level of impurities.

The moisture meter and the samples should be equilibrated to the same temperature before the assessments are made.

During the determination, exposure of the sample to the atmosphere of the laboratory shall be reduced to the absolute minimum.

9.2.1.5.2. Calibration sample

Five samples should be obtained from each of a minimum of two varieties of the species for which the moisture meter is being calibrated. The samples from each variety should have a range of moisture contents evenly covering the required measurement range of the moisture meter being checked.

If there is evidence that varieties of a species give significantly different results, a calibration per variety, or group of varieties is necessary.

The samples selected should be free of mustiness, fermentation and sprouted seed.

If samples contain impurities that might interfere with the measurement, they should be cleaned by hand, using sieves or a mechanical separator.

9.2.1.5.3. Working sample from calibration sample

Calibration samples should be placed in moisture-proof containers and the containers sealed. The containers should be at least two thirds full. Calibration samples should be used within 10 days of preparation and should be stored at $5 \pm 2^{\circ}\text{C}$ until used.

Working samples should be drawn after thoroughly mixing them using one of the following methods:

Either (a) Stir the sample in its container with a spoon.

Or (b) Place the opening of the original container against the opening of a similar container and pour the seed back and forth between the two containers.

Each working sample shall be drawn in such a manner that the sample is not exposed to the air for more than 30 seconds.

9.2.1.5.4 Weighing

Weighing, when required, should be in accordance with Chapter 3.5.1A.

9.2.1.5.5. Prescribed methods

The moisture content of the calibration samples is assessed using the oven method (see chapter 9.1.), which is the reference method.

Three successive measurements are made on each calibration sample, using the moisture meter according to the manufacturer's instructions.

After each measurement, the sample tested is recombined with the calibration sample from which it was drawn. The calibration sample is then thoroughly mixed prior to drawing the next working sample (see chapter 9.2.1.5.3.). Where the determination is destructive, the measurements should be carried out on three independent working samples.

The moisture content of the calibration samples should be rechecked after the measurement, using the reference oven method (see chapter 9.1).

9.2.1.6. Calculation of results

9.2.1.6.1. Reference oven method

For each test sample two reference results are available x_1 obtained before measuring the moisture content with the moisture meter, and x_2 obtained after measuring the moisture content with the moisture meter. The mean of these two values is the true value of the moisture content provided the difference between the readings is no greater than 0.3%. If the difference is greater than 0.3% the calibration must be repeated.

9.2.1.6.2. Moisture meters

For each calibration sample three results are available (y_1, y_2, y_3).

Calculate the mean result y_x ($y_x = (y_1 + y_2 + y_3)/3$) and z_i (the difference of y_x from the true value of the moisture content (see 9.2.1.6.1.)).

9.2.1.6.3. Tolerances

A moisture meter is considered to be within calibration when z_i (the difference between y_x and the true value) is lower than the following maximum permissible errors:

True value (reference method)	Maximal permissible error
Less than 10%	Non-chaffy seeds : $\pm 0.4\%$
	Chaffy seeds : $\pm 0.5\%$
10% or more	Non-chaffy seeds : $\pm 0.04 \times$ moisture content
	Chaffy seeds : $\pm 0.05 \times$ moisture content

Item 8c Adding procedures for electronic moisture measurement. Measurement.

9.2.2. DETERMINATION OF MOISTURE CONTENT (MOISTURE METERS)

9.2.2.1. Object

The object is to determine the moisture content of specified species of seed using a calibrated moisture meter (see chapter 9.2.1.).

9.2.2.2. Definition

See chapter 9.1.2.

9.2.2.3. Principle

The moisture content of a sample of seed affects its physiochemical and electrical properties. These can be measured, and meters are available for the routine determinations of the moisture content.

9.2.2.4. Apparatus

The following apparatus is necessary, depending on the method used:

- Moisture meter.
- Containers, airtight.
- Grinder: where required, grinding shall be carried out according to 9.1.5.4.
- Balance appropriate for the method in question (see chapter 3.5.1A)

9.2.2.5. Procedure

9.2.2.5.1. Precautions

The submitted sample (see Rule 2.6.) shall be accepted for moisture determination only if it is in an intact, moisture-proof container from which as much air as possible has been displaced.

During the determination, exposure of the sample to the atmosphere of the laboratory shall be reduced to the absolute minimum.

9.2.2.5.2. Working sample

The determination shall be carried out in duplicate on two independently drawn working samples each of the weight/volume required for the specified meter.

Before the working sample is drawn, the submitted sample shall be thoroughly mixed by one of the following methods:

- (a) Stir the sample in its container with a spoon.
- (b) Place the opening of the original container against the opening of a similar container and pour the seed back and forth between the two containers.

Each working sample shall be drawn in such a manner that the sample is not exposed to the air for more than 30 seconds.

9.2.2.5.3. Weighing

Weighing, when required, should be in accordance with Chapter 3.5.1A.

9.2.2.6. Calculation of results**9.2.2.6.1. moisture meters**

The moisture content as a percentage by weight shall be calculated to one decimal place by means of the following formula:

$$\frac{M_1 + M_2}{2}$$

Where M_1 and M_2 are the readings of duplicate one and two from the meter.

9.2.2.6.2. Tolerances

The result is the arithmetic mean of the duplicate determinations carried out on a sample if the difference between the two determinations does not exceed 0.2%.

Otherwise, repeat the determination in duplicate.

9.2.2.7. Reporting results

The moisture content must be reported to the nearest one decimal place in the space provided on the International Seed Testing Association International Seed Analysis Certificate.

Brand and type of the equipment shall be reported under 'other determination' and the range for which the moisture meter is calibrated should be given.

Item 8c Adding procedures for electronic moisture measurement. Annexe.**ANNEXE TO CHAPTER 9.2.****DETERMINATION OF MOISTURE CONTENT (MOISTURE METERS)****9.2.1. Calibration of moisture meters****9.2.1.4.A.a. Apparatus**

- (a1) Where the moisture meter indicates the moisture content directly, the name of the selected species should be indicated clearly.
- (a2) Where the moisture meter does not indicate the moisture content directly, conversion table(s) should be available for each species tested.
The requirements regarding the scale interval (see a3) and the maximum permissible errors (see chapter 9.2.1.6.3.) apply to the results of the moisture content obtained from the conversion tables and expressed as a percentage and not to the reading given on the conventional scale of the moisture meter.
- (a3) The scale interval should be such that moisture content can be read to at least one decimal place.
- (a4) The housing of the moisture meters shall be robust and so constructed that the main components of the instrument are inaccessible and protected from dust and moisture.

9.2.1.5.A. Procedure**9.2.1.5.2.A. Working sample**

Working sample containers shall be filled to approximately two-third of their capacity. If the container is too full, the sample cannot be mixed thoroughly. If the container is not filled sufficiently there can be hygrometric exchanges between the seeds and the air that is present in the container, and this can result in a modification of the moisture content of the sample in the period prior to testing.

9.2.2. Determination of moisture content (moisture meters)

9.2.2.5. Procedure

Equilibration of samples

When the temperature of the sample is very different from the room temperature where the moisture meter is operated, there is a risk of condensation. Before testing, samples should therefore be equilibrated to the required room temperature.

Operation environment

The preferred operating environments of moisture meters are temperatures of between 15 and 25°C and relative humidities of between 45 and 75%.

NEW

Item 8e Proposal for inclusion of *Elytrigia* spp. into Table 9C high constant temperature oven method for determining moisture content.

Item 9 Proposal for Chapter 10, Weight. Moisture proof packaging

10.4.1 Working sample

The working sample shall be the entire pure seed fraction of a purity analysis carried out in accordance with Chapter 3 of these Rules. A change of the moisture content of the working sample shall be avoided as far as possible by storing the working samples before testing only for short periods and in moisture proof containers.

Item 10a Weighed replicates

13.2. General principles

For weighed replicate tests, the aim is to test a weight of material containing approximately 400 seed units. The actual weight of seed tested is a much smaller fraction of the lot than the total amount normally tested in purity and germination tests. Extreme care must therefore be taken to ensure that truly representative submitted and working samples are drawn. Because of the difficulties of carrying out a purity analysis, no such test is required; nevertheless, the full size of working sample specified in column 4 of Table 2A must still be examined for authentication of species and removal of readily identifiable seeds of other species. The name and number of such other seeds found, together with the weight examined, must be reported.

In the case where determination of other seeds by number is requested, the requirements of Chapter 4 apply. Four replicates of the prescribed weight are drawn from the working sample by an approved sampling method. The replicates are planted on or in the substrate, and germinated under the temperature conditions and for the length of time prescribed in the Annex to this chapter (Table 13A and 13B) and only the numbers of normal and abnormal seedlings produced recorded. The result is reported as the number of normal seedlings produced by the weight of seed material examined.

13.3. Field of application

The weighed replicate test is restricted to the tree species listed in Table 13A. and non-tree species listed in Table 13 B. In these species, measurements of purity percentage, thousand pure seed weight and/or germination percentage are impossible or impractical. The reasons for this are varied, for example:

- i) a purity test may be impossible - because seed and inert matter are indistinguishable by eye alone, e.g. most *Eucalyptus*;
- ii) a purity test may be impractical - because although seed and inert matter are just about distinguishable, inert matter constitutes such a large proportion of the seed lot that a purity test is too costly to perform in relation to the value of the seed, e.g. some *Eucalyptus* and most *Betula*.
- iii) the majority of seed lots may have high percentages of empty seed - this makes it likely that unequal distribution of full and empty seed between germination replicates will bias the number of potential germinants before the germination test has been started, e.g. most *Eucalyptus*, *Betula*, and *Chloris*
- iv) any combination of the above.

13.4. Procedure

...

13.4.2. Physical examination of the working sample

For *Eucalyptus* and *Betula* the whole working sample shall be examined in order to determine that the seeds are of the species stated by the sender and in order to identify as far as possible any other seeds contaminating the seed lot.

13.5. Calculation and expression of results

The result for the no prechill test is obtained by adding together the four individual replicate no prechill results. It is expressed as the number of seeds germinated in the total weight of seed tested.

The prechill test results are calculated and expressed similarly.

To check the reliability of a test result the average percentage of the replicates is calculated and compared with Table 13.1 of the Annex to Chapter 15.

13.6. Reporting results

Since the usual kind of purity and germination test is not carried out, an -N- must be entered in all the spaces provided for reporting the percentages of germination tests on the International Seed Testing Association International Seed Analysis Certificate. If the purity test is requested the result must be entered in all the spaces provided for reporting it in the Certificates. If other seeds are found to be present in the weighed replicates, these must be reported under 'Other Determinations' giving the scientific name(s) and number(s) of seeds found in the weight of seed examined.

The following shall also be reported under 'Other Determinations':

Average weight of four replicates.

Average number of normal seedlings in four replicates.

Number of normal seedlings per kg.

Other information as specified in Rule 5.9.

Note: section 13.4.3 and 13.4.4 will need to refer to Table 13B.

Item 11 Proposal for new Chapter 15, Vigour testing

15. Seed Vigour Testing

15.1 Object

The object of a seed vigour test is to provide information about the planting value in a wide range of environments and/or the storage potential of seed lots. The test provides additional information to the standard germination test (See Chapter 5) to assist in differentiation of seed lots of acceptable germination.

15.2 Field of application

A vigour test is valid for those species for which there is a validated method in the current ISTA Handbook of Vigour Test Methods.

15.3 Definitions

15.3.1 Seed vigour

Seed vigour is the sum of those properties that determine the activity and performance of seed lots of acceptable germination in a wide range of environments.

Seed vigour is not a single measurable property, but is a concept describing several characteristics associated with the following aspects of seed lot performance:

- i. Rate and uniformity of seed germination and seedling growth.
- ii. Emergence ability of seeds under unfavourable environmental conditions.

- iii. Performance after storage, particularly the retention of the ability to germinate.

A vigorous seed lot is one that is potentially able to perform well even under environmental conditions which are not optimal for the species

15.3.2 Seed vigour test

A seed vigour test is either a direct or indirect analytical procedure to evaluate the vigour of a seed lot under standardised conditions.

- i. Direct tests are those tests for which an environmental stress or other conditions are reproduced in the laboratory and the percentage and/or rate of seedling emergence are recorded.
- ii. Indirect tests are those tests which measure other characteristics of the seed that have proved to be associated with some aspect of seedling performance.

15.3.3 Seed lot of 'acceptable germination'

A seed lot of 'acceptable germination' is one which in the absence of seed dormancy, has an acceptable standard germination level for that species.

15.3.4 Additional definitions

Seedling emergence: the emergence through the soil or other planting medium of a young plant developing from the embryo of the seed..

Seedling performance: the ability of a seedling to emerge from the soil or other medium and develop into a normal plant.

15.4 Principle

A vigour test assesses, either directly or indirectly, the physiological and physical basis of potential seed lot performance in a wide range of environments and provides a more sensitive differentiation between seed lots of acceptable germination than does the germination test. Such information can be used to make informed decisions regarding the value of different seed lots.

Vigour tests are able to provide:

- i.) A more sensitive index of seed quality than the standard germination test.
- ii.) A consistent ranking of seed lots of 'acceptable germination' in terms of their potential physiological and physical quality.
- iii.) Information on emergence and storage potential of seed lots to plan marketing strategy.

15.5 Procedure

15.5.1 Working sample

The required number of seeds and replicates (see ISTA Handbook of Vigour Test Methods) must be taken at random from the pure seed fraction (see Chapter 3.2.1) of the sample.

15.5.2 General directions

Different vigour test methods (direct and indirect) are described in the ISTA Handbook of Vigour Test Methods under three general categories: stress tests, seedling growth tests and biochemical tests. Those tests listed as 'validated' for a species have been rigorously evaluated through recognised protocols including extensive comparative testing and many comparisons of seed lot performance. Those tests listed as 'suggested' need additional comparative testing and have not completed evaluation.

15.5.3 Test conditions

Permissible apparatus, substrates, temperatures, seed moisture contents, duration and additional directions are provided in the ISTA Handbook of Vigour Test Methods. Methodology for each test is prescriptive and no other methodology may be used if an ISTA International Seed Analysis Certificate is issued.

15.5.4 Specific directions

Specific methods and requirements are described for validated tests in the ISTA Handbook of Vigour Test Methods.

15.5.5 Control samples

All vigour tests require rigid control of test conditions and should include a control seed sample, to provide internal quality control of vigour test uniformity. Variability in control seed sample results provides an indication of slight fluctuations in test conditions (e.g. changes in temperature and/or seed moisture) which can significantly affect reliability of results. Specific guidelines for the seed lot selection, storage and handling of control samples are described in the ISTA Handbook of Vigour Test Methods.

15.6. Calculation and expression of results

Results are expressed in different formats for various vigour tests as shown for validated tests in the ISTA Handbook for Vigour Test Methods.

15.6.1 Reporting results

The result is reported on an ISTA International Seed Analysis Certificate under 'Other Determinations', using the procedure described in the ISTA Handbook of Vigour Test Methods.

The results must be accompanied by a statement of the test method used, including specific variables (time, temperature, seed moisture) when appropriate.

Annexe to Chapter 15

SEED VIGOUR TESTING

15.5.2.A General directions

An important source of information on seed vigour is the current ISTA Handbook of Vigour Test Methods. Compilation of this handbook is continuing as vigour tests are added to the validated and suggested categories and as vigour testing methodology is standardised. See also: the current Association of Official Seed Analysts Seed Vigor Testing Handbook and the Proceedings of the ISTA Seed Vigour Testing Seminar held in Copenhagen, Denmark in 1995.

The ISTA Handbook of Vigour Test Methods includes two categories of vigour tests: validated and suggested. Those tests listed as 'validated' for a species have completed rigorous evaluation through recognised protocols, extensive comparative testing and many comparisons of seed lot performance. Thus, the methods are considered as standardised and repeatable and can be used routinely in laboratories with experience in vigour testing. Those tests listed as 'suggested' are used for specific species, but need additional comparative testing and evaluation before recommendation.

Vigour test methods are species specific and require suitable equipment, the use of control samples and experience of the analyst. The expectation that a seed analyst can infrequently analyze an isolated sample to establish a level of vigour is unrealistic. Uniformity can be best achieved by working for a period of time alongside another analyst experienced in the use of the method. Training of analysts may be more important than the exact agreement in details of procedure.

15.5.3.A Specific directions: Recommended Vigour Tests.

The methods listed in the validated category of the ISTA Handbook of Vigour Testing Methods are listed in Table 1. Only laboratories with staff training and experience should conduct a validated vigour test.

Table 1. Vigour tests that have completed multi-laboratory validation.

Vigour Test	Crop	Species
Conductivity	Garden pea	<i>Pisum sativum</i>
Accelerated ageing	Soybean	<i>Glycine max</i>

Item 13a Green International Certificates

16.2.1. Seed Lot Certificate

...

2. Green International Seed Lot Certificate

The Certificate is issued when the sample is drawn officially from the lot under the authority of one accredited laboratory, but the tests are carried out at another accredited laboratory in a different country ...

CONSTITUTION OF
THE INTERNATIONAL SEED TESTING ASSOCIATION

*Adopted at the Extra-Ordinary Meeting in Washington DC on June 4, 1971,
amended at the Ordinary Meetings
in Warsaw 1974, Brisbane 1986, and Copenhagen 1995*

ARTICLE I

Name

The Association shall be known as The International Seed Testing Association, hereinafter referred to as 'the Association'.

ARTICLE II

Seat

The headquarters of the Association shall be at the office of the Secretary-Treasurer. The Executive Committee may also establish offices at such other places as the Executive Committee may from time to time determine would facilitate carrying out the purposes of the Association.

ARTICLE III

Objects

- (a) The primary purpose of the Association is to develop, adopt and publish standard procedures for sampling and testing seeds, and to promote uniform application of these procedures for evaluation of seeds moving in international trade.
- (b) The secondary purposes of the Association are actively to promote research in all areas of seed science and technology, including sampling, testing, storing, processing, and distributing seeds, to encourage variety (cultivar) certification, to participate in conferences and training courses aimed at furthering these objectives, and to establish and maintain liaison with other organizations having common or related interests in seed.

ARTICLE IV

Designated Authority

- (a) A Designated Authority is an authority designated by a government to act on its behalf in designating Designated Members and in liaison with the Association, in particular regarding the accreditation of member laboratories.

Membership

- (b) Designated Members are persons and/or laboratories engaged in the science or practice of seed testing or in the technical control of such activities, who are designated by their respective Designated Authority and admitted by the Association to participate in the affairs of the Association.
- (c) A Member is a person or seed laboratory who/which supports the Association and its objects and is admitted by the Association.

(d) The duly designated Designated Members shall be entitled to vote in meetings of the Association, subject to the provisions of Article IX.

Accredited Laboratory

(e) An Accredited Laboratory is a member laboratory accredited by the Executive Committee according to the Accreditation Standards approved under Article VII(c)(14) of the Constitution and fulfilling the requirements for independence given in these standards.

ARTICLE V

Officers

(a) The Officers of the Association shall be:

President

First Vice-President

Second Vice-President

Secretary-Treasurer

(b) The tenure of office of the President and other Officers shall be from the adjournment of the ordinary meeting at which they are appointed to the adjournment of the next ordinary meeting.

(c) On completion of the tenure of office the outgoing President shall not at any time in the future be eligible for reappointment as President or for appointment as First Vice-President.

ARTICLE VI

Functions of Officers

(a) The President shall call and preside at meetings of the Association and of the Executive Committee. The President shall be an ex-officio member of all committees of the Association.

(b) The First Vice-President shall assist the President and, in the event of the inability of the President to serve, shall carry out such duties as pertain to the office of the President.

(c) The Second Vice-President shall assist the President and, in the event of the inability of the President and of the First Vice-President to serve, shall carry out such duties as pertain to the office of the President.

(d) (1) The Secretary-Treasurer, at the request of the President, shall summon all meetings of the Association and of the Executive Committee, shall attend and keep records at all such meetings, and shall perform all other duties of a secretarial nature.

(2) The Secretary-Treasurer shall carry out all such functions in relation to the collection and disbursement of such funds belonging to the Association as the Executive Committee shall authorize.

ARTICLE VII

Executive Committee

(a) The Executive Committee shall consist of the President, the First Vice-President, the Second Vice-President, and the Secretary-Treasurer, together with seven members-at-large who shall be Designated Members.

(b) The tenure of office of the members-at-large shall be the same as that for Officers as provided in Article V(b).

- (c) The functions of the Executive Committee shall be as follows:
- (1) The Executive Committee shall manage and direct the affairs of the Association according to the provisions of this Constitution and to decisions arrived at by the Association at ordinary or extraordinary meetings.
 - (2) In the event of vacancies in the panel of Officers or members-at-large of the Executive Committee, the remaining members of the Committee are empowered to appoint substitutes to serve until the next ordinary meeting of the Association.
 - (3) The meetings of the Executive Committee shall be called in accordance with the provisions of Article VI or on the written request of six or more of its members.
 - (4) The Executive Committee is empowered to form committees to study and report on problems appertaining to the affairs of the Association, to establish and maintain liaison with such other organizations as may be concerned with the objects of the Association, and plan and approve conferences and training courses aimed at furthering the objectives of the Association.
 - (5) Responsibility for the finances of the Association is vested in the Executive Committee.
 - (6) The Executive Committee shall appoint an Editor to "Seed Science and Technology".
 - (7) The Executive Committee shall approve interpretations of the International Rules for Seed Testing, when need therefore arises, after having consulted with the technical committees concerned.
 - (8) The Executive Committee is empowered to appoint, at each ordinary meeting, an Auditor who shall not be an Officer or member-at-large of the Executive Committee and who need not be a Designated Member.
 - (9) The Executive Committee shall render to each ordinary meeting of the Association a full account of its proceedings and of the activities of the Association and shall present to said meeting an audited statement of accounts up to the end of the preceding calendar year.
 - (10) The Executive Committee is empowered to call and summon an International Seed Testing Convention in conjunction with the ordinary meeting of the Association. All such Conventions shall be devoted to the reading of scientific papers, discussions and demonstrations on seed investigations, and such related subjects as appertain to the objects of the Association.
 - (11) The Executive Committee is empowered to employ and pay for such clerical assistance as is deemed necessary.
 - (12) The Executive Committee is empowered to approve the admission of new Members of the Association.
 - (13) The Executive Committee is empowered to delegate the handling of special problems.
 - (14) The Executive Committee is empowered to approve and publish Accreditation Standards and, in agreement with the Designated Authority, to accredit member laboratories and authorise such laboratories to issue International Seed Testing Association Certificates.
 - (15) The Executive Committee shall prior to an ordinary meeting decide the place of the next ordinary meeting of the Association.
 - (16) Six members of the Executive Committee shall constitute a quorum. Between meetings, business shall be transacted by correspondence in which at least 6 members must participate to effect a decision.

ARTICLE VIII

Nomination and Election

- (a) At each ordinary meeting of the Association the outgoing First Vice-President, provided that person was duly elected to that office at the previous ordinary meeting, without further election

shall be appointed President for the ensuing period. If at any ordinary meeting, for whatever reason, the outgoing First Vice-President is not available for appointment as President, the office of the President shall be filled by election by the procedure prescribed for other officers in paragraphs (b) and (c) of this Article.

(b) Subject to the provisions of paragraph (a) of this Article, the election of Officers and members-at-large of the Executive Committee shall be by ballot at an ordinary meeting of the Association.

(c) Subject to the provisions of paragraph (a) of this Article, nominations for the election of Officers and of members-at-large of the Executive Committee may be submitted only by Designated Members. Such nominations shall be in writing supported by a mover and a seconder (both being Designated Members) and must be received by the Secretary-Treasurer at the latest on the day prior to the ordinary meeting at which the elections are to take place.

ARTICLE IX

Voting

(a) Irrespective of the number of Designated Members designated by a single Government, only one vote may be cast on behalf of that Government.

(b) The following categories of motions require for adoption a two-thirds majority of those voting: motions to alter this Constitution, motions to dissolve the Association, and motions arising during meetings and relating to temporary adjournment, closing of debate, or postponement of action. All other motions require a simple majority of those voting for adoption.

(c) On urgent matters as determined by the Executive Committee, and in which the Executive Committee is not authorised to act, voting members may be requested by the Secretary-Treasurer to vote by correspondence during the period between ordinary meetings of the Association in accordance with paragraph (a) and (b) of this article.

ARTICLE X

Meetings of the Association

(a) The ordinary meeting of the Members of the Association shall normally be held every third year, but extraordinary meetings may be held when considered necessary by the Executive Committee or when requested by two-thirds of the Designated Members.

(b) Matters in dispute at meetings of the Association shall be referred to a vote.

(c) In the event of a tie in a vote, the President, or in his/her absence a Vice-President, shall have a deciding vote at meetings of the Association and of the Executive Committee. In all other committees of the Association, in the event of a tie, the acting Chairman shall have a deciding vote.

(d) Designated Members designated by forty percent of the Designated Authorities shall constitute a quorum at meetings of the Association. In determining the percentage, fractions less than 0.50 shall be dropped and those 0.50 or greater shall be regarded as a whole number.

(e) The agenda for the ordinary meeting of the Association shall include:

- (1) Call to order.
- (2) President's address.
- (3) Roll call of Designated Members entitled to vote.
- (4) Reading and acceptance of Minutes.
- (5) Report of the Executive Committee.
- (6) Report of the Treasurer.
- (7) Discharge of the Executive Committee.
- (8) Consideration and adoption of reports.

- (9) Election of Officers and members-at-large of the Executive Committee. (10) Installation of new Officers.
- (11) Announcement of the place and date for the next ordinary meeting of the Association.
- (12) Fixation of annual subscriptions.
- (13) Any other business raised by a Member, of which notice in writing has been received by the Secretary-Treasurer at least two months prior to the date of the meeting.
- (14) Any other business raised by consent of the Executive Committee.
- (15) President's closing address.
- (16) Adjournment.

ARTICLE XI

Finances

- (a) Payment of monies belonging to the Association may be made only in connection with matters directly related to the objects of the Association as provided for in this Constitution.
- (b) The income of the Association shall be derived from annual subscriptions paid by Governments, Designated Authorities, Designated Members, or by Members, and from payments and donations received from persons, organisations, or governments for specified or general purposes.
- (c) The amount of the annual subscription for Designated Members, Members and Accredited Laboratories shall be determined for at least a three-year period at the ordinary meeting of the Association, due consideration being given to statements submitted in accordance with Article VII(c)(9) and paragraph (g) of this Article. Notification of proposals to change the rate of annual subscriptions shall be sent to the Designated Authorities, Designated Members and Members at least six months prior to the Ordinary Meeting.
- (d) (1) The representation by any Designated Member, the subscription of or for whom/which is in arrears for more than two years, shall lapse, provided that due notice of arrears in subscription has been given by the Secretary-Treasurer.
(2) The membership of any Member, the subscription of or for whom/ which is in arrears for more than two years, shall lapse, provided that due notice of arrears in subscription has been given by the Secretary-Treasurer.
- (e) The financial year of the Association shall be from January 1st to December 31st, and subscriptions for each financial year shall be payable on January 1st of that year.
- (f) Accounts of all monies received and expended by the Association shall be kept by the Secretary-Treasurer.
- (g) A statement showing the financial position of the Association, examined and certified by the Auditor, shall be circulated annually to the Members of the Association and published in Seed Science and Technology.

ARTICLE XII

Amendments

The provisions of this Constitution may be amended as follows:

- (1) Any proposal to alter the provisions of this Constitution must be received in writing by the Secretary-Treasurer at least four months prior to the date of the meeting of the Association at which it is to be considered.
- (2) The Secretary-Treasurer shall communicate any such proposal to each Member of the Association at least three months prior to the date of such meeting of the Association and shall maintain records showing evidence of such communications.

(3) Amendments of this Constitution shall come into force only if they receive the support of at least two-thirds of the Designated Members voting at a meeting of the Association, provided a quorum is present.

ARTICLE XIII

Interpretation

In any case where the interpretation of this Constitution is in doubt, the English text thereof shall govern.

ARTICLE XIV

Dissolution of the Association

Dissolution of the Association can take place when a meeting called for this purpose shall have voted therefore by a two-thirds majority of the Designated Members voting, provided a quorum is present.

ARTICLE XV

Withdrawal

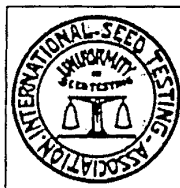
(a) Any Government may withdraw its Designated Members from the Association by giving notice of withdrawal at any time. Such notice shall be communicated to the Secretary-Treasurer who shall inform all Members thereof.

(b) If a Government states, in its notice, that its withdrawal is because it cannot comply with an amendment adopted under Article XII, such withdrawal shall be effective on the date of the entry into force of such amendment, provided the Secretary-Treasurer has received the notice not more than 30 days after the entry into force of the amendment. Withdrawal under any other circumstances shall become effective at the end of the calendar year in which the notice for that purpose is given.

(c) The financial obligation to the Association of a Government which has given notice of withdrawal shall include the entire calendar year in which the notice is given, except that, if the withdrawal is effective on the date of the entry into force of an amendment as provided above, the Government shall have no further liability for subscription after that date.

PROPOSED CONSTITUTION CHANGES

TO BE VOTED ON AT THE
ORDINARY MEETING 2001



ISTA • 26 th Congress of the
International Seed Testing Association
June, 14 - 22 • 2001
Angers, France



INTRODUCTION

The Executive Committee of ISTA is suggesting to update the current valid ISTA Constitution and is therefore seeking the Designated Members of the Association for approval of the following proposed changes:

I. The introduction of the position of a "Secretary General" in the Constitution.

II. The Accreditation of a member laboratory and the Authorisation to issue ISTA Certificates should be regarded as two different acts.

To grant Accreditation (= assurance of the technical competence of a laboratory following the ISTA Accreditation System) of a Member Laboratory is in the responsibility of the Executive Committee of ISTA, while the Authorisation of a Member Laboratory to issue ISTA Certificates is in agreement with the ISTA Designated Authority in the country of concern.

III. The department of legal services of the Cantonal Taxation Office of Zurich has requested amendments to Article XIV in order to grant the Association exemption from taxes.



I.

PROPOSED CONSTITUTION CHANGES
POSITION OF A SECRETARY GENERAL



The following changes and amendments of the current Constitution of the International Seed Testing Association are proposed for adoption at the next Ordinary Meeting of the Association to be held in Angers, France in June 2001.

1.) It has been proposed to update Article II as follows:

CURRENT VERSION:	PROPOSED VERSION:
ARTICLE II <i>Seat</i> The headquarters of the Association shall be at the office of the Secretary-Treasurer. The Executive Committee may also establish offices at such other places as the Executive Committee may from time to time determine would facilitate carrying out the purposes of the Association.	ARTICLE II <i>Seat</i> The headquarters of the Association <u>are in Zurich, Switzerland. The change of the place of the seat of the headquarters must be approved by the majority vote of the Executive Committee.</u>

2.) It has been proposed to remove 'Secretary-Treasurer' in Article V (a), hence to completely remove Article VI (d).

CURRENT VERSION:	PROPOSED VERSION:
ARTICLE V <i>Officers</i> (a) The Officers of the Association shall be: President First Vice-President Second Vice-President Secretary-Treasurer ...	ARTICLE V <i>Officers</i> (a) The Officers of the Association shall be: President First Vice-President Second Vice-President
ARTICLE VI <i>Functions of Officers</i> ... (d) (1) The Secretary-Treasurer, at the request of the President, shall summon all meetings of the Association and of the Executive Committee, shall attend and keep records at all such meetings, and shall perform all other duties of a secretarial nature. (2) The Secretary-Treasurer shall carry out all such functions in relation to the collection and disbursement of such funds belonging to the Association as the Executive Committee shall authorize.	ARTICLE VI <i>Functions of Officers</i> ...



- 3.) It has been proposed to remove 'Secretary-Treasurer' in Article VII (a), hence 'seven' should be replaced by 'eight'.

CURRENT VERSION:

PROPOSED VERSION:

ARTICLE VII	ARTICLE VII
<p style="text-align: center;"><i>Executive Committee</i></p> <p>(a) The Executive Committee shall consist of the President, the First Vice-President, the Second Vice-President, and the Secretary-Treasurer, together with seven members-at-large who shall be Designated Members.</p> <p>...</p>	<p style="text-align: center;"><i>Executive Committee</i></p> <p>(a) The Executive Committee shall consist of the President, the First Vice-President and the Second Vice-President, together with <u>eight</u> members-at-large who shall be Designated Members.</p> <p>...</p>

- 4.) It has been proposed that in the same Article VII, under (c) paragraph (1) the expression 'manage and direct' should be replaced by 'determine the policy and direct'.

CURRENT VERSION:

PROPOSED VERSION:

ARTICLE VII	ARTICLE VII
<p style="text-align: center;"><i>Executive Committee</i></p> <p>...</p> <p>(c) The functions of the Executive Committee shall be as follows:</p> <p>(1) The Executive Committee shall manage and direct the affairs of the Association according to the provisions of this Constitution and to decisions arrived at by the Association at ordinary or extraordinary meetings.</p> <p>...</p>	<p style="text-align: center;"><i>Executive Committee</i></p> <p>...</p> <p>(c) The functions of the Executive Committee shall be as follows:</p> <p>(1) The Executive Committee shall <u>determine the policy and direct</u> the affairs of the Association according to the provisions of this Constitution and to decisions arrived at by the Association at ordinary or extraordinary meetings.</p> <p>...</p>



- 5.) It has been proposed to introduce a new paragraph (2) under Article VII (c), hence renumbering of former paragraph (2) and thereafter following paragraphs is necessary.

CURRENT VERSION:

PROPOSED VERSION:

ARTICLE VII	ARTICLE VII
<p style="text-align: center;"><i>Executive Committee</i></p>	<p style="text-align: center;"><i>Executive Committee</i></p>
<p>...</p> <p>(c) The functions of the Executive Committee shall be as follows:</p>	<p>...</p> <p>(c) The functions of the Executive Committee shall be as follows:</p>
<p>...</p> <p>(2) In the event of vacancies in the panel of Officers or members-at-large of the Executive Committee, the remaining members of the Committee are empowered to appoint substitutes to serve until the next ordinary meeting of the Association.</p>	<p>...</p> <p>(2) <u>The Executive Committee shall appoint a Secretary General. The task of the Secretary General is to manage ISTA under the authority and the control of the Executive Committee. The relations between the Executive Committee and the Secretary General are laid down in the Management Regulations, established and approved by the Executive Committee.</u></p>
<p>(3) The meetings of the Executive Committee shall be called in accordance with the provisions of Article VI or on the written request of six or more of its members.</p>	<p>(3) In the event of vacancies in the panel of Officers or members-at-large of the Executive Committee, the remaining members of the Committee are empowered to appoint substitutes to serve until the next ordinary meeting of the Association.</p>
<p>...</p> <p>(16) Six members of the Executive Committee shall constitute a quorum. Between meetings, business shall be transacted by correspondence in which at least 6 members must participate to effect a decision.</p>	<p>(4) The meetings of the Executive Committee shall be called in accordance with the provisions of Article VI or on the written request of six or more of its members.</p>
	<p>...</p> <p>(17) Six members of the Executive Committee shall constitute a quorum. Between meetings, business shall be transacted by correspondence in which at least 6 members must participate to effect a decision.</p>

- 6.) It has been proposed to replace 'Secretary-Treasurer' by 'Secretary General' in Article VIII (c):

CURRENT VERSION:

PROPOSED VERSION:

ARTICLE VIII	ARTICLE VIII
<p style="text-align: center;"><i>Nomination and Election</i></p>	<p style="text-align: center;"><i>Nomination and Election</i></p>
<p>...</p> <p>(c) Subject to the provisions of paragraph (a) of this Article, nominations for the election of Officers and of members-at-large of the Executive Committee may be submitted only by Designated Members. Such nominations shall be in writing supported by a mover and a seconder (both being Designated Members) and must be received by the Secretary-Treasurer at the latest on the day prior to the ordinary meeting at which the elections are to take place.</p>	<p>...</p> <p>(c) Subject to the provisions of paragraph (a) of this Article, nominations for the election of Officers and of members-at-large of the Executive Committee may be submitted only by Designated Members. Such nominations shall be in writing supported by a mover and a seconder (both being Designated Members) and must be received by the <u>Secretary General</u> at the latest on the day prior to the ordinary meeting at which the elections are to take place.</p>



7.) It has been proposed to replace 'Secretary-Treasurer' by 'President' in Article IX (c):

CURRENT VERSION:

PROPOSED VERSION:

CURRENT VERSION:	PROPOSED VERSION:
<p>ARTICLE IX</p> <p><i>Voting</i></p> <p>...</p> <p>(c) On urgent matters as determined by the Executive Committee, and in which the Executive Committee is not authorised to act, voting members may be requested by the Secretary-Treasurer to vote by correspondence during the period between ordinary meetings of the Association in accordance with paragraph (a) and (b) of this article.</p>	<p>ARTICLE IX</p> <p><i>Voting</i></p> <p>...</p> <p>(c) On urgent matters as determined by the Executive Committee, and in which the Executive Committee is not authorised to act, voting members may be requested by the <u>President</u> to vote by correspondence during the period between ordinary meetings of the Association in accordance with paragraph (a) and (b) of this article.</p>

8.) It has been proposed to replace 'Treasurer' by 'Secretary General' in Article X (e) under paragraph (6):

CURRENT VERSION:

PROPOSED VERSION:

CURRENT VERSION:	PROPOSED VERSION:
<p>ARTICLE X</p> <p><i>Meetings of the Association</i></p> <p>...</p> <p>(6) Report of the Treasurer.</p> <p>...</p>	<p>ARTICLE X</p> <p><i>Meetings of the Association</i></p> <p>...</p> <p>(6) Report of the <u>Secretary General</u>.</p> <p>...</p>

9.) It has been proposed to replace 'Secretary-Treasurer' by 'Secretary General' in Article X (e) under paragraph (13):

CURRENT VERSION:

PROPOSED VERSION:

CURRENT VERSION:	PROPOSED VERSION:
<p>ARTICLE X</p> <p><i>Meetings of the Association</i></p> <p>...</p> <p>(13) Any other business raised by a Member, of which notice in writing has been received by the Secretary-Treasurer at least two months prior to the date of the meeting.</p> <p>...</p>	<p>ARTICLE X</p> <p><i>Meetings of the Association</i></p> <p>...</p> <p>(13) Any other business raised by a Member, of which notice in writing has been received by the <u>Secretary General</u> at least two months prior to the date of the meeting.</p> <p>...</p>



- 10.) It has been proposed to replace 'Secretary-Treasurer' by 'Secretary General' in Article XI (d), paragraph (1) and (2) and in paragraph (f):

CURRENT VERSION:

PROPOSED VERSION:

CURRENT VERSION:	PROPOSED VERSION:
<p style="text-align: center;">ARTICLE XI</p> <p style="text-align: center;"><i>Finances</i></p> <p>...</p> <p>(d) (1) The representation by any Designated Member, the subscription of or for whom/which is in arrears for more than two years, shall lapse, provided that due notice of arrears in subscription has been given by the Secretary-Treasurer.</p> <p>(2) The membership of any Member, the subscription of or for whom/ which is in arrears for more than two years, shall lapse, provided that due notice of arrears in subscription has been given by the Secretary-Treasurer.</p> <p>...</p> <p>(f) Accounts of all monies received and expended by the Association shall be kept by the Secretary-Treasurer.</p> <p>...</p>	<p style="text-align: center;">ARTICLE XI</p> <p style="text-align: center;"><i>Finances</i></p> <p>...</p> <p>(d) (1) The representation by any Designated Member, the subscription of or for whom/which is in arrears for more than two years, shall lapse, provided that due notice of arrears in subscription has been given by the <u>Secretary General</u>.</p> <p>(2) The membership of any Member, the subscription of or for whom/ which is in arrears for more than two years, shall lapse, provided that due notice of arrears in subscription has been given by the <u>Secretary General</u>.</p> <p>...</p> <p>(f) Accounts of all monies received and expended by the Association shall be kept by the <u>Secretary General</u>.</p> <p>...</p>

- 11.) It has been proposed to replace 'Secretary-Treasurer' by 'Secretary General' in Article XII (1) and (2):

CURRENT VERSION:

PROPOSED VERSION:

CURRENT VERSION:	PROPOSED VERSION:
<p style="text-align: center;">ARTICLE XII</p> <p style="text-align: center;"><i>Amendments</i></p> <p>The provisions of this Constitution may be amended as follows:</p> <p>(1) Any proposal to alter the provisions of this Constitution must be received in writing by the Secretary-Treasurer at least four months prior to the date of the meeting of the Association at which it is to be considered.</p> <p>(2) The Secretary-Treasurer shall communicate any such proposal to each Member of the Association at least three months prior to the date of such meeting of the Association and shall maintain records showing evidence of such communications.</p>	<p style="text-align: center;">ARTICLE XII</p> <p style="text-align: center;"><i>Amendments</i></p> <p>The provisions of this Constitution may be amended as follows:</p> <p>(1) Any proposal to alter the provisions of this Constitution must be received in writing by the <u>Secretary General</u> at least four months prior to the date of the meeting of the Association at which it is to be considered.</p> <p>(2) The <u>Secretary General</u> shall communicate any such proposal to each Member of the Association at least three months prior to the date of such meeting of the Association and shall maintain records showing evidence of such communications.</p>



- 12.) It has been proposed to replace 'Secretary-Treasurer' by 'Secretary General' in Article XV (a) and (b):

CURRENT VERSION:

PROPOSED VERSION:

CURRENT VERSION:	PROPOSED VERSION:
<p style="text-align: center;">ARTICLE XV</p> <p style="text-align: center;"><i>Withdrawal</i></p> <p>(a) Any Government may withdraw its Designated Members from the Association by giving notice of withdrawal at any time. Such notice shall be communicated to the Secretary-Treasurer who shall inform all Members thereof.</p> <p>(b) If a Government states, in its notice, that its withdrawal is because it cannot comply with an amendment adopted under Article XII, such withdrawal shall be effective on the date of the entry into force of such amendment, provided the Secretary-Treasurer has received the notice not more than 30 days after the entry into force of the amendment. Withdrawal under any other circumstances shall become effective at the end of the calendar year in which the notice for that purpose is given.</p> <p>...</p>	<p style="text-align: center;">ARTICLE XV</p> <p style="text-align: center;"><i>Withdrawal</i></p> <p>(a) Any Government may withdraw its Designated Members from the Association by giving notice of withdrawal at any time. Such notice shall be communicated to the <u>Secretary General</u> who shall inform all Members thereof.</p> <p>(b) If a Government states, in its notice, that its withdrawal is because it cannot comply with an amendment adopted under Article XII, such withdrawal shall be effective on the date of the entry into force of such amendment, provided the <u>Secretary General</u> has received the notice not more than 30 days after the entry into force of the amendment. Withdrawal under any other circumstances shall become effective at the end of the calendar year in which the notice for that purpose is given.</p> <p>...</p>



II.

PROPOSED CONSTITUTION CHANGES

ACCREDITATION VS AUTHORISATION



The following changes and amendments of the current Constitution of the International Seed Testing Association are proposed for adoption at the next Ordinary Meeting of the Association to be held in Angers, France in June 2001.

Please note that in the case of acceptance of the proposed Constitution Changes stated under I. "Position of a Secretary General", the expression "Secretary-Treasurer" will be changed to "Secretary General" in the proposed text below under Article XV in this Constitution Change. Accordingly the numeration of Article VII (also referred to under Article IV) will be changed.

1.) It has been proposed to update Article IV as follows:

CURRENT VERSION:

PROPOSED VERSION:

ARTICLE IV	ARTICLE IV
<i>Accredited Laboratory</i> (e) An Accredited Laboratory is a member laboratory accredited by the Executive Committee according to the Accreditation Standards approved under Article VII(c)(14) of the Constitution and fulfilling the requirements for independence given in these standards.	<i>Accredited Laboratory</i> (e) An Accredited Laboratory is a member laboratory accredited by the Executive Committee according to the Accreditation Standards approved under Article VII(c)(14) of the Constitution and fulfilling the requirements for independence given in these standards.

2.) Accordingly it has been proposed to amend Article VII (c)(14) as suggested below:

CURRENT VERSION:

PROPOSED VERSION:

ARTICLE VII	ARTICLE VII
<i>Executive Committee</i> ... (c) (14) The Executive Committee is empowered to approve and publish Accreditation Standards and, in agreement with the Designated Authority, to accredit member laboratories and authorise such laboratories to issue International Seed Testing Association Certificates. ...	<i>Executive Committee</i> ... (c) (14) The Executive Committee is empowered to approve and publish Accreditation Standards <u>and to accredit member laboratories</u> and, in agreement with the Designated Authority, to authorise such laboratories to issue International Seed Testing Association Certificates. ...



- 3.) It has been proposed to update Article XV by adding (d), (e) and (f) as new paragraphs in order to cover the situation for members which are not designated by the Government:

CURRENT VERSION:

PROPOSED VERSION:

ARTICLE XV	ARTICLE XV
<p style="text-align: center;"><i>Withdrawal</i></p> <p>(a) Any Government may withdraw its Designated Members from the Association by giving notice of withdrawal at any time. Such notice shall be communicated to the Secretary-Treasurer who shall inform all Members thereof.</p> <p>(b) If a Government states, in its notice, that its withdrawal is because it cannot comply with an amendment adopted under Article XII, such withdrawal shall be effective on the date of the entry into force of such amendment, provided the Secretary-Treasurer has received the notice not more than 30 days after the entry into force of the amendment. Withdrawal under any other circumstances shall become effective at the end of the calendar year in which the notice for that purpose is given.</p> <p>(c) The financial obligation to the Association of a Government which has given notice of withdrawal shall include the entire calendar year in which the notice is given, except that, if the withdrawal is effective on the date of the entry into force of an amendment as provided above, the Government shall have no further liability for subscription after that date.</p>	<p style="text-align: center;"><i>Withdrawal</i></p> <p>(a) Any Government may withdraw its Designated Members from the Association by giving notice of withdrawal at any time. Such notice shall be communicated to the Secretary-Treasurer who shall inform all Members thereof.</p> <p>(b) If a Government states, in its notice, that its withdrawal is because it cannot comply with an amendment adopted under Article XII, such withdrawal shall be effective on the date of the entry into force of such amendment, provided the Secretary-Treasurer has received the notice not more than 30 days after the entry into force of the amendment. Withdrawal under any other circumstances shall become effective at the end of the calendar year in which the notice for that purpose is given.</p> <p>(c) The financial obligation to the Association of a Government which has given notice of withdrawal shall include the entire calendar year in which the notice is given, except that, if the withdrawal is effective on the date of the entry into force of an amendment as provided above, the Government shall have no further liability for subscription after that date.</p> <p><u>(d) Any Member Laboratory/Personal Member may withdraw its Membership from the Association by giving notice of withdrawal at any time. Such notice shall be communicated to the Secretary-Treasurer who shall inform all Members thereof.</u></p> <p><u>(e) If a Member Laboratory/Personal Member states, in its notice, that its withdrawal is because it cannot comply with an amendment adopted under Article XII, such withdrawal shall be effective on the date of the entry into force of such amendment, provided the Secretary-Treasurer has received the notice not more than 30 days after the entry into force of the amendment. Withdrawal under any other circumstances shall become effective at the end of the calendar year in which the notice for that purpose is given.</u></p> <p><u>(f) The financial obligation to the Association of a Member Laboratory/Personal Member which has given notice of withdrawal shall include the entire calendar year in which the notice is given, except that, if the withdrawal is effective on the date of the entry into force of an amendment as provided above, the Member Laboratory/Personal Member shall have no further liability for subscription after that date.</u></p>



III.

PROPOSED CONSTITUTION CHANGES

TAXATION CLAUSE



The following changes and amendments of the current Constitution of the International Seed Testing Association are proposed for adoption at the next Ordinary Meeting of the Association to be held in Angers, France in June 2001.

1.) The department of legal services of the Cantonal Taxation Office of Zurich has requested the following amendments to Article XIV in order to grant the Association exemption from taxes:

CURRENT VERSION:

PROPOSED VERSION:

CURRENT VERSION:	PROPOSED VERSION:
<p style="text-align: center;">ARTICLE XIV</p> <p style="text-align: center;"><i>Dissolution of the Association</i></p> <p>Dissolution of the Association can take place when a meeting called for this purpose shall have voted therefore by a two-thirds majority of the Designated Members voting, provided a quorum is present.</p>	<p style="text-align: center;">ARTICLE XIV</p> <p style="text-align: center;"><i>Dissolution of the Association</i></p> <p>Dissolution of the Association can take place when a meeting called for this purpose shall have voted therefore by a two-thirds majority of the Designated Members voting, provided a quorum is present. <u>The funds remaining after dissolution of the Association shall be given to an institution granted exemption from taxes with the same or similar objects. Allotment of the remaining funds to the Membership shall not be possible.</u></p>

2001-2004年ISTA主席、副主席及執行委員名單

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