

**Technical Committee****TC/58/31.****Fifty-Eighth Session  
Geneva, October 24 and 25, 2022****Original:** English  
**Date:** October 25, 2022

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**REPORT***adopted by the Technical Committee**Disclaimer: this document does not represent UPOV policies or guidance*

1. The Technical Committee (TC) held its fifty-eighth session in Geneva on October 24 and 25, 2022. The list of participants is reproduced in Annex I to this report.
2. The session was opened by Mr. Nik Hulse, Chairperson of the TC, who welcomed the participants.
3. The Vice Secretary-General introduced Mr. Cornelis (Kees) van Ettehoven, who began a contract with UPOV in October 2022 and Laurianne Nicolo, who is working in UPOV under an agency contract.

Adoption of the agenda

4. The TC adopted the agenda as presented in document TC/58/1 Rev.

Report by the Vice Secretary-General on developments in UPOV

5. The TC noted that a pre-recorded video presentation in English, with subtitles in English, French, German and Spanish, was available on the TC, CAJ and Council webpages and that a copy of the presentation was published as document TC/58/INF/5.

Progress report on the work of the Technical Working Parties

6. The TC noted that, since its fifty-seventh session, the Technical Working Party for Agricultural Crops (TWA), Technical Working Party for Fruit Crops (TWF), Technical Working Party on Testing Methods and Techniques (TWM), Technical Working Party for Ornamental Plants and Forest Trees (TWO) and Technical Working Party for Vegetables (TWV) had each held one session. The TC noted that the TWA had held a physical hybrid meeting and all other TWP meetings had been held virtually.
7. The TC received oral reports from the Chairpersons on the work of the TWA, TWF, TWM, TWO and TWV. The TC noted that the reports from the Chairpersons were provided in documents TC/58/17 and TC/58/17 Add.
8. The TC noted the following elements highlighted by the respective chairpersons:
  - TWA: organization of the first ever hybrid meeting, held in the United Kingdom;
  - TWF: ongoing discussions on access to plant material for management of variety collections and DUS examination;
  - TWM: discussions on image analysis; confidentiality and access to molecular data; and the proposal for future hybrid meetings;
  - TWO: discussions on amending the requirement for example varieties when illustrations were provided for certain characteristics;
  - TWV: discussion on disease resistance characteristics, including particular features requiring special attention in relation to general guidance on DUS examination.

9. The TC approved the programs of work for the TWP, at their sessions in 2023, as set out in documents TC/58/17 and TC/58/17 Add..

Matters arising from the Technical Working Parties

10. The TC considered document TC/58/3.

11. The TC noted developments in the TWP concerning:

- (i) Information required to enhance the use of existing DUS test reports;
- (ii) DUS examination of mutant varieties of apple;
- (iii) Access to plant material for the purpose of management of variety collections and DUS examination;
- (iv) Use of disease resistance characteristics;
- (v) Disease resistance in ornamental crops;
- (vi) New issues arising for DUS examination;
- (vii) Experiences with new types and species;
- (viii) Examining hybrid varieties;
- (ix) New technologies in DUS examination;
- (x) Big data platform for DUS examination;
- (xi) The assessment of color in fruit crops; and
- (xii) Phenotyping and image analysis

Development of guidance and information materials

*Matters for adoption by the Council in 2022*

12. The TC considered document TC/58/4.

Information Materials

*Revision of document UPOV/INF/16 “Exchangeable Software” (document UPOV/INF/16/11 Draft 1)*

13. The TC considered the proposed revision of document UPOV/INF/16 “Exchangeable Software” on the basis of document UPOV/INF/16/11 Draft 1 and agreed with the recommendation from the TWM, at its first session, to propose including the PATHOSTAT application in document UPOV/INF/16, as follows:

“(d) DUS trial design and data analysis”

Date added	Program name	Programming language	Function (brief summary)	Source & contact details	Condition for supply	UPOV member(s) using the software	Application by user(s)
	PATHOSTAT	Excel	Decision support tool to integrate statistics for the analysis of pest resistance test results for vegetable species	France: Ms. Sophie Perrot e-mail: <a href="mailto:sophie.perrot@geves.fr">sophie.perrot@geves.fr</a> and <a href="mailto:PATHOSTAT@geves.fr">PATHOSTAT@geves.fr</a>	Available as a web service / not for download	FR	Vegetable species

14. The TC noted that, subject to agreement by the CAJ, an agreed draft of document UPOV/INF/16 would be presented for adoption by the Council in 2022.

*Revision of document UPOV/INF/22 “Software and Equipment Used by Members of the Union” (document UPOV/INF/22/9 Draft 1)*

15. The TC agreed with the proposed revision of document UPOV/INF/22 “Software and Equipment Used by Members of the Union” on the basis of document UPOV/INF/22/9 Draft 1.

16. The TC noted that, subject to agreement by the CAJ, an agreed draft of document UPOV/INF/22 would be presented for adoption by the Council in 2022.

Explanatory Notes

*Explanatory Notes on Variety Denominations under the UPOV Convention  
(document UPOV/EXN/DEN)*

17. The TC noted that, subject to agreement by the CAJ, the proposed revision of document UPOV/EXN/DEN/1 for including the genus “*xTrititrigia*” in variety denomination Class 201 would be presented for adoption by the Council in 2022, as set out in document TC/58/4, paragraphs 17 and 18.

TGP Documents

*TGP/5: Experience and Cooperation in DUS Testing, Section 6: UPOV Report on Technical Examination and UPOV Variety Description (Revision) (document TGP/5: Section 6/4 Draft 1)*

18. The TC noted that, subject to agreement by the CAJ, an agreed draft of document TGP/5: Section 6 would be presented for adoption by the Council in 2022, as set out in document TC/58/4, paragraphs 20 and 21.

*TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability (Revision)*

19. The TC noted that, subject to agreement by the CAJ, the proposed revision of document TGP/8/4 for including guidance on “Different forms that variety descriptions could take and the relevance of scale levels” would be presented for adoption by the Council in 2022.

*TGP/12: Guidance on Certain Physiological Characteristics (Revision)*

20. The TC noted that, subject to agreement by the CAJ, the proposed revision of document TGP/12/2 to replace state of expression “moderately resistant” by “intermediate resistant” in the example of disease resistance characteristic with ‘1-3’ scale would be presented for adoption by the Council in 2022, as set out in document TC/58/4, paragraphs 26 and 27.

*Possible future revisions of guidance and information materials*

21. The TC considered document TC/58/5.

Document UPOV/INF/23 “UPOV Code System”

22. The TC agreed to revise document UPOV/INF/23 “Guide to the UPOV Code System”, as follows:

“5 UPOV CODE: APPENDED INFORMATION

“5.1 Appended element construction

“5.1.1. Where required, an element may be appended to a UPOV code to provide information on the variety group, variety type and/or denomination class.

“The appended element to UPOV codes is identifiable through the following naming convention:

- “A digit (number from 1 to 9) prefix identifies the new appended element.
- “Different digits or letters could, if appropriate, indicate different categories of information.
- “The appended element should contain a maximum of six digits or letters in total (e.g. ‘1AC2TG’)”

“This element may be appended to any UPOV code, regardless of plant taxa (genera, species or subspecies levels). Examples:

“UPOV code for genus *Abies*: ..... ABIES

“UPOV code with appended element: ..... ABIES\_4234\_1AC2TG

“UPOV code for species *Abies sibirica*: ..... ABIES\_SIB

“UPOV code with appended element: ..... ABIES\_SIB\_4234\_1AC2TG

“UPOV code for sub-species *Abies sibirica* subsp. *semenovii*: ..... ABIES\_SIB\_SEM

“UPOV code with appended element: ..... ABIES\_SIB\_SEM\_4234\_1AC2TG”

Document TGP/7 “Development of Test Guidelines”

*Example varieties for asterisked quantitative characteristics when illustrations are provided*

23. The TC considered a proposal to amend document TGP/7 to remove the requirement to provide example varieties for asterisked quantitative characteristics when illustrations were provided.

24. The TC agreed to invite the TWPs, at their sessions in 2023, to consider the situations described by the TWO in document TC/58/5, paragraph 24 to 29, as the basis to develop guidance on possible exceptions to the requirement to provide example varieties for asterisked quantitative characteristics when illustrations were provided. The TC agreed to invite the TWPs to specify situations where such approach would be applicable.

*Indication of grouping characteristics in UPOV Test Guidelines (Table of characteristics and TQ 5)*

25. The TC agreed to discontinue discussions on the proposal to revise document TGP/7 “Development of Test Guidelines” to indicate characteristics in the Table of Characteristics and Technical Questionnaire used as grouping characteristics.

*Converting standard wording in Test Guidelines into optional wording*

26. The TC agreed to amend document TGP/7 “Development of Test Guidelines” to convert the standard wording in the Test Guidelines template, paragraph 4.2.2, into additional standard wording (optional), as set out in document TC/58/5, paragraph 39 and reproduced below:

“4.2.2 These Test Guidelines have been developed for the examination of [type or types of propagation] varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5: “Testing Uniformity” should be followed.”

*Disease resistance characteristics: Addition of state of expression and placement of non-asterisked disease resistance characteristics in Section 5 of the Technical Questionnaire*

27. The TC agreed to invite the Office of the Union to present a proposal to the TWPs, at their sessions in 2023, to amend document TGP/7 GN 13 “Characteristics with specific functions” to clarify that non-compulsory disease resistance characteristics should be presented in Section 5 of Technical Questionnaires (TQ) with the addition of a state of expression “not tested”.

Document TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability

*Section 9 “The Combined-Over-Years Uniformity Criterion (COYU)”*

28. The TC considered document TC/58/6.

29. The TC noted that a new version of DUSTNT incorporating COYU with splines (DUST9NT) was planned to be launched by September 2023, once the improvements identified from the testing campaign had been incorporated, including extrapolation.

30. The TC noted that further revisions to document TGP/8 would be required to incorporate guidance on extrapolation and minimum data requirements.

31. The TC noted the recommendation that there should be particular consideration of uniformity by the crop experts when extrapolation occurred.

32. The TC noted that the TWM had agreed that further discussion would be required on approaches when extrapolation was indicated and had agreed to invite the United Kingdom and other members to report at the second session of the TWM.

33. The TC agreed to request the TWM to prepare a report of the results of the test campaign of the software for COYU Splines for consideration by the TC, in conjunction with the revision of document TGP/8.

Document TGP/12 'Guidance on certain physiological characteristics'

*Word "highly" in only one state of expression*

34. The TC noted discussions at the TWV on disease resistance characteristics that could require special treatment in relation to general UPOV guidance, as presented in document TC/58/5, paragraphs 52 to 56, including matters such as establishing distinctness for quantitative disease resistance characteristics on the basis of a difference of one note between varieties.

New proposal for revision of guidance and information materials

*Document TGP/9 "Examining Distinctness"*

35. The TC considered the proposal from the TWF to amend document TGP/9 "Examining Distinctness" to clarify the possibility to include in trials a lower number of plants for varieties of common knowledge than the candidate variety, under certain circumstances, as set out in document TC/58/5, paragraph 60.

36. The TC noted the practical difficulty reported by the TWF to organize growing trials with the same number of plants for example varieties and the candidate variety.

37. The TC agreed to invite the drafters from Brazil and European Union to develop the proposal taking into consideration the requirement of consistency with the other paragraphs of the section in document TGP/9, which concerned the required precision of records. The TC agreed that the revised proposal should be presented to the TWPs, at their sessions in 2023.

Program for the development of relevant information materials

38. The TC agreed the program for the development of TGP documents, as set out in document TC/58/5, Annex VII.

39. The TC agreed the program for the development of relevant information materials, as set out in document TC/58/5, Annex VIII.

40. The TC noted that the program for the development of TGP documents and information materials would be considered by the Administrative and Legal Committee, at its seventy-ninth session, to be held in Geneva on October 26, 2022, in conjunction with the conclusions of the TC at its fifty-eight session.

Molecular techniques

41. The TC considered documents TC/58/7.

*Cooperation between international organizations*

42. The TC noted the results of the surveys on the use of molecular marker techniques by members, per crop, as set out in the Annex to document TC/58/7.

43. The TC noted the draft joint document explaining the principal features of the systems of OECD, UPOV and ISTA.

44. The TC recalled the topics it had previously agreed for a future joint UPOV/OECD/ISTA workshop, as set out in document TC/58/7, paragraph 17, as follows:

- (i) providing information on the use of molecular techniques in each organization;
- (ii) procedure for approval of biochemical and molecular methods in each organization; and
- (iii) possibilities for harmonizing terms, definitions and methods between UPOV, OECD and ISTA.

45. The TC noted the information from OECD and ISTA that there had been no significant developments to discuss at this time and that it would be advisable to plan a joint workshop in 2023, at the earliest.

46. The TC agreed that the Office of the Union should explore possibilities with OECD and ISTA to further elaborate the draft joint document explaining the principal features of the systems of OECD, UPOV and ISTA in relation to the use of molecular techniques.

*Session to facilitate cooperation in relation to the use of molecular techniques*

47. The TC noted the reports from the TWPs on the organization of discussion groups at their sessions in 2022. The TC agreed that the chairpersons should have flexibility to consider whether to organize discussion groups during TWP sessions to allow participants to exchange information on their work and explore areas for cooperation on the use of biochemical and molecular techniques in DUS examination.

*Confidentiality & ownership of molecular information*

48. The TC noted discussions held at the TWPs, at their sessions in 2022, on “Confidentiality & Ownership of Molecular Information”.

49. The TC noted the concerns expressed by breeders’ organizations at the TWM that molecular information provided for the examination of a variety should not be provided to others outside the authority that received the application without the permission of the breeder.

50. The TC agreed to invite members and observers to report existing policies on confidentiality of molecular information at the TWPs, at their sessions in 2023.

International cooperation in examination

51. The TC considered document TC/58/8.

52. The TC noted that members of the Union had the possibility to update information on a person(s) to be contacted for matters concerning international cooperation in DUS examination by:

(i) updating information when invited to provide information for document TC/[xx]/4 “List of genera and species for which authorities have practical experience in the examination of distinctness, uniformity and stability”; and/or

(ii) notifying the Office of the Union by sending an e-mail to [upov.mail@upov.int](mailto:upov.mail@upov.int);

53. The TC noted the development of a package of compatible IT tools (e-PVP) as reported in document TC/58/8 paragraphs 9 to 13.

54. The TC noted that e-PVP Asia was planned to be launched in early 2023.

55. The TC noted that there had been no developments concerning databases containing variety description information that members of the Union wished to list in a UPOV platform.

56. The TC noted that matters concerning a proposal on the revision of the GENIE database were presented in document TC/58/18 “Survey on the needs of members and observers in relation to the TWPs”;

57. The TC noted that the CAJ, at its seventy-ninth session would be invited to consider:

(i) the proposed questions for the survey of members of the Union for information on their policies or legal barriers that could prevent international cooperation in DUS examination;

(ii) the information provided by breeders’ organizations to clarify the issues concerning the wish of breeders to use, or not to use, existing DUS reports; and

(iii) whether to postpone the development of explanatory notes of Article 12 of the UPOV Convention (“Examination of the Application”) until information from the survey of members of the Union and from breeders’ organizations is available and considered by the CAJ; and

58. The TC noted that the impact of the proposed measures would be assessed on the basis of the number of cooperation agreements reported by members of the Union, as presented in document C/[xx]/INF/5 “Cooperation in examination”.

59. The TC noted the explanation provided by the Office of the Union that it could be envisaged that a fee would be charged for using the DUS exchange platform and that it would be a matter for decision by the members in relation to information to be uploaded to the platform.

Increasing participation of new members of the Union in work of the TC and the TWPs

The TC considered document TC/58/18.

*Results of the survey*

60. The TC noted the report of the interviews of UPOV members and observers on ways in which UPOV could improve its support for DUS examination, as presented in Annex III to document TC/58/18.

61. The TC noted the summary of issues identified by participants in the interviews, as set out in document TC/58/18, paragraph 19.

*Options to address issues raised*

62. The TC noted the initiatives proposed to address the issues raised and needs identified by participants in the interviews.

63. The TC noted there were concerns raised by members in relation to the proposals that would require further discussion and clarification.

64. The TC agreed to establish a Working Group with the following terms of reference:

“TERMS OF REFERENCE OF THE  
“WORKING GROUP ON DUS SUPPORT (WG-DUS)

“PURPOSE:

“The purpose of the WG-DUS is to make recommendations to the Technical Committee at its fifty-ninth session on the proposals presented in TC/58/18 “Survey on the needs of members and observers in relation to TWPs”.

“COMPOSITION:

“(a) the following members of the Union and observers that expressed an interest to be part of the WG-DUS: Argentina; Australia, Belarus, Brazil; Canada, Chile, China, Czech Republic, European Union, France, Germany, Ghana, Hungary, Japan, Kenya, Morocco, Netherlands, New Zealand; Republic of Korea; Romania, Slovakia, South Africa, Spain, United Kingdom, United Republic of Tanzania, United States of America, CIOFORA, CropLife International, ISF and SAA.

“(b) other members of the Union would be free to participate at any meeting of the WG-DUS; and

“(c) meetings to be chaired by the Vice Secretary-General

“MODUS OPERANDI:

“(a) The WG-DUS to:

- (i) draft recommendations on the proposals presented in TC/58/18 “Survey on the needs of members and observers in relation to TWPs”, including the possibility to present new proposals that would address the issues identified by participants in the interviews;
- (ii) specify the objectives of each of the recommended proposals and identify performance indicators that would enable an objective measurement of the success of those proposals;
- (iii) clarify the role of the Office of the Union, as appropriate, in each of the proposals;

- (iv) present draft recommendations at the Technical Working Parties at their meetings in 2023; and
- (v) present recommendations to the Technical Committee at its fifty-ninth session.

“(b) the WG-DUS to meet at a time and frequency to address its mandate, by physical and/or virtual means, as agreed by the WG-DUS; and

“(c) the documents of the WG-DUS to be made available to the TC.”

#### Increasing participation of new members of the Union in work of the TC and the TWPs

65. The TC considered document TC/58/9.

##### *Participation at TWP meetings by electronic means*

66. The TC noted the satisfaction survey conducted with participants at the hybrid meeting of the TWA, as presented in document TC/58/9, Annex I.

67. The TC noted the participation at TWP sessions in 2022, as presented in document TC/58/9, Annex II.

##### *Measures agreed by the TC for physical and virtual participation at TWP meetings*

68. The TC reviewed the measures implemented for the TWP sessions in 2022 and agreed to repeat the same approach in 2023.

69. The TC agreed to issue the same participant satisfaction survey issued for the TWA for the 2022 for the TWPs that would be held as in-person meetings in 2023.

#### Information and databases

##### *(a) UPOV information databases*

70. The TC considered document TC/58/10.

##### Proposals for amending the UPOV code system

71. The TC agreed that the cross-references to document UPOV/INF/12 “Explanatory Notes to Variety Denominations under the UPOV Convention” should be corrected and replaced by UPOV/EXN/DEN in paragraphs 4.2 and 4.3 of document UPOV/INF/23.

##### *Proposals for creating variety groups*

72. The TC agreed to invite the TWA and TWV, at their sessions in 2023, to consider the proposal to create variety groups for UPOV codes for *Beta vulgaris* L. ssp. *vulgaris*, as set out in document TC/58/10, paragraph 18.

73. The TC agreed to invite the TWV, at its session in 2023, to consider the proposal to create variety groups for UPOV codes for *Brassica oleracea* var. *capitata* L., as set out in document TC/58/10, paragraph 19.

74. The TC agreed to invite the TWA and TWV, at their sessions in 2023, to consider whether to create variety groups for the UPOV code ZEAAA\_MAY\_MAY, as set out in document TC/58/10, paragraph 21.

75. The TC agreed to delete the UPOV codes HYLOC, HYLOC\_COS, HYLOC\_GUA, HYLOC\_GUN, HYLOC\_POL and HYLOC\_UND, as set out in document TC/58/10, paragraph 27.

76. The TC agreed to delete the UPOV codes CALAT\_CRO, CALAT\_LOE, CALAT\_LRO, CALAT\_ROS and CALAT\_WAR, as set out in document TC/58/10, paragraph 30.

Matters for information

77. The TC noted that 131 new UPOV codes had been created in 2021 and a total of 9,342 UPOV codes are included in the GENIE database;

78. The TC noted that the TWV, at its fifty-sixth session, had agreed that variety groups should be used to replace complex infra-specific botanical names, such as for *Beta vulgaris*, *Brassica oleracea* and *Cichorium intybus*.

79. The TC noted the invitation for the Netherlands to further develop the proposal to create variety groups for *Beta vulgaris*, *Brassica oleracea* and *Cichorium intybus* to be presented at the fifty-seventh session of the TWV.

80. The TC noted the invitation by the TWV for the Office of the Union to develop proposals for revising the UPOV codes with appended information according to the approach to use variety groups for complex botanical names.

81. The TC noted that the UPOV code CITRU\_AUM would be amended to append information to create groups "1MA" for mandarins and "2OR" for oranges, as set out in document TC/58/10, paragraph 41.

82. The TC noted that, on the basis of the conclusions at the TC, at its fifty-seventh session, the UPOV codes BRASS\_OLE\_GA, BRASS\_OLE\_GB, CITRU\_AUR, CITRU\_CLE, CITRU\_MRE, CITRU\_CRE, CITRU\_INT, CITRU\_AUR, CITRU\_DAV, CITRU\_EXC, CITRU\_KER, CITRU\_BAL, CITRU\_KAR, CITRU\_BEN, ZEAAA\_MAY\_SAC, ZEAAA\_MAY\_EVE and ZEAAA\_MAY\_MIC would be deleted, as set out in document TC/58/10, paragraphs 40, 42 and 43, on January 1, 2023, and the members of the Union and contributors of data to the PLUTO database would be informed of the changes by means of a Circular in advance.

(b) *Exchange and use of software and equipment*

83. The TC considered document TC/58/11.

Document UPOV/INF/16 "Exchangeable Software"

84. The TC noted that the Council, at its fifty-fifth ordinary session, had adopted in the procedure by correspondence, on September 21, 2021, document UPOV/INF/16/10 "Exchangeable Software".

85. The TC noted that note that the Office of the Union had received replies from China, the Czech Republic, France, Poland and Uzbekistan in response to Circular E 22/002 inviting members of the Union to provide or update information regarding exchangeable software included in document UPOV/INF/16;

86. The TC noted that clarification would be required on the software proposed by Uzbekistan, including its availability for exchange.

87. The TC agreed to propose the inclusion of the PATHOSTAT application in document UPOV/INF/16, as set out in document TC/58/11, paragraph 15.

88. The TC noted that, subject to agreement of a draft of document UPOV/INF/16/11 by the TC and the CAJ, on the basis of document UPOV/INF/16/11 Draft 1, with the inclusion of the PATHOSTAT application, as set out in document TC/58/11, paragraph 16, an agreed draft of document UPOV/INF/16/11 would be presented for adoption by the Council in 2022.

Document UPOV/INF/22 "Software and Equipment Used by Members of the Union"

89. The TC noted that the Council, at its fifty-fifth ordinary session, had adopted in the procedure by correspondence, document UPOV/INF/22/8 "Software and Equipment Used by Members of the Union", on the basis of document UPOV/INF/22/8 Draft 1.

90. The TC noted that the Office of the Union had received replies from the Czech Republic, the Netherlands, Poland and Uzbekistan in response to Circular E-22/002 inviting members of the Union to provide or update information regarding the use of the software included in document UPOV/INF/22.

91. The TC agreed to propose the adoption of document UPOV/INF/22/9 Draft 1.

92. The TC noted that, subject to agreement by the TC and the CAJ, an agreed draft of document UPOV/INF/22/9 would be presented for adoption by the Council in 2022, on that basis.

*(c) Variety description databases*

93. The TC considered document TC/58/12.

94. The TC recalled the invitation for members of the Union to report to the TC and TWPs on work concerning the development of databases containing morphological and/or molecular data.

95. The TC agreed to invite the Office of the Union to explore possibilities to make information about webpages with variety descriptions available on the UPOV website.

96. The TC noted the report from the Office of the Union that changes to the UPOV website had been postponed and that the inclusion of information on the availability of variety descriptions would be included in the new website, subject to approval by the UPOV members concerned.

*(d) Web-based TG template*

97. The TC considered document TC/58/13

Development of individual authorities' test guidelines

98. The TC noted that interviews to collect requirements and development of the new functionalities for version 2 of the web based TG template would start in 2023.

99. The TC noted the expression of interest of the European Union to join the list of UPOV members to be interviewed for collecting requirements for version 2 of the web based TG template. The TC recalled that members could contact the Office of the Union to participate in the interviews.

Migration to cloud servers

100. The TC noted that the web-based TG template and database of approved characteristics were currently being migrated to cloud servers, including an upgrade to new technologies in infrastructure and program to address issues reported by users and enabling use for drafting individual authorities' test guidelines.

Training

101. The TC is invited to note that training on the web based TG template could be organized upon request.

Preparatory workshops

102. The TC considered document TC/58/14.

103. The TC agreed to organize preparatory workshops as a series of webinars, at suitable dates according to the schedule of TWP sessions in 2023, in conjunction with workshops with physical participation, where requested, as set out in document TC/58/14, paragraphs 15 to 18.

Variety denominations

104. The TC considered document TC/58/15.

*New proposals for variety denomination classes for Allium, Brassica and Prunus*

105. The TC noted discussions on new proposals for denomination classes of the genera *Allium*, *Brassica* and *Prunus*, as set out in document TC/58/15, paragraphs 5 to 10.

*Expansion of the content of the PLUTO database*

106. The TC noted developments concerning the expansion of the content of the PLUTO database.

Discussion on minimum distances between varieties

107. The TC noted that no documents had been received for item 14 “Discussion session: Minimum distances between varieties,” and agreed to delete the topic for discussion. The TC agreed to invite presentations at its fifty-ninth session for a discussion session on molecular techniques in DUS examination.

Test Guidelines

108. The TC considered document TC/58/2.

*Revision of Technical Questionnaires of Test Guidelines*

Relationship between Asterisked, Grouping and TQ characteristics

109. The TC noted that no proposals had been received to revise document TGP/7 “Development of Test Guidelines” to clarify the relationship between asterisks in the Test Guidelines and characteristics in the technical questionnaires.

Proposals for partial revisions of test guidelines

110. The TC noted that a proposal for the partial revision of the Test Guidelines for Maize to revise characteristic 24 and the Technical Questionnaire would be presented to the TWA at its fifty-second sessions.

111. The TC noted that the proposals for partial revision of the Test Guidelines for vegetable crops would continue to be discussed at the fifty-seventh session of the TWV, as set out in document TC/58/2, paragraph 23 and 24.

*Additional characteristics / states of expression*

112. The TC noted the additional state of expression and characteristic notified to the Office of the Union since the fifty-seventh session of the TC, as set out in document TC/58/2, Annex X.

113. The TC noted that the additional state of expression and characteristic notified would be presented to the TWV, at its fifty-seventh session, for consideration on whether to be posted on the TG Drafters’ webpage of the UPOV website and/or to initiate a partial revision of the Test Guidelines for Asparagus and Lettuce.

*Test Guidelines for adoption*

114. According to the procedures established in document TGP/7, the TC adopted four revised Test Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability and thirteen partially revised Test Guidelines, as listed in the table below, on the basis of the amendments specified in Annex II to this document and the linguistic changes recommended by the TC-EDC and agreed that they should be published on the UPOV website at the earliest opportunity:

**	TWP	Document No. No. du document Dokument-Nr. No del documento	English	Français	Deutsch	Español	Botanical name
<b>REVISIONS OF TEST GUIDELINES / RÉVISIONS DE PRINCIPES DIRECTEURS D'EXAMEN ADOPTÉS / REVISIONEN ANGENOMMENER PRÜFUNGSRICHTLINIEN / REVISIONES DE DIRECTRICES DE EXAMEN ADOPTADAS</b>							
DE	TWA	TG/23/7(proj.4)	Potato	Pomme de terre/	Kartoffel	Papa, Patata	<i>Solanum tuberosum</i> L.
FR	TWA	TG/31/9(proj.3)	Cocksfoot	Dactyle	Knautgras	Dactilo	<i>Dactylis glomerata</i> L.
AR	TWA	TG/80/7(proj.9)	Soya Bean	Soja	Sojabohne	Soya, Soja	<i>Glycine max</i> (L.) Merr.

**	TWP	Document No. No. du document Dokument-Nr. No del documento	English	Français	Deutsch	Español	Botanical name
JP	TWO	TG/86/6(proj.4)	Anthurium	Anthurium	Flamingoblume	Anthurium	<i>Anthurium</i> Schott
<b>PARTIAL REVISIONS OF TEST GUIDELINES / RÉVISIONS PARTIELLES DE PRINCIPES DIRECTEURS D'EXAMEN ADOPTÉS / TEILREVISIONEN ANGENOMMENER PRÜFUNGSRICHTLINIEN / REVISIONES PARCIALES DE DIRECTRICES DE EXAMEN ADOPTADAS</b>							
GB	TWA	TG/3/12, TC/58/29	Wheat	Blé	Weizen	Trigo	<i>Triticum aestivum</i> L. emend. Fiori et Paol.
FR	TWV	TG/7/10 Rev. 2, TC/58/23	Pea	Pois	Erbse	Guisante, Arveja	<i>Pisum sativum</i> L.
QZ	TWO	TG/11/8 Rev., TC/58/27	Rose	Rosier	Rose	Rosal	<i>Rosa</i> L.
NL	TWV	TG/55/7 Rev. 6, TC/58/24	Spinach	Épinard	Spinat	Espinaca	<i>Spinacia oleracea</i> L.
DE	TWA	TG/58/7, TC/58/28	Rye	Seigle	Roggen	Centeno	<i>Secale cereale</i> L.
NL	TWV	TG/65/4 Rev., TC/58/21	Kohlrabi	Chou-rave	Kohlrabi	Col rábano	<i>Brassica oleracea</i> L. var. <i>gongyloides</i> L.
CZ	TWF	TG/125/7, TC/58/16	Walnut	Noyer	Walnuss	Nogal	<i>Juglans regia</i> L.
AU	TWF	TG/137/5, TC/58/30	Blueberry	Myrtille	Heidelbeere	Arándano americano	<i>Vaccinium angustifolium</i> Aiton, <i>V. corymbosum</i> L., <i>V. formosum</i> Andrews, <i>V. myrtilloides</i> Michx., <i>V. myrtillus</i> L., <i>V. virgatum</i> Aiton, <i>V. simulatum</i> Small
FR	TWV	TG/154/4, TC/58/22	Leaf Chicory	Chicorée à feuille (sauvage)	Blattzichorie	Achicoria de hoja	<i>Cichorium intybus</i> L. var. <i>foliosum</i> Hegi
NL	TWV	TG/162/4, TC/58/20	Garlic	Ail	Knoblauch	Ajo	<i>Allium sativum</i> L.
NL	TWV	TG/244/1 Rev., TC/58/26	Lincoln's- weed, Sand mustard, Sand rocket, Wall rocket, Wild rocket	Roquette sauvage	Wilde Rauke	Roqueta silvestre	<i>Diplotaxis tenuifolia</i> (L.) DC.
NL	TWV	TG/245/1 Rev., TC/58/19	Arugula, Cultivated Rocket, Garden Rocket, Rocket-salad, Rugula, Salad Rocket	Roquette cultivée	Ölrauke, Rauke, Ruke, Rukola, Senfrauke	Oruga común, Roqueta	<i>Eruca sativa</i> Mill.
NL	TWV	TG/294/1 Corr. Rev. 3, TC/58/25	Tomato Rootstocks	Porte-greffe de tomate	Tomaten- unterlagen	Portainjertos de tomate	<i>Solanum habrochaites</i> S. Knapp & D.M. Spooner; <i>S. lycopersicum</i> L. x <i>S. habrochaites</i> S. Knapp & D.M. Spooner; <i>S. lycopersicum</i> L. x <i>S. peruvianum</i> (L.) Mill.; <i>S. lycopersicum</i> L. x <i>S. cheesmaniae</i> (L. Ridley) Fosberg; <i>S. pimpinellifolium</i> L. x <i>S.habrochaites</i> S. Knapp & D.M. Spooner

115. UPOV has adopted 337 Test Guidelines, which are freely available on the UPOV website ([http://www.upov.int/test\\_guidelines/en/](http://www.upov.int/test_guidelines/en/)).

116. On the basis of the recommendations of the TC-EDC, as set out in Annex II of this document, the TC agreed there were editorial clarifications required from the leading experts for the following draft Test Guidelines:

**	TWP	Document No. No. du document Dokument-Nr. No del documento	English	Français	Deutsch	Español	Botanical name
<b>REVISIONS OF TEST GUIDELINES / RÉVISIONS DE PRINCIPES DIRECTEURS D'EXAMEN ADOPTÉS / REVISIONEN ANGENOMMENER PRÜFUNGSRICHTLINIEN / REVISIONES DE DIRECTRICES DE EXAMEN ADOPTADAS</b>							
DE	TWF	TG/14/10(proj.6)	Apple	Pommier (variétés fruitières)	Apfel (Fruchtsorten)	Manzano (variedades frutales)	<i>Malus domestica</i> (Suckow) Borkh.
DE	TWF	TG/22/11(proj.5)	Strawberry	Fraisier	Erdbeere	Fresa, Frutilla	<i>Fragaria</i> L.
HU	TWA	TG/81/7(proj.5)	Common Sunflower	Tournesol	Sonnenblume	Girasol	<i>Helianthus annuus</i> L.
DE	TWO	TG/94/7(proj.3)	Ling, Scots Heather	Callune	Besenheide	Brezo	<i>Calluna vulgaris</i> (L.) Hull
NL	TWO	TG/168/4(proj.4)	Statice	Limonium, Statice	Statice	Limonium	<i>Goniolimon</i> Boiss., <i>Limonium</i> Mill., <i>Psylliostachys</i> (Jaub. & Spach) Nevski

#### Corrections to Test Guidelines

117. The TC noted the following corrections to be made to the adopted Test Guidelines for Black Walnut, Chrysanthemum and Heuchera; Heucherella:

- (a) TG/332/1 Black Walnut

The correction concerns the following items:

- Characteristic 19: correction of example varieties presented in reverse order between states 1 and 3

- (b) TG/26/5 Corr. 2 Rev. Chrysanthemum

The correction concerns the following items:

- Characteristic 28: French and German translations to read: "Variétés buissonnantes seulement" and "Nur buschige Sorten"

- (c) TG/280/1 Heuchera; Heucherella / Document TGP/14 "Glossary of terms used in UPOV documents"

The correction concerns the following items:

- Section 8.2, Worked Example Two – Venus (variety with several leaf colors), 45: Leaf blade: color three: distribution: to read: "between veins in ~~intermediate central~~ zone (5)"
- The same explanation is reproduced in document TGP/14 "Glossary of terms used in UPOV documents" and would be corrected as a consequential change.

#### Draft Test Guidelines discussed by the TWPs in 2022

118. The TC noted the draft Test Guidelines discussed by the TWPs, at their sessions in 2022, as listed in document TC/58/2, Annex XII.

*Test Guidelines adopted by correspondence in 2022*

119. The TC noted that one new Test Guidelines and 3 revised Test Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability, as listed in the table below, had been adopted by correspondence on the basis of the amendments specified in Annex II to this document and the linguistic changes recommended by the TC-EDC:

**	TWP	Document No. No. du document Dokument-Nr. No del documento	English	Français	Deutsch	Español	Botanical name
<u>NEW TEST GUIDELINES / NOUVEAUX PRINCIPES DIRECTEURS D'EXAMEN / NEUE PRÜFUNGSRICHTLINIEN / NUEVAS DIRECTRICES DE EXAMEN</u>							
MX	TWO	TG/339/1	Zinnia	Zinnia	Zinnie	Zinnia	Zinnia ( <i>Zinnia xmarylandica</i> D. M. Spooner et al.; <i>Zinnia angustifolia</i> Kunth; <i>Zinnia elegans</i> Jacq.; <i>Zinnia haageana</i> Regel; <i>Zinnia peruviana</i> (L.) L.)
<u>REVISIONS OF TEST GUIDELINES / RÉVISIONS DE PRINCIPES DIRECTEURS D'EXAMEN ADOPTÉS / REVISIONEN ANGENOMMENER PRÜFUNGSRICHTLINIEN / REVISIONES DE DIRECTRICES DE EXAMEN ADOPTADAS</u>							
FR	TWV	TG/37/11(proj.9)	Turnip	Navet	Mairübe	Nabo	<i>Brassica rapa</i> L. var. <i>rapa</i> L.
FR	TWO	TG/68/4(proj.6)	Berberis	Berberis	Berberitze	Berberis	<i>Berberis</i> L.
KE	TWA	TG/238/2(proj.6)	Tea	Théier	Tee	Té	<i>Camellia sinensis</i> (L.) Kuntze

*Draft Test Guidelines to be discussed by the TWPs in 2023*

120. The TC agreed with the program for the development of new Test Guidelines and for the revision of adopted Test Guidelines, as set out in document TC/58/2, Annex XIV.

*Superseded Test Guidelines*

121. The TC noted that the superseded versions of Test Guidelines were available on the "Superseded Test Guidelines" page of the UPOV website ([https://www.upov.int/test\\_guidelines/en/list\\_supersede.jsp](https://www.upov.int/test_guidelines/en/list_supersede.jsp)).

Matters for information

122. The TC noted that, along with the decision by the Council to organize only one annual session of the of the UPOV bodies meeting in Geneva, a set of measures had been adopted to make the sessions as efficient as possible, including the separation of documents into two types: documents containing matters on which a decision by the body concerned is needed ('decision documents'); and documents for information only.

123. The TC noted that documents for information only were posted on a separate section of the website of the body concerned ('information section') and not considered individually.

124. The TC noted that the following documents were posted as documents for information on the TC/58 webpage:

- (a) List of genera and species for which authorities have practical experience in the examination of distinctness, uniformity and stability (document TC/57/INF/4)
- (b) PLUTO Plant Variety Database (document TC/58/INF/3)

- (c) UPOV PRISMA (document TC/58/INF/2)
- (d) Variety description databases (document TC/58/INF/5)
- (e) Molecular techniques (document TC/58/INF/6)
- (f) Denomination similarity search tool (document TC/58/INF/7)

#### Program for the fifty-ninth session

1. Opening of the session
2. Adoption of the agenda
3. Report on developments in UPOV
4. Progress reports on the work of the Technical Working Parties
5. Matters arising from the Technical Working Parties
6. Guidance and Information materials
7. Molecular techniques
8. Cooperation in examination
9. Increasing participation of members of the Union in work of the TC and restructuring the work of the TWPs
10. Information and databases
  - (a) UPOV information databases
  - (b) UPOV PRISMA
  - (c) Exchange and use of software and equipment
  - (d) Variety description databases
  - (e) Web-based TG template
11. Preparatory workshops
12. Variety denominations
13. Discussion on: molecular techniques in DUS examination
14. List of genera and species for which authorities have practical experience in the examination of distinctness, uniformity and stability
15. Test Guidelines
16. Program for the sixtieth session
17. Adoption of the report (if time permits)
18. Closing of the session

#### Chairperson and Vice-chairperson

125. The TC noted that the term of chairmanship of Mr. Nik Hulse (Australia) would end with the closing of the forthcoming ordinary session of the Council. It proposed to the Council that it elect Ms. Beate Rücker (Germany) as new Chairperson and Ms. Nuria Urquía Fernández (Spain) as new Vice-Chairperson of the TC for the forthcoming three-year term.

#### UPOV Medal

126. At the close of the session, Mr. Nik Hulse (Australia) was awarded a UPOV Silver Medal on completing his term as Chairman of the TC, from 2019 to 2022. In awarding the medal, Mr. Peter Button, Vice Secretary-General of UPOV, recalled that Mr. Hulse had been appointed chair just before start of COVID-19 pandemic and steered TC through the first ever virtual meeting. Under Mr. Hulse's leadership, the TC adopted 63 new or revised Test Guidelines; revised a range of TGP documents, including TGP/5 "Experience and Cooperation in DUS Testing"; TGP/7 "Development of Test Guidelines"; TGP/8 "Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability"; TGP/10 "Examining Uniformity"; TGP/14 "Glossary of Terms Used in UPOV Documents"; and TGP/15 "Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)". Under

Mr. Hulse's term the TC agreed the initiative to explore ways to improve the technical support provided by UPOV for DUS examination.

127. The Vice Secretary-General recalled that Mr. Hulse was highly respected and appreciated throughout the world. He attended his first UPOV meeting in 1997 and acted as leading expert for five Test Guidelines. He was chairperson of the TWO from 2012 to 2014; and the BMT from 2017 to 2019. He acted as speaker and trainer in several UPOV capacity building activities in different regions and was a graduate of the UPOV Train the Trainers program. He participated actively in the initial development of the web-based TG Template and UPOV similarity search tool. He had also made a valuable contribution to explain the procedures for involving breeders in the examination of DUS.

*128. The TC adopted this report at the close of its session on October 25, 2022.*

[Annex I follows]

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[Annex II follows]

## AMENDMENTS TO THE DRAFT TEST GUIDELINES

Test Guidelines adopted at the fifty-eighth session of the Technical Committee

*Partial revisions*

**TC/58/16 Partial Revision of the Test Guidelines for Walnut**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/16 and agreed that the partial revision of the Test Guidelines for Walnut be submitted to the TC for adoption.

**TC/58/19 Partial Revision of the Test Guidelines for Garden Rocket**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/19 and agreed that the partial revision of the Test Guidelines for Garden be submitted to the TC for adoption.

**TC/58/20 Partial Revision of the Test Guidelines for Garlic**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/20 and made the recommendations presented in the table below.

The TC-EDC agreed that the partial revision of the Test Guidelines for Garlic be submitted to the TC for adoption.

Chapter II, par. 3	to read "Seed-propagated varieties: 15,000 seeds in the case of Vegetatively propagated varieties: 60 bulbs"
Chapter III, par. 3	last sentence to read "Separate plots for visual observation and for measuring can only be used ..."
Methods and observation, par. 1	to split in two sentences.
Chapter IV, par. 4	- to add "of" after "uniformity" - last sentence to read "In the case of a sample size of 100 plants, three off-types are allowed."

**TC/58/21 Partial Revision of the Test Guidelines for Kohlrabi**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/21 and agreed that the partial revision of the Test Guidelines for Kohlrabi be submitted to the TC for adoption.

**TC/58/22 Partial Revision of the Test Guidelines for Leaf Chicory**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/22 and made the recommendations presented in the table below.

The TC-EDC agreed that the partial revision of the Test Guidelines for Leaf Chicory be submitted to the TC for adoption.

Char. 10	to check whether to read " <u>Only varieties with: Leaf: anthocyanin distribution: diffused only: Leaf: area of anthocyanin coloration</u> "
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**TC/58/23 Partial Revision of the Test Guidelines for Pea**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/23 and made the recommendations presented in the table below.

The TC-EDC agreed that the partial revision of the Test Guidelines for Pea be submitted to the TC for adoption.

Ad. 58, 10.3 & 10.4	to replace "2 weeks old seedlings" by "2 week old seedlings"
Ad. 58, 10.4	- to read "Inoculation Methods" - last sentence to read "Cut the apical 2/3 of the roots, dip the remaining roots of the seedling..."
Ad. 59, 10.2	to correct superscripts: $1 \times 10^5$ to $1 \times 10^6$ spores/mL
Ad. 60, 10.3	to replace "2 weeks old seedlings" by "2 week old seedlings"

**TC/58/24 Partial Revision of the Test Guidelines for Spinach**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/24 and agreed that the partial revision of the Test Guidelines for Spinach be submitted to the TC for adoption.

**TC/58/25 Partial Revision of the Test Guidelines for Tomato Rootstocks**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/25 and agreed that the partial revision of the Test Guidelines for Tomato Rootstocks be submitted to the TC for adoption.

**TC/58/26 Partial Revision of the Test Guidelines for Wild Rocket**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/26 and agreed that the partial revision of the Test Guidelines for Wild Rocket be submitted to the TC for adoption.

**TC/58/27 Partial Revision of the Test Guidelines for Rose**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/27 and agreed that the partial revision of the Test Guidelines for Rose be submitted to the TC for adoption.

**TC/58/28 Partial Revision of the Test Guidelines for Rye**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/28 and agreed that the partial revision of the Test Guidelines for Rye be submitted to the TC for adoption.

**TC/58/29 Partial Revision of the Test Guidelines for Wheat**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/29 and agreed that the partial revision of the Test Guidelines for Wheat be submitted to the TC for adoption.

**TC/58/30 Partial Revision of the Test Guidelines for Blueberry**

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TC/58/30 and agreed that the partial revision of the Test Guidelines for Blueberry be submitted to the TC for adoption.

Revisions

Apple ( <i>Malus domestica</i> (Suckow) Borkh.)	TG/14/10(proj.6)	Mr. Erik Schulte (DE)	TWF	*
	No. of chars.: 51 No. of (*) chars.: 34	(Interested experts: AU, BR, CA, CL, CN, CZ, FR, HU, JP, KR, MX, NL, NZ, PL, QZ, RU, ZA, CIOFORA)		

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TG/14/10(proj.6) and made the recommendations presented in the following table.

The TC-EDC agreed there were editorial clarifications required from the leading expert on the draft Test Guidelines for Apple (indicated below by "#") and agreed to reconsider the draft Test Guidelines at its meeting to be held in March 2023.

General	to add space before the %
#4.1.4	to check whether to add number of parts of plants per plant (ASW 7b)
#Table of char.	- to ensure that explanations are compatible with the BBCH scale (see individual comments on characteristics and explanations) - to indicate growth stages from ... to (e.g. 75 - 77, not 75/77)
Char. 1	to remove (a) (conflicts with Ad. 1)
#Char. 2	to add illustration (see TGP/14, page 50)
#Chars. 6 to 16	to check growth stages (75/77 seems rather late, while in stage 19 the first leaves are already fully expanded)
Char. 10	- to replace "conical" with "conic" - to replace "obconical" with "obconic"
Char. 13	to add hyphen to "cross-section"
Char. 19	- to check growth stage (67-69 not in line with (d)) - to read "Flower: anthocyanin coloration at base of filament"
Char. 20	to be moved after characteristic 17
Char. 21	to delete "(stage 65)" and stage 73
Char. 22	to invert order of states 6 and 7
#Char. 35	to add explanation of "russet" (dull brown rough finish on the skin of some apples) or illustrations
#Char. 36	to add explanation or illustration of "cheeks"
#Chars. 35 to 43	to check whether to use drawing of Ad. 40 to explain the parts of the apple mentioned in these characteristics and add to 8.1 (g)
Chars. 45, 46, 47	to add definitions for main and secondary colors (see standard definition TGP/14)
Char. 47	to delete "Only varieties with..."
#Chars. 47, 48	to add (g)
8.1 (a)	to read "Observations should be made on bare trees in winter, after at least one satisfactory crop of fruit."
8.1 (a) and (b)	Chars. 1 to 5 are observed at the end of the growing season, which corresponds to the definition of a growing cycle (see 3.1.4). The season starts with growth stage 01 and ends with growth stage 00. Consequently, (a) can be deleted and (b) should read „Observations should be made on lateral shoots." As (b) applies only to char. 4 and 5, it could be moved to 8.2.
8.1 (c)	to check whether to add time of observation (growth stage 75/77?)
8.1 (e)	to be deleted (applies only to 21. and covered by growth stage 73-74)
8.1 (g)	to read "Observations should be made on fruits when they are ripe for eating."
Ad. 1	Clarification on the time of observation is necessary. The first sentence refers to observation at stage 00, e.g. <u>at the end</u> of the growing cycle. The second sentence describes observation in the second growing cycle only ( <u>after</u> at least one satisfactory crop of fruits), e.g. an additional establishing year for this characteristic?!
Ad. 1	to read "... considering shoot length and thickness, and trunk diameter"

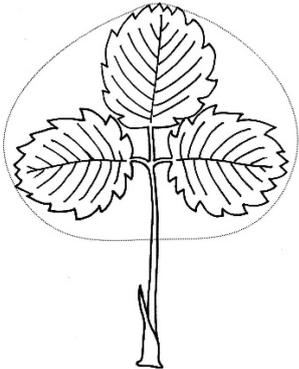
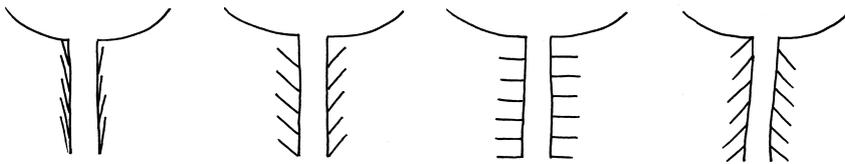
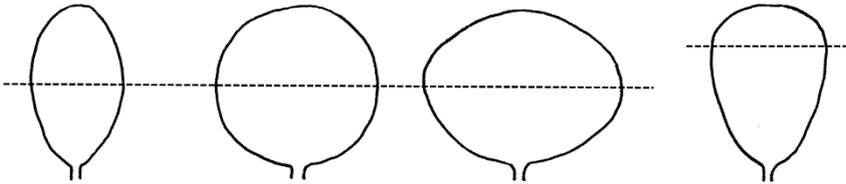
Ad. 1	1 to read “one”
Ad. 1	The tree vigor (Char. 1) has a growth stage of 00. However, the explanation suggests to assess vigor when dormant or at peak of vegetative growth in summer. Should the growth stage be removed in Char 1 or another added?. If the assessment is typically made when dormant, I would change the order to explain this first in Ad. 1.
Ad. 4	to read “Observations should be in the middle third of the shoot.”
Ad. 5	to read “Observations should be made in the middle third of the shoot, by counting in a defined area or by visual assessment of the density of lenticels on the bark.
Ad. 17	to add “a” before “horizontal”
Ad. 19	to enlarge arrow head
Ad. 25	to be deleted
Ad. 30	to add “the” before “bloom”
Ad. 31	to be deleted
#Ad. 33	to check whether to provide better photos for state 4 or whether to replace photos with drawings
Ad. 38	to read “[e.g. a <del>window</del> an area of 1 cm <sup>2</sup> ]”
Ad. 40	to read “...; in case of depth of eye basin: a-c instead of b-d.”
Ad. 44	- to check whether to be deleted (not necessary, see 8.1 (g)) - if kept, add “the” before “time”; in the next sentence replace “it” with “this”
Ad. 50	to read “The time for harvest is reached when fruits are ripe for picking and...”
Ad. 51	to read “The time of eating maturity is reached when the fruit is ripe for eating and has reached its optimum flavor and aroma...”
8.3	- to add literature reference in heading and to move source to 9. - to check whether table with synonyms at the bottom of 8.3 to become 8.4 named “Other Names of the Example Varieties”
TQ 5	to delete the extra space before “please mark”
TQ 7.3	to read “In the case of mutant varieties...”

Strawberry ( <i>Fragaria L.</i> )	TG/22/11(proj.5)	Mr. Erik Schulte (DE)	TWF	*
	No. of chars.: 44 No. of (*) chars.: 23	(Interested experts: AU, CA, CL, ES, JP, KE, KR, MA, NZ, PL, PT, QZ, CIOPORA, ISF)		

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TG/22/11(proj.5) and made the recommendations presented in the following table.

The TC-EDC agreed there were editorial clarifications required from the leading expert on the draft Test Guidelines for Strawberry (indicated below by “#”) and agreed to reconsider the draft Test Guidelines at its meeting to be held in March 2023.

Table of Chars.	to correct names of example varieties as follows: Aramella    Aromella Rinia        Rina CF 4402    CIR 104
Char. 2	to reduce scale to 5 notes (see illustration for state 3 in Ad. 2 looks very sparse)
Char. 5	state 2 to read “very few to few”
Char. 11	state 3 to read “slightly longer than broad”
Char. 14	to read “...incisions of margin”
Char. 15	to read “Leaf: profile in cross-section”
Char. 18	to be indicated as (a) (delete (b))
Chars. 19 to 25	to be indicated as (b) (delete (c))
Char. 26	to read “Fruit: length in relation to width”
Char. 28	state 2 to read “conic” (see TGP/14)
Char. 29	- to read “Fruit: position of maximum width” - to add (d)

Char. 30	to reverse order so that acute is the first state (see TGP/14)
Char. 35	to add (d)
8.1 (a)	to read "Observations should be made shortly before ..."
8.1 (b)	to read "Observations should be made at full flower. Observations on the flower ..."
8.1 (c)	to read "Observations should be made after the end of bearing of the non-remontant varieties."
#8.1 (d)	to check whether to read "Observations should be made at picking ripeness, excluding the terminal fruits of the infructescences." ("one-year-old plants" are inconsistent with 3.1.2; to clarify how to observe fruits in the second year from a single planting)
Ad. 7	to replace current illustration with the following on: 
Ad.14	to replace current illustration with improved one below: 
Ad. 16	to move illustration in same direction as in Ad. 7
Ad. 17	to replace current illustrations with improved ones below: 
Ad. 23	to replace current illustrations with improved ones below: 
Ad. 35	to read "Observations should be made on the side of the fruit which is exposed to the sun."
Ad. 36	to read "Observations should be made on the central part of the fruit by counting in a defined area [e.g. a 1 cm square] or by visual assessment."
TQ 4.2.2	to read "Seeds" (see GN 31, example 2)
Ad. 42	to read "... plants have at least one open flower"
Ad. 43	to read "... plants have at least one fully colored fruit."

Potato ( <i>Solanum tuberosum</i> L.)	TG/23/7(proj.4)	Ms. Beate Rücker (DE)	TWA	*
	No. of chars.: 37 No. of (*) chars.: 16	(Interested experts: AU, AT, BR, CA, CN, CZ, DK, ES, FR, GB, IR, IT, JP, KE, KR, NL, NZ, PL, QZ, SK, TZ, AFSTA, CLI, Euroseeds, ISF)		

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TG/23/7(proj.4) and made the recommendations presented in the table below.

The TC-EDC agreed that the draft Test Guidelines for Potato be submitted to the TC for adoption.

3.4.1	to replace 2 by “two”
Chars. 5 and 9	to replace “pubescence” by “hairiness”
Chars. 6, 7, 8, 9, 10	to replace “tip” with “apex”
Char. 14	to read “Stem: anthocyanin coloration”
Char. 15	to read “Leaf: size”
Char. 16	- to read “Leaf: arrangement of leaflets” - to have states (1) overlapping, (2) overlapping to touching, (3) touching, 4 touching to free, (5) free
Char. 17	- to read “Leaf: number of secondary leaflets” - to have states (1) absent or very few to (9) very many
Char. 18	to read “Leaf: intensity of green color”
Char. 19	to read “Leaf: anthocyanin coloration of midrib”
Char. 21	to have states (1) absent or very few to (9) very many
Char. 22	to read “Flower bud: anthocyanin coloration”
Char. 23	- to read “Plant: number of inflorescences” - to have states (1) absent or very few to (9) very many
Char. 25	to read “Peduncle: anthocyanin coloration”
Char. 26	to read “Corolla: diameter”
Char. 32	to read “Tuber: form”
Chars. 34, 37	states 7 and 9 to read “mottled red” and “mottled blue violet”
8.1 (a)	to replace “tip” with “apex”
8.1 (c)	to replace “midway” by “halfway”
8.1 (d)	to read “Corolla” instead of “Flower corolla” (same as in table of characteristics)
Ad. 4	to delete hyphens from “red-violet” and “blue-violet”
Ad. 5	to replace “pubescence” by “hairiness”
Ad. 6	- to replace “tip” with “apex” - to delete second sentence and the table
Ad. 9	- to replace “pubescence” by “hairiness” - to replace “tip” with “apex”
Ad. 21	to read “Observations should be made on fully developed leaves throughout the whole plant.”
Ad. 22	to read “Observations should be made”
Ad. 37	second sentence to read “A few minutes after cutting the tuber, ...”

Cocksfoot ( <i>Dactylis glomerata</i> L.)	TG/31/9(proj.3)	Ms. Anne-Lise Corbel (FR)	TWA	*
	No. of chars.: 16 No. of (*) chars.: 6	(Interested experts: AR, DE, GB, IT, JP, NZ, PL, QZ, SK, Euroseeds)		

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TG/31/9(proj.3) and made the recommendations presented in the table below.

The TC-EDC agreed that the draft Test Guidelines for Cocksfoot be submitted to the TC for adoption.

3.3.3	C to read "special test" (singular)
3.4.1	to replace 2 by "two"
3.4.2	to replace 2 by "two"
6.5	to add to legend: A: spaced plants B: row plots C: special test
Char. 6	to read "Leaf: green color <u>without vernalization</u> "
Char. 7	to add hyphen to read "semi-erect" and "semi-prostrate"
Char. 8	to read "Leaf: green color <u>after vernalization</u> "
8.1 (a)	to check whether quality of illustrations can be improved (see e.g. TG Timothy)
Ad. 12	second sentence to read "Length and width should be measured on the same leaf."
Ad. 14	to delete "in the field"

Soya Bean ( <i>Glycine max</i> (L.) Merr.)	TG/80/7(proj.9)	Mr. Mariano Alejandro Mangieri (AR)	TWA	*
	No. of chars.: 21 No. of (*) chars.: 9	(Interested experts: AR, AT, AU, BR, CA, CN, CO, ES, FR, HU, IT, JP, KR, NL, PL, PY, QZ, SK, TZ, US, UY, VN, ZA, AFSTA, CLI, Euroseeds, ISF, SAA)		

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TG/80/7(proj.9) and made the recommendations presented in the table below.

The TC-EDC agreed that the draft Test Guidelines for Soya Bean be submitted to the TC for adoption.

3.4.1	2 should read two, as in 3.4.2
Char. 4	- state 3 to read "ovate with acute apex" - state 4 to read "ovate with rounded apex"
Char. 7, Ad 7. and TQ 5.2 (7)	I believe semi determinate should have a hyphen "semi-determinate"?
Char. 4	to invert example varieties for notes 3 and 4
Char. 8	semi erect should read semi-erect
Char. 14	to read "Pod: grey coloration of seed convexities"
Char. 16	to read "spheric" instead of "spherical" (see TGP/14)
Char. 16	to add illustrations  <p>spheric</p> <p>spheric flattened</p> <p>elongated</p> <p>elongated flattened</p>
Char. 19	to be indicated as VG
Ad. 1	"... intense sunlight after emergence...."
Ad. 13	- first sentence to read "Observation should be made on pods from the middle third of the plants, including pubescence and excluding grey coloration of the seed convexities." - second sentence to read "Observations..."
Ad. 14	to read "Observations should be made on the seed convexities of the pod (shown with arrows) check seed convexities in plural throughout
Ad. 17	- to read "Observations..." - to add "See Ad. 21"
Ad. 19	- second to last paragraph to read "...on a white background for observation." - last sentence to read "Other methods might be used..."
Ad. 20	to add "See Ad. 21"
Ad. 20	to read: "Imperfect black: black center, surrounded by a brown halo"
Ad. 21	- to read "Courtesy of the Canadian Food Inspection Agency" - to improve format of arrows (same thickness of arrows)
9. Literature	to check and complete literature references

Sunflower ( <i>Helianthus annuus</i> L.)	TG/81/7(proj.5)	Mr. Zoltán Csűrös (HU)	TWA	*
	No. of chars.: 21 No. of (*) chars.: 9	(Interested experts: AU, AR, BG, BR, CA, CN, DE, ES, FR, IT, JP, KE, QZ, RO, SK, TZ, UY, ZA, AFSTA, ISF, Euroseeds, CLI)		

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TG/81/7(proj.5) and made the recommendations presented in the following table.

The TC-EDC agreed there were editorial clarifications required from the leading expert on the draft Test Guidelines for Sunflower (indicated below by “# ”) and agreed to reconsider the draft Test Guidelines at its meeting to be held in March 2023.

General	- to replace “grains” by “seeds” throughout the TG - to correct spelling of “disc floret” (instead of “disk” throughout the TG)
2.3	to read “... 1 kg of seed for hybrid and open-pollinated varieties...”
3.1.2	to be deleted as it is an annual crop
Char. 5	to read “Leaf: profile in cross-section”
#Char. 6	to be reviewed (states of expression do not relate to the title of the char.)
Char. 7	to read “Leaf: lobes”
Char. 8	- to read “Leaf: parenchyma at base of lateral veins” - to have states (1) none or very weak, (2) weak, (3) strong
Char. 12	- state 1 to read “erect” - state 2 to read “semi-erect”
Char. 13	- to read “Ray floret: profile” - to have states (1) flat, (2) rolled, (3) twisted, (4) strongly recurved
Char. 16	to delete “moderately” from states 2 and 3
#Char. 20	to check whether to have same explanation as characteristic 21
Char. 26	to replace “embracing” with “adpressed” in all states
Char. 30	to read “... position of branching”
#Char. 34	- to read “Head: diameter” - to add in the explanation that for branching varieties the central head should be observed
Char. 42	to check whether to have order of colors according to document TGP/14 (brown before grey)
Char. 40	- to read “Seed: stripes on margins” - to have states (1) none or very weak, (2) weak, (3) strong
Char. 41	to have states (1) none or very weak, (2) weak, (3) strong
#Ad. 6	- to add drawings illustrating the shapes - to read “Observations should be made on the upper two-thirds of the leaf.”
Ad. 17	to check whether to read “The ray floret color is the color with the largest surface area. In cases where the areas of the color are too similar to reliably decide which color has the largest area, the darker color is to be observed.”
Ad. 18	to read “...inner third of the disc.”
Ad. 23	to read “To be observed excluding the differentiated tip.”
Ad. 24	to delete arrow
Ad. 30	state 3 to read “throughout”
9.	to adjust format of literature references (see TGP/7, GN 30)
TQ 5.6, 5.7	to delete “the variety is not ...”
TQ 7.3 (2)	to replace “precise” with “specify” in (a) and (b)
ANNEX, Part III, Procedure, 5.4	- to remove additional space between “de-ionised water” - to remove additional space before “fixed in 40% ethanol solution”

Anthurium ( <i>Anthurium</i> Schott)	TG/86/6(proj.4)	Mr. Koji Nakanishi (JP)	TWO	*
	No. of chars.: 43 No. of (*) chars.: 24	(Interested experts: AU, CN, MX, NL, QZ, CIOPORA)		

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TG/86/6(proj.4) and made the recommendations presented in the table below.

The TC-EDC agreed that the draft Test Guidelines for Anthurium be submitted to the TC for adoption.

Char. 9	to delete the underlining
Char. 10	to delete “of upper side”
Char. 32	to add hyphen to “ cross-section”
Char. 37	to read “Only varieties with Spadix: rolling: absent”
Char. 40	to delete wording in brackets
8.1 (a)	to read “... on the largest fully developed leaf.”
Ad. 5	to read “Observations should be made relative to the full size of the leaf blade.”
Ad 8	to delete the upright lines and replace solid horizontal line with dotted line
Ad. 13	to read “Observations...”
Ad. 21	to read “Observations should be made relative to the full size of the spathe.”
Ad. 24	to delete the upright lines and replace solid horizontal line with dotted line
Ad. 35	to read “Observations...”
Ad. 42	to read “...when one to two thirds of anthers in the basal part of the spadix have dehisced.”
TQ 1.	to add 1.3 for indication of species
TQ 5.7(ii)	to add note 1 “none”

Ling, Scots Heather ( <i>Calluna vulgaris</i> (L.) Hull)	TG/94/7(proj.3)	Ms. Daniela Christ (DE)	TWO	*
	No. of chars.: 24 No. of (*) chars.: 21	(Interested experts: FR, GB, QZ, CIOPORA)		

The TC-EDC, at its meeting on October 18, 19 and 24, 2022, considered document TG/94/7(proj.3) and made the recommendations presented in the following table.

The TC-EDC agreed there were editorial clarifications required from the leading expert on the draft Test Guidelines for Ling, Scots Heather (indicated below by “#”) and agreed to reconsider the draft Test Guidelines at its meeting to be held in March 2023.

Cover page	to add “Bruyère commune” and “Bruyère callune” as French alternative names
2.2	to delete “well-rooted”
#Table of chars.	to check whether to reduce “Only varieties with...” exclusions from the char. title and find a better approach (possible explanations in Chapter 8.1)
Char. 4	to add MS
Char. 5	to read “Shoot: color”
Char. 6	to read “... Shoot apex: leaf color”
Char. 7	to read “... Shoot apex: leaf color on sunny side in winter”
Chars. 7, 11	to replace “black purple” with “blackish purple”
Chars. 8 to 11	to replace “main color” by “color”
Char. 10	to replace “black green” with “blackish green”
Char. 12	state 3 to read “on lateral shoots”

Char. 12	to be split in two QL char.: - “Inflorescence: branching” with states (1) absent, (9) present - “Only varieties with Inflorescence: branching: absent: Inflorescence: arrangement of flowers” with states (1) solitary and (2) whorl - both to be indicated as VG, (*), (a), combined (+) (See Ad. ...)
8.1 (a)	to read “... middle third of the shoots”
8.1 (b)	to read “... on the shaded part of the plant.”
8.1 (c)	to read “...after a few days with minimum temperatures below zero degrees Celsius.”
8.1 (e)	to read “Observations should be made when 10 % of the plants have at least 10 senescent flowers.”

Test Guidelines adopted by correspondence

**TC-EDC/Mar22/3 Matters to be resolved concerning Test Guidelines put forward for adoption by the Technical Committee: Zinnia**

The TC-EDC, at its meeting, organized by electronic means, on March 22, 2022, considered documents TG/ZINNIA(PROJ.10) and TC-EDC/Mar22/3 and made the recommendations presented in the table below.

The TC-EDC agreed that, subject to agreement by the Leading Expert on the recommendations provided, the draft Test Guidelines for Zinnia be circulated to the TC for adoption by correspondence.

Cover page	to spell “Peruvian zinnia” and “Wild zinnia” with a capital “Z” <i>Leading Expert: agreed</i>
#2.3	to check whether to read: “The minimum quantity of plant material, to be supplied by the applicant, should be: “ <del>F1 hybrids</del> <u>Self-pollinated varieties</u> : a sufficient quantity of seed to produce a minimum of 15 plants. “Cross-pollinated varieties: a sufficient quantity of seed to produce a minimum of 40 plants.” <i>Leading Expert: Zinnia plants are self-incompatible. Androsterility is a natural trait that allows producing homozygous plants similar to Sunflower and Marigold. Therefore, 2.3 to read:</i> “The minimum quantity of plant material, to be supplied by the applicant, should be: “F1 hybrids: a sufficient quantity of seed to produce a minimum of 15 plants. “ <del>Cross-pollinated</del> <u>open-pollinated</u> varieties: a sufficient quantity of seed to produce a minimum of 40 plants.” <i>TC-EDC: to refer to “hybrid varieties” and “cross-pollinated varieties” (throughout the document)</i>
#3.4.1	to check whether to read “In the case of <del>F1 hybrids</del> <u>self-pollinated varieties</u> , each test ...” <i>Leading Expert: keep 3.4.1 as it is (see 2.3)</i> 3.4.2 to read In the case of <del>cross-pollinated</del> <u>open-pollinated</u> varieties, each test should be designed to result in a total of at least 40 plants. <i>TC-EDC: to refer to “hybrid varieties” and “cross-pollinated varieties”</i>

<p>#4.1.4</p>	<p>"In the case of <del>F1 hybrids</del> <u>cross-pollinated varieties</u>, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 20 plants or parts taken from each of 20 plants and any other observation made on all plants in the test, disregarding any off-type plants. In the case of <del>cross self</del> <u>self-pollinated varieties</u>, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 10 plants or parts taken from each of 10 plants and any other observation made on all plants in the test, disregarding any off-type plants." <i>Leading Expert: to read as follows, including correction of number of plants/parts of plants</i> "In the case of F1 hybrids, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 10 plants or parts taken from each of 10 plants and any other observation made on all plants in the test, disregarding any off-type plants." <i>In the case of <del>cross open</del> <u>open-pollinated varieties</u>, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 20 plants or parts taken from each of 20 plants and any other observation made on all plants in the test, disregarding any off-type plants."</i> <i>TC-EDC: to refer to "hybrid varieties" and "cross-pollinated varieties"</i></p>
<p>#4.2.4</p>	<p>to check whether to read "For the assessment of uniformity of <del>F1 hybrids</del> <u>self-pollinated varieties</u>, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 15 plants, 1 off-type is allowed." <i>Leading Expert: keep 4.2.4 as it is (see 2.3), 4.2.3 to read:</i> "The assessment of uniformity for <del>cross open</del> <u>open-pollinated varieties</u> should be according to the recommendations for cross-pollinated varieties in the General Introduction." <i>TC-EDC: to refer to "hybrid varieties" and "cross-pollinated varieties"</i></p>
<p>#Char. 2</p>	<p>to check whether "Profusion Red" is correctly indicated in note 4, or whether it should be note 3 <i>Leading Expert: to move "Profusion Red" to state 3</i> <i>TC-EDC: agreed</i></p>
<p>#Chars. 12, 13</p>	<p>to check whether to add explanation "Observations should be made on the upper side of a typical leaf." <i>Leading Expert: agreed</i> <i>TC-EDC: agreed</i></p>
<p>Char. 26</p>	<p>to read "Ray floret: degree of curvature" <i>Leading Expert: agreed</i></p>
<p>Chars. 28 to 34</p>	<p>to delete "of inner side" (see 8.1 (b)) <i>Leading Expert: agreed</i></p>
<p>8.1 (a)</p>	<p>to read "Observations should be made on <del>the upper side of a typical leaf</del> <u>leaves</u> from the middle third of the stem." <i>Leading Expert: agreed</i></p>
<p>#Ad. 4</p>	<p>to check whether to improve contrast of illustrations (provide illustration with white background for better contrast) <i>Leading Expert: provided improved illustrations</i></p>  <p style="text-align: center;"> <span style="margin-right: 100px;">1</span> <span style="margin-right: 100px;">2</span> <span style="margin-right: 100px;">3</span> <span style="margin-right: 100px;">4</span> <span>5</span> </p> <p style="text-align: center;"> <span style="margin-right: 100px;">absent or very sparse</span> <span style="margin-right: 100px;">sparse</span> <span style="margin-right: 100px;">medium</span> <span style="margin-right: 100px;">dense</span> <span>very dense</span> </p> <p><i>TC-EDC: agreed</i></p>

#9.	to review formatting and complete references (see document TGP/7, GN 30) Leading Expert: literature provided as follows: Calderón, G., Rzedowski, J., 2005: Flora Fanerogámica del Valle de México. Instituto de Ecología, A.C. y Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, Pátzcuaro/Michoacán, MX, 909 pp. Smith, A.R., 2006: Flora of North America Editorial Committee. Flora of North America. North of Mexico. Vol. 21. Oxford University Press. Oxford, GB, 71 pp. Torres, A.M., 1963: Taxonomy of zinnia. Brittonia 15: 1-25., Springer/New York Botanical Garden, Bronx/New York, US, pp. 1-25 <i>TC-EDC: agreed</i>
#TQ 4.2	to check whether to be adjusted according to proposed changes in sections 3.4.1, 4.1.4 and 4.2.4 <i>Leading Expert: to delete "(a) Self-pollination", (b) to read "Open-pollination"</i> <i>TC-EDC: TQ 4.2.1 to indicate "Hybrid", "Cross-pollinated" and "Other" and delete "Self-pollination"</i>

**TC-EDC/Mar22/4 Matters to be resolved concerning Test Guidelines put forward for adoption by the Technical Committee: Turnip**

The TC-EDC, at its meeting, organized by electronic means, on March 22, 2022, considered documents TG/37/11(PROJ.8) and TC-EDC/Mar22/4 and made the recommendations presented in the table below.

The TC-EDC agreed that, subject to agreement by the Leading Expert on the recommendations provided, the draft Test Guidelines for Turnip be circulated to the TC for adoption by correspondence.

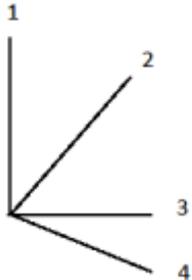
Char. 3	- state 4 to read "semi-erect to horizontal" - state 5 to read "horizontal" <i>Leading Expert: agreed</i>
Char. 6	- to delete (b) - to add (+) (see comment on 8.1 (b)) <i>Leading Expert: agreed</i>
Char. 7	to delete (b) <i>Leading Expert: agreed</i>
Char. 9	- to read "Leaf: depth of the incisions of margin of upper part of the leaf" with states "absent or very shallow" to "very deep" - to be moved after Char. 7 <i>Leading Expert: agreed</i>
#Char. 22	- state 2 to read "broad oblate" - state 5 to read "broad oblong" - state 7 to read "narrow obovate" - to renumber states (see comment on grid in Ad. 22) <i>Leading Expert: agreed</i> <i>TC-EDC: agreed</i>
8.1 (b)	- to move the first part referring to the number of lobes to Ad. 6 - to read "Parts of the leaf blade are considered to be <u>lobes</u> <del>lobed</del> if: ..." - to delete reference to char. 6 from the illustration and legend currently at the bottom of (b) <i>Leading Expert: agreed</i>
#Ad. 1	-to check whether 20 plants are required (Genetic non-uniformity is unlikely and mixtures will be detected by other characteristics.) <i>Leading Expert: explanation to read "Observations should be made on at least 5 plants."</i> <i>To check whether Char. 1 to be indicated as "C" for special test and add C to legend</i> <i>TC-EDC: agreed with number of plants to observe ploidy to be indicated as 5, but no need to indicate Char. 1 as special test</i>
Ad. 4	sentence to read "The <del>black line</del> <u>represents the profile of the whole leaf should be observed.</u> " <i>Leading Expert: agreed</i>

Ad. 15	<p>to read:          “The ratio weight of leaves / weight of root should be observed.          absent or weak &gt;10          medium 2 to10          strong &lt;2”  <i>Leading Expert: agreed</i></p>
#Ad. 22	<p>- to confirm where is the point of attachment on illustration for state 1. Check whether to improve illustration (point of attachment is clearly seen on other illustrations and are positioned on top of respective illustrations)  <i>Leading Expert: provided new illustration for state 1 “ovate” (see grid below)</i>          - to check whether to use the modified grid below (numbering of states of expression adjusted according to document TGP/14; size of illustration for state 8 adjusted; narrow/broad added to relevant states; names of states “broad obovate” and “narrow obovate” inverted according to illustrations)  <i>Leading Expert: agreed</i>  <i>TC-EDC: to move “narrow obovate” and “triangular” one row up</i></p>

←		broadest part	→
below middle	at middle		above middle

relative width	↑	narrow					
			6 narrow oblong				
							
			5 broad oblong	8 narrow obovate			
							
	↓	broad					
			1 ovate	4 circular	7 broad obovate	9 triangular	
							
				3 broad oblate			
							
				2 narrow oblate			



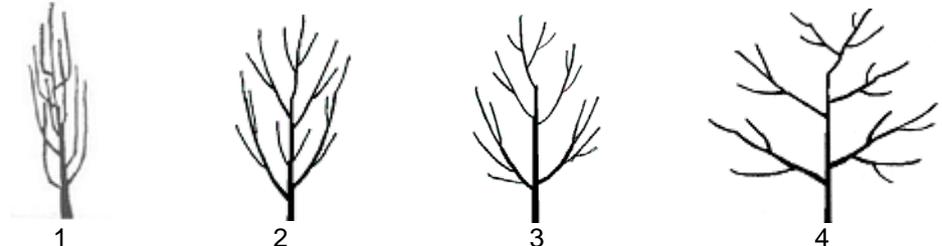
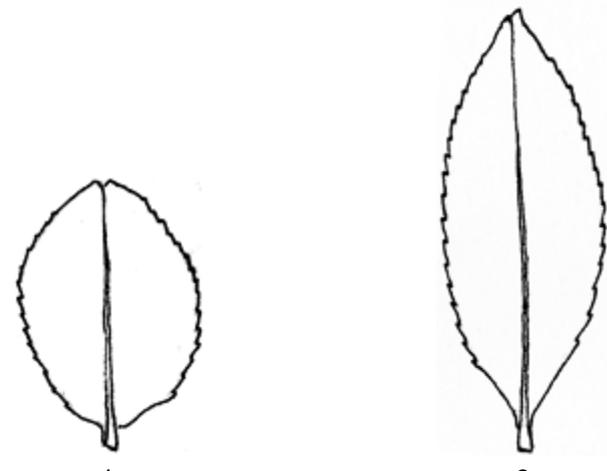
#Ad. 5	<p>to be improved (current pictures show trees, which is not appropriate for Berberis and to present more clearly the difference from Char. 2)  <i>Leading Expert: Char. 2 refers to the general aspect of the plant. For Char. 5, we look at the branches and how they grow. Proposed new illustration:</i></p>  <p style="margin-left: 400px;"> <b>1 – erect</b>  <b>2 – semi-erect</b>  <b>3 – horizontal</b>  <b>4 - drooping</b> </p> <p><i>TC-EDC: to keep illustration as presented in TG/68/4(proj.5)</i></p>
Ad. 29	<p>to adjust legend of the grid according to TGP/14 (“relative width”, “narrow”, “broad”)  <i>Leading Expert: agreed</i></p>
#9.	<p>- to correct typo in date of second reference: “Caduc Alain, 2017: ...”          - to add city and country to both references  <i>Leading Expert: Société Nationale d’Horticulture de France (SNHF), Paris-France</i>  <i>TC-EDC: agreed</i></p>
TQ 6.	<p>characteristic name to read “Fruit: shape in lateral view”  <i>Leading Expert: agreed</i></p>

**TC-EDC/Mar22/6 Matters to be resolved concerning Test Guidelines put forward for adoption by the Technical Committee: Tea**

The TC-EDC, at its meeting, organized by electronic means, on March 22, 2022, considered documents TG/238/2(PROJ.5) and TC-EDC/Mar22/6 and made the recommendations presented in the table below.

The TC-EDC agreed that, subject to agreement by the Leading Expert on the recommendations provided, the draft Test Guidelines for Tea be circulated to the TC for adoption by correspondence.

Table of Chars.	<p>to reinstate char. 12 (correction)  <i>Leading Expert: agreed</i></p>
Char. 11	<p>state 2 to read “upwards to horizontal”  <i>Leading Expert: agreed</i></p>
#Char. 14	<p>to check whether to add MS  <i>Leading Expert: agreed</i>  <i>TC-EDC: agreed</i></p>
Char. 17	<p>to check whether to add (b)  <i>Leading Expert: agreed</i></p>

<p>#Ad. 2</p>	<p>to check whether illustration for state 1 is appropriate (current illustration presents “fastigiata” instead of “upright” growth habit)  <i>Leading Expert: to have the following states and notes in Char. 2 and Ad. 2:</i></p> <table border="0"> <tr> <td>fastigiata</td> <td></td> <td>1</td> </tr> <tr> <td>upright</td> <td>TRFK 301/3</td> <td>2</td> </tr> <tr> <td>upright to spreading</td> <td>AHP S15/10</td> <td>3</td> </tr> <tr> <td>spreading</td> <td>TRFK 371/8</td> <td>4</td> </tr> </table>  <p>1 fastigiata      2 upright      3 upright to spreading      4 spreading</p> <p><i>TC-EDC: agreed with new proposal; Char. 2 to be indicated as PQ</i></p>	fastigiata		1	upright	TRFK 301/3	2	upright to spreading	AHP S15/10	3	spreading	TRFK 371/8	4
fastigiata		1											
upright	TRFK 301/3	2											
upright to spreading	AHP S15/10	3											
spreading	TRFK 371/8	4											
<p>#Ad. 14</p>	<p>to adjust illustration according to new wording (please indicate two images to show low and high ratio)  <i>Leading Expert: to illustrate states 1 and 3 only:</i></p>  <p>1 low      3 high</p> <p><i>TC-EDC: agreed</i></p>												