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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS Geneva

TECHNICAL COMMITTEE

Fiftieth Session Geneva, April 7 to 9, 2014

REPORT¹

adopted by the Technical Committee

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Opening of the session

*1. The Technical Committee (TC) held its fiftieth session in Geneva from April 7 to 9, 2014. The list of participants is reproduced in Annex I to this report.

*2. The session was opened by Mr. Alejandro Barrientos Priego (Mexico), Chairman of the TC, who welcomed the participants.

*3. The TC expressed its condolences for the sad loss of Mr. François Boulineau, Chairman of the Technical Working Party for Vegetables (TWV), who had died on December 23, 2013. It was recalled that, in addition to being Chairman of the TWV, Mr. Boulineau had brought great experience and expert knowledge to UPOV's technical work and was a leading expert for a number of important UPOV Test Guidelines.

*4. The Chairman reported that observer status had been granted to Malaysia for the TC.

*5. The Vice Secretary-General reported that Mr. Fuminori Aihara had completed his three-year secondment to UPOV and had been replaced by Mr. Jun Koide, national of Japan. Following a competition, Mrs. Alexandra Fava had been appointed to the post of Secretary I on October 1, 2013.

*6. The Chairman confirmed that the report of the forty-ninth session of the TC, held in Geneva on March 18 to 20, 2013 (document TC/49/42), had been adopted by correspondence and was available on the UPOV website.

Adoption of the agenda

*7. The TC adopted the agenda as presented in document TC/50/1 Rev.

¹ The asterisked (*) paragraphs in this report are reproduced from document TC/50/36 (Report on the Conclusions).

Report on developments in UPOV including relevant matters discussed in the last sessions of the Administrative and Legal Committee, the Consultative Committee and the Council (oral report by the Vice Secretary-General)

*8. The TC considered document TC/50/10 "Report on developments in UPOV including relevant matters discussed in the last sessions of the Administrative and Legal Committee, the Consultative Committee and the Council".

Matters for Information

*9. The Vice Secretary-General provided an oral report on developments in UPOV, including developments at the sixty-seventh and sixty-eighth sessions of the CAJ, the eighty-fifth and eighty-sixth sessions of the Consultative Committee and the thirtieth extraordinary session and the forty-seventh ordinary session of the Council, on the basis of the annex to document TC/50/10.

Matters for Consideration by the Technical Committee

Variety Descriptions

*10. The TC noted that the CAJ, at its sixty-ninth session, to be held in Geneva on April 10, 2014, would consider the proposal of the Administrative and Legal Committee Advisory Group (CAJ-AG) to invite the TC to develop further guidance on certain matters concerning variety descriptions, as set out in document TC/50/10, paragraphs 37 to 41.

Matters Raised by the International Seed Federation (ISF)

*11. The TC noted that the Consultative Committee had agreed to the development of document UPOV/INF/15 "Guidance for Members of UPOV on Ongoing Obligations and Related Notifications and on the Provision of Information to Facilitate Cooperation" into an umbrella document that would identify key issues for the operation of a plant variety protection system, as set out in document TC/50/10, paragraphs 44 and 45.

*12. The TC invited ISF to consider the relevant UPOV materials and to explain where it considered that further guidance might be developed in relation to the following matters, as set out in document TC/50/10, paragraph 46:

- (a) Photographs
- (b) Minimum sample size
- (c) Reference collections
- (d) Length of examination
- (e) Variety description of most similar variety
- (f) Variety description by applicant
- (g) Variety description databases

*13. The TC noted that ISF was invited to express its views to the TC with regard to databases of variety descriptions and the criteria identified by the TC for the publication of variety descriptions, as set out in document TC/45/9 "Publication of Variety Descriptions".

Web-Based TG Template

*14. The TC received a presentation on the web-based TG Template, a copy of which would be provided in an addendum to document TC/50/10. The TC noted the features of Version 1 of the web-based TG Template, as set out in document TC/50/10, paragraph 55.

*15. The TC noted that the Office would request all Leading Experts to participate in the testing of Version 1 in May and June 2014. The TC also noted that the Leading and Interested Experts would be requested to use the web-based TG Template for the preparation of draft Test Guidelines for the forty-third session of the Technical Working Party for Agricultural Crops (TWA), to be held in Mar del Plata, Argentina, from November 17 to 21, 2014. The TC approved the plans for the implementation of the web-based TG Template, including the exclusive use of the web-based TG Template for the development of all Test Guidelines from 2015, as set out in document TC/50/10, paragraphs 56 to 58.

*16. The TC noted the features and timetable for development of Version 2 of the web-based TG Template, as set out in document TC/50/10, paragraphs 59 to 63.

Progress reports on the work of the Technical Working Parties, including the Working Group on Biochemical and Molecular Techniques, and DNA-Profiling in Particular (BMT), and the Ad Hoc Crop Subgroups on Molecular Techniques

17. The TC received oral reports from the Chairpersons on the work of the Technical Working Party for Agricultural Crops (TWA), the Technical Working Party on Automation and Computer Programs (TWC), the Technical Working Party for Fruit Crops (TWF), the Technical Working Party for Ornamental Plants and Forest Trees (TWO) and the Technical Working Party for Vegetables (TWV). The TC noted that no session of the Working Group on Biochemical and Molecular Techniques, and DNA-Profiling in Particular (BMT) had been held since the forty-ninth session of the TC. A copy of the presentations is provided in Annex II to this report (in original language only) and a summary of the work provided by the Chairpersons is provided below:

Technical Working Party for Agricultural Crops (TWA)

18. The Technical Working Party for Agricultural Crops (TWA) held its forty-second session in Kiev, Ukraine, from June 17 to 21, 2013 under the chairmanship of Mrs. Robyn Hierse (South Africa). The report of this meeting can be found in document TWA/42/31 "Report".

19. The session was attended by 86 participants from 32 members of the Union. The preparatory workshop was held on the afternoon of June 16 and was attended by 36 participants from 16 members of the Union.

20. The TWA was welcomed by Mrs. Nataliya Khrapiychuk, Head of Seed Production Section of Agriculture Department, Ministry of Agrarian Policy and Food of Ukraine and then received a presentation from Mr. Petro Vasyliuk, Director, Ukrainian Institute for Plant Variety Examination on "Right Protection for Plant Variety in Ukraine" and from Mrs. Svitlana Gryniv, Head of Department for Qualifying Examination of Plant Varieties on Distinctness, Uniformity and Stability on "Qualifying Examination on Distinctness, Uniformity and Stability".

21. The TWA noted that the information on developments in plant variety protection from members and observers was provided in document TWA/42/28. This was then followed by a presentation from the Office of the Union on the latest developments within UPOV, and a presentation on the results of the 2012 survey on improving the effectiveness of the Technical Working Parties, as requested by the TC at its forty-ninth session, a copy of which was provided in document TWA/42/27 Add..

22. After the reports, the TWA noted the information on developments in UPOV on molecular techniques, which was provided in document TWA/42/2 "Molecular Techniques". It was also noted that the TC had proposed to hold a coordinated meeting of the Working Group on Biochemical and Molecular Techniques, and DNA-Profiling in Particular (BMT) with the International Organization for Standardization (ISO), the International Seed Testing Association (ISTA) and the Organization for Economic Co-Operation and Development (OECD) which would also include breeders. If that was not possible a meeting of the BMT would be organized in the meantime. The TWA agreed with the TC that there was a need to provide suitable information on the situation in UPOV with regard to the use of molecular techniques to a wider audience, including breeders and the public in general.

23. Regarding the TGP documents, the TWA noted the matters approved by the TC for future revision of documents TGP/7 "Development of Test Guidelines", TGP/8 "Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability" and TGP/9 "Examining Distinctness" and several TGP documents were discussed, namely TGP/7, TGP/8 and TGP/14 "Glossary of Terms Used in UPOV Documents".

24. In the revision of TGP/7, the TWA considered document TWA/42/9 "Revision of document TGP/7: Additional Standard Wording for Growing Cycle for Tropical Species" and noted the information provided. The TWA requested that the relationship between an individual flower and the harvesting of fruit be clarified by the drafter of the proposal. The TWA also considered documents: TWA/42/10 "Revision of document TGP/7: Source of Propagating Material", TWA/42/11 "Revision of document TGP/7: Indication of Growth

Stage in Test Guidelines", TWA/42/12 "Revision of document TGP/7: Providing Illustrations of Color in Test Guidelines" and TWA/42/13 "Revision of document TGP/7: Presence of Leading Expert at Technical Working Party Sessions" and several proposals and comments were made and noted.

25. TGP/8 "Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability": several documents were given consideration and the information in those documents was noted and discussed and certain proposals and recommendations were made.

26. Document TWA/42/21 "Revision of document TGP/14: Section 2: Botanical Terms, Subsection 3: Color, Definition of "Dot"" was considered and it was agreed that it would not be appropriate to provide a definition for "dot" in document TGP/14 and noted that the terms "dot" and "spot" were useful both as a synonym and as separate terms in the different UPOV languages.

27. The TWA noted the information provided in document TWA/42/4 "Variety Denominations" and the developments concerning the International Commission for the Nomenclature of Cultivated Plants of the International Union for Biological Sciences (IUBS Commission) and the International Society for Horticultural Science Commission for Nomenclature and Cultivar Registration (ISHS Commission) which are of relevance for UPOV. The TWA also noted the planned contribution from the Office of the Union to the Draft Joint Notice for publication in the *Hanburyana Journal* and the participation of UPOV in the IUBS Commission.

28. Uniformity assessment was discussed in document TWA/42/22 "Assessing Uniformity by Off-types on the Basis of more than one Sample or Sub-samples" and document TWA/42/26 "Testing uniformity of apple varieties arising from mutation".

29. The TWA received a presentation by an expert from Ukraine on experiences with new types and species in the country, including the new species, *Sorghum oryzoidum*, which is an intergeneric hybrid between *Sorghum bicolor* and *Oryza sativa*.

30. The TWA considered the document TWA/42/25 Add. "Addendum to Pea Study Database" and agreed with the draft partial revision of the Test Guidelines for Pea proposed by the TWV. On that basis, the TWA agreed to submit the partial revision of the Test Guidelines for Pea to the TC in April 2014. The TWA welcomed the results of the study on the pea database and noted that it presented a good method for improvement of Test Guidelines.

31. With regard to the "Guidance for drafters of Test Guidelines, the TWA considered document TWA/42/24. The TWA also noted the plan for the development of a prototype web-based TG Template for testing by interested experts by the end of 2013. The TWA supported the initiative and agreed to the continuation of work on the TG Template.

32. The developments regarding information and databases were considered in the following documents: TWA/42/5 "UPOV information databases", TWA/42/6 "Variety description databases", TWA/42/7 "Exchangeable software" and TWA/42/8 "Electronic application systems".

33. The TWA discussed 11 draft Test Guidelines and agreed to submit three of those Test Guidelines to the TC, namely, Groundnut, Kentucky Bluegrass and Rhodesgrass. It was agreed to discuss the following draft Test Guidelines in 2014: Adlay, Adzuki/Red bean, Cassava, Castor Bean, Elytrigia, Finger Millet, Ginseng, Quinoa, Scorpion Weed, Sorghum, Urochloa, Wheat and Yellow Potato.

34. At the invitation of Argentina, the TWA agreed to hold its forty-third session in Mar del Plata, Argentina from November 17 to 21, 2014, with the preparatory workshop on November 16, 2014.

35. The TWA proposed to consider the following items at its forty-third session:

- 1. Opening of the Session
- 2. Adoption of the agenda
- 3. Short reports on developments in plant variety protection
 - (a) Reports from members and observers (oral reports by the participants)
 - (b) Reports on developments within UPOV (oral report by the Office of the Union)
- 4. Molecular Techniques (document to be prepared by the Office of the Union)
- 5. TGP documents
- 6. Variety denominations (document to be prepared by the Office of the Union)
- 7. Information and databases

- (a) UPOV information databases (document to be prepared by the Office of the Union)
- (b) Variety description databases (document to be prepared by the Office of the Union and documents invited)
- (c) Exchangeable software (documents to be prepared by the Office of the Union)
- (d) Electronic application systems (document to be prepared by the Office of the Union)
- 8. Uniformity assessment
- 9. Matters to be resolved concerning Test Guidelines adopted by the Technical Committee (if appropriate)
- 10. Discussion on draft Test Guidelines (Subgroups)
- 11. Recommendations on draft Test Guidelines
- 12. Guidance for drafters of Test Guidelines
- 13. Date and place of the next session
- 14. Future program
- 15. Report on the session (if time permits)
- 16. Closing of the session

36. On the evening of June 17, 2013, the TWA visited the Grishko National Botanical Garden where it received a presentation on the collections of agricultural and numerous other crops, including roses and fruit trees by Mr. Dzhamal B. Rakhmetov, Doctor of Agricultural Sciences and Head of the Department of Alternative Crops of the Grishko National Botanical Garden and Ms. Olena Rubtsova, Doctor of Biological Sciences and leading Researcher at the Grishko Botanical Gardens.

37. On the afternoon of June 20, 2013, the TWA visited Mankivka State Variety Examination Station in Dzenzelivka village, Mankivka region, Cherkasy oblast, where it was welcomed by Mr. Oled Levchenko, Director, Mankivka State Variety Examination Station. The main task of the Mankivka State Variety Examination Station is to conduct field examination of varieties for value for cultivation and use (VCU) and DUS testing and post-control as well as disease resistance assessment of several agricultural crops, such as soft wheat, barley, durum wheat, oat and soy bean.

38. The TWA agreed to propose to the TC that it recommend to the Council to elect Mr. Tanvir Hossain (Australia) as the next Chairperson of the TWA.

Technical Working Party on Automation and Computer Programs (TWC)

39. The Technical Working Party on Automation and Computer Programs (TWC) held its thirty first session in Seoul, Republic of Korea, from June 4 to 7, 2013, under the chairmanship of Mr. Sami Markkanen (Finland).

40. The TWC session was attended by 43 participants from 12 members of the Union. The preparatory workshop was held during the afternoon of Monday, June 3, and was attended by 23 participants from 10 members of the Union. 37 documents were discussed during the meeting. Four presentations were made by electronic means, via the internet.

41. The TWC was welcomed by Mr. Shin Hyun Kwan, Director General, Korean Seed and Variety Service (KSVS), Ministry of Agriculture, Food and Rural Affairs (MAFRA). The TWC received a presentation on the plant variety protection (PVP) system in the Republic of Korea from Mr. Lee Sang Hyug, Director, Plant Variety Protection Division, KSVS, MAFRA.

42. The TWC received a presentation from experts from China on the research on the construction of DNA fingerprint database in maize and suggested that the information also be made available to the BMT.

43. TGP/8 "Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability": The TWC considered document TWC/31/14 "Minimizing the variation due to different observers" for Part I of TGP/8 and noted that the drafter from the Netherlands was no longer participating in the TWC meetings. The TWO and TWV had proposed experts to help to develop further guidance with regard to guidance on PQ and QN/MG characteristics. The TWF had proposed that an expert from New Zealand would report at its forty-fifth session on the work done on the "Publication of harmonized variety description for apple for an agreed set of varieties", in order to consider if it could be relevant to further develop the study.

44. Part II of TGP/8: The TWC discussed the topic "Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions" and received a presentation by an expert from the United Kingdom on a preliminary use of the Flax data set, offered by the experts from France, to illustrate two different methods from the United Kingdom. The TWC noted that the document had been prepared to illustrate the way in which the different methods could be applied. The TWC was informed that data sets of Chrysanthemum and Pea had also been received from Japan and the Netherlands and would be made available for the experts participating in the practical exercise. During discussions the TWC noted that there was no guidance on the production of variety descriptions for cross pollinated, self-pollinated or vegetatively propagated crops. The TWC agreed that the Office of the Union should seek to ensure that the crops and data in the practical exercise would enable all methods for self-pollinated and/or vegetatively propagated varieties to be included.

45. The TWC considered document "Statistical Methods for Visually Observed Characteristics" and agreed that the method proposed was new and considered that it had advantages over the Chi-square test already provided in document TGP/8 for multinomial distributed data, such as visually observed characteristics, whereas COYD for normally distributed data is not suitable for multinomial distributed data. The TWC agreed that it would be beneficial to further develop the method for multinomial data and to compare the decisions made using the two methods based on real data from Finland and the United Kingdom (Timothy, Red Clover and Meadow Fescue: growth habit).

46. Under the topic exchangeable software, the TWC received a presentation by an expert of France on the development of a color analysis process using AIM software which would be used in DUS testing in France. The TWC agreed on the importance of the environmental conditions when taking photos for the image analysis.

47. The TWC received a presentation by electronic means by an expert from Mexico on the SISNAVA and SIVAVE software proposed by Mexico for inclusion in document UPOV/INF/16 "Exchangeable software". The TWC agreed that the SIVAVE software proposed by Mexico was suitable for inclusion and requested Mexico to provide further information on the SISNAVA software to clarify the method of determination for the crop specific limits of acceptance (sum of differences), including the role of the crop experts in this process.

48. The issue of uniformity assessment by off-types was discussed with the expert from Germany, who made an presentation by electronic means on the subject. The TWC requested the experts from Germany to explain the Type I and Type II errors used in the statistical basis for the acceptable number of off-types in the subsample of 20 plants used in the context of a sample size of 100 plants. The TWC agreed that the statistical basis for this approach should continue to be discussed at its thirty-second session. The TWC agreed that it would not be appropriate to recommend this approach for other crops or sample sizes before it had agreed on the statistical basis.

49. The TWC considered document "Method of Calculation of COYU". The TWC noted that the present method of calculation of COYU was overly strict due to the method of smoothing used and that very low probability levels were used in compensation. The TWC agreed that the bias in the present method of calculation of COYU could be addressed by a change of smoothing method from "moving average" to "cubic smoothing splines". The TWC welcomed the offer by the experts from the United Kingdom to write software for the proposed COYU method in FORTRAN for integration into the DUST software and to present a demonstration version of the DUST software using the proposed COYU method at the thirty-second session of the TWC. The TWC agreed that the probability levels to be used in the proposed COYU method should be discussed on the basis of the experience of UPOV members in using the proposed method. The TWC agreed that a circular should be prepared by an expert from the United Kingdom and issued by the Office of the Union to the TC representatives, in order to investigate which members of the Union used the current COYU method and in which software it was used. The TWC agreed that guidance should be developed on the minimum number of varieties that would be suitable for using the COYU method.

50. The TWC agreed to propose to the TC that it recommend to the Council to elect Mr. Adrian Roberts (United Kingdom) as the next chairperson of the TWC.

51. The TWC agreed to hold its thirty-second session in Helsinki, Finland, from June 3 to 6, 2014, with the preparatory workshop on June 2, 2014.

52. The TWC planned to discuss the following items during the thirty-second session:

1. Opening of the session

- 2. Adoption of the agenda
- 3. Short reports on developments in plant variety protection
 - (a) Reports from members and observers (written reports to be prepared by members and observers)
 - (b) Reports on developments within UPOV (document to be prepared by the Office of the Union)
- 4. Molecular techniques (document to be prepared by the Office of the Union and documents invited)
- 5. TGP documents
- 6. Information and databases
 - (a) UPOV information databases (document to be prepared by the Office of the Union and documents invited)
 - (b) Variety description databases (document to be prepared by the Office of the Union and documents invited)
 - (c) Exchangeable software (document to be prepared by the Office of the Union and documents invited)
 - (d) Electronic application systems (document to be prepared by the Office of the Union and documents invited)
- 7. Variety denominations (document to be prepared by the Office of the Union)
- 8. Uniformity assessment by off-types (documents to be prepared by France, Germany and the Office of the Union)
- 9. Data loggers (document to be prepared by the Office of the Union)
- 10. Image analysis (document to be prepared by the European Union)
- 11. Development of COYU (document to be prepared by the United Kingdom)
- 12. Database for researching TWC documents (document to be prepared by Germany)
- 13. Date and place of the next session
- 14. Future program
- 15. Report on the session (if time permits)
- 16. Closing of the session

Technical Working Party for Fruit Crops (TWF)

53. The Technical Working Party for Crops (TWF) held its forty-fourth session in Napier, New Zealand, from April 29 to May 30, 2013. The session was opened and chaired by Mrs. Carensa Petzer (South Africa). The report of the session is provided in document TWF/44/31 "Report"

54. The TWF session was attended by 42 participants from 14 members of the Union, 4 observer States and 2 observer organizations.

55. The preparatory workshop, which was held on April 28, 2014, was attended by 25 participants from 9 members of the Union and 3 observer States.

56. The TWF was welcomed by Mr. Chris Barnaby, Assistant Commissioner/Principal Examiner, Plant Variety Rights Office of New Zealand, who made a presentation on plant variety protection in New Zealand.

57. The TWF proposed that a suitable agenda item be added to the program of its forty-fifth session, under which the following items would be discussed:

- a) Management of reference collections for DUS examination (document to be prepared by France and the European Union);
- b) Duration of DUS tests in the fruit sector (document to be prepared by the European Union);
- c) Harmonized example varieties for Apple: historical data and possible new developments (document to be prepared by Germany, New Zealand and the Office of the Union)."
- d) The TWF agreed that it would be useful to receive more information on the use of molecular techniques in DUS examination and, in that regard, invited the experts from Spain to provide information on the use of such tools by the *Oficina Española de Variedades Vegetales* (OEVV).

58. The TWF also invited other participants to present their experiences on the use of biochemical and molecular techniques in fruit crops at the TWF session in 2014.

59. The TWF received a presentation by the expert from France on the study concerning Peach and molecular markers made by the Group for Study and Control of Varieties and Seeds (GEVES).

60. The TWF considered the following TGP documents on the basis of document TWF/44/3:

TGP/7: Development of Test Guidelines

- (i) Coverage of Types of Varieties in Test Guidelines
- (ii) Selection of Asterisked Characteristics
- (iii) Standard References in the Technical Questionnaire
- (iv) Applications for Varieties with Low Germination
- (v) Procedure for the Development of Test Guidelines
- (vi) Quantity of Plant Material Required
- (vii) Minimum Quantity of Plant Material
- (viii) Guidance on Number of Plants to be Examined (for Distinctness)
- (ix) Guidance for Method of Observation
- (x) Example Varieties
- (xi) Providing Photographs with the Technical Questionnaire
- (xii) Duration of Test
- (xiii) Number of Plants Required for Description

61. For document TGP/8, Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability, the TWF discussed:

- Part I: DUS Trial Design and Data Analysis
- Part II: Techniques Used in DUS Examination

62. The TWF noted document TWF/44/30 "Proposal for a Partial Revision of the Test Guidelines for Mandarins" and received a presentation from Mr. Jean Maison (European Union), the coordinator of the subgroup. The experts from Spain, Morocco and South Africa reported on their progress to date. Copies of those presentations were provided in the Annex to document TWF/44/30.

63. The TWF agreed that the following draft Test Guidelines should be submitted to the Technical Committee for adoption at its fifth session, to be held in Geneva in March, 2014.

Subject	Relevant document
Apple rootstocks (<i>Malus</i> Mill.) (Revision)	TG/163/4(proj.3)
Litchi (<i>Litchi chinensis</i> Sonn.)	TG/LITCHI(proj.3)
Peach (Prunus persica (L.) Batsch) (Partial revision)	TG/53/7 and TWF/44/29
Prunus rootstocks (Prunus L.) (Revision)	TG/187/2(proj.2)
Vanilla (<i>Vanilla planifolia</i> Jacks)	TG/VANIL(proj.3)

64. The TWF proposed to discuss the following 11 Test Guidelines at its forty fifth session:

*Acca (<i>Acca sellowiana</i> (Berg) Burret)		
Apricot (<i>Prunus armeniaca</i> L.) (Partial revision: exavarieties)	ample	
Avocado rootstock (<i>Persea</i> Mill.)		
*Coconut (<i>Cocos nucifera</i> L.)		
Chestnut (<i>Castanea sativa</i> Mill.) (Revision)		
Date palm (<i>Phoenix dactylifera</i>)		
Juglans rootstock		

*Mandarins (Citrus L Group 1) (Partial revision)	
*Papaya (<i>Carica papaya</i> L.)	
*Pecan nut (<i>Carya illinoinensi</i> s (Wangenh.) K. Koch)	
Walnut (<i>Juglans regia</i> L.) (Revision)	

65. On the morning of May 1, the TWF visited the ENZA[™] PAK fruit cool storage and packing facility, in Whakatu, near Hastings, followed by a visit to the New Zealand Institute for Plant and Food Research (Plant and Food Research), Hawke's Bay Research Center, near Havelock North Village, where it received presentations from Ms. Cath Kingston, Portfolio Manager, Food Innovation Portfolio and Mr. Satish Kumar, Senior Scientist, Breeding & Genetics. The TWF also visited one of the orchards containing an apple variety collection, where they were accompanied by Mr. Ben van Hooijdonk, Scientist, Sustainable Production - Crop & Fruit Production Systems, and Mr. Mike Malone, Scientist, Breeding & Genomics - Premium Crops.

66. At the invitation of Morocco, the TWF agreed to hold its forty-fifth session in Marrakesh, Morocco, from May 26 to 30, 2014, with the preparatory workshop on May 25, 2014.

67. The TWF agreed to propose to the TC that it recommend to the Council to elect Mr. Katsumi Yamaguchi (Japan), as the next chairperson of the TWF.

68. The TWF proposed to discuss the following items at its next session:

- 1. Opening of the Session
- 2. Adoption of the agenda
- 3. Short reports on developments in plant variety protection
 - (a) Reports from members and observers
 - (b) Reports on developments within UPOV (oral report by the Office of the Union)
 - Molecular Techniques (document to be prepared by the Office of the Union)
- 5. TGP documents

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- 6. Variety denominations (document to be prepared by the Office of the Union)
- 7. Information and databases
 - (a) UPOV information databases (document to be prepared by the Office of the Union)
 - (b) Variety description databases (document to be prepared by the Office of the Union and documents invited)
 - (c) Exchangeable software (documents to be prepared by the Office of the Union)
 - (d) Electronic application systems (document to be prepared by the Office of the Union)
- 8. Uniformity assessment
- 9. Management of reference collections for DUS examination (document to be prepared by France and the European Union)
- 10. Duration of DUS tests in the fruit sector (document to be prepared by the European Union)
- 11. Harmonized example varieties for Apple: historical data and possible new developments (document to be prepared by Germany, New Zealand and the Office of the Union)
- 12. Matters to be resolved concerning Test Guidelines adopted by the Technical Committee (if appropriate)
- 13. Discussion on draft Test Guidelines (Subgroups)
- 14. Recommendations on draft Test Guidelines
- 15. Guidance for drafters of Test Guidelines
- 16. Date and place of the next session
- 17. Future program
- 18. Report on the session (if time permits)
- 19. Closing of the session

Technical Working Party for Ornamental Plants and Forest Trees (TWO)

69. The Technical Working Party for Ornamental Plants and Forest Trees (TWO) held its forty-sixth session in Melbourne, Australia, from April 22 to 26, 2013. The session was chaired by Mr. Nik Hulse (Australia), Chairperson of the TWO. The detailed report appears in document TWO/46/29.

70. The meeting was attended by 43 participants, from 18 members of the Union, 3 observer States and 1 observer organization. The preparatory workshop was held during the afternoon of April 21 and was attended by 30 participants from 13 members of the Union, 3 observer States and 1 observer organization.

71. The TWO was welcomed by Ms. Fatima Beattie, Deputy Director General, IP Australia, by electronic means. The former Chairperson of the TWO, Mrs. Andrea Menne, thanked Australia for hosting the TWO session.

72. The Chairperson, Mr. Nik Hulse, made a presentation on the PVP system in Australia.

73. The TWO noted the information on developments in variety protection from members and observers provided in document TWO/46/28 Prov. "Report on development in plant variety protection from members and observers". It received an oral report from the Office of the Union on the latest developments within UPOV.

74. The TWO considered document TWO/46/2 "Molecular Techniques". The TWO strongly agreed with the TC that there was a need to provide suitable information on the situation in UPOV with regard to the use of molecular techniques to a wider audience, including breeders and the public in general. That information should explain the relationship between genotype and phenotype and the reasons such techniques are generally not appropriate in DUS examination.

75. The TWO considered the proposed guidance on source of propagating material, as presented in Section IV "Guidance for drafting Test Guidelines" of the Annex to document TWO/46/10 "Revision of document TGP/7: Source of Propagating Material". Whilst the TWO agreed wording should not be included in section 9.2 of the Technical Questionnaire it noted that the document contained useful information on the possible effects of source of propagating material. In that regard the TWO requested the preparation of a condensed version for inclusion in TGP/7 as general guidance.

76. The TWO considered document TWO/46/11 "Indication of Growth Stage in Test Guidelines" and considered that the indication of growth stages in Test Guidelines should be optional and used where appropriate. Furthermore, the TWO agreed that the Additional Standard Wording 4 "Conditions for conducting the examination" (ASW 4) should be amended to reflect the current practice in UPOV Test Guidelines of indicating growth stages using letters, numbers or combinations of letter and numbers.

77. The TWO considered document TWO/46/12 "Providing Illustrations of Color in Test Guidelines" and proposed guidance for inclusion in a future revision of TGP/7 to indicate that it was generally not appropriate to use illustrations of color in Test Guidelines.

78. The TWO considered document TWO/46/14 "Minimizing the Variation Due to Different Observers" and proposed that experts from Australia, Germany, the Netherlands and the United Kingdom help to develop further guidance in relation to PQ and QN/MG characteristics in the proposed new section to be included in TGP/8 Part I: DUS Trial and Design and Data Analysis. However, the TWO also noted that the Test Guidelines were important in providing clear guidance for DUS examiners to ensure consistency of observations.

79. The TWO considered and noted several other documents regarding the revision of document TGP/8: Part II: Selected Techniques Used in DUS Examination. Those related to the method of calculation of COYU, relative variance method and examining DUS in bulk samples.

80. The TWO considered document TWO/46/18 "Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions". The TWO agreed with the practical exercise and requested the development of guidance on data processing for the assessment of distinctness and for producing variety descriptions of vegetatively propagated crops.

81. The TWO considered document TWO/46/19 "Guidance of Data Analysis for Blind Randomized Trials", noting comments made by the TWP's in 2012 and the TC-EDC in 2013. In addition, the TWO suggested the following improvements: amend the title of the new section to "Draft guidance for blind randomized trials".

conducted by the authority or a third party"; make the introduction more generic; and provide an example for ornamental plants.

82. The TWO considered document TWO/46/21 "Color, Definition of Dot" and agreed that "dot" was a small "spot". The TWO also agreed that in future Test Guidelines only the term "spot" should be used and existing Test Guidelines should be considered for revision whenever the use of those terms could cause confusion.

83. The TWO considered document TWO/46/24 "Guidance for Drafters of Test Guidelines" and noted progress in the development of a prototype web-based TG Template that would provide sufficient flexibility to allow proposals for new standard wording and structure to allow further development of Test Guidelines.

84. An expert from Australia gave a presentation on a new inter-generic hybrid variety between the Australian species *Disphyma crassifolium* ssp. *clavellatum* and the African species *Glottiphyllum longum*.

85. The TWO agreed to submit four Test Guidelines to the Technical Committee (TC) at its fiftieth session in April 2014; China Aster, Hosta, Lilac and Mandevilla. At its forty-seventh session in 2014, the TWO planned to discuss 15 Test Guidelines, consisting of the following five revisions and 10 new Test Guidelines:

Abelia (<i>Abelia</i> R.Br.)
Aglaonema Schott.
Aloe
Campanula L.
Calibrachoa L. (Revision)
Cordyline (Cordyline Comm. Ex. Juss.)
Cosmos (<i>Cosmos</i> Cav.)
Carnation (<i>Dianthus</i> L.) (Revision)
Freesia (Revision)
Grevillea (Grevillea R. Br. Corr. R. Br.)
Petunia (Revision)
Plectranthus L'Hér.
Regal Pelargonium (Revision)
Salvia (<i>Salvia</i> L.)
Zinnia L.

86. At the invitation of Kenya, the TWO agreed to hold its forty-seventh session in Naivasha, Kenya, from May 19 to 23, 2014 with the preparatory workshop in Nairobi on May 18, 2014.

87. The TWO agreed to propose to the Technical Committee that it recommend to the Council that Mr. Kenji Numaguchi (Japan) be appointed as the next chairperson of the TWO.

88. The TWO proposed to discuss the following items at its forty-seventy session:

- 1. Opening of the Session
- 2. Adoption of the agenda
- 3. Short reports on developments in plant variety protection
 - (a) Reports from members and observers
 - (b) Reports on developments within UPOV (oral report by the Office of the Union)
- 4. Molecular Techniques (document to be prepared by the Office of the Union)
- 5. TGP documents
- 6. Variety denominations (document to be prepared by the Office of the Union)
- 7. Information and databases

- (a) UPOV information databases (document to be prepared by the Office of the Union)
- (b) Variety description databases (document to be prepared by the Office of the Union and documents invited)
- (c) Exchangeable software (documents to be prepared by the Office of the Union)
- (d) Electronic application systems (document to be prepared by the Office of the Union)
- 8. Uniformity assessment
- 9. Experience with new types and species
- 10. Matters to be resolved concerning Test Guidelines adopted by the Technical Committee (if appropriate)
- 11. Discussion on draft Test Guidelines (Subgroups)
- 12. Recommendations on draft Test Guidelines
- 13. Guidance for drafters of Test Guidelines
- 14. Date and place of the next session
- 15. Future program
- 16. Report on the session (if time permits)
- 17. Closing of the session

Technical Working Party for Vegetables

89. The Technical Working Party for Vegetables (TWV) held its forty-seventh session in Nagasaki, Japan, from May 20 to 24, 2013. The session was opened and chaired by Mr. François Boulineau (France). The detailed report is available in document TWV/47/34 "Report".

90. The TWV session was attended by 53 participants from 16 members of the Union, 3 observer States and 2 observer organizations.

91. The Preparatory meeting was attended by 20 participants from 6 members of the Union and 2 observer States.

92. The TWV was welcomed by Mr. Junya Endo, Director, New Business and Intellectual Property Division, Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries of Japan (MAFF) who made a presentation on plant variety protection in Japan.

93. On the afternoon of May 22, 2013, the TWV visited the Unzen Station of the National Center for Seeds and Seedlings (NCSS), where the TWV was welcomed by Mr. Sanji Takemori, President of NCSS, and Mr. Kunio Tokunaga, Director General of the Unzen Station. The TWV received a presentation on NCSS and the Unzen Station by Mr. Kazuto Higasimura. At the facilities of Unzen Station the TWV visited DUS growing trials for several vegetable crops including tomato, lettuce, pumpkin, garlic, bitter gourd and bottle gourd.

94. The TWV considered the following TGP documents on the basis of document TWV/47/3:

- TGP/7: Development of Test Guidelines
- TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability
- TGP/14: Glossary of Terms Used in UPOV Documents

95. The TWV noted that the TC had proposed to hold a coordinated meeting of the Working Group on Biochemical and Molecular Techniques, and DNA-Profiling in Particular (BMT) with the International Organization for Standardization (ISO), the International Seed Testing Association (ISTA) and the Organization for Economic Co-Operation and Development (OECD) and including breeders; and that if it was not possible to organize a coordinated meeting in 2014, a meeting of the BMT would be organized in the meantime.

96. The TWV agreed with the TC that there was a need to provide suitable information on the situation in UPOV with regard to the use of molecular techniques to a wider audience, including breeders and the public in general.

97. The TWV considered the proposed guidance on source of propagating material, as presented in Section IV "Guidance for drafting Test Guidelines" of the Annex to document TWV/47/10 "Revision of document TGP/7: Source of Propagating Material", which was presented by an expert from the European Union.

98. The TWV noted that the document provided useful information on the effects of the source of propagating material as a source of general guidance for drafters of Test Guidelines, for inclusion in document TGP/7, and requested the expert from the European Union, with the support of experts from France and the Netherlands, to prepare a condensed version of the wording to be presented to the TWV at its forty-eighth session in 2014.

99. The TWV agreed to request the addition of examples for vegetatively propagated vegetables

100. The TWV noted that the TC had agreed to replace the proposed text for new Section 11 "Examining DUS in Bulk Samples" in the Annex to document TC/49/28 "Revision of document TGP/8: Part II: Techniques used in DUS Examination, New Section 11: Examining DUS in Bulk Samples" with guidance on the use of characteristics examined on the basis of bulk samples, in order to ensure that the characteristics fulfill the basic requirements for a characteristic.

101. The TWV agreed that Leading Experts of Test Guidelines could be requested to provide data from different years to demonstrate that the expression of the characteristic is "sufficiently consistent and repeatable in a particular environment".

102. The TWV considered the developments presented in document TWV/47/18 "Revision of document TGP/8: Part II: New Section: Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions" on a practical exercise with a common data set to produce variety descriptions of self-pollinated and/or vegetatively propagated varieties, in order to determine the aspects in common and divergence between methods, with a view to developing general guidance. The TWV agreed that the COY method was working well for cross pollinated crops and highlighted the importance of developing guidance for producing variety descriptions for self-pollinated and/or vegetatively propagated varieties.

103. The TWV agreed with the value of a practical exercise and requested the development of guidance on data processing for the assessment of distinctness and for producing variety descriptions of vegetatively propagated crops.

104. The TWV noted that a draft of the new section "Examining Characteristics Using Image Analysis" for document TGP/8 would be presented to the TWC in 2013.

105. The TWV invited experts from Czech Republic, France, Germany, the Netherlands and the United Kingdom to make a presentation at its forty-eighth session, on the use of image analysis on pea, carrot, onion and parsley respectively. With regard to pea, the TWV agreed to receive presentations from the Czech Republic, France and the United Kingdom in order to compare the method used for image analysis in different UPOV members on the same crop.

106. The TWV requested the expert from France to make a presentation, at its forty-eighth session, on the GEMMA software being used by the Group for Study and Control of Varieties and Seeds (GEVES) in a CPVO R&D project. This software was seen as being adapted for the development of such a common database.

107. The TWV agreed that the following draft Test Guidelines should be submitted to the TC for adoption at its fiftieth session, to be held in Geneva in April 2014.

Subject	Basic Documents (2013)
Chives (Allium schoenoprasum L.) (Revision)	TG/198/2(proj.2)
Cucumber (<i>Cucumis sativus</i> L.) (Partial revision: disease resistance)	TG/61/7, TWV/47/29
Melon (<i>Cucumis melo</i> L.) (Partial revision: disease resistance)	TG/104/5, TWV/47/30

Sweet Pepper, Hot Pepper, Paprika, Chili (<i>Capsicum annuum</i> L.) (Partial revision: disease resistance)	TG/76/8, TWV/47/31
*Pea (<i>Pisum sativum</i> L.) (Partial revision: grouping characteristics) ²	TG/7/10, TWV/47/25, TWV/47/25 Add.
*Opium/Seed Poppy (<i>Papaver somniferum</i> L.) (Revision)	TG/166/4(proj.4), TWV/47/32

108. The TWV agreed to discuss the following draft Test Guidelines at its forty-eighth session

Subject		
Basil (Ocimum basilicum L.) (Revision)		
Bottle Gourd, Calabash (<i>Lagenaria siceraria</i> (Molina) Standl.)		
*Brassica (Partial revision: male sterility for all concerned subspecies)		
Brown Mustard (<i>Brassica juncea</i> (L.) Czern.)		
*Cassava (Manihot esculenta Crantz.)		
*Cucumber (Partial revision: Cucurbit yellow stunting disorder virus (CYSDV))		
Cucurbita maxima x Cucurbita moschata		
*French Bean (<i>Phaseolus vulgaris</i> L.) (Partial Revision: format of disease resistance explanations)		
*Leaf Chicory (Cichorium intybus L. var. foliosum Hegi) (Revision)		
*Lentil (<i>Lens culinaris</i> Medik.) (Revision)		
Lettuce (Lactuca sativa L.) (Revision)		
*Shiitake (Lentinula edodes (Berk.) Pegler) (Partial revision: plant material required)		
Turnip (<i>Brassica rapa</i> L. var. <i>rapa</i> L. (Revision)		
Witloof Chicory (Cichorium intybus L. partim) (Revision)		

109. At the invitation of Italy, the TWV agreed to hold its forty-eighth session in Paestum, Italy, from June 23 to 27, 2014, with the preparatory workshop on June 22, 2014.

110. The TWV agreed to propose to the TC that it recommend to the Council to elect Mrs. Swenja Tams (Germany) as the next chairperson of the TWV.

- 111. The TWV proposed to discuss the following items at its next session:
 - 1. Opening of the Session
 - 2. Adoption of the agenda
 - 3. Short reports on developments in plant variety protection
 - (a) Reports from members and observers
 - (b) Reports on developments within UPOV (oral report by the Office of the Union)
 - 4. Molecular Techniques
 - (a) Developments in UPOV (document to be prepared by the Office of the Union)
 - (b) Presentation on the use of molecular techniques in DUS examination (document to be prepared by the Netherlands and presentations invited from members of the Union)
 - 5. TGP documents
 - 6. Presentation on the use of statistical approaches in DUS examination (document to be prepared by the Netherlands and presentations invited from members of the Union)
 - 7. Variety denominations (document to be prepared by the Office of the Union)
 - 8. Information and databases

² Subject to approval by the TWA at its forty-second session.

- (a) UPOV information databases (document to be prepared by the Office of the Union)
- (b) Variety description databases (document to be prepared by the Office of the Union and documents invited)
- (c) Exchangeable software (documents to be prepared by the Office of the Union)
- (d) Electronic application systems (document to be prepared by the Office of the Union)
- 9. Uniformity assessment
- 10. Presentation on the use of disease resistance characteristics in DUS examination (document to be prepared by the European Union and presentations invited from members of the Union)
- 11. Management of reference collections (document to be prepared by France and presentations invited from members of the Union)
- 12. New issues arising for DUS examination (presentations invited from members of the Union)
- 13. Matters to be resolved concerning Test Guidelines adopted by the Technical Committee (if appropriate)
- 14. Discussion on draft Test Guidelines (Subgroups)
- 15. Recommendations on draft Test Guidelines
- 16. Guidance for drafters of Test Guidelines
- 17. Date and place of the next session
- 18. Future program
- 19. Report on the session (if time permits)
- 20. Closing of the session

Matters arising from the Technical Working Parties

*112. The TC considered document TC/50/3.

Matters for Information and for Possible Decision to be Taken by the Technical Committee

Guidance for drafters of Test Guidelines

*113. The TC noted the report on developments concerning the new web-based TG Template in document TC/50/10 "Report on developments in UPOV including relevant matters discussed in the last sessions of the Administrative and Legal Committee, the Consultative Committee and the Council".

*114. The TC agreed to the organization of a series of electronic workshops (e-workshops) to demonstrate the use of the new web-based TG template. The e-workshops would be organized to coincide with the start of drafting work by Leading Experts. The TC also agreed that a demonstration of the new web-based TG template should be made at the Technical Working Party sessions.

*115. The TC noted that the Office of the Union would prepare a grid template for shape and ratio characteristics, for use by Leading Experts.

Data loggers

*116. The TC requested the Office of the Union to issue a new circular concerning hand-held data capture devices, inviting further entries in advance of the thirty-second session of the TWC. The TC agreed that breeders should also be invited to provide information on the use of hand-held data capture devices.

Matters for Information

Subject for discussion

*117. The TC noted the addition of subjects for discussion during the TWF and the TWV at their session in 2014, as set out in document TC/50/3, paragraphs 15 and 16.

Experiences with new types and species

*118. The TC noted the information on experiences with new types and species presented to the TWO and the TWA at their sessions in 2013, as set out in document TC/50/3, paragraphs 18 and 19.

TGP documents

TGP Documents Proposed for Revision in 2014

TGP/0: List of TGP Documents and Latest Issue Dates

*119. The TC considered document TC/50/5 "TGP Documents" and noted that the Council would be invited to adopt document TGP/0/7, in order to reflect the adoption of TGP documents.

TGP/2: List of Test Guidelines Adopted by UPOV

*120. The TC considered the revision of document TGP/2, as set out in document TC/50/5, paragraph 12, and agreed that document TGP/2 be amended to read as follows:

"A list and copies of adopted and published Test Guidelines can be obtained at <u>http://www.upov.int/test_guidelines/en/</u>".

<u>TGP/5:</u> Experience and Cooperation in DUS Testing: Section 10: Notification of Additional Characteristics

*121. The TC considered document TC/50/15 and agreed that the guidance in document TGP/5: Section 10, should read as follows:

"4.2 Proposals for additional characteristics and states of expression notified to the Office of the Union by means of document TGP/5 Section 10, will be presented to the relevant Technical Working Party(ies) (TWP(s)) at the earliest opportunity with information on the extent of use of the characteristic. The characteristics will then, as appropriate, be posted on the TG Drafters' Webpage of the UPOV website (*http://www.upov.int/restricted_temporary/tg/index.html*) on the basis of comments made by the relevant TWP(s), and/or the TWP(s) may initiate a revision or a partial revision of the Test Guidelines concerned."

TGP/7: Development of Test Guidelines

*122. The TC noted that the revisions to document TGP/7 previously agreed by the TC, as set out in document TC/50/5, Annex I, would be a basis for the adoption of document TGP/7/4 by the Council, at its forty-eighth ordinary session, subject to the following amendments:

Annex I, ASW 0	in the German version: to amend the translation of "Subject of these Test Guidelines" to read "Gegenstand dieser Prüfungsrichtlinien"	
Annex I, GN 7	last paragraph to read: "In general, in the case of <i>plants</i> required only for a single growing trial (e.g. no plants required for special tests or variety collections), the number of plants requested in Chapter 2.3 often corresponds to the number of plants specified in Chapters 3.4 "Test Design" and 4.2 "Uniformity". In that respect, it is recalled the quantity of plant material specified in Chapter 2.3 of the Test Guidelines is the minimum quantity that an authority might request of the applicant. Therefore, each authority may decide to request a larger quantity of plant material, for example to allow for potential losses during establishment (see GN 7 (a))."	
Annex I, GN 28, Section 3.2.2.	to read as follows: "3.2.2 Where different sets of example varieties are provided for different types of varieties covered by the same Test Guidelines, they are placed in the Table of Characteristics in the same column as normal. The sets of example varieties (e.g. winter and spring) are separated by a semicolon, and/or indicated by a key which is provided for each set and an explanation for the option chosen should be included in the legend of Chapter 6 of the Test Guidelines."	
Annex I, GN 28,	4.1 Reference to Section 2 to be replaced by reference to Section 4.24.2.3 Reference to Figure 1 to be replaced by reference to Section 4.2.3	

Section 4.	4.2.5 Reference to Figure 1 to be deleted	
Annex I, GN 35, Introduction	First sentence to read: "The taking of photographs is influenced by factors, such as light conditions, quality and setting of the camera, and the background."	

*123. The TC noted that the French, German and Spanish translations of the original English text would be checked by the relevant members of the Editorial Committee prior to submission of the relevant drafts of TGP documents that would be presented for adoption by the Council, at its forty-eighth ordinary session.

(i) Revision of document TGP/7: Additional Standard Wording for Growing Cycle for Tropical Species

*124. The TC considered document TC/50/16 and agreed with the proposed ASW for evergreen species with indeterminate growth for inclusion in document TGP/7 to read as follows:

"New (after (b)): Evergreen species with indeterminate growth

"The growing cycle is considered to be the period ranging from the beginning of development of an individual flower or inflorescence, through fruit development and concluding with the harvesting of fruit from the corresponding individual flower or inflorescence."

(ii) Revision of document TGP/7: Indication of Growth Stage in Test Guidelines

*125. The TC considered document TC/50/18.

*126. The TC agreed that document TGP/7, ASW 4, GN 24 and GN 9 should be amended to read as follows:

"ASW 4 (TG Template: Chapter 3.3) – Conditions for conducting the examination

"Information for conducting the examination of particular characteristics

"(a) Stage of development for the assessment

The optimum stage of development for the assessment of each characteristic is indicated by a reference in the second column of the Table of Characteristics. The stages of development denoted by each reference are described in Chapter 8 [...]."

"GN 9 (TG Template: Chapter 3.3) - Growth stage key

"<u>In some cases</u>, where it is appropriate to provide a growth stage key for the observation of characteristics, the following is a useful guide:

'Growth stages of mono-and dicotyledonous plants - BBCH Monograph' (Federal Biological Research Centre for Agriculture and Forestry) ISBN Number: 3-8263-3152-4 http://www.jki.bund.de/fileadmin/dam_uploads/_veroeff/bbch/BBCH-Skala_englisch.pdf

"In some other cases, a simplified growth stages key might be more appropriate, such as the example in the Test Guidelines for Potato (document TG/23/6):

"8.3 Optimal Stage of Development for the Assessment of Characteristics

1 = bud stage

- 2 = flowering stage
- 3 = ripening stage of tubers
- 4 = after harvest"

"GN 24 (TG Template: Chapter 7: column 2, header row 1) - Growth stage

"In some Test Guidelines, the growth stage at which the examination of the characteristic should be done is provided here. In such cases, the stages of development denoted by each reference are described in a section within Chapter 8, according to ASW 4(a)."

(iii) Revision of document TGP/7: Providing Illustrations of Color in Test Guidelines

*127. The TC considered document TC/50/19.

*128. The TC agreed to include the following guidance on the risks of providing illustrations of color in Test Guidelines in document TGP/7:

"It is generally not appropriate to use illustrations of color, as such, in the Test Guidelines because the color in photographs can be affected by the technology of the camera, the facilities used to display the photograph (including printer, computer and screen) and lighting conditions under which the photograph is/was taken. Furthermore, the expression of color may vary according to the environment in which the variety is grown. For example, a photograph of a 'weak intensity' of anthocyanin coloration (or 'light intensity' of a color) observed in one environment may not represent a 'weak intensity' of anthocyanin coloration (or 'light intensity' of a color) observed in another environment."

(iv) Revision of document TGP/7: Presence of Leading Expert at Technical Working Party Sessions

*129. The TC considered document TC/50/20.

*130. The TC agreed to include the following guidance on the presence of Leading Experts in Technical Working Party sessions in document TGP/7, Section 2.2.5.3:

"In order to be considered by a Technical Working Party, the Leading Expert of the draft Test Guidelines should be present at the session. Subject to approval by the Technical Working Party Chairperson, and where arranged sufficiently in advance of the session, a suitable alternative expert may act as the Leading Expert at the session, or the Leading Expert may participate by electronic means, where that enables the Test Guidelines to be considered in an effective way."

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

*131. The TC noted that the revisions to document TGP/8 previously agreed by the TC, as set out in document TC/50/5, Annex II, would be a basis for the adoption of document TGP/8/2 by the Council, at its forty-eighth ordinary session subject to the following amendments:

۸	te delate beeding "The checkute more point"	
Annex II,	to delete heading "The absolute zero point"	
Part I,		
Section		
2.3.3.6.2		
Annex II,	to correct format for case I and case II and formulas	
Part I,		
Section		
2.3.3.7.3		
Annex II,	to reinsert scales to graphs and remove colors	
Part I,		
Sections		
3.5.1 and		
4.2.2		
Annex II,	- title to read as follows: "Ovalia planting of variation from the variativ collection to reduce	
,	• title to read as follows: "Cyclic planting of varieties from the variety collection to reduce	
Part I,	trial size"	
Section 5	· · · · · · · · · · · · · · · · · · ·	
	collection (established varieties) to reduce trial size is appropriate for use in	
	trials where:"	
	• paragraph 1.1 to introduce a last bullet point: "three independent growing cycles and	
	normally grown. The guidance below is for this case. However, it may also be adapted	
	for crops where two independent growing cycles are normally grown."	
	 last sentence of second paragraph in 1.2 to read as follows: "If, after DUS testing, a variety is added to the variety collection it is allocated to a series and is cyclically 	
	omitted from the trial every third year."	
	 paragraph 1.3, sentences 5 and 6 to read as follows: "Because of a possible lag between final DUS testing and the design on the application, condidate variation are 	
	between final DUS testing and the decision on the application, candidate varieties are kept in trial for a fourth year after the three-year test period. If a positive decision is	
	taken, they will become an established variety and will enter the cyclic planting	

 system." note in paragraph 1.4, first sentence to read as follows: Note: if the DUSTNT software is used, a variety can be made to appear missing simply by removal of the variety from the "E file".
 paragraph 4.2.1, to remove extra dash in "t—test"

*132. The TC noted that the French, German and Spanish translations of the original English text would be checked by the relevant members of the Editorial Committee prior to submission of the relevant drafts of TGP documents that would be presented for adoption by the Council, at its forty-eighth ordinary session.

Revision of document TGP/8: Part II: Section 10: Uniformity Assessment on the Basis of the Relative Variance Method

*133. The TC considered document TC/50/23 and agreed with the proposed revision of document TGP/8, Section 10: "Uniformity Assessment on the Basis of the Relative Variance Method", as set out in document TC/50/23, Annex II.

TGP/14: Glossary of Terms Used in UPOV Documents - Correction (Spanish)

*134. The TC noted the correction to the Spanish version of document TGP/14: Section 2: Subsection 3: Color, paragraph 2.2.2, as set out in document TC/50/5, paragraph 22.

Future Revision of TGP Documents Previously Agreed by the TC

TGP/9: Examining Distinctness

*135. The TC noted the revisions already agreed by the TC for document TGP/9, as set out in document TC/50/5, Annex III.

*136. The TC agreed to request an expert from Germany to develop guidance on the use of photographs for the analysis of distinctness for inclusion in document TGP/9. The new guidance would make reference to the complete guidance available in TGP/7.

Future Revisions under Development

TGP/7: Development of Test Guidelines

Revision of document TGP/7: Source of Propagating material

*137. The TC considered document TC/50/17.

*138. The TC encouraged experts to present to the TWPs, at their sessions in 2014, their experiences with regard to plant material submitted for examination and how they had addressed the problems that could arise, which could be developed into guidance that would reflect good practice. The title of the document should be amended accordingly.

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

(i) Revision of document TGP/8: Part I: New Section: Minimizing the Variation due to Different Observers

*139. The TC considered document TC/50/21.

*140. The TC noted that the TWF had requested an expert from New Zealand to report, at its session in 2014, on the previous work done on harmonized variety description for apple for an agreed set of varieties, as set out in document TC/50/21, paragraph 17.

*141. The TC invited the expert from Australia, with the assistance of experts from the European Union, France, Germany, the Netherlands and the United Kingdom, to draft further guidance to be included in a future revision of document TGP/8 on minimizing the variation due to different observers, including guidance on PQ and QN/MG characteristics, for consideration by the TWPs at their sessions in 2014.

(ii) Revision of document TGP/8: Part II: Method of Calculation of COYU

*142. The TC considered document TC/50/22 and received a presentation by Mr. Adrian Roberts, United Kingdom, on "Proposed Improvements to COYU". It noted that a copy of the presentation would be made available as an addendum to document TC/50/22.

*143. The TC noted the developments in the work concerning the proposals to address the bias in the present method of calculation of COYU, as set out in document TC/50/22, paragraphs 8 to 21.

*144. The TC agreed that the development of a demonstration module in DUST should be continued and demonstrated to the TWC at its session in 2014. The TC agreed that a practical exercise should be conducted using real data to compare decisions made using the current and the proposed improved method.

*145. The TC requested the Office of the Union to issue a new circular inviting further information on the extent and modalities of use of the current COYU method, in advance of the thirty-second session of the TWC.

(iii) Revision of document TGP/8: Part II: New Section 11: Examining DUS in Bulk Samples

*146. The TC considered document TC/50/24.

*147. The TC invited experts from France and the Netherlands to provide examples of their experience in the development of characteristics based on bulk samples, for seed- and vegetatively propagated varieties, as a basis to develop guidance on the development of characteristics examined on the basis of bulk samples.

(iv) Revision of document TGP/8: Part II: New Section: Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions

*148. The TC considered document TC/50/25.

*149. The TC noted the invitation by the TWF to an expert from New Zealand to make a presentation at its forty-fifth session, on the project for "apple reference varieties" that began in New Zealand in 2011, and how that work would contribute to developing improved example varieties and variety descriptions.

*150. The TC agreed to invite an expert from Germany to develop a text to explain the different forms that variety descriptions could take and the relevance of scale levels in that regard.

*151. The TC agreed that the experts from France, Germany, Italy, Japan, Netherlands, Republic of Korea and United Kingdom should provide the results on the practical exercise to the Office of the Union and noted the plans for a summary of aspects in common and divergences between the methods to be presented to the TWPs in 2014 and to the TC at its fifty-first session.

*152. The TC noted that, on the basis of the results of the practical exercise, it would be invited to consider whether to develop guidance on data processing for the assessment of distinctness and for producing variety descriptions that would be relevant for different types of propagation.

(v) Revision of document TGP/8: Part II: New Section: Guidance of Data Analysis for Blind Randomized Trials

*153. The TC considered document TC/50/26 and agreed to request that experts from France continue the development of the proposed guidance on the basis of the comments in that document.

*154. The TC agreed that the circumstances under which blind randomized trials would be appropriate should be clarified.

*155. The TC agreed that the structure of the document should be reviewed in order to improve clarity and that consideration should be given to including guidance on the use of blind randomized trials without data analysis, which would require deletion of "Data analysis" from the title of document. The TC agreed that the Office of the Union should seek information on the use of blind randomized trials for presentation to the TWPs and the TC.

(vi) Revision of document TGP/8: Part II: New Section: Examining Characteristics Using Image Analysis

*156. The TC considered document TC/50/27.

*157. The TC agreed to the redrafting of the proposed text, by an expert from the European Union, into a standard TGP style of impersonal speech and to add the following introduction to the proposed text, as set out in document TC/50/27, paragraph 9:

"1. Introduction

"Characteristics which may be examined by image analysis should also be able to be examined by visual observation and/or manual measurement, as appropriate. Explanations for observing such characteristics, including where appropriate explanations in Test Guidelines, should ensure that the characteristic is explained in terms which would enable the characteristic to be understood and examined by all DUS experts."

- "2. Combined characteristics
- "2.1 The General Introduction (document TG/1/3, Chapter 4, Section 4) states that:
 - '4.6.3 <u>Combined Characteristics</u>

'4.6.3.1 A combined characteristic is a simple combination of a small number of characteristics. Provided the combination is biologically meaningful, characteristics that are assessed separately may subsequently be combined, for example the ratio of length to width, to produce such a combined characteristic. Combined characteristics must be examined for distinctness, uniformity and stability to the same extent as other characteristics. In some cases, these combined characteristics are examined by means of techniques, such as Image Analysis. In these cases, the methods for appropriate examination of DUS are specified in document TGP/12, 'Special Characteristics'.'

"2.2 Thus, the General Introduction clarifies that the use of image analysis is one possible method for examining characteristics which fulfill the basic requirements for use in DUS testing (see document TG/1/3, Chapter 4.2), which includes the need for the uniformity and stability of such characteristics to be examined. With regard to combined characteristics, the General Introduction also explains that such characteristics should be biologically meaningful."

(vii) Revision of document TGP/8: Part II: New Section: Statistical Methods for Visually Observed Characteristics

*158. The TC considered document TC/50/28.

*159. The TC agreed to the development of a new method for multinomial distributed data.

*160. The TC invited the TWC to compare the new method for multinomial distributed data and the Chi-square test, as set out in document TC/50/28, paragraph 10.

*161. The TC requested the TWC to identify a suitable expert to draft the document.

TGP/14: Glossary of Terms Used in UPOV Documents

Revision of document TGP/14: Section 2: Botanical Terms, Subsection 3: Color: Definition for "Dot"

*162. The TC considered document TC/50/29 and agreed not to develop a definition of "dot" for inclusion in document TGP/14, Section 2: "Botanical Terms, Subsection 3: Color".

New Proposals for Future Revisions of TGP documents

TGP/7: Development of Test Guidelines

(i) Coverage of the Test Guidelines

*163. The TC agreed to request the Office of the Union to develop guidance for Test Guidelines that are developed on the basis of varieties with one type of propagation when varieties may be developed in the future with other types of propagation.

(ii) Revision of document TGP/7: Drafter's Kit for Test Guidelines

*164. The TC agreed that document TGP/7 Section 4.3: "Drafter's Kit for Test Guidelines" and Annex 4 "Collection of Approved Characteristics" should be revised, subject to the introduction of the web-based TG Template in 2014.

TGP/9: Examining Distinctness

(i) Method of Observation

*165. The TC agreed that examples and illustrations to explain a single measurement (MG) on plant parts should be compiled by the Office of the Union and presented to the TWPs for inclusion in a future revision of document TGP/9, Subsections 4.3.2 and 4.3.4.

(ii) Schematic Overview of TGP Documents Concerning Distinctness

*166. The TC considered the revision of the flow diagram in TGP/9, as set out in document TC/50/5, paragraph 34, and agreed that it should be reviewed in conjunction with other possible changes to be introduced in documents TGP/4 "Constitution and Maintenance of Variety Collections" and TGP/9 "Examining Distinctness" resulting from the adoption of document UPOV/INF/15 "Guidance for Members of UPOV on Ongoing Obligations and Related Notifications and on the Provision of Information to Facilitate Cooperation".

TGP/14: Glossary of Terms Used in UPOV Documents

Section 2.4: Apex/Tip Shape Characteristics

*167. The TC requested the Office of the Union to develop an explanation that it may be possible in some cases for an apex characteristic to include a state of expression based on a differentiated tip, for consideration by the TWPs at their sessions in 2014.

PROGRAM FOR THE DEVELOPMENT OF TGP DOCUMENTS

*168. The TC agreed to delay the revision of document TGP/9 until 2015.

*169. The TC agreed the program for the development of TGP documents, as set out in document TC/50/5, Annex IV, subject to its conclusions, above, on matters concerning TGP documents.

Molecular techniques

*170. The TC considered document TC/50/13.

USE OF BIOCHEMICAL AND MOLECULAR MARKERS IN THE EXAMINATION OF DISTINCTNESS, UNIFORMITY AND STABILITY (DUS)

*171. The TC encouraged experts from China, the Republic of Korea and other members of the Union to make presentations at the fourteenth session of the BMT, on the use of molecular techniques to supplement the selection of similar varieties for inclusion in the growing trial, as set out in document TC/50/13, paragraph 6.

172. The TC noted the report by the European Seed Association (ESA) on a project to construct a database of molecular markers and morphological characteristics in potato and its plan to present information on that project during the fourteenth session of the BMT.

WORKING GROUP ON BIOCHEMICAL AND MOLECULAR TECHNIQUES, AND DNA-PROFILING IN PARTICULAR (BMT)

*173. The TC noted that the fourteenth session of the BMT would be held in Seoul, the Republic of Korea, from November 10 to 13, 2014.

*174. The TC agreed to the proposed amendment of the program of the fourteenth session of the BMT, as set out in paragraph 20 of this document.

*175. The TC agreed to the proposed plan for the fourteenth session of the BMT to be held in conjunction with the Joint Workshop with ISTA and OECD, to be held on November 12, 2014, as set out in document TC/50/13, paragraph 21.

*176. The TC agreed that the progress of work of the BMT and the outcomes of the Joint Workshop with ISTA and OECD should be reported to the TC at its fifty-first session.

PRESENTATION OF INFORMATION ON THE SITUATION IN UPOV WITH REGARD TO THE USE OF MOLECULAR TECHNIQUES TO A WIDER AUDIENCE, INCLUDING BREEDERS AND THE PUBLIC IN GENERAL

*177. The TC considered the proposed explanation of the situation in UPOV with regard to the use of molecular techniques, as set out in document TC/50/13, paragraph 26.

*178. The TC recalled that, at its forty-ninth session, held in Geneva from March 18 to March 20, 2013, it had agreed that there was a need to provide suitable information on the situation in UPOV with regard to the use of molecular techniques to a wider audience, including breeders and the public in general. That information should explain the potential advantages and disadvantages of the techniques, and the relationship between genotype and phenotype, which lay behind the situation in UPOV (see document TC/49/41 "Report on the Conclusions").

*179. The TC agreed that the explanation provided in document TC/50/13, paragraph 26, provided suitable information on the situation in UPOV with regard to the use of molecular techniques for breeders and persons with knowledge of DUS testing, subject to the following amendments:

Question: Does UPOV allow molecular techniques (DNA profiles) in the DUS examination?

Answer: "It is important to note that, in some cases, varieties may have a different DNA profile but be morphologically phenotypically identical, whilst, in other cases, varieties which have a large phenotypic difference may have the same DNA profile for a particular set of molecular markers (e.g. some mutations).

"In relation to the use of molecular markers that are not related to phenotypic differences, the concern is that it might be possible to use a limitless number of markers to find differences between varieties. In particular, differences could be found at the genetic level that are not reflected in morphological phenotypic characteristics.

"On the above basis, UPOV has agreed the following uses of molecular markers in relation to DUS examination:

"(a) Molecular markers can be used as a method of examining DUS characteristics that satisfy the criteria for characteristics set out in the General Introduction if there is a reliable link between the marker and the characteristic.

"(b) A combination of phenotypic differences and molecular distances can be used to improve the selection of varieties to be compared in the growing trial if the molecular distances are sufficiently related to phenotypic differences and the method does not create an increased risk of not selecting a variety in the variety collection which should be compared to candidate varieties in the DUS growing trial. "The situation in UPOV is explained in documents TGP/15 'Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)' and UPOV/INF/18 'Possible use of Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)".

*180. With regard to a wider audience, the TC agreed that the question was not framed in an appropriate way and, therefore, it would not be appropriate to seek to develop an answer to that question. The TC agreed that the question should be rephrased after clarification of the issues of interest to a wider audience.

Variety denominations

*181. The TC considered document TC/50/14.

POSSIBLE REVISION OF DOCUMENT UPOV/INF/12 "EXPLANATORY NOTES ON VARIETY DENOMINATIONS UNDER THE UPOV CONVENTION"

*182. The TC noted the ongoing work of the CAJ-AG concerning the development of guidance on variety denominations, as set out in paragraphs 3 to 6 of document TC/50/14.

*183. The TC noted that the CAJ, at its sixty-ninth session to be held in Geneva on April 10, 2014, would be invited to consider whether it would be appropriate to amend document UPOV/INF/12, paragraph 2.3.3(a)(i), as set out in document TC/50/14, paragraph 7.

*184. The TC agreed that the example "Bough" and "Bow" in document UPOV/INF/12, paragraph 2.3.3(i) should be replaced by a suitable example and further noted that the work on the possible development of a UPOV similarity search tool might be reflected in a review of document UPOV/INF/12. It also agreed that guidance on confusion for phonetic reasons should continue to be included in document UPOV/INF/12.

POSSIBLE DEVELOPMENT OF A UPOV SIMILARITY SEARCH TOOL FOR VARIETY DENOMINATION PURPOSES

*185. The TC noted the report concerning the possible development of a UPOV similarity search tool for variety denomination purposes provided in document TC/50/14, Section II.

*186. The TC welcomed the establishment of a working group for the development of a UPOV similarity search tool and invited experts to contribute to its work.

*187. The TC agreed that there were some challenges concerning linguistic and alphabet aspects which should be considered by the working group when defining the objectives of its work.

DEVELOPMENTS CONCERNING POTENTIAL AREAS FOR COOPERATION WITH THE IUBS COMMISSION AND THE ISHS COMMISSION

*188. The TC noted the developments concerning potential areas for cooperation between the International Commission for the Nomenclature of Cultivated Plants of the International Union for Biological Sciences (IUBS Commission), the International Society for Horticultural Science Commission for Nomenclature and Cultivar Registration (ISHS Commission) and UPOV, as set out in document TC/50/14, Section III.

Information and databases

- (a) UPOV information databases
- *189. The TC considered document TC/50/6.

Information on type of crop

*190. The TC agreed to provide information on the type of crop for each UPOV code in the GENIE database, as set out in document TC/50/6, paragraph 8. It was clarified that more than one crop type could be allocated to a single UPOV Code

*191. The TC noted that the proposed approach would enable the data in the PLUTO database to be analyzed with regard to applications filed, titles issued and titles having ceased to be in force by type of crop, whilst noting that the multiple crop types for some UPOV codes would result in some limitations in that regard.

UPOV CODE SYSTEM

*192. The TC noted the developments concerning UPOV codes, as set out in document TC/50/6, paragraph 13.

*193. The TC noted the plan of the Office of the Union to prepare tables of UPOV codes additions and amendments, for checking by the relevant authorities, for each of the TWP sessions in 2014, as set out in paragraph 14 of document TC/50/6.

PLUTO DATABASE

*194. The TC noted the developments concerning the program for improvements to the Plant Variety Database, as reported in document TC/50/6, paragraphs 16 to 38.

SURVEY OF MEMBERS OF THE UNION ON THEIR USE OF DATABASES AND ELECTRONIC APPLICATION SYSTEMS

*195. The TC noted the results of the survey of members of the Union on their use of databases for plant variety protection purposes and also on their use of electronic application systems, as presented in document TC/50/6, Annex IV.

*196. The TC noted that the CAJ would be invited to consider the results of the survey at its sixty-ninth session, to be held in Geneva on April 10, 2014.

Variety description databases

*197. The TC considered document TC/50/7.

*198. The TC noted the developments on variety description databases, as set out in document TC/50/7, paragraphs 10 to 21.

*199. The TC noted that the TWV had requested an expert from France to make a presentation, at its forty-eighth session, on the GEMMA software being used by the Group for Study and Control of Varieties and Seeds (GEVES) in a Community Plant Variety Office of the European Union (CPVO) Research and Development project. In that regard, it noted the report from France that the presentation would not be possible for 2014.

*200. The TC noted that the TWC had invited an expert from China to make a presentation on variation of variety descriptions over years in different locations, at its thirty-second session. The TC agreed that it would be beneficial to make a presentation to the TWA.

*201. The TC noted that the TWC had suggested that the information presented by experts from China, at its thirty-first session, on the research on the construction of DNA fingerprint database in Maize, should be made available to the BMT.

*202. The TC noted that the TWF had invited an expert from the European Union to present the development of a database for Peach and noted the report that this presentation would now be made in 2015.

*203. The TC noted that the TWO had requested an expert from Australia to lead an initial study on the viability of the development of a database, in a similar way to the database being developed for Pea, at its forty-seventh session.

Exchangeable software

*204. The TC considered document TC/50/8.

PROPOSAL TO DEVELOP A NEW INFORMATION DOCUMENT

*205. The TC agreed to propose document UPOV/INF/22 "Software and equipment used by members of the Union" for adoption by the Council at its forty-eighth ordinary session, to be held in Geneva on October 16, 2014, as set out in document TC/50/8, paragraphs 6 to 8.

*206. The TC noted that the comments of the TC, at its fiftieth session, on the proposed new information document UPOV/INF/22, would be reported to the CAJ, at its sixty-ninth session, to be held on April 10, 2014.

*207. Subject to adoption of document UPOV/INF/22 by the Council at its forty-eighth ordinary session, to be held in Geneva on October 16, 2014, the TC agreed to issue a circular to the designated persons of the members of the Union in the TC, inviting them to provide information regarding non-customized software and equipment used by members of the Union, as appropriate, as set out in document TC/50/8, paragraph 9.

REVIEW OF DOCUMENT UPOV/INF/16 "EXCHANGEABLE SOFTWARE"

Software proposed for inclusion in document UPOV/INF/16 "Exchangeable software"

*208. The TC agreed to include the SIVAVE software in document UPOV/INF/16, as set out in document TC/50/8, paragraph 15.

*209. The TC noted that a revision of document UPOV/INF/16/3 concerning the inclusion of the SIVAVE software would be presented to the CAJ, at its sixty-ninth session, to be held on April 10, 2014, and if agreed by the CAJ, would be presented for adoption by the Council at its forty-eighth ordinary session, to be held on October 16, 2014, as set out in document TC/50/8, paragraphs 16 and 17.

*210. The TC noted that Mexico had been invited to provide further information on the SISNAVA software at the thirty-second session of the TWC.

Information on use by members

*211. The TC approved the revision of document UPOV/INF/16 concerning the inclusion of information on the use of software by members of the Union, as set out in document TC/50/8, Annex III.

*212. The TC noted that the comments of the TC, at its fiftieth session, concerning the use of software by members of the Union, would be reported to the CAJ at its sixty-ninth session, to be held in Geneva on April 10, 2014.

TRANSLATION OF SOFTWARE IN DOCUMENT UPOV/INF/16/3

*213. The TC noted that an expert from France would make a presentation on the AIM software at the thirty-second session of the TWC, based on the English translation of the software, as set out in document TC/50/8, paragraph 25.

*214. The TC noted that the translation of the user interfaces of the "Information System (IS) used for Test and Protection of Plant Varieties in the Russian Federation" software would be technically very difficult.

*215. The TC agreed that selected screenshots in English of the software "Information System (IS) used for Test and Protection of Plant Varieties in the Russian Federation" be presented to the TWC at its thirty-second session, in order to explain how the software worked, as set out in document TC/50/8, paragraph 28.

Electronic application systems

*216. The TC considered document TC/50/9.

*217. The TC noted the developments concerning the development of a prototype electronic form as set out in document TC/50/9.

Assessing uniformity by off-types on basis of more than one sample or sub-samples

*218. The TC considered document TC/50/12.

*219. The TC noted that the TWC had proposed to provide more detailed information and further analysis on the consequences of the use of the approaches presented in situations A, B, C and D at its session in 2014, as set out in document TC/50/12, paragraph 33. The TC agreed that the document should be modified in order to explain that, in Situations A and B, a variety might be rejected after a single growing cycle under certain circumstances.

*220. The TC noted that the TWC had proposed that the statistical basis for the acceptable number of off-types in situation D be considered further at its session in 2014, as set out in document TC/50/12, paragraphs 34 and 35.

*221. The TC agreed to develop guidance in document TGP/10 for situations A, B, C and D, as set out in document TC/50/12, Annexes I to IV, after consideration of the comments by the TWC.

*222. The TC agreed that document TGP/10, paragraph 6 should be considered when considering the possible development of guidance on the approach presented in situation C, as set out in document TC/50/12, Annex III.

Preparatory workshops

*223. The TC considered document TC/50/11.

*224. The TC noted the report of the preparatory workshops held in 2013.

*225. The TC noted that the results of a survey and possible measures for improving the effectiveness of the preparatory workshops were considered in document TC/50/35.

*226. The TC considered the proposed program for preparatory workshops for 2014, as set out in document TC/50/11, paragraphs 10 to 12.

Discussion on improving the effectiveness of the Technical Committee, Technical Working Parties and Preparatory Workshops

*227. The TC considered document TC/50/35 and received a presentation by the Office of the Union on improving the effectiveness of the Technical Committee, Technical Working Parties and Preparatory Workshops.

Background

*228. The TC noted the measures implemented at the TWPs sessions in 2013, for improving the effectiveness of the TWPs, as set out in document TC/50/35, paragraph 10.

Results from the surveys in 2013

*229. The TC noted the participation to the surveys in 2013, as presented in document TC/50/35, paragraphs 12 and 13.

*230. The TC noted the results of the surveys in 2013 presented in document TC/50/35, Annex I.

Proposals for improving the effectiveness of the Technical Committee, Technical Working Parties and Preparatory Workshops

*231. The TC noted the aims set out in document TC/50/35, paragraph 18, that were the basis of the proposals for improving the effectiveness of the TWPs.

*232. The TC noted the information provided in document TC/50/35, Annex II, containing information on attendance of members of the Union to the TC and TWPs in the last five years.

Technical Committee

*233. The TC agreed the proposals concerning possible means of improving the effectiveness of the Technical Committee, as set out in document TC/50/35, paragraph 21, and agreed that further consideration should be given to other proposals at its fifty-first session.

Technical Working Parties and Preparatory Workshops

*234. The TC considered the proposals concerning possible means of improving the effectiveness of the TWPs, as set out in document TC/50/35, paragraphs 23 to 27, and agreed:

(a) to revise TWP invitations, as proposed in document TC/50/35, Annex III; and

(b) to make a survey of the participants at the TWP sessions in 2014, on the basis of document TC/50/35, Annex IV, and to include a question on whether participants to the TWPs and Preparatory Workshops had participated in the UPOV distance learning courses.

*235. In the case of proposals that could imply cost or timing changes, it agreed that the TWPs should be invited to consider the proposals set out in document TC/50/35, paragraphs 23 and 24, on the basis of further information to be provided by the Office of the Union. The TC would consider those proposals, on the basis of the comments of the TWPs, at its fifty-first session.

Discussion on Opportunities for training in the examination of DUS

*236. The TC received the following presentations on opportunities for training in the examination of DUS:

Australia: Training in DUS Examination	Australia (Mr. Nik Hulse)
Opportunities for Training in the Examination of DUS in Japan	Japan (Mr. Kenji Numaguchi)
Opportunities for Training in DUS Testing in the Netherlands	Netherlands (Mr. Kees van Ettekoven)
Formación en el examen DHE co-organizada por España	Spain (Mr. Luis Salaices)
Training resources in UPOV	UPOV Office (Mr. Peter Button)

*237. The TC noted that a copy of the presentations would be made available on the UPOV website.

Discussion on Cooperation with breeders in the examination of DUS

*238. The TC received the following presentations on cooperation with breeders in the examination of DUS:

Organization of DUS examination in Argentina	Argentina (Mr. Alberto Ballesteros)
Breeder Cooperation	Australia (Mr. Nik Hulse)
Canada's Plant Breeders' Rights (PBR) Framework: Breeder Cooperation	Canada (Mr. Anthony Parker)
Implementation of cooperation with breeders in the French Examination Office	France (Ms. Virginie Bertoux)

Cooperation with Breeders in New Zealand DUS Testing

Breeder Cooperation in DUS Examination in South Africa

Cooperation with Breeders in the Examination of DUS

New Zealand (Mr. Chris Barnaby)

South Africa (Mrs. Carensa Petzer)

United States of America (Mr. Paul Zankowski)

*239. The TC noted that a copy of the presentations would be made available on the UPOV website.

Test Guidelines

*240. The TC considered documents TC/50/2, TC/50/30, TC/50/31, TC/50/32, TC/50/33 and TC/50/34.

*241. The TC adopted six new Test Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability and nine revised Test Guidelines, as listed in the table below, on the basis of the amendments specified in Annex III 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
		DELINES / NOUVEA		RECTEURS D'EXAM	IEN / NEUE PRÜFL	INGSRICHTILINIEN	<u>/</u>
NL	TWO	TG/HOSTA (proj.9)	Funkia, Hosta, Plantain Lily	Funkia, Hémérocalle du Japon	Funkie	Hosta	Hosta Tratt.
CN	TWO	TG/LILAC(proj.6)	Lilac	Lilas	Flieder	Lila	Syringa L.
CN	TWF	TG/LITCHI (proj.5)	Litchi, Lychee	Litchi	Litschi	Litchi	Litchi chinensis Sonn.
NL	TWO	TG/MANDE (proj.7)	Brazilian-jasmine		Brasilijasmin		Mandevilla Lindl., Dipladenia A. DC.
AU	TWA	TG/RHODES (proj.4)	Rhodesgrass	Herbe de Rhodes	Rhodesgras	Hierba de Rhodes	Chloris gayana Kunth
MX	TWF	TG/VANIL(proj.5)	Vanilla	Vanillier	Vanille-Pflanze	Vainilla, Xanath	Vanilla planifolia Jacks.
							ONEN ANGENOMMENER
		HTLINIEN / REVISIO				ADOPTES / REVISIC	<u>JNEN ANGENOMMENER</u>
DE	TWA	TG/33/7(proj.4)	Kentucky Bluegrass	Pâturin des prés	Wiesenrispe	Poa de los prados	Poa pratensis L.
ZA	TWA	TG/93/4(proj.5)	Groundnut	Arachide	Erdnuß	Cacahuete, Maní	Arachis L.
HU	TWV	TG/166/4(proj.6)	Opium/Seed Poppy	OEillette, Pavot	Mohn, Schlafmohn	Adormidera, Amapola, Opio	Papaver somniferum L.
DE	TWF	TG/187/2(proj.4)	Prunus Rootstocks	Porte-greffes de Prunus	Prunus- Unterlagen	Portainjertos de prunus	Prunus L.
NL	TWV	TG/198/2(proj.4)	Chives, Asatsuki	Ciboulette, Civette	Schnittlauch	Cebollino	Allium schoenoprasum L.
<u>PARTIA</u> TEILRE	L REVIS	SIONS OF TEST GUII EN ANGENOMMENE	DELINES / RÉVISIO R PRÜFUNGSRICH	<u>ONS PARTIELLES D</u> ITLINIEN / REVISIO	E PRINCIPES DIRE	ECTEURS D'EXAME DE DIRECTRICES D	<u>EN ADOPTÉS /</u> E EXAMEN ADOPTADAS
FR	TWV	TG/7/10 and document TC/50/32	Pea	Pois	Erbse	Guisante, Arveja	Pisum sativum L.
FR	TWF	TG/53/7 and documents TC/50/33, TG/53/7 Rev. (proj.1)	Peach	Pêcher	Pfirsich	Durazno, Melocotonero	Prunus persica (L.) Batsch, Persica vulgaris Mill., Prunus L. subg. Persica
NL/FR	TWV	TG/61/7 and document TC/50/30	Cucumber, Gherkin	Concombre, Cornichon	Gurke	Pepino, Pepinillo	Cucumis sativus L.
NL/FR	TWV	TG/104/5 and document TC/50/31	Melon	Melon	Melone	Melón	Cucumis melo L.

*242. UPOV has adopted 301 Test Guidelines, all of which are freely available on the UPOV website (<u>http://www.upov.int/test_guidelines/en/</u>).

*243. With regard to the Test Guidelines for Peach (documents TC/50/33 and TG/53/7 Rev.(proj.1)), the TC adopted the Test Guidelines subject to the following issues being approved by the TWF at its forty-fifth session, as set out in Annex III to this report:

- grouping characteristics
- the deletion of "Fruit: flesh type" from TQ 5 (to be moved to TQ 7.3).
- change of method of observation for Characteristics 56 and 59

*244. The TC adopted the Test Guidelines for Vanilla subject to the addition of asterisks to Characteristics 5, 7, 11, 14, 21 being approved by the TWF by correspondence, as set out in Annex III to this report.

*245. The TC noted that the Leading Expert, Mr. Hennie Venter (South Africa), after consultation with Chairperson of the TWF, had requested that the draft Test Guidelines for Apple rootstocks (*Malus* Mill.) be rediscussed by the TWF at its forty-fifth session in order to agree on the proposals concerning example varieties, as set out in Annex III to this report.

*246. The TC agreed to inform the TWPs that it would be helpful if the Leading Experts could be contacted by e mail during the TC-EDC meetings to resolve minor issues.

Corrections to Test Guidelines

*247. The TC noted the corrections made to the adopted Test Guidelines for Curly Kale (document TG/90/6), Tomato Rootstocks (document TG/294/1) and African Lily (document TG/266/1 Rev.), on the basis of document TC/50/34.

Draft Test Guidelines Discussed by the Technical Working Parties in 2013

*248. The TC noted the draft Test Guidelines discussed by the Technical Working Parties at their sessions in 2013, as listed in document TC/50/2, Annex II.

Draft Test Guidelines to be discussed by the Technical Working Parties in 2014

*249. The TC agreed the program for the development of new Test Guidelines and for the revision of Test Guidelines, as shown in document TC/50/2, Annex III, subject to the inclusion of the partial revision of the Test Guidelines for Spinach (document TG/55/7 Rev. 2).

*250. The TC noted the status of the existing Test Guidelines, as listed in Annex IV to document TC/50/2.

Test Guidelines on the UPOV Website

Superseded versions of Test Guidelines

*251. The TC noted the list of superseded Test Guidelines, as presented in document TC/50/2, Annex V.

*252. The TC noted that information on the date of adoption of Test Guidelines had been made available on the UPOV website.

*253. The TC approved the cover page and location on the UPOV website of superseded versions of Test Guidelines, as set out in document TC/50/2, paragraphs 22 and 23.

Guidance for drafters of Test Guidelines

*254. The TC noted that the provision of training on the use of the web-based TG Template was considered in document TC/50/3 "Matters arising from the Technical Working Parties".

*255. The TC noted that a report on the development of a web-based Test Guidelines template was considered in document TC/50/10 "Report on developments in UPOV including relevant matters discussed in the last sessions of the Administrative and Legal Committee, the Consultative Committee and the Council".

*256. The TC noted the importance of a harmonized approach in the different Test Guidelines so that the assessment of uniformity would take into consideration the specific question of cross-pollinated varieties

(relative uniformity standard). This matter is addressed in TGP/7 which was not in effect when many of the existing Test Guidelines were adopted.

List of genera and species for which authorities have practical experience in the examination of distinctness, uniformity and stability

*257. The TC considered document TC/50/4 and noted the number of genera and species for which members of the Union indicated their practical experience in the examination of DUS increased from 2,589 in 2013 to 3,305 in 2014 (+ 27.7%). The information on members of the Union with practical experience in DUS examination is freely accessible via the GENIE database.

Chairpersons

*258. The TC agreed to recommend to the Council the election of the next chairpersons of the TWPs as follows:

<u>TWP</u>	Proposal
TWA	Mr. Tanvir Hossain (Australia)
TWC	Mr. Adrian Roberts (United Kingdom)
TWF	Mr. Katsumi Yamaguchi (Japan)
тwo	Mr. Kenji Numaguchi (Japan)
TWV	Ms. Swenja Tams (Germany)
BMT	Mr. Kees van Ettekoven (Netherlands)

Program for the fifty-first session

*259. The following draft agenda was agreed for the fifty-first session of the TC, to be held in Geneva in 2015:

- 1. Opening of the session
- 2. Adoption of the agenda
- 3. Discussion on:
 - (a) Molecular Techniques
 - (b) Possible ways of improving the effectiveness of the TC, TWPs and Preparatory Workshops
- 4. Report on developments in UPOV including relevant matters discussed in the last sessions of the Administrative and Legal Committee, the Consultative Committee and the Council (oral report by the Vice Secretary-General)
- 5. Progress reports on the work of the Technical Working Parties, including the Working Group on Biochemical and Molecular Techniques, and DNA-Profiling in Particular (BMT)
- 6. Matters arising from the Technical Working Parties
- 7. TGP documents
- 8. Molecular techniques
- 9. Variety denominations
- 10. Information and databases
 - (a) UPOV information databases

- (b) Electronic application systems
- (c) Exchangeable software
- (d) Variety description databases
- 11. Assessing uniformity by off-types on the basis of more than one sample or sub-samples
- 12. Preparatory workshops
- 13. Test Guidelines
- 14. List of genera and species for which authorities have practical experience in the examination of distinctness, uniformity and stability
- 15. Program for the fifty-second session
- 16. Adoption of the report on the conclusions (if time permits)
- 17. Closing of the session

*260. The TC agreed that consideration should be given to inviting other organizations e.g. the Convention on Biological Diversity (CBD), the Food and Agriculture Organization of the United Nations (FAO), ISTA, the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), OECD and the World Intellectual Property Organization (WIPO) to make presentations at a future session. In that regard, it agreed that it would be appropriate to report this suggestion for consideration by the Consultative Committee.

261. This report was adopted by correspondence.

[Annexes follow]

ANNEXE I / ANNEX I / ANLAGE I / ANEXO I

LISTE DES PARTICIPANTS / LIST OF PARTICIPANTS / TEILNEHMERLISTE / LISTA DE PARTICIPANTES

(dans l'ordre alphabétique des noms français des membres / in the alphabetical order of the French names of the Members / in alphabetischer Reihenfolge der französischen Namen der Mitglieder / por orden alfabético de los nombres en francés de los miembros)

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ORGANISATION RÉGIONALE AFRICAINE DE LA PROPRIÉTÉ INTELLECTUELLE (ARIPO) / AFRICAN REGIONAL INTELLECTUAL PROPERTY ORGANIZATION (ARIPO) / AFRIKANISCHE REGIONALORGANISATION ZUM SCHUTZ GEISTIGEN EIGENTUMS (ARIPO) / ORGANIZACIÓN REGIONAL AFRICANA DE LA PROPIEDAD INTELECTUAL (ARIPO)



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Glenn MAC STRAVIC, Head, Brand Database Section, Global Databases Service, Global Infrastructure Sector



Lili CHEN (Ms.), Software Developer, Brand Database Section, Global Databases Service, Global Infrastructure Sector



José APPAVE, Senior Service Data Administration Clerk, Brand Database Section, Global Databases Service, Global Infrastructure Sector

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V. BUREAU / OFFICE / VORSITZ / OFICINA

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Kees VAN ETTEKOVEN, Vice-Chairman

VI. BUREAU DE L'UPOV / OFFICE OF UPOV / BÜRO DER UPOV / OFICINA DE LA UPOV



Peter BUTTON, Vice Secretary-General



Yolanda HUERTA (Mrs.), Legal Counsel



Jun KOIDE, Technical/Regional Officer (Asia)



Ben RIVOIRE, Technical/Regional Officer (Africa, Arab countries)



Leontino TAVEIRA, Technical/Regional Officer (Latin America, Caribbean countries)



Romy OERTEL (Ms.), Secretary II

[L'annexe II suit/ Annex II follows/ Anlage II folgt/ Sigue el Anexo II]

TC/50/37

ANNEX II

ORAL REPORTS OF THE CHAIRPERSONS OF THE TECHNICAL WORKING PARTIES

Oral Report of the Chairperson of the Technical Working Party for Agricultural Crops



TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS (TWA)

42nd SESSION KIEV, UKRAINE JUNE 17-21, 2013 with the PREPARATORY WORKSHOP on the 16 JUNE 2013

CHAIRPERSON: ROBYN HIERSE Report: TWA/42/31 REPORT

TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS (TWA)

- 86 participants from 32 members of the Union
- Preparatory Workshop was attended by 36 participants from 16 members of the Union



TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS (TWA)

- TGP/8: Trial Design and Techniques used in the Examination of Distinctness, Uniformity and Stability
- Minimizing the Variation due to Different Observers
- Method of Calculation of COFU
- Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions
- Guidance of Data Analysis for Blind Randomized Triah
- Statistical methods for visually observed characteristics

TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS (TWA)

- > TGP/7 Development of Test Guidelines
 - ASW for Growing Cycle for Tropical Species
 - Source of Propagating Material
 - Presence of Leading Expert at Technical Working Party Sessions

TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS (TWA)

- Reports from the participants -TWA/42/28
 Followed by a presentation from the UPOV OFFICE on latest developments and the results of the survey conducted in 2012
- Molecular Techniques

TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS (TWA)

- Uniformity assessment
- Pea Study Database
- Guidance for Drafters of Test Guidelines
- Presentation by an expert from Ukraine on experiences with new types and species

TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS (TWA)

- 43rd TWA Session Mar del Plata, ARGENTINA, NOVEMBER 17 - 21 2014
- Preparatory Workshop NOVEMBER 16, 2014
- Next Chairperson of the TWA Mr Tanvir Hossain (Australia)



TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS (TWA)

- > Two technical visits:
- On the evening of June 17 2013 the TWA visited the Grishko National Botanical Garden
- And on June 20 2013, the TWA visited the Mankivka State Variety Examination Station



TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS (TWA)

- ThreeTG's to be submitted to theTC Groundnut, Kentucky Bluegrass and Rhodesgrass
- TWA plan to discuss 13 TG's at TWA session in 2014
- TG's to be discussed: Adlay, Adzuki/Red bean, Cassava, Castor Bean, Elytrigia, Finger millet, Ginseng, Quinoa, Scorpion Weed, Sorghum, Urochloa, Wheat and Yellow Potato

TECHNICAL COMMITTEE MEETING Report Back of the TWA 2013

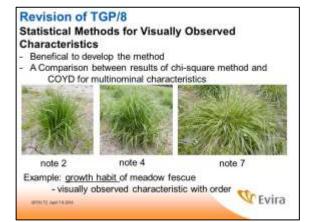
THANK YOU

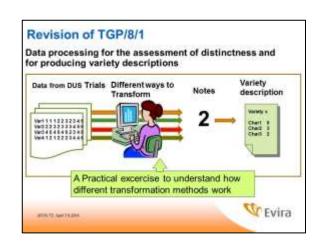


Oral Report of the Chairperson of the Technical Working Party on Automation and Computer Programs









Uniformity assessment

Assessing uniformity by off-types on the basis of more than one sample or sub samples - Explanations of Type I and Type II errors used in the

statistical basis of subsample 20/sample 100 - Discussion continues

Method of Calculation of COYU

KOUTE AND ALIM

- Cubic smoothing splines
 Demo version of DUST software in TWC 2014
 - Presentation to come during this TC

WEvira

Image analysis

KONTE ANTA JH

AIM: Management of color analysis, France
 Color analysis process with AIM was expalined to the TWC
 Control of environmental conditions important

Exchangeable software

SISNAVA / SIVAVE, Mexico

- SIVAVE: management of application process TWC recommended to the list of "Exchangeable software"
- SISNAVA: software used for deciding whether candidate should go into DUS test
 - More information of the Distinctness decision process was asked for the next meeting

WEvira







Thank you for your attention

Oral Report of the Chairperson of the Technical Working Party for Fruit Crops



Proposals for Partial Revision: Mandarins

- The TWF received a presentation from Mr. Jean Maison (European Union), the coordinator of the subgroup.
- The experts from Spain, Morocco & South Africa reported on their progress to date, copies are provided in the Annex to document TWF/44/30.
- The TWF agreed that the decision as to the suitability of this characteristic for the purpose of inclusion in the UPOV guidelines is expected after the results of the second year are known.



Test Guidelines

- The TWF agreed that the following draft Test Guidelines should be sent to the TC for adoption at its 50th session :
- + Litchi (Litchi chinensis Sonn.)
- + Peach (Prunus persica (L.) Batsch) (Partial revision
- + Prunus rootstocks (Prunus L.) (Revision)
- Vanilla (Vanilla planifolia Jacks)



New Guidelines for discussion 2014

- "Acca (Acca sellowiana (Berg) Burret) Apricot (Prunus armeniaca L.) (Partial revision: example varieties)
- Avocado rootstock (Persea Mill.)
- "Coconut (*Cocos nucifera* L.) Chestnut (*Castanea sativa* Mill.) (Revision) Date palm (*Phoenix dactylifera*)
- Juglans rootstock
- *Mandarins (Citrus L. Group 1) (Partial revision)
- Papaya (Carica papaya L.)
- *Pecan nut (Carya illinoinensis (Wangenh.) K. Koch) Walnut (Juglans regia L.) (Revision)

Technical Working Party for Fruit Crops

- + At the invitation of an expert from Morocco, the TWF agreed to hold its 45th session in Marrakesh, from May 26 - 30 May, 2014, with a preparatory workshop on 25 May,2014.
- + The workshop gives an introduction to UPOV, an overview of how to draft & interpret Guidelines & thus provides an excellent opportunity for training of DUS examiners.

Technical Working Party for Fruit Crops

Apart from discussing TGP documents & Guidelines the TWF also builds relations and exchange knowledge across UPOV member States:

Thank you !



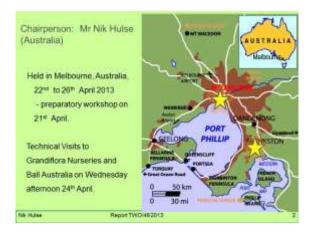


Technical Working Party for Fruit Crops

- On May 1, the TWF visited the ENZA[™] PAK fruit cool storage & packing facility, in Whakatu, near Hastings, followed by a visit to the New Zealand Institute for Plant & Food Research (Plant and Food Research), Hawke's Bay Research Center, near Havelock North Village.
- The TWF agreed to propose to the TC that it recommend to the Council to elect Mr. Katsumi Yamaguchi (Japan), as the next chairperson of the TWF.

Oral Report of the Chairperson of the Technical Working Party for Ornamental Plants and Forest Trees

Progress report on Technical Working Party for Ornamental Plants and Forest Trees (TWO) 46th Session





(170) Technical Working Party for Ornamostal Plants and Forest Trees 46* Session, Melbourse, Australia, 22** to 26** April 2013

The meeting was attended by 43 participants from 18 members of the Union, three observer states and one organisation. The preparatory workshop was attended by 30 participants.

Report TWD/462013

The TWO was welcomed by;

NB HURR

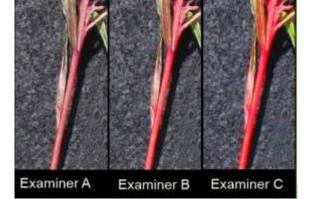
Mrs. Fatima Beattle, Deputy Director General, IP Australia who gave an overview of PVP in Australia - via Webex

The Chairperson of the TWO gave a presentation on experiences in DUS examination in Australia.

Report TWDH62013

Documents discussed

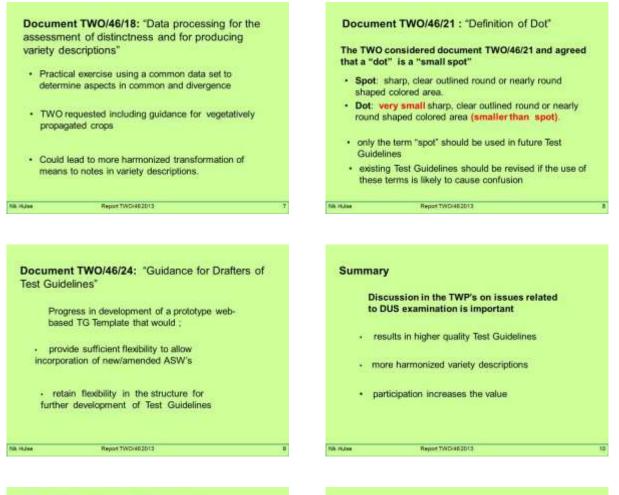
- Many documents were discussed, including 15 Test Guidelines
- Although all of the discussions were important only a few of the key points are presented here.





-

Report TWDH82013



The TWO agreed to submit four Test Guidelines to the TC in 2014.

New TG's: China Aster, Hosta, Lilac, Mandevilla.

The TWO also agreed to propose:

Mr Kenji Numaguchi (Japan) as the next chairperson of the TWO from 2015-2017.

Nik Hulan



Report TWD/462013

At its forty-seventh session the TWO plans to discuss 15 Test Guidelines, consisting of four revisions and 11 new Test Guidelines

TWO 47th Session

At the invitation of Kenya, the TWO agreed to hold its forty-seventh session in Naivasha, Kenya from May 19 to 23, 2014.

Nik Hulan



Report TWD/462013



Oral Report of the Chairperson of the Technical Working Party for Vegetables







TWV Forty-Seventh Session held in Nagasaki, Japan, from May 20 to 24, 2013 Preparatory workshop on May 19, 2013

Technical Visits to the Unzen Station of the National Center for Seeds and Seedlings (NCS5)- DUS growing trials station.







The meeting was attended by 53 participants from 16 members of the Union, 3 observer states and 2 organisations. The preparatory workshop was attended by 20 participants.

Technical Working Party for Vegetables

Relevant matters

Molecular Techniques

- The TWV received a presentation by an expert from
 the Netherlands on "Male sterility detection (in cabbage) using Molecular Techniques",
 - and by an expert from France on "Molecular Techniques in DUS Testing in the Group for Study and Control of Varieties and Seeds (GEVES)"





Technical Working Party for Vegetables The TWV was welcomed by

Mr. Junya Endo, Director, New Business and Intellectual Property Division, Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries of Japan (MAFF)

who made a presentation on plant variety protection in Japan

The Plant Variety Protection System in Japan



Technical Working Party for Vegetables

Relevant matters

Revision of document TGP/8: Part II: Selected Techniques Used in DUS Examination, New Section: Examining characteristics using image analysis

The TWV invited experts from Czech Republic, France, Germany, the Natherlands and the United Kingdom to make a presentation at its forty-eighth session, on the use of image analysis <u>on pea, carrot</u>, <u>onion and parsiesy respectively.</u> With regard to pea, the TWV agreed to receive presentations from the Czech Republic, France and the United Kingdom in order to compare the method used for image analysis in different UPOV members on the same crop





Technical Working Party for Vegetables

The TWV agreed to propose to the TC that it recommend to the Council to elect Mrs. Swenja Tams (Germany), as the next chairperson of the TWV.



Technical Working Party for Vegetables

Matters for future consideration

The TWV proposed that suitable agenda items to be added to the program at its forty-eighth session, under which the following items would be presented and discussed:

- · Presentation on the use of molecular techniques in DUS examination
- · Presentation on the use of statistical approaches in DUS examination
- Presentation on the use of disease resistance characteristics in DUS examination
- Management of reference collections
- · New issues arising for DUS examination



TWV 48th Session

At the invitation of Italy, the TWV agreed to hold its forty-eighth session in Paestum, Italy, from June 23 to 27, 2014, with the preparatory workshop on June 22, 2014.



[Annex III follows]

TC/50/37

ANNEX III

AMENDMENTS TO THE DRAFT TEST GUIDELINES PRIOR TO THEIR ADOPTION AT THE FIFTIETH SESSION OF THE TECHNICAL COMMITTEE (TC)

1. PARTIAL REVISIONS

TC/50/30 Partial Revision of the Test Guidelines for Cucumber (Document TG/61/7)

(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in document TC/50/30, submitted to the TC:

General	to improve format of explanations
remark	
5.3	to correct numbering of characteristics in EN, FR, ES

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

Char. 47	in the Spanish version to delete "velloso" from the name of the characteristic
Char. 48	to add ex. var. "Pepinova" for state 1 (already used in Ad. 48); written approval
	requested by TWV, no objections received (circular E-14/032)

TC/50/31 Partial Revision of the test guidelines for Melon (Document TG/104/5)

(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in document TC/50/31, submitted to the TC:

General remark	to improve format of explanations
Table of	- to replace "race" by "pathotype" in the French translations
Chars.	Leading Expert disagreed
	- to add (+) to all sub chars. of all chars.

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

General	to remove highlight in bold and/or color
remark on	
Addendums	

TC/50/32 Partial Revision of the Test Guidelines for Pea (Document TG/7/10)

The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in document TC/50/32, submitted to the TC:

Par. 5 to delete reference to maintainer	Par. 5 to delete reference to maintainer
--	--

TC/50/33 Partial Revision of the test guidelines for Peach (Document TG/53/7)

The TC-EDC recommended to the TC that the Test Guidelines for Peach be adopted subject to the following issues being approved by the TWF at its forty-fifth session:

- grouping characteristics
- the deletion of "Fruit: flesh type" from TQ 5 (to be moved to TQ 7.3).
- change of method of observation for Characteristics 56 and 59

(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in document TC/50/33, submitted to the TC:

General	the Office to prepare a complete draft for TC/50 session
remark	Leading Expert: agreed
3.5	to read "plants should be at least 5."
6.5	to add full explanation on method of observation to Chapter 4
Table of	Method of observation:
Chars.	- VG for 59, not MG (to delete duplicate)
	Leading Expert agreed
	- to check if some chars. are missing
	Leading Expert: no characteristics are missing
	Numbering of char. has to be changed from 52 on. So far only the change due to
	deletion of old 63 was considered. General remark on renumbering would be sufficient.
	Leading Expert: The numbering of chars. has changed from the Characteristic 52 to the
	last Characteristic 70.
	to check example variety of Char. 51
	Leading Expert: to replace "Lovel" by "Lovell"
New Chars.	- to delete underlined part (see TGP/7)
52, 53, 54	- to retain the example varieties for states in the current TG (e.g. Redhaven; is it absent
	or present? To be clarified)
	Leading Expert: The new presentation of the Characteristics 52, 53, 54 does not require
	to make appear the variety Redhaven as an example variety. Also, "Redhaven" is an old
	variety, which is not used anymore.
	- to be checked wether it should be "Springfire" or "Spring Fire"?
	Leading Expert: We propose to maintain the orthography "Springfire". This is the peach
	example variety proposed by the NZ delegation in May 2012 at the same time of the
	proposition of the additional Characteristics 52, 53, 54.
	We want to highlight the possible confusion between the peach variety "Springfire"
	(which have the anteriority) and the nectarine variety "Spring Fire" granted in the US
	and in application in ZA and AU.
Ad. 55	to replace "extent" by "amount"
Char. 65 <u>64</u>	to delete underlined part
	Leading Expert: agreed. In this case the only change to the characteristic is the
	addition of the method of observation.
Char. and Ad.	- to read "Time of maturity"
68 <u>67</u>	Ad. to read "The time of maturity is when the overall appearance, firmness and taste
	indicate that the fruit is ready for consumption."
Ad. 8	to read "The density of flower buds is determined along the length of the current year's
	shoot."
Ad. 50	to be deleted
TQ 5	to be updated according to the agreed changes to the grouping characteristics (see
	general remark above)
TQ 7.1	- to be moved to TQ 7.3 and keep Standard Wording for 7.1
	- to add request to provide information on flesh type for the candidate variety (box)

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

5.3, TQ 7.3.3	to use "stony hard" in the French version instead of the translation "dure comme la pierre" throughout the whole document
New Chars. after 52, 53, 54	to read "Fruit: intensity of" instead of "degree of"
Char. 56	to be indicated as MG instead of VG
Char. 59	to be indicated as VG instead of MG
Ad. 3	to delete sentence

2. NEW TEST GUIDELINES

<u>General</u>

8.	- TGP/14: grids: to delete brackets in header
	 to check spacing in titles of Addendums

Hosta (<i>Hosta</i> Tratt.) TG/HOSTA(proj.9)	Tratt.) TG/HOSTA(proj.9)
---	--------------------------

(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/HOSTA(proj.9)), submitted to the TC:

5.3 (b), (c)	to read "largest" instead of "greatest" (according to TGP/14)
Table of	to check spelling of Example Variety "Georg Smith"
Chars.	Leading Expert: to read "Georg Smith"
Char. 1	to provide example varieties for states 1 and 3
	provided by Leading Expert
Char. 5	to read "Petiole: shape of inner side in cross section"
Char. 7	to check with Leading Expert whether state 1 to read "absent"
	Leading Expert: agreed
Char. 11	to check with Leading Expert whether order of states can be reversed (according to
	TGP/14)
	Leading Expert: agreed
Chars. 14 to	to follow order in TGP/14: color; distribution; pattern; total area
33	
Char. 14	to add VG
Chars. 16, 20,	- state 1 to read "at basal zone" - state 3 to read "at center"
24, 28, 32 Char, 47	
Char. 51	to read "Bract: shape in cross section" to be indicated as QN
Chars. 57 to	to underline "inner" and "outer"
64	to underline inner and outer
Chars. 58, 62	to change order of states according to TGP/14
Char. 63	to read "Corolla: color of outer side of inner lobes"
Char. 67	to provide example varieties for state 1 or 2
	provided by Leading Expert
8.1 (b)	last sentence to read "The Guideline makes provision for five colors;"
Ad. 1	to read "The Characteristic should be observed when the first shoots emerge and before
	opening of the leaves."
Ad. 10	to provide improved illustrations for states 1 and 2 and add lines where to be observed;
	or use drawings instead of photos
	Leading Expert provided drawings for all four states

Ad. 11	- to add images for states 1 and 5
	- the image for state 6 corresponds to an ovate not an elliptic leaf blade, and it
	corresponds better to note 2, and the image of note 2 is better set on note 1. A better
	example of an narrow elliptic is in Ad. 36 image 1.
	Leading Expert provided photos for states 1, 2, 5 and 8
Ad. 12	to improve photo for state 3 (The Ad. 11 image 8 is the same on note 3 and was
	manipulated to have a truncate base shape. Another image is necessary, possibly closer
	to image 1 in Ad. 13)
	provided by Leading Expert
Ad. 16	to delete notes and keep states only (different notes for Char. 16 and Chars. 20, 24, 30,
	32 for the same illustration)
Ad. 58, 62	- to check order of states and provide illustration in a grid according to TGP/14
	- to improve illustration for states 7 and 8
	provided by Leading Expert; Leading Expert also provided missing illustration for state 4
TQ 5	to delete char. numbers (Reference to Chars. 14, 17 and 18 is not appropriate because
	of different classification of colors (proportion vs. RHS numbering))
9.3	to check whether to delete
	Leading Expert: no change

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

Char. 1 to read "Plant: color of first scaly leaves"		
--	--	--

Lilac (Syringa L.) TG/L	ILAC(proj.6)
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(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/LILAC(proj.6)), submitted to the TC:

General	to check wording whether to use "flower" and use consistently throughout TG
remark	Leading Expert: agreed
2.2	to delete "2-year to 3-year old"
Char. 3	to check whether 9 notes is appropriate
	Leading Expert: to have notes 1, 3, 5
Chars. 6, 7, 8	- to check whether the characteristics can be reliably assessed (especially state 1 in
	Char. 7)
	Leading Expert: no change
	- to check whether illustrations in Ad. 7 (state 7) are correct
	Leading Expert: no change
	- to check notes of Char. 7
	Leading Expert: Characteristic 7 to have notes 1, 2, 3, 4
	- to check whether example varieties can be provided
	provided by Leading Expert
Char. 7, 8	Characteristic 7 implies a continuous variation from absent to very deep. Is it possible to
	assess a correct number in char. 8?
	Leading Expert: Yes, it is possible. It is quite easy to count lobe number. This char. is
	used to assess the number of lobes, it has a different visual quality especially between
	numerous lobes and less lobes.
Char. 9	to check with Leading Expert whether state 4 to read "broad elliptic"
	Leading Expert: no change
Char. 11	to read "Leaf: main color of upper side"
Char. 12	- to read "Leaf: secondary color of upper side"
	- state 1 to read "none" instead of "absent"
Char. 15	to replace species by example variety in state 7
	Leading Expert: to delete "S. chinensis" and reduce scale to have notes 1, 3, 5
Char. 16	- to check whether to be indicated as QN
	Leading Expert: agreed
	- state 2 to read "conic to cylindric"
	- state 3 to read "cylindric"

Char. 17	to algrify what a paniele is particularly for all the illustrations in Ad. 19, if update sheek	
Char. 17	to clarify what a panicle is, particularly for all the illustrations in Ad. 18; if unclear check whether Char. 17 can be deleted	
	Leading Expert: to delete Characteristic 17	
Char. 19	to read "Floret: fragrance"	
Char. 19	Leading Expert: to read "Flower: fragrance"	
Chars. 21, 22	to check whether MG is used or whether to delete it	
Gliais. 21, 22	Leading Expert: to delete MG	
Char. 25	to check whether state 1 to read "broad elliptic"	
Ghai. 25	Leading Expert: agreed	
Char. 28	to delete underlined part	
Char. 33	to check whether VG is applicable or to be deleted	
Char. 55	Leading Expert: to delete VG	
8.1 (a)	to read "Observations on the leaf should be made on leaves from the middle part of the	
0.1 (a)	shoot on the current year's growth."	
8.1 (b)	- to read "Observations on the inflorescence should be made on inflorescences from the	
0.1 (0)	middle to upper part of the shoots when 50% of the inflorescences have all flowers open.	
	Observations on the flower should be made on flowers from the middle part of the	
	inflorescence. Observations on the corolla lobe of double flowers should be made on the	
	lobes of the second whorl from the top of the flower."	
	- further editing needed (check flower vs. floret)	
	Leading Expert: agreed	
Ad. 8	add "es" to sinus	
Ad. 9	- to add explanation how to observe on simple leaves and on compound leaves (e.g.	
	each state in Ad. 7) – imaginary outline?	
	provided by Leading Expert	
	- to correct grid according to TGP/14	
Ad. 10	to read "For compound leaves, the terminal leaflet should be observed."	
Ad. 12	to read "The secondary color (if present)"	
Ad. 13	to read "Observation on the flower bud should be made before opening."	
Ad. 15	- to check what should be observed	
	- to improve indication of length	
	provided by Leading Expert	
Ad. 20	to add explanation	
	Leading Expert provided additional illustration	
Ad. 22	to review illustrations	
	Leading Expert provided additional illustration	
Ad. 23	to explain what constitutes whorls	
	Leading Expert provided improved illustration	
Ad. 25	to correct grid according to TGP/14	
Ads. 29, 30	to be combined	
9.	to complete the reference: "Peart, B.: Database of Lilac Photographs"	
TO 4	provided by Leading Expert	
TQ 1	to read: 1.1 Genus	
	1.1.1 Botanical name Syringa L. 1.1.2 Common name Lilac	
	1.2 Species	
	1.2.1 Botanical name (please complete)	
	1.2.2 Common name	

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

Char. 12	to move example variety "Chantilly Lace" from state 1 "none" to state 2 "white"
Char. 19	to correct spelling of example variety to read "Edith Braun"
Chars. 19, 21	to replace example variety "Blanche Sweet" by "Magellan"
Char. 25	to move example varieties "Edith Braun" and "Wan Hua Zi" from state 2 "medium" to state 3 "strong" to move example variety "Alba Grandiflora" from state 3 "strong" to state 1 "absent or weak"

Char. 26	to correct spelling of example varieties to read "Helena Agathe Keessen"; "Frank
	Paterson"; and "Bailbelle"
Ads. 11, 12	to be combined (see Ad. 29, 30)

Litchi (*Litchi chinensis* Sonn.) TG/LITCHI(proj.5)

(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/LITCHI(proj.5)), submitted to the TC:

4 4 4	to shool whether to yood "I blood athematics in Besteric for the management of the Continues
4.1.4	- to check whether to read "Unless otherwise indicated, for the purposes of distinctness,
	all observations on single plants should be made on 5 plants or parts taken from each of
	5 plants and any other observations made on all plants in the test, disregarding any off-
	type plants."
	Leading Expert: agreed
	- to check whether to add "In the case of observations of parts taken from single plants,
	the number of parts to be taken from each of the plants should be 2."
	Leading Expert: agreed
Char. 1	to check whether to be indicated as QN (as Char. 5)
0 1 10	Leading Expert: agreed
Char. 10	to check whether to be indicated as PQ
	Leading Expert: agreed
Char. 12	to check whether to read "Petiole: color of upper side"
	Leading Expert: agreed
Char. 13	state 5 to read "oblanceolate"
Char. 14	to check whether to reverse order of states
	Leading Expert: agreed
Char. 19	to provide illustration (illustration is always needed for ratio; see TGP/14)
	provided by Leading Expert
Chars. 20, 22,	to read "Leaflet:"
24	
Chars./Ads.	- to check whether Char. 21 can be deleted as it is covered by Char. 20 (same
20, 21	illustrations)
	Leading Expert agreed
	- to improve illustration for state 2 in Ad. 20
	provided by Leading Expert
Char. 23	state 3 to read "truncate"
Char. 30	to provide illustration (illustration is always needed for ratio; see TGP/14)
	provided by Leading Expert
Char. 41	states to read as follows:
	(1) smooth or slight protuberances
	(2) moderate protuberances
	(3) strong protuberances
Char. 45	- to read "Seed: shape"
	- state 3 to read "ovate"
Char. 46	to read "Seed: color"
Char. 47	to read "Fruit: brown color on the inner side of aril" and add corresponding states (light
	brown, medium brown, dark brown)
Char. 48	to have notes 1, 2, 3 (see Ad. 48)
Char. 49	VG to be deleted
Char. 51	to check whether to be indicated as MG instead of VG
	Leading Expert: yes, to be indicated as MG
8.1 (b)	to check whether to read "Observations on the shoot should be made on the mature
	autumnal shoots at the outside of the upper canopy, when all leaves are turning green."
	(deletion of last part)
	- check wording "leaves are turning green" in autumn
	Leading Expert: to read "Observations on the shoot should be made on the mature
	autumnal shoots at the outside of the upper canopy, when all leaves have turned green
	in autumn."

8.1 (c)	to read "Observations on the leaf should be made on well developed leaves at the central third of the mature autumnal shoots at the outside of the upper canopy."
A L O	
Ad. 6	to be improved (position of arrows); it does not indicate length but height
	provided by Leading Expert
Ad. 36	to move state 1 up, to move state 3 down
Ad. 44	to read "Flesh should be assessed at time of harvest maturity and to be determined on
	20 fruits. When weighing the flesh, fruit skin and seed should be removed."
Ad. 45	- to rotate drawings to have the point of attachment as the base
	- state "irregular" to be moved out of grid
Ad. 48	- to read "Select 20 fruits randomly, then cut the fruit into pieces along the suture to take
	out the seeds and then vertically cut the seed open to check the number of the aborted
	embryos."
	- It is not appropriate to indicate "%" for a sample of 20 seeds. To read:
	Low: less than 4 seeds aborted
	Medium: 4 - 16 seeds aborted
	High: more than 16 seeds aborted
Ad. 50	- to review explanation (The absorption capacity of the paper is probably much more
Au. 50	
	important than the size (A5). The method for state 3 seems to be different?)
	Leading Expert: to delete "(A5 paper size)"; provided modified explanation for state 3
	- to delete "and" after coma in first sentence
Ad. 51	to be clarified (how is the observation done?)
	to check whether to read "The beginning of flowering is considered when 10% of the
	flowers on 5 inflorescences have started to flower."
	Leading Expert: to read "The beginning of flowering is when 10% of the inflorescences
	on each plant have started to flower."
Ad. 52	to read "The time of harvest maturity is when the overall appearance, firmness and taste
	indicate that the fruit is ready for consumption."
TQ 5	to check whether more chars. to be added (only the 4 grouping characteristics are asked
	for; is more chars not advisable?)
	Leading Expert: We would not like to add more characteristics, since there are not so
	many varieties for Litchi. We think 4 grouping characteristics are enough.

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

8.1 (d)	to read "Observations on the flower should be made on well developed flowers at the outside of the upper canopy when 25-75% of the flowers are in blossom"
8.1 (e)	to read "Observations on the fruit should be made at the time of physiological ripeness at the outside of the upper canopy"
Ad. 35	to remove last column

Mandevilla (<i>Mandevilla sanderi</i> (Hemsl.) Woodson;	
Mandevilla ×amabilis (Backh. & Backh. f.) Dress)	IG/MANDE(ploj.7)

(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/MANDE(proj.7)), submitted to the TC:

Char. 1	to add explanation (density of what?) Leading Expert: characteristic to read "Plant: density of foliage"
Char. 2	state 1 to read "none"
Chars. 4, 10	state 3 to read "moderate"
Char. 14	to read "Leaf blade: ratio length/width" and provide illustration
	provided by Leading Expert
Char. 21	to read "Leaf blade: bulging between veins"
Char. 25	to read "Leaf blade: shape in cross section"
Chars. 34, 35	to add note (e)
Char. 38	to add Char. 38 to Ad. 36, 37, 39, 40
Char. 41	- state 1 to read "funnel-shaped"
	- state 3 to read "tubular"

Chars. 44, 45	to be indicated as VG
Char. 46	to check whether to be indicated as QN
	Leading Expert: agreed
Char. 52	to add explanation
	provided by Leading Expert
8.1 (a)	to check whether to read "Young stems are stems which are not lignified."
	Leading Expert: agreed
8.1 (c)	to become Ad. 31
Ad. 3, 4	to be deleted (see 8.1 (a))
Ad. 25	illustration should show inner and outer side
	Leading Expert added indication of inner side
Ad. 36 etc.	lines need to be corrected (e.g. Corolla throat: width of distal part)
	provided by Leading Expert
Ad. 41	to remove corolla lobes
	provided by Leading Expert
Ad. 46	to add explanation how to be observed (from base to midpoint or to apex?)
	Leading Expert added lines to photos to indicate how the characteristic should be
	observed
TQ 5	to include grouping chars. 36 and 41
TQ 5.4	to check whether to split in 5.4 i (RHS Colour Chart (indicate reference number)) and 5.4
	li
	Leading Expert: agreed

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

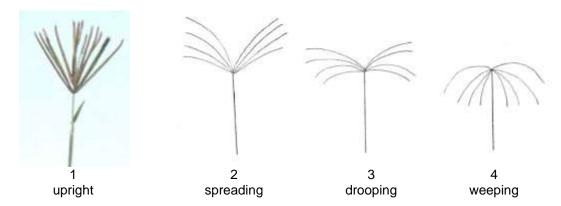
Cover page	to add French common name "Dipladénia" and "Mandevilla"
Char. 31	to have note (c) instead of (b)
Char. 50	to add note (c)
Char. 52	to read "Corolla lobe: shape of distal part in longitudinal section"
9.	to complete first literature reference to read:
	"Chittenden, F. J., 1951: Dictionary of Gardening. Oxford, GB: p. 1245"

Rhodesgrass (*Chloris gayana* Kunth) TG/RHODES(proj.4)

(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/RHODES(proj.4)), submitted to the TC:

Cover page	to add Spanish common names: Pasto de Rhodes, Grama de Rhodes	
3.3.2	to be deleted	
4.2	to read "4.2.2 The assessment of uniformity should be according to the recommendations for cross-pollinated varieties in the General Introduction. For the characteristics Plant: ploidy (characteristic 1) and Inflorescence: color of spike (characteristic 23), a population standard of 2% and an acceptance probability of 95% should be applied. In the case of a sample size of 60 plants, 3 off-types are allowed."	
6.5	to delete A and C (see comment on 3.3.2)	
Table of	to delete A and C (see comment on 3.3.2)	
Chars.		
Char. 3	to be deleted	
Char. 4	- to provide explanation on branching of stolons	
	provided by Leading Expert	
	- to delete (b)	
Chars. 6 to 9	to delete (b)	
Chars. 7, 8, 9	to provide information which leaf to be observed	
	provided by Leading Expert	
Char. 11	to replace "width" by "thickness"	
Char. 20	to replace "width" by "thickness"	

Char./Ad. 22 to reword and have illustration as follows:



Char. 26	to read "Time of flowering"
8.1 (a)	 see Chars. 7 to 9: to check whether to clarify explanation or change image in 8.2 to check whether to replace "tip" by "distal end of stolon" Leading Expert: 8.1 (a) to read "Observations on the stolon should be made on the fourth visible stolon node from the distal part of the stolon."
	 - 8.1 (b) does not need to be changed. This is an image of a typical Rhodesgrass plant showing different plant parts. This image is provided to give a general impression of the morphology of the plant, not necessarily to show the position of the fourth stolon. The fourth stolon node can be identified easily by counting the number for stolon nodes from distal part of the stolon.
Ad. 19	to check whether to replace "inflorescence" by "spikes" Leading Expert agreed and proposes to read " peduncle length" instead of only "length"
Ad. 20	to check whether to replace "inflorescence" by "spikes" Leading Expert agreed and proposes to read " peduncle width" instead of only "width"
Ad. 26	to add explanation of when a plant is flowering provided by Leading Expert

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

TQ 7.3	to reinstate missing standard wording	

Vanilla TG/VANIL(proj.5)

The TC-EDC recommended to the TC that the Test Guidelines for Vanilla be adopted subject to the addition of asterisks to Characteristics 5, 7, 11, 14, 21 being approved by the TWF by correspondence.

(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/VANIL(proj.5)), submitted to the TC:

Cover page	approval	ner to change coverage to Vanilla and L.E. to request in	terested experts'
	Leading Expert:	to indicate the coverage of TG/Vanilla as follows:	
	VANIL_PLA	Vanilla planifolia Jacks.	
	VANIL_POD	Vanilla planifolia Jacks. x Vanilla odorata	
	VANIL_PBA	Vanilla planifolia Jacks. x Vanilla bahiana	
	VANIL_PPO	Vanilla planifolia Jacks. x Vanilla pompona	
	VANIL_PPH	Vanilla planifolia Jacks. x Vanilla phaeantha	
	VANIL_PTA	Vanilla planifolia Jacks. x Vanilla tahitensis	
1.	to delete "and in	terspecific hybrids" (see TGP/7)	

2.2	to read "with at least 2 nodes, or one-year-old plants."
3.1.1	- to read "The minimum duration of tests should normally be two growing cycles. In
	particular, it is essential that the plants produce a satisfactory crop of fruit in each of the
	growing cycles."
	 to clarify whether 2 growing cycles are needed
	Leading Expert: yes, two growing cycles are correct
3.3	to delete second sentence
4.1.4	can only be a maximum of 9 plants
	Leading Expert: yes, 9 plants is correct
4.2.2	to read "For the assessment of uniformity, a population standard of 1% and an
	acceptance probability of at least 95 % should be applied. In the case of a sample size
Table of	of 10 plants, one off-type is allowed." to check number of (*) characteristics
Chars.	Leading Expert:
Unars.	to add an asterisk to the following characteristics:
	5 Stem: internode length
	7 Stem: texture
	11 Leaf: base
	14 Leaf: width
	21 Inflorescence: number of flowers
Char. 7	to check wording of characteristic
	Leading Expert: characteristic to read "Stem: texture" and to have states 1 "smooth"
	and 2 "rough"
Chars. 8, 9,	to read "Leaf:"
11, 12, 13, 16,	
17, 19, 20	
Char. 9	state 3 to read "rounded"
Char. 13	to read "Leaf: intensity of green color"
Char. 16	to read "Leaf: ratio length/width"
Char. 19 Char. 23	to read "Leaf: shape in cross section" to read "Petal: length"
Char. 24	to read "Petal: width"
Char. 26	to read "Fruit: shape in cross section"
8.1 (a)	to read "Stem and leaf: observations should be made, when the first fruit is fully
0.1 (a)	developed. Observations on the stem should be taken at mid-length of the stem.
	Observations on the leaf blade should be made on fully developed leaves from the
	middle third of the stem."
8.1 (c)	to read "Fruit: observations should be made at physiological maturity"
8.2	all red backgrounds to be removed – new pictures to be provided
	provided by Leading Expert
Ad. 7	to improve picture for state 9
	provided by Leading Expert
Ad. 9	to add lines to indicate exclusion of tip
	provided by Leading Expert
Ad. 16	to be improved
	provided by Leading Expert
Ad. 22	- first sentence to be deleted
	 to add explanation that some parts of the flower are removed (left petal and left lower petal are missing).
	provided by Leading Expert
Ad. 25	to improve photos
, \u. 20	provided by Leading Expert
Ad. 26	image for state 4 "trullate" to be placed half way down in large cell
Ad. 29, 30	- to improve explanation (e.g. pods from 5 plants, quantification on the basis of fresh or
	dry matter, allocation of notes according to example varieties, consistency with chapter
	4.1.4)
	provided by Leading Expert
9.	to check whether to delete literature reference Kaunzinger, Juchelka, Mosandl
	Leading Expert agreed
TQ 6	to replace current example (char. "Fruit: color" was deleted")
	provided by Leading Expert

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

Chars. 16	to read "Leaf blade:"
Char. 29	to replace example variety of state 9 with "A55"

3. REVISIONS

Kentucky Bluegrass (Poa pratensis L.)	TG/33/7(proj.4)
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The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/33/7(proj.4)), submitted to the TC:

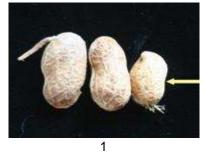
4.2.2	to delete space before %
Ad. 9, 10	to delete commas to read
	"Length should be measured from the tip of the leaf blade to the leaf sheath."
	"Width should be measured at the widest point of the leaf blade."
8.2	DC 49: to have capital "F" for first

Groundnut (Arachis L.)	TG/93/4(proj.5)
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The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/93/4(proj.5)), submitted to the TC:

3.1	to check whether one growing cycle correct for a seed propagated crop
	Leading expert: to change to two growing cycles
3.3.3	to be deleted, no relevant characteristics
4.2	to read: "4.2 Uniformity
	4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:
	4.2.2 For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95 % should be applied. In the case of a sample size of 60 plants, 2 off-types are allowed."
Char. 1	to delete hyphen in state 2
Char. 5	to delete (a)
Char. 6	- to check whether to delete MG and to add MS
	Leading Expert: to be indicated as VG/MS
	- to read "Leaflet: length"
Char. 7	- to read "Leaflet:"
	- to reverse order of states
Char. 8	- to read "Leaflet:"
Chars. 13, 14	to check whether to add growth stage 99
	Leading Expert agreed
Char. 14	to read "Kernel: presence of secondary color of testa" (see Ad. 13/14, same stage as for
	Char. 13)
Char. 15	- to read "100 kernel weight" and to have states low to high
	- to add (+)
Char. 16	- to add (+)
	- to check whether "pod thickness" or "seed covers thickness"
	Leading Expert: to read "Pod: thickness of shell"

8.1 (a)	to read "Observations on the leaflet should be made on a fully developed basal leaflet."
Ads. 4, 9	to split and create separate Ad. 9 with wording at bottom
Ad. 6	- text box to read only "Length"
	- to correct arrows
	provided by Leading Expert
Ad. 7	to consider a new image (or illustration) for state 2. The position of the broadest part appears to be towards the middle. Difference between 2 and 3 appears to be in basal leaflet width. Leading Expert: to delete illustration for state 2
Ad. 10	to use new illustrations with arrows added



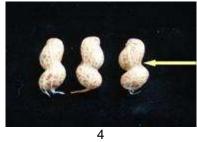


∠ weak



3 medium

absent or very weak





strong

very strong

Ad. 11	to check whether to improve illustration for state 3
	new photo provided by Leading Expert
Ads. 13, 14	- Ad 13 and 14 should be combined.
	- to add sentence on secondary color
Ad. 15	to replace "seeds" by "kernels"
Ad. 18	to correct number to 16 and move after Ad. 15
8.3	- to check format of growth stages after 13 and 23
	provided by Leading Expert
	- 2: capital F
TQ 6	to replace current example (current one doesn't exist in T.o.C.)
	provided by Leading Expert
TQ 7	to provide example variety for state "Runner"
	provided by Leading Expert
	7.1 to become 7.3 and to reinstate standard wording for 7.1
TQ 9.3	to check whether to be deleted
	Leading Expert: can be deleted

Apple Rootstocks (<i>Malus</i> Mill.) To	G/163/4(proj.4)
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The Leading Expert Mr. Hennie Venter (South Africa), after consultation with the Chairperson of the TWF, request that the draft Test Guidelines for Apple rootstocks (*Malus* Mill.) be rediscussed by the TWF at its forty-fifth session in order to agree on the proposals concerning example varieties.

The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/163/4(proj.5)), submitted to the TC:

General	to check whether all AB indications can be deleted (and remove from Chapter 6.5)
remark	Leading Expert agreed
Alternative	to correct French name to "Porte-greffe de pommier"
	to conect French name to Folte-grene de polninier
names 1.	to delete reference to "vegetatively propagated"
3.4.1	to split in two paragraphs to read:
5.4.1	"3.4.1 In the case of trees, each test should be designed to result in a total of at least 5 plants.
	3.4.2 In the case of stoolbeds, each test should be designed to result in a total of at least 10 plants."
4.2.2	to add standard sentence that in a sample size of 10 plants one off-type is allowed
6.4, Table of	to include only example varieties from Europe in the Test Guidelines and to add the
Chars.	other example varieties in an annex as regional sets (see TGP/7, 4.2.3 and TG/16/8 Rice Annex/16)
	to check spaces for example varieties (e.g G202, G 202)
Char. 6	to read "One-year-old shoot: growth pattern"
Char. 9	MG to be deleted and to add MS
Chars. 19, 48	Should it be "M116"?
Char. 33	to replace MG by MS
Char. 34	to read "Petiole: extent of anthocyanin coloration"
Char. 51	- to check if VG has to be deleted (see attached explanation, document TC/49/18,
	Annex)
	Leading Expert: delete VG
	- to check whether to add indication A or B
	Leading Expert: no, neither A nor B needs to be added
Char. 52	to check if VG has to be deleted
	Leading Expert: delete VG
8.1 (b)	to delete "Unless otherwise indicated,"
Ad. 4	to add sentence that Addendum only applies to "B"
Ad. 34	to read "Should be assessed regarding the degree to which the amount of anthocyanin coloration extends from the petiole base towards the base of the leaf."
Ad. 39	to read "The observation should be done with the petals pressed into a horizontal position."
Ad. 51	to read "The time of beginning of bud burst is when 10% of the buds show green points."
Ad. 52	to read "The time of beginning of flowering is when 10% of the flowers on the 5 trees are fully open."
TQ 1	to add full list of species covered by the TG (see TG/Prunus rootstocks TG/187/2(proj.3)) or to read as follows 1.1 Genus 1.1.1 Botanical name 1.1.2 Common name
	1.2 Species 1.2.1 Botanical name (please complete) 1.2.2 Common name Leading Expert: I prefer the second option
TQ 4.1	to be adapted according to TGP/7/3 ASW 15
TQ 4.3	to move to TQ 7.3
TQ 5	to add indication "A"

Opium/Seed Poppy (*Papaver somniferum* L.) TG/166/4(proj.6)

(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/166/4(proj.6)), submitted to the TC:

Char. 22	to be indicated as VG
8.1 (b)	to read "Observations on the flower bud should be made at hook stage of pedicel."
8.1 (d)	to read "drop down on the main stem."
Ad. 18	it would be better to have the axes length/width ratio and broadest part and improve grid Leading Expert: agreed
Ad. 24	to delete photos and keep only illustrations
	Leading Expert: disagreed and prefers to keep photos and illustrations
Ad. 29 – 32	 Heading should be as usual with the correct quotation of the characteristics. Sampling is not clear: analysis of capsules or stalk (see sampling vs. sample preparation)? Leading Expert: 3.1 Sample preparation to read "The receipt sample is weighted and dried to air-dry condition. The capsules with 1-2 cm stem are ground using 0.5 mm sieve." Expression of results in mg/kg is not appropriate. Guidance necessary for allocation of notes.(use ex. vars. for calibration to exclude influence of environment (see TG/Hemp))
	Leading Expert: to keep the mg/kg because mg/kg= $\%_0$ and $\%_0$ is not accepted unit.
9.	to be completed and to reorder according to the date: - Bernáth, J., 1998: "Poppy, The Genus <i>Papaver</i> ", Harwood Academic Publishers >> to add country <i>Leading Expert: to add the Netherlands</i>
	 Biomed. Chromatogr., 2001,15,45. >> to add author and title Biomed. Chromatogr., 2002,16,390. >> to add author and title Leading Expert: to delete these references and replace with new provided one

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

Ad. 29, 30, 31,	- to provide clarification on the method
32	provided by Leading Expert

	Prunus Rootstocks (Prunus L.)	TG/187/2(proj.4)
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(a) The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/187/2(proj.4)), submitted to the TC:

Cover page	to add TGs from Chapter 1.2 to "Associated documents" Leading Expert: agreed
2.3	to check whether "seedlings" to be replaced by "plants" Leading Expert: agreed
3.4	to complete and add information for seed propagated varieties Leading Expert: agreed and proposed consequential change to Chapter 4.2.2
4.1.4.1 and .2	to replace "plants" with "varieties" Leading Expert: agreed
6.5, Table of Chars.	to check if the indication of C, PL, PE and AP should be deleted from Table of Characteristics and be added to Chapter 8.3 Leading Expert provided table to be added to Chapter 8.3 with the following corrections to the table presented in document TG/187/2(proj.3): - corrected spelling of example variety "GF 655" to "GF 655-2" in the table as well as in Characteristic 21, state 3, Characteristic 34, state 2, in Characteristic 36, state 1. - addition of "(AL). for the use of almond varieties" to the legend, which was missing - addition of example varieties "Myruni" and "Prunus besseyi" to the table, which was already in Table of Characteristics as example variety

Table of Chars.	to check number of (*) characteristics Leading Expert: The number of (*) characteristics in the current draft guidelines had been a matter of discussion during the subgroup discussions. The participants were made aware that a low number of (*) characteristics would reduce the amount of international harmonization. However, the current draft Guidelines, with the indications of asterisks as they are, is what the group was able to agree upon, only.
Char. 18	 - state 2 to read "medium ovate" - to provide example variety for state 6 if available <i>Leading Expert agreed and provided example variety for state 6</i>
Ad. 5	to check whether the explanation should read as follows: "Should be assessed at the middle third of the shoot." Leading Expert agreed and noted that Ad. 4, 7 and Ad. 5 should be combined as they now have the same wording
TQ 1	 1.1 to be deleted 1.4.10 and 1.4.11 need space for providing the requested information (text box) Leading Expert agreed
TQ 7.3	depending on comment on 6.5, T.o.C: include information on the use (C, PL, PE and AP) Leading Expert agreed

(b) Changes proposed by the TC-EDC in April 2014, which are to be included in the document submitted to the TC:

8.3	to remove bold font of example variety "Alkavo"

Chives (Allium schoenoprasum L.)

TG/198/2(proj.4)

The following table contains the comments by the Enlarged Editorial Committee at its meeting on January 8 and 9, 2014. Unless otherwise indicated, all comments are already incorporated in the draft Test Guidelines (document TG/198/2(proj.4)), submitted to the TC:

Char. 2	to add (+) and explanation
	provided by Leading Expert
Char. 14	to have states "absent to very low", "low", "very high"
8.1 (b)	remove "Particularly the" in the second sentence
8.1 (a), (b)	to delete underlined parts
Ad. 9	to read "Observations should be made when 10% of the plants have a bud and directly
	after bud emergence."
Ad. 14	- state 1 should be % male sterility = "< 10%"
	- state 3 should be % male sterility = "> 80%"

[End of Annex III and of document]