

**Technical Working Party for Ornamental Plants and Forest Trees** TWO/51/12**Fifty-First Session**  
**Christchurch, New Zealand, February 18 to 22, 2019****Original:** English  
**Date:** March 6, 2019

---

**REPORT***Document prepared by the Office of the Union**Disclaimer: this document does not represent UPOV policies or guidance*Opening of the session

1. The Technical Working Party for Ornamental Plants and Forest Trees (TWO) held its fifty-first session in Christchurch, New Zealand, from February 18 to 22, 2019. The list of participants is reproduced in Annex I to this report.
2. The TWO was welcomed by Mr. Simon Gallagher, National Manager, Intellectual Property Office of New Zealand (IPONZ).
3. In the absence of Mr. Henk de Greef (Netherlands), Chairperson of the TWO, the session was opened by Mr. Nik Hulse (Australia) who welcomed the participants. The TWO session was chaired by Mr. Hulse.
4. The TWO received a presentation by Mr. Chris Barnaby, Assistant Commissioner / Principal Examiner for Plant Variety Rights, Plant Variety Rights Office, IPONZ, on plant variety rights in New Zealand. A copy of the presentation is provided in Annex II to this report.

Adoption of the agenda

5. The TWO adopted the agenda as reproduced in document TWO/51/1 Rev..

Short Reports on Developments in Plant Variety Protection

(a) *Reports on developments in plant variety protection from members and observers*

6. The TWO noted the information on developments in plant variety protection from members and observers provided in document TWO/51/3 Prov. The TWO noted that reports submitted to the Office of the Union after February 1, 2019, would be included in the final version of document TWO/51/3.

(b) *Reports on developments within UPOV*

7. The TWO received a presentation from the Office of the Union on latest developments within UPOV, a copy of which is provided in document TWO/51/2.

TGP documents

8. The TWO considered document TWP/3/1 Rev..

*Matters for adoption by the Council in 2019*

9. The TWO noted the revisions previously agreed by the TC to documents TGP/7, TGP/8, TGP/10, TGP/14 and TGP/15 that would be proposed for adoption by the Council at its fifty-third ordinary session, to

be held in Geneva on November 1, 2019, subject to approval by the CAJ, at its seventy-sixth session, to be held in Geneva on October 30, 2019.

*Possible future revisions of TGP documents*

10. The TWO noted the invitation by the United Kingdom for interested experts to get in contact for testing the new software containing the improved method of calculation of COYU.

11. The TWO noted the invitation by the TWC for the expert from the United Kingdom to draft a replacement section for document TGP/8 on the method of calculation of COYU.

*New proposals for revisions of TGP documents*

TGP/7: Development of Test Guidelines

*Procedure for partial revision of UPOV Test Guidelines*

12. The TWO noted that the TC had considered a proposal to revise the procedure for partial revisions of Test Guidelines.

*Proprietary method of assessment for male sterility*

13. The TWO noted that the TC, at its fifty-fourth session, had agreed that members should propose any alternative methods or markers for DNA marker tests in Test Guidelines.

*Suitability of characteristics in previous versions of Test Guidelines*

14. The TWO noted that the TC, at its fifty-fourth session, had recalled that it was the responsibility of the TWPs to assess whether characteristics met the requirements for a characteristic, as set out in document TGP/7, including those characteristics in previously adopted Test Guidelines.

*Presentation of full scale of notes for quantitative characteristics in Test Guidelines*

15. The TWO considered the proposal for the revision of document TGP/7 and agreed that all states of expression for quantitative characteristics should be presented in Test Guidelines.

16. The TWO recalled that guidance in document TGP/7 required quantitative characteristics with "1-9" scale to have example varieties for at least three states of expression and "1-5" / "1-4" / "1-3" scales for at least two states of expression. The TWO agreed with the proposal to present all states of expression of quantitative characteristics in Test Guidelines and agreed that this would not change the minimum number of example varieties required in document TGP/7.

TGP/12: Guidance on Certain Physiological Characteristics

*Explanations on disease resistance characteristics*

17. The TWO noted that the TC, at its fifty-fourth session, had agreed to await the TWV discussion on disease resistance characteristics in DUS examination before considering whether to develop further guidance.

*Program for the development of TGP documents*

18. The TWO noted the program for the development of TGP documents, as set out in document TWP/3/1, Annex VI.

*TGP/7: Development of Test Guidelines*

Characteristics which only apply to certain varieties

19. The TWO considered document TWP/3/9.

20. The TWO considered the request to provide suitable examples of quantitative and pseudo-qualitative characteristics to demonstrate how the proposed approach might be used in a way that would not present risks for decisions on distinctness.

21. The TWO agreed that when a structure was “absent or very weak” on a plant part, the observation of further characteristics on that structure could be difficult or impractical. For example, it would not be practical to observe “hair: color” on a plant part with “presence of hairs: absent or very weak.”

22. The TWO agreed that the following pseudo-qualitative characteristic from the Test Guidelines for Dahlia (TG/226/1) was a suitable example to demonstrate how the proposed approach might be used in a way that would not present risks for decisions on distinctness.

(PQ) Flower head: type: single (1); semi-double (2); daisy-eyed double (3); double (4)

23. The TWO agreed that the header of the characteristic should preferably contain the exclusion and, if necessary, an explanation may be provided in the Test Guidelines.

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

Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions

24. The TWO considered document TWP/3/10.

25. The TWO considered the summary of different approaches used by members of the Union to convert observations into notes for producing variety descriptions of measured characteristics, as set out in document TWP/3/10, Annex II.

26. The TWO noted the request by the TC for the experts from France, Germany, Japan and the United Kingdom to provide information on the circumstances in which their methods would be suitable, including the method of propagation of the variety and other factors that had been used in deciding to use the method.

*TGP/14: Glossary of Terms Used in UPOV Documents*

Color names for the RHS Colour Chart

27. The TWO considered document TWP/3/11.

28. The TWO considered the proposal for the revision of the list of UPOV Color Groups in document TGP/14 “Glossary of Terms used in UPOV Documents” on the basis of the color groups set out in document TWP/3/11, Annex I. The TWO agreed that the new list of UPOV Color Groups prepared on the basis of the Sixth Edition of the RHS Colour Chart should be proposed for inclusion in document TGP/14.

29. The TWO considered the proposal for the revision of document TGP/14, Section 2, Subsection 3: “Color”, and Subsection 3: Annex: “Color names for the RHS Colour Chart”, to reflect the introduction of the revised list of UPOV Color Groups. The TWO agreed that document TGP/14 should be revised to reflect the introduction of the new list of UPOV Color Groups on the basis of the proposal set out in document TWP/3/11, Annex II.

*TGP/15: Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)*

New example: Characteristic-specific marker with incomplete information on state of expression

30. The TWO considered document TWP/3/12.

31. The TWO noted that the TC had agreed that document TGP/15 should be amended to clarify that it was the responsibility of the authority to decide on the reliability of the link between the gene and the expression of the characteristic.

32. The TWO noted that the TC had agreed to include an explanation in document TGP/15 that it would be the responsibility of the respective TWP and the TC to assess whether the reliability of the link between the gene and the expression of the characteristic was satisfied in order to include a method in the Test Guidelines.

33. The TWO noted that the TC had agreed that a new example should be added to document TGP/15 to illustrate a situation where the characteristic-specific marker does not provide complete information on the state of expression of a characteristic.

34. The TWO agreed with the proposed example to be added to document TGP/15 to illustrate a situation where the characteristic-specific marker does not provide complete information on the state of expression of a characteristic, as set out in the Annex to document TWP/3/12.

35. The TWO noted that disease resistance characteristics were not commonly used in ornamental plants.

#### Molecular Techniques

36. The TWO considered document TWP/3/7.

#### *Developments at the seventeenth session of the Working Group on Biochemical and Molecular Techniques, and DNA-Profiling in Particular*

37. The TWO noted the report on developments in the TWPs and BMT, as set out in document TWP/3/7, paragraphs 7 to 72.

#### *Developments at the fifty-fourth session of the Technical Committee*

#### Review of document UPOV/INF/17 "Guidelines for DNA-Profiling: Molecular Marker Selection and Database Construction ('BMT Guidelines')

38. The TWO noted that the European Union, France and the Netherlands would be invited to prepare a new draft of document UPOV/INF/17 for consideration at the eighteenth session of the BMT, as set out in document TWP/3/7, paragraph 75.

#### Cooperation between international organizations

39. The TWO noted that the TC had agreed that UPOV and OECD should make progress on the matters previously agreed by the TC, namely:

(a) to develop a joint document explaining the principal features of the systems of the OECD, UPOV and ISTA;

(b) to develop an inventory on the use of molecular marker techniques, by crop, with a view to developing a joint OECD/UPOV/ISTA document containing that information, in a similar format to UPOV document UPOV/INF/16 "Exchangeable Software", subject to the approval of the Council and in coordination with OECD and ISTA; and

(c) the proposal for the BMT to develop lists of possible joint initiatives with OECD and ISTA in relation to molecular techniques for consideration by the TC.

40. The TWO noted that ISTA would be invited to join the above initiatives, when in a position to do so.

41. The TWO noted that the Office of the Union would prepare a draft of a joint document explaining the principal features of the systems of the OECD, UPOV and ISTA, for consideration by the BMT, at its eighteenth session, on the basis of relevant texts from the World Seed Partnership and the frequently asked question on the use of molecular techniques in the examination of DUS, as set out in document TWP/3/7, paragraph 79.

42. The TWO endorsed the following elements for the inventory on the use of molecular marker techniques, by crop, proposed by the Office of the Union:

Country or Intergovernmental Organization using molecular marker technique
Source [the name of the Authority] and Contact details [email address]
Type of molecular marker technique
Crop (s) for which the molecular marker technique is used [botanical name(s) and UPOV code(s) to be provided]
Purpose of the use of the molecular technique [UPOV model “Characteristic-Specific Molecular Markers”, UPOV model “Combining Phenotypic and Molecular Distances in the Management of Variety Collections”, Purity, Identity, Verification of hybridity]
Is the molecular marker technique used as part of Seed Certification in the last two years? [National certification, OECD certification] [relevant for OECD seed schemes]
In the last 2 years, how many times did the Authority use the molecular marker techniques?
The molecular marker technique is covered by [UPOV Test Guideline(s), UPOV TGP document(s), other document(s) (please specify)]
Is the molecular technique validated? [If yes, please specify a particular organization or authority] [relevant for OECD seed schemes]

43. The TWO agreed that the term “identity” should be clarified to include the verification of conformity of plant material to a protected variety for the exercise of breeders’ rights. The TWO also agreed to propose that information on molecular markers should provide details on source and availability of the marker, such as whether it was a publicly available or a proprietary marker.

44. The TWO noted that, on the basis of the comments received from the TWPs and BMT, proposed elements for the inventory on the use of molecular marker techniques, would be presented for consideration by the TC at its fifty-fifth session, as set out in document TWP/3/7, paragraph 82.

45. The TWO noted that, subject to agreement by the TC at its fifty-fifth session, a circular would be issued to request the member of the Union to complete the survey as a basis to develop the inventory on the use of molecular marker techniques, by crop, after coordination with the OECD Seed Schemes Bureau, as set out in document TWP/3/7, paragraph 83.

46. The TWO noted that the BMT, at its eighteenth session, would be invited to develop lists of possible joint initiatives with OECD and ISTA in relation to molecular techniques for consideration by the TC at its fifty-fifth session, as set out in document TWP/3/7, paragraph 84.

Revision of document TGP/15 “Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)”

*Revision of the model “Combining phenotypic and molecular distances in the management of variety collections”*

47. The TWO noted that the Model “Combining Phenotypic and Molecular Distances in the Management of Variety Collections” of document TGP/15, Section 2.2, would be revised at a later stage once an additional threshold level has been implemented in France, as set out in document TWP/3/7, paragraph 87.

*Proposal for inclusion of a new model “genetic selection of similar varieties for the first growing cycle”*

48. The TWO noted that the TC had agreed with the inclusion of a new model “Genetic selection of similar varieties for the first growing cycle: example French Bean” in document TGP/15, as presented in document TWP/3/7, Annex II

49. The TWO noted that a draft of document TGP/15/2 “Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)” incorporating the new model would be presented to the seventy-sixth session of the CAJ, to be held on October 30, 2019, and if agreed by the CAJ, a draft of document TGP/15/2 would be presented for adoption by the Council at its fifty-third ordinary session, to be held on November 1, 2019, on that basis.

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

50. The TWO noted the results of the coordination session at the seventeenth session of the BMT, as set out in document TWP/3/7, paragraphs 62 to 71.

51. The TWO noted that all TWPs would be invited to form discussion groups for the main crops at each TWP to allow participants to exchange information on their work on biochemical and molecular techniques and explore areas for cooperation, in order to build on the BMT outcomes and feed into the future work of the BMT, as set out in document TWP/3/7, paragraph 97.

52. The following information was provided by TWO participants:

Australia	<ul style="list-style-type: none"> <li>• DNA information may be used in some cases of infringement action;</li> <li>• currently considering constituting DNA collection for native species</li> </ul>
China	<ul style="list-style-type: none"> <li>• crop interest: forestry sector and woody ornamentals, <i>Fraxinus</i> in particular;</li> <li>• currently developing databases with DNA information for Rose, Poplar and Tree Peony</li> </ul>
European Union:	<ul style="list-style-type: none"> <li>• applicants for new varieties of Rose can request for a fee to have a DNA sample extracted and stored; similar procedure for fruit crops under consideration</li> </ul>
France	<ul style="list-style-type: none"> <li>• crop interest: Hydrangea;</li> <li>• currently testing a set of molecular markers for Hydrangea varieties</li> </ul>
Netherlands	<ul style="list-style-type: none"> <li>• crop interest: <i>Chrysanthemum</i>, <i>Gypsophila</i>, <i>Helleborus</i>, <i>Lilium</i>, <i>Phalaenopsis</i> and Rose;</li> <li>• currently building a DNA database for <i>Fraxinus</i> and <i>Ulmus</i>;</li> <li>• DNA information used for varietal identity;</li> <li>• possible future development of databases with DNA information for ornamental plants</li> </ul>

53. The TWO agreed that possible UPOV initiatives could include the development of guidance on collecting DNA samples, ownership of material collected and how to facilitate the use of material or information.

Future program

54. The TWO noted that the TC had agreed the items for discussion on Wednesday, October 16, 2019, to facilitate discussion and cooperation between the TWC and BMT, as set out in document TWP/3/7, paragraph 101.

Cooperation in examination

55. The TWO considered document TWP/3/14.

56. The TWO noted the results of the survey of the current situation of members of the Union with regard to cooperation in examination, as set out in the Annex to document TWP/3/14.

57. The TWO noted that the UPOV Office would invite the Council representatives to identify contact the persons for international cooperation in DUS examination and that the information received would be made available on the UPOV website.

58. The TWO noted that the topic of international cooperation in DUS examination would be presented as an introduction to the agenda item "Cooperation in examination" during the normal program for the TWPs to explain the existing possibilities for cooperation between UPOV members.

59. The TWO formed discussion groups to discuss the technical concerns that prevent cooperation in DUS examination and how to overcome the technical concerns raised.

60. The TWO noted the following technical concerns raised by participants in the discussion groups:

- Level of experience of an authority to conduct DUS examination for a particular crop;
- Whether the testing authority has an appropriate set of example varieties;

- Whether relevant varieties have been considered in the examination;
- Environmental influence over the expression of relevant characteristics (e.g. color of plant parts);
- Need for information on quality controls on reports produced from trials grown on breeders' premises;
- DUS test reports that do not conform to UPOV Test Guidelines;
- Difficulties to import plant material for DUS examination (e.g. for centralized testing of particular crops);
- Additional requirement for a comparison variety to be described along with the candidate

61. The TWO noted the following proposals from the participants in the discussion groups on how to overcome the technical concerns raised:

- To provide information on varieties available in the variety collection;
- To report which varieties were considered in the examination (not only the most similar variety chosen to be grown in the trial);
- Possible use of verification trials with additional relevant varieties (e.g. local varieties) and/or to confirm environmental influence on expression of relevant characteristics;
- To provide data from characteristics assessed during trials (field observations);
- To disclose procedures used for DUS testing by different authorities;
- To conduct ring-tests for mutual understanding on possible observation discrepancies between different authorities;
- To maintain updated information available on cooperation in the GENIE database;
- To facilitate access to morphological databases from different authorities (possible role of UPOV to facilitate such access);
- To facilitate requesting variety information;
- To share information at TWPs to improve discussion about requirements and possibilities for cooperation;
- To develop an online portal to facilitate requesting DUS test reports;
- To provide information on contact person for cooperation in DUS examination;
- To promote participation at TWP sessions as an opportunity to facilitate cooperation and enhance communication between authorities

#### Defining "growing cycle" for ornamental species

62. The TWO considered document TWO/51/10.

63. The TWO recalled that the TC had agreed to include a standard sentence in Test Guidelines to explain that "The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test". The TWO agreed there was no need to distinguish between "growing cycle" and "testing cycle" for the examination of ornamental varieties at this stage.

#### Experiences with defining trees, shrubs and vines

64. The TWO received a presentation on the "Classification: Tree/Vine versus Shrub" by an expert from the European Union. A copy of the presentation is provided in document TWO/51/9.

65. The TWO received a presentation on "Classification of Trees and Vines in Australia" by an expert from Australia. A copy of the presentation would be provided as an Addendum to document TWO/51/9.

66. The TWO noted there were different interpretations among UPOV members of the notion of trees and vines for the purposes of the provisions of novelty and the duration of protection.

67. The TWO agreed to propose to invite authorities to make available the list of genera and species considered as trees and vines through UPOV PRISMA. The TWO agreed to invite authorities to report to the TWO at its following session on information provided to UPOV PRISMA.

68. The TWO agreed there were certain genera and species for which a decision on whether a variety should be considered as tree or vine could not be generalized. The TWO agreed to request authorities to provide information on the genera and species they considered should be treated on a case-by-case basis.

#### Experiences with characteristics assessed on the basis of bulk samples

69. The TWO received a presentation on “Experience with Bulk Sampling” by an expert from the United Kingdom. A copy of the presentation is provided in document TWO/51/8.

#### Guidance for drafters of Test Guidelines

70. The TWO considered document TWP/3/8.

71. The TWO noted the issues on the web-based TG template addressed during 2018, as set out in document TWP/3/8, paragraph 11.

72. The TWO noted the issues currently being addressed on the web-based TG template, as set out in document TWP/3/8, paragraph 12.

73. The TWO noted that the Office of the Union would issue a circular to identify requirements of UPOV members for the development of individual authorities’ test guidelines using the web-based TG template.

74. The TWO received a demonstration by the Office of the Union and noted that training on the web-based TG template would be provided to all TWPs, at their sessions in 2019.

#### Experience with the RHS Colour Chart and possible future addition of colors

75. The TWO received a presentation on an “Update on possible additions of colors to future RHS Colour Chart edition” by an expert from the United Kingdom. A copy of the presentation is provided in document TWO/51/4.

#### Experience with taxonomic databases

76. The TWO received a presentation on “Experience with taxonomic databases” by an expert from the United Kingdom. A copy of the presentation is provided in document TWO/51/5.

77. The TWO received a presentation on “Experience with taxonomic databases in Australia” by an expert from Australia. A copy of the presentation would be provided as an Addendum to document TWO/51/5.

78. The TWO noted the importance of the GRIN database as a source of taxonomic information for UPOV members and as the primary source of taxonomic information for the UPOV Code System.

#### Inconsistencies between TQ information and plant material submitted for trial

79. The TWO received a presentation on “Inconsistencies between TQ information and plant material submitted for DUS trial in the European Union PBR system” by an expert from the European Union. A copy of the presentation is provided in document TWO/51/6.

#### Differences in notes for the assessment of distinctness (document TWP/3/13)

80. The TWO considered document TWP/3/13.

81. The TWO noted existing guidance in the General Introduction and documents TGP/8, TGP/9 and TGP/14 on differences in notes for the assessment of distinctness.

82. The TWO noted the clarification provided in document TWP/3/13 on how the approach for QN characteristics could be applicable for certain states of expression in some PQ characteristics.

Number of growing cycles in DUS examination

83. The TWO considered document TWO/51/11.

84. The TWO noted that no documents on “Number of growing cycles in DUS examination” had been proposed for discussion at the fifty-first session of the TWO and that the matter was not included in the agenda of the TC at its fifty-fifth session.

Discussion on draft Test Guidelines

\**Alstroemeria* (*Alstroemeria L.*) (*Revision*)

85. The subgroup discussed document TG/29/8(proj.3), presented by Mr. Marco Hoffman (Netherlands) on behalf of the Leading Expert Mr. Henk de Greef (Netherlands), and agreed the following:

4.2.2	to delete repeated “varieties”
Char. 4	to be indicated as PQ
Chars. 5, 6	to add (*)
Char. 6	to add explanation
Char. 8	to read “Leaf blade: variegation” with states “absent” and “present”
Char. 9	- to replace “silvery” with “greyish” - to add (*)
Char. 17	to read “Flower: length”
Char. 18	- state 3 to read “circular” - to renumber states of expression (see comment on Ad. 18)
Char. 28	to renumber states of expression (see comment on Ad. 28)
Char. 25	to delete “(green area excluded)”
Char. 27	to have states absent or very few (1), few (2), medium (3), many (4), very many
Char. 30	to delete “(tip excluded)”
Char. 34	- to read “...length of stripes on inner side” and to add explanation in 8.2 “Observations should be made on the longest stripes, excluding the stripe on the central vein”- - to add states very short (1), very long (9)
Char. 35	- to read “...width of stripes on inner side” and to add explanation in 8.2 “Observations should be made on the widest stripes, excluding the stripe on the central vein” - to add states very short (1), very long (9)
Char. 39	to move “blue” before “brownish”
Char. 43	to read “Ovary: extent of anthocyanin coloration” with states from “absent or very small” to “very large”
Ad. 5	to add explanation for length and width in the same photograph
Ad. 8	to replace “silvery” with “greyish”
Ad. 18	- to renumber states of expression from bottom to top, left to right - state 4 to read “medium obovate”
Ad. 21	states and notes to match Char. 21
Ad. 28	- - to renumber states of expression from bottom to top, left to right
TQ 1.	to add 1.3 for indication of species
TQ 4.2.1	- to delete (a) and (b) - to add “[ ]” (no sub-selection for seed-propagated varieties)
TQ 4.2.2 (b)	- to replace “Rhizomes” with “Division”

*Berberis* (*Berberis L.*)

86. The subgroup discussed document TG/68/4(proj.2), presented by Mr. Kévin Daubigny (France), and agreed the following:

4.1.4	to assess distinctness on 5 plants (allowing 1 off-type plant as in 4.2.3)
4.2.2	to delete duplicated word "variety"
4.3.2	to delete "seed or"
Table of Chars.	- to check whether to add asterisk to other characteristics (13 out of 33) - to check the approach for presenting color characteristics (Should the Lisbon approach be used?)
Char. 1	- to correct spelling of "plant" - to be indicated as PQ
Char. 2	state 4 to read "spreading"
Char. 3	- to read "Branch: attitude" - to be moved after Characteristic 5 - to be indicated as PQ
Char. 4	to be indicated as MG/VG
Char. 13	state "lanceolate" to read "narrow elliptic" and state "elliptic" to read "broad elliptic"
Char. 14	to be indicated as PQ
Chars. 17, 19, 20	state "absent" to read "none"
Char. 19	state "absent" to read "none"
Char. 21	- to be indicated as QN - to have states absent or weak (1), medium (2), strong (3) - to check which state corresponds to example variety "Lutin Rouge"
Char. 22	to check whether to split in two characteristics (margin and curvature)
Char. 24	to read "Floral type"
Char. 25	to clarify where to be observed (position on the plant and at what stage)
Char. 28	- to add explanation - to check whether to be indicated as QN
Char. 29	- to improve wording of characteristic (e.g. "Plant: fruit formation") and to provide explanation - to check whether to be indicated as QN with states "absent or few", "medium", "many"
Char. 30	state "cordate" to read "ovate" and reorder states of expression (see grid in Ad. 30)
Char. 33	to check whether to be deleted
8.1	to check whether to add when observations on fruits should be made
8.1 (e)	- to be reconsidered along with approach to describe colors - to correct spelling of "classification"
Ad. 2	to improve illustration for state 1
Ad. 3	to improve illustration according to new wording "Branches: attitude"
Ad. 13	to be updated according to changes to Characteristic 13
Ad. 24	to add legend to the illustrations (notes)
Ad. 30	- to rotate illustrations by 180 degrees and reorder illustrations accordingly - to be updated according to changes to Characteristic 30
TQ 1.	to add 1.3 for indication of species
TQ 4.2	to be completed
TQ 5.6	to add color groups (as in TQ 5.9)
TQ 5.9	state "yellow" to read "medium yellow"
TQ 5.12	state "purple" to read "medium purple"
TQ 7	to add ASW to request providing a photograph of the variety

\**Calendula* (*Calendula L.*)

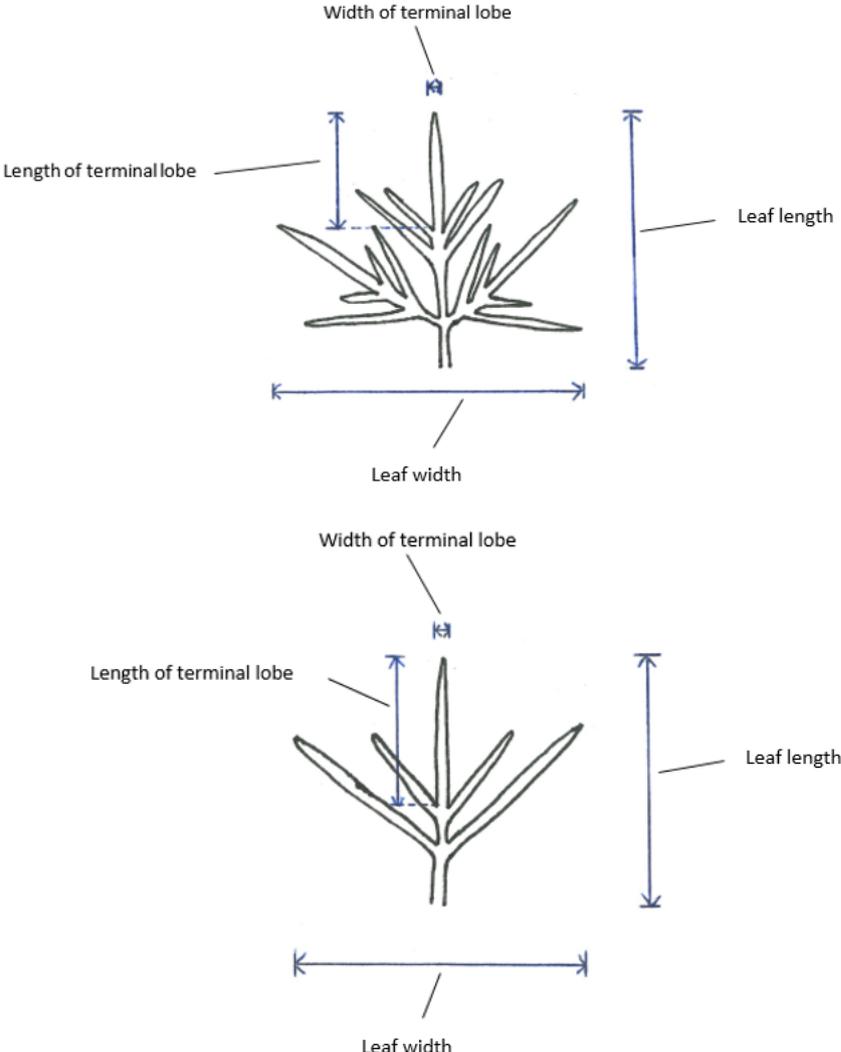
87. The subgroup discussed document TG/CALEN(proj.3), presented by Mr. Koji Nakanishi (Japan), and agreed the following:

Cover page	to add the following alternative names: Ringelblume (German), Calendula (French), Calendula (Spanish)
4.2.2	to read "These Test Guidelines have been developed for the examination of cross-pollinated seed-propagated and vegetatively propagated varieties. For varieties with other types of propagation the recommendations..."
4.2.4	to delete repeated "varieties"
5.3 (c)	- to add "with the following groups" after characteristic name - add new "Gr. 1: white" and renumber following groups
Char. 1	to add example variety "Winter Sun" for state 3
Chars. 3, 4, 6, 7, 15, 16, 18, 19, 34,	to add MG
Char. 11	to delete "per stem"
Char. 16	to add underlining "Only varieties... and double:"
Chars. 27, 32	to delete states "basal half" and "distal half"
8.1	general explanation to read "Unless otherwise indicated, observations should be made when 50% of the terminal flower heads of primary lateral shoots have fully opened."
8.1 (a)	to be deleted
8.1 (b), (c)	to read "Observations should be made..."
8.1 (c)	to read "... If the disc is not visible, observations should be made when the terminal flower head is fully open but before it starts fading."
Ad. 1	to add "Calendulas can be grown in the ground or in pots. When grown in pots, the growth habit of state 3 can be more drooping than horizontal."
Ad. 12	to enlarge image
Ads. 27, 32	to add illustrations from Ad. 25 without states 3 and 4
Ad. 35	to read "...when anthers of the 2-3 outer rows of disc florets have dehisced."
TQ 1.2.1	to be renumbered 1.1.3
TQ 1.2.2	to be deleted
TQ 5.7 (ii)	to add "Gr. 1: white"
TQ 5.8 (ii)	to add "Gr. 1: white"
TQ 5.10 to 5.12	to be deleted

\**Coreopsis* (*Coreopsis L.*)

88. The subgroup discussed document TG/COREO(proj.2), presented by Ms. Hilary Papworth (United Kingdom), on behalf of the Leading Expert, Mr. Peter Baker (United Kingdom), and agreed the following:

3.4.1	to be moved after 3.4.2
3.4.2	to be presented as separate sentences for each type of propagation
4.2.2	to be completed (self-pollinated seed-propagated and vegetatively propagated varieties)
4.2.3	to read "For the assessment of self-pollinated seed-propagated varieties,..."
4.2.3, 4.2.4	to correct numbering
5.3 (d), (e)	to add after characteristic name "with the following groups"
Char. 4	to add example varieties "VIZCOR 609" for state 3 and "Uritwo02" for state 5
Char. 5	to be indicated as QL
Chars. 6, 7, 8	to read "Simple leaf: ..."

Chars. 9, 10, 11	to read "Divided leaf: ..."
Chars. 15, 16, 17	to remove underlined part of characteristic title
Char. 15	to read "Divided leaf: length of terminal lobe"
Char. 16	to read "Divided leaf: width of terminal lobe"
Char. 17	to read "Divided leaf: ratio length/width of terminal lobe"
Char. 19	to be indicated as VG only
Char. 20	- state 1 to read "below or same level" - to be indicated as QN
Char. 36	to add explanation "Markedly different means a different color, not a difference in intensity of one color."
Char. 37	to read " <u>Only varieties with Ray floret: color of outer side compared to inner side: markedly different:</u> Ray floret: color of outer side"
Chars. 41, 42	to read "...indentations at tip"
8.1 (a), (f), (g)	to read "Observations should be made..."
8.1 (b), (c), (e)	to be deleted
8.1 (d)	to replace current illustration with the two following ones:  
Ad. 11	to replace illustration for state 3 with clean illustration as in 8.1 (d)
Ad. 13	to correct spelling of "color"
Ad. 19	to delete illustration

Ad. 21	to add explanation "1. Only one row of ray florets 2. More than one row of ray florets, but a clearly defined disc present. 3. Multiple rows of ray florets with no clearly defined disc."
Ad. 30	to add "Although distribution may be in more than half of the ray floret, the total area covered is still less than the main color."
Ad. 33	to add "Although distribution may be in up to half of the ray floret, the total area covered is still less than the secondary color."
Ad. 38	to improve images (increase size)
8.3	to be moved to the beginning of Chapter 8.1
9.	to read "Kindersley" (delete first s) in both references
TQ 1	to add 1.3 indication of species

*Eustoma* (*Eustoma grandiflorum* (Raf.) Shinnery L.)

5. The subgroup discussed document TG/197/2(proj.1), presented by Mr. Kazunari Horiguchi (Japan), and agreed the following:

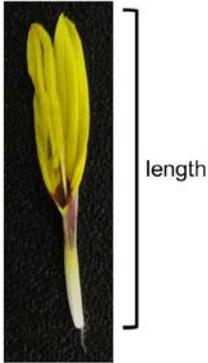
1.	- to check whether to read "These Test Guidelines apply to all varieties of <i>Eustoma grandiflorum</i> (Raf.) Shinnery and interspecific hybrids." or whether to specify hybrids individually in the coverage of the Test Guidelines - if hybrids aren't specified individually, to add Chapter 1.1 to read "Guidance on the use of Test Guidelines for interspecific hybrids that are not explicitly covered by Test Guidelines is provided in document TGP/13 "Guidance for New Types and Species."
4.1.4	observations on vegetatively propagated varieties to be made on 18 plants
4.2.2	- to add cross-pollinated seed propagated varieties - to delete repeated "varieties"
5.3 (e), (f)	- to add "with the following groups" after characteristic names - to order states as follows: "white", "light green", "yellow", "orange", "pink", "red", "purple", "blue purple"
Char. 1	to add example variety for state 7
Char. 3	to add explanation or illustration on "main stem"
Char. 4	to delete "only" from states 2 and 3
Char. 9	- to read "Leaf: glaucosity" - to check whether to have states of expression "absent or weak", "medium", "strong" - to check whether to add example variety for state 3
Char. 10	- to read "Leaf: intensity of green color" - to add explanation that to be observed on upper side of leaf after removing glaucosity
Char. 11	to read "Plant: number of flower buds"
Char. 12	to add illustration
Char. 14	to check whether to be indicated as QN and to have states from "weak" to "strong"
Char. 17	- to read "Flower: shape in profile" - to check whether to add new characteristic for flower height - to check whether to describe separate components of shape in different characteristics (e.g. length, ratio)
Char. 18	to check whether to reduce scale (notes 1, 3, 5?)
Char. 21	state "obovate" to read "medium obovate"
Char. 23	to check whether to reduce scale (notes 1, 3, 5?)
Char. 24	to check whether to have states "absent or weak", "medium", "strong"
Char. 25	to read "Petal: main color of inner side"
Char. 26	to read "Petal: secondary color of inner side"
Char. 27	- to read "Petal: relative area of secondary color of inner side" - to delete state 1 "absent"

Char. 28	- to read "Petal: distribution or pattern of secondary color of <u>inner side</u> " - to check whether to split distribution and pattern as separate characteristics - state "shaded" to read "flushed"
Char. 29	to read "Petal: main color of <u>outer side</u> "
Char. 30	to read "Petal: color of upper part of base of <u>inner side</u> "
Char. 31	to read "Petal: color of lower part of base of <u>inner side</u> "
Char. 32	to be indicated as QL
Char. 33	to be indicated as QN with 3-note scale (e.g. absent or weak, medium, strong)
Char. 34	- to read "Time of beginning of flowering" and to add explanation that to be observed for seed-propagated varieties - to add MG
8.1	general explanation to read "Unless otherwise indicated, observations should be made..."
8.1 (a)	to read "Observations should be made..."
8.1 (b)	to read "observations on double flowers should be made on..."
Ad. 13	to replace illustration with a complete flower (e.g. Ad. 17)
Ad. 15	to add "Single varieties have only five petals."
Ad. 21	to improve photo for state 1
9.	to read "...Seibundo-Shinkosha..."
TQ 4.2.1	to add cross-pollination
TQ 5.	to add all states of expression and corresponding notes in case of abbreviated scales
TQ 6.	to add example

\**Gazania* (*Gazania Gaertn.*)

6. The subgroup discussed document TG/GAZAN(proj.3), presented by Ms. Hilary Papworth (United Kingdom), on behalf of Mr. Adriaan de Villiers (South Africa), and agreed the following:

4.2.2, 4.2.4	to delete repeated "varieties"
4.2.3	to be deleted
Char. 7	- to be indicated as QN - to read "Leaf: intensity of green color"
Chars. 8, 9, 10	to delete "of upper side"
Char. 20	to have notes 1, 2, 3
Char. 24	to add new state of expression "marginal zone" with note 20 and to renumber current state 20 to become state 21
Chars. 26, 28, 30	to add new state of expression "marginal zone" with note 21

Char. 33	<ul style="list-style-type: none"> <li>- to add explanation to read "Observations should be made on petaloid disc floret from the outer whorl, when at least 75% of the disc florets have opened"</li> <li>- to delete MS</li> <li>- to add the illustration:</li> </ul> 
8.1 (a)	to read "Observations should be made on the upper side of fully developed leaves from the middle part of the plant. If there are only rosette leaves, fully developed rosette leaves should be observed. Pubescence should be removed when making observations on leaf color.
8.1 (c)	to read "Observations should be made..."
Ad. 18	to read "See Ad. 17"
Ads. 24, 26	to add the following illustration for new state "marginal zone": 
TQ 1.3	to read "Species: (please complete)"
TQ 5.5	to read "Ray floret: color covering the greatest surface area of upper side, with the following groups:"

*\*Hydrangea (Hydrangea L.)*

10. The subgroup discussed document TG/133/5(proj.3), presented by Mr. Kévin Daubigny (France), and agreed the following:

4.1.4	to indicate 7 plants for distinctness
4.2.2	to delete repeated "varieties"
6.4	<ul style="list-style-type: none"> <li>- formatting: italics for botanical names</li> <li>- "and" in small letters</li> <li>- to correct spelling of "example"</li> </ul>
Char. 1	to replace example varieties for state 1
Char. 3	<ul style="list-style-type: none"> <li>- to check spelling of example variety "Dharuma" (without h?)</li> <li>- to check spelling of example variety "Mite Late Summer" (Mid Late Summer?)</li> </ul>
Char. 6	to replace state "red" with "pink"
Char. 7	<ul style="list-style-type: none"> <li>- state 1 to read "absent or very few"</li> <li>- state 5 to read "very many"</li> </ul>
Char. 14	state 1 to read "absent or short"
Char. 17	to read "...intensity of anthocyanin..."
Char. 18	to be indicated as PQ

Char. 22	- to be indicated as QN - to have states absent or weak (1), medium (2) strong (3)
Char. 25	state "green and brown" to read "greenish brown"
Char. 26	- to provide illustrations for states 2 and 4 and check wording of these two states
Char. 28	to have states of expression from "narrow" to "broad"
Char. 29	to have states absent or weak (1), medium (2), strong (3)
Char. 30	- to read "Sterile flower: continuous formation of sepals" - to be moved after Char. 32
Char. 32	- state 1 to read "very sparse" - state 5 to read "very dense" - to read "Only varieties with conspicuous fertile flowers: absent or weak: Inflorescence: density of sterile flowers"
Char. 34	- to be indicated as MG and PQ - to check whether to add example varieties
Char. 36	to read "shape of apex of sepal"
Char. 38	to delete "the"
Char. 39	to check whether to read "overlapping of sepals" (delete "degree")
Char. 44	to add new state "purple" or "violet" as state 5
Char. 45	- state 3 to read "in upper half" - state 4 to read "in lower half"
Char. 48	to delete underlined part
8.1	- to start sentences with "Observations should be made..." - to review wording of all explanations (currently (a) and (b) refer to leaves) - to add general explanation without label "Unless otherwise indicated, observations should be made at the time of full flowering."
Ad. 2	to replace current tree illustrations with illustrations for shrubs
Ad. 17	to delete illustrations
Ad. 25	- to correct spelling of "petiole" - to replace "central zone" with "middle third" - to read "Observations should be made on..."
Ad. 27	to replace photos with drawing
Ad. 37	to check whether to improve images (states 2 and 3 seem alike)
Ad. 40	to check whether state 1 to read "absent or weak" (to match Char. 40)
Ad. 45	to improve drawing for state "distal part"
Ad. 48	to add explanation that "Observation may be of particular relevance for <i>paniculata</i> and <i>quercifolia</i> varieties."
TQ 1.	to add 1.3 for indication of species

*Kangaroo Paw (Anigozanthos Labill.; Macropidia fuliginosa (Hook.) Druce) (Revision)*

11. The subgroup discussed document TG/175/4(proj.2), presented by Mr. Nik Hulse (Australia), and agreed the following:

2.3	To read "10 plants"
4.2.2	method of propagation to be indicated as vegetatively propagated varieties
Char. 2	to add (*)
Char. 6	to be deleted
Char. 7	to be deleted
Char. 9	- to delete "degree" - to add (*)
Char. 10	to delete "degree of"

Char. 11	- to read "... lowest lateral branch" - to add (*) - to add state very short (1) without example variety - to add state very long (9) with example variety "Black Velvet"
Char. 12	to add (*)
Char. 16	to add (*)
Char. 17	- to delete "predominant" - to add explanation "The overall impression of color should be observed."
Char. 18	to read "Perianth tube hair: number of colors"
Char. 19	to read "Perianth tube hair: color..."
Char. 20	to read "Perianth tube hair: color..."
Chars. 18, 19, 20	to add new explanation (c)
Char. 23	to add (*)
8.1	to add new explanation (c) to read "The individual hairs on the perianth tube may have up to three colors."
Ad. 10	- to number states of expression as in Characteristic 10 - to add the following illustration for state "absent":  
Ad. 11	to replace photo with the following drawing:  
Ad. 22	to delete illustration for state 9
Ad. 26	to read "The time of beginning of flowering is when at least 4 of the plants have at least one open flower."
8.3	to be moved before 8.1
TQ 1.	to add 1.1.3 for indication of species
TQ 4.1	to be completed with indication of female and male parents of controlled and partially known crosses
TQ 4.2	to delete 4.2.1 (d) "Rhizomes"
TQ 5.4	state 2 to read "very weak to weak"
TQ 6	to be updated according to the Table of Characteristics

*Lagerstroemia* (*Lagerstroemia L.*) (Revision)

12. The subgroup discussed document TG/95/4(proj.2), presented by Ms. Stéphanie Christien (France), and agreed the following:

3.1.1	to check whether minimum duration of test should be indicated as one growing cycle (see Chapter 2.2)
4.2.2	to delete repeated “varieties”
5.3	color group Gr. 3 to read “medium pink” or “dark pink”
Table of Chars.	General remark: to check whether to clarify when should each characteristic be observed
Char. 1	- to check whether to add explanation - to check whether this characteristic is needed or can be deleted (better to be replaced with characteristics height, width, ratio, density) - if kept, to check wording of state 2 “normal”
Char. 2	to check whether to be indicated as QN or PQ
Chars. 4, 5	- to check whether to add explanation - to add MS
Char. 6	- to check whether to add explanation (of at least states “low” and “high”) - to add MS
Char. 7	- to check whether to add explanation - to check whether to have states (“elliptic”, “elliptic and obovate”, “obovate”) - to check whether to add where to observe this characteristic (middle third of the stem?) and whether two shapes in one state do really exist
Char. 8	- to delete “absent or” - to be moved after Characteristic 10
Char. 9	- to check whether to clarify state “central” (would it be between veins?) - to check whether to be indicated as PQ - state 4 to read “entire”
Char. 10	to have states of expression from “light” to “dark” (intensity)
Char. 13	to move explanation to section 8 (“excluding anthocyanin coloration”)
Char. 14	- to check whether to be combined with Char. 13 (QL characteristic with 3 states of expression) - to check whether to add more colors
Chars. 15, 16	to check whether to add illustration
Char. 17	- to check whether to improve explanation on differences between states of expression (e.g. grid) - to check whether to use 2-dimensional shapes (e.g. circular, broad oblong, narrow oblong, narrow obovate, broad obovate)
Char. 18	- to check whether state 1 to read “absent or weak” - to read “Flower bud: prominence of ridges”
Char. 19	to check whether to clarify whether intensity or area and to update states of expression accordingly
Char. 22	to check whether to reword states of expression (see Ad. 22)
Char. 24	- to check whether to have states from “few” to “many” (or would it be density with states from “sparse” to “dense”) - to check whether to add plus and explanation
Char. 26	to read “Petal: claw length”
Char. 27	to read “Petal: claw color”
Char. 28	to check whether to be deleted (as there are characteristics for main and secondary color)
Char. 29	- Capital “P” for Petal - to be indicated as VG
Char. 30	to be indicated as VG
Char. 32	state 2 to read “inconspicuous”

Char. 33	- to check whether this is a suitable DUS characteristic - to check whether to be deleted
Char. 34	- to check whether there are intermediate states - to correct spelling of "elliptic" - to check whether to delete this characteristic and add characteristics for fruit width and ratio length/width
Chars. 35, 36	to check whether to add plus and illustration
Char. 37	- to check whether to clarify state "absent" (is it just impossible to observe on anthocyanin colored varieties? Are there other colors?) - to check whether to delete state "absent or" - to have states from "light" to "dark"
Char. 38	to check whether intensity or area/extent is observed
Chars. 39, 40	- to check whether to add illustration - to check whether to be indicated as QN and add an intermediate state
Char. 41	to read "Time of vegetative bud burst"
Ad. 2	- to improve illustration for state 2 - add when to be observed
Ad. 3	to be deleted (document TGP/7 GN 36)
Ad. 19	to check whether to improve illustration for state 1 (the photographs would only be appropriate to illustrate the total area of anthocyanin)
Ad. 22	- to check whether to improve illustrations - to check whether to clarify differences between the different states of expression
Ad. 25	to have one general illustration for diameter
Ads. 29, 30	to be deleted and add to 8.1 for all color chars. and use standard definition according to TGP/14
Ad. 31	- to check whether to improve image quality (size, resolution) - to replace photos with drawings for states 1,3, 5 only
Ad. 32	to check whether to provide close-up image of an individual flower
TQ 1	to check whether to add 1.3 for indication of species
TQ 4	to be completed
TQ 5.9 (ii)	Gr. 3 to read "medium pink" or "dark pink"
TQ 5.10	to add color groups
TQ 7.3	add ASW for request of provision of photograph

*Phalaenopsis (Phalaenopsis Bl.) (Partial Revision)*

14. The subgroup discussed document TWO/51/7, presented by Mr. Marco Hoffman (Netherlands), on behalf of the Leading Expert Mr. Henk de Greef (Netherlands), and agreed the following:

New Char. 1	state 1 to read "none"
New Char. 2	to read "Only varieties with Lip: fusion of lateral lobes to apical lobe: strongly or completely fused; Lip: extension of fused lobes" and to have states absent or weak (1), moderate (2), strong (3)
New Ad. 2	to delete sentence

*Portulaca* (*Portulaca grandiflora* Hook.; *Portulaca oleracea* L.; *Portulaca umbraticola* Kunth)

15. The subgroup discussed document TG/242/2(proj.1), presented by Ms. Andrea Menne (Germany), and agreed the following:

1.	- to delete "and hybrids between these species and other species of <i>Portulaca</i> L." - to add "Guidance on the use of Test Guidelines for interspecific hybrids that are not explicitly covered by Test Guidelines is provided in document TGP/13 "Guidance for New Types and Species".  "In the case of vegetable varieties, in particular, it may be necessary to use additional characteristics or additional states of expression to those included in the Table of Characteristics in order to examine Distinctness, Uniformity and Stability."
4.2	to correct numbering
4.2.2	to read "These Test Guidelines have been developed for the examination of vegetatively propagated and cross-pollinated seed-propagated varieties. For varieties with other types of propagation the recommendation..."
4.2.3	to read "For the assessment of uniformity of vegetatively propagated varieties, a population standard..."
5.3 (d), (e)	to add "with the following groups" after characteristic names
Char. 6	- to add states 1 "very narrow" and 9 "very broad" - to add example variety "Sunseeker Orange" for state 1
Char. 11	- to be indicated as QL - state 3: to delete "single"
Char. 12	- to be indicated as QN - to add colon after "type:"
Char. 15	to read " <u>Only varieties with Flower: type: single:</u> Flower: conspicuousness of color at base"
Char. 16	to read " <u>Only varieties with Flower: type: single:</u> Flower: color at base"
Chars. 18, 19, 20, 21, 22, 23	to add (c)
Char. 24	- to add explanation with photograph provided in Ad. 25 - to read " <u>Only varieties with Flower: type: with petaloid staminodes:</u> Petaloid staminodes: color of outer staminodes"
Char. 25	to read " <u>Only varieties with Flower: type: with petaloid staminodes:</u> Petaloid staminodes: color of inner staminodes"
8.1 (c)	to correct spelling of whorl
Ad. 11	last sentence to read "...the number of petals is irrelevant."
Ad. 15	to delete first sentence "For varieties..."
Ad. 17	to read "...which color has the larger..."
Ad. 19	- to read "In <i>Portulaca</i> varieties with bi- or multi-colored flowers the proportion of the main and the secondary color can change due to environmental conditions. Those flowers which have the predominant distribution should be described. "Arrow points to the secondary color: - state 2 to move the arrow away from margin with light reflection
Ad. 25	to read "staminodes"
TQ 4.2.1	to add options for cross-pollination and hybrids
TQ 7.	to add ASW to request provision of photograph

*Ranunculus* (*Ranunculus L.*)

15. The subgroup discussed document TG/RANUN(proj.2), presented by Mr. Satoshi Fujisako (Japan), and agreed the following:

Table of Chars.	- to check spelling of example varieties (only first letter in capitals?) - to check whether to add new characteristic "Color of flower bud" with the following states and example varieties: light green (1), ABWPRE medium (2), ABLEIGONG dark green (3) purple (4) green and purple (color name to be checked) (5) ABULANJI greyish purple (6) ABOSHOSSI - to add explanation to read "Observations should be made when flower have size (to clarify whether height/width/diameter) of 1 to 1.5 cm"
Chars. 1, 5, 6, 9, 10, 13, 17, 23, 31	to check whether to add example varieties
Char. 7	to correct spelling of "ternate"
Char. 11	- " <u>C</u> auline leaf: intensity of green color" (there is no "secondary color" characteristic) - to have states of expression "light", "medium", "dark" (delete "green") - to delete (a)
Chars. 16, 26	to add asterisk (grouping characteristic)
Char. 19	- to underline " <u>Only varieties...and double:</u> " - to check whether to add example variety for an intermediate state
Chars. 26, 29	- state 4 to read "at base", state 5 to read "basal half" - to add new state of expression "distal half"
Chars. 33, 34	- to replace the use of a color chart with relevant colors - to add time of observation
8.1	- explanation covering all characteristics to read "Unless otherwise indicated, ..." - to reorder explanation labels (the color definitions in (a) are not the first ones to appear in the Table of Characteristics anymore)
8.1 (c)	to read "Observations on varieties with semi-double and double flowers..."
Ad. 14	to add explanation (e.g. "to be observed from ground level to base of lowest open flower")
Ad. 16	"semi-double" to read "..., and clearly visible pistils and stamens"
Ad. 20	to correct legend to read absent (1), present (9)
Ad. 30	- to check whether to improve image quality - to add illustration for state 5 - to check whether to use illustrations of petals instead of full flower
Ad. 31	to check whether to improve illustration for state 2
TQ 4.1	to be completed
TQ 5.	to complete the full scale of states of expression for all characteristics
TQ 5.7, 5.8	to add the possibility to provide the RHS Colour Chart reference number
TQ 6.	to replace example by another characteristic (e.g. Plant: height; medium; tall)

Experiences with new types and species

89. The TWO received a presentation by an expert from China on "A proposal for new Test Guidelines for Magnolia," a copy of which would be included in document TWO/51/3 "Reports on Developments in Plant Variety Protection from Members and Observers."

Information and databases

(a) *Variety description databases*

90. The TWO considered document TWP/3/2.

91. The TWO noted that the TC, at its fifty-fourth session, had agreed with the TWF that the initial step before building any database should be to agree on the information to be shared and the format to exchange and store the information.

92. The TWO noted that the TC, at its fifty-fourth session, had agreed with the proposal by the BMT that, as a first step, discussions on databases should address the issues of how to overcome ownership matters, confidentiality, access to data and material, authorization for work to be performed and availability of results and information to partners.

(b) *Electronic application systems*

93. The TWO considered document TWP/3/3 and noted the developments concerning UPOV PRISMA.

(c) *UPOV information databases*

94. The TWO considered document TWP/3/4.

UPOV Code System

*UPOV code developments*

95. The TWO noted that 242 new UPOV codes were created in 2018 and a total of 8,844 UPOV codes are included in the GENIE database, as set out in document TWP/3/4, paragraph 9.

*UPOV code amendments considered by the TC at its fifty-fourth session*

96. The TWO noted that the TC, at its fifty-fourth session, had agreed not to delete the UPOV Codes for sweet corn and popcorn and for certain subspecies of *Brassica oleracea*, therefore creating exceptions to the “Guide to the UPOV Code System”, as set out in document TWP/3/4, paragraphs 15 and 32.

97. The TWO noted that amendments to the “Guide to the UPOV Code System” would be considered by the TC, at its fifty-fifth session, to be held in Geneva on October 28 and 29, 2019, as set out in document TWP/3/4, paragraph 16.

98. The TWO noted that the TC had agreed to amend the UPOV codes for subspecies in the *Mucuna*, *Epichloe* and *Neotyphodium* genera and to correct the UPOV codes for *Sesbania sesban*.

99. The TWO noted that the Office of the Union had issued Circular E-18/208 to the designated persons of the members of the Union in the TC, the CAJ, TWPs and contributors to PLUTO, announcing the amendments to UPOV codes and requesting contributors to PLUTO to use the amended UPOV codes from February 22, 2019, as set out in document TWP/3/4, paragraph 21.

*Proposed amendments for consideration by the TWPs in 2019*

*UPOV code for inter-generic hybrids between Echeveria and Sedum*

100. The TWO agreed to delete the UPOV Codes ECSED and ECSED\_EMO, as set out in document TWP/3/4, paragraph 46.

*UPOV codes for Platostoma and Platostoma calcaratum*

101. The TWO agreed to delete the UPOV Codes CRTNT and CRTNT\_CAL, as set out in document TWP/3/4, paragraph 51.

*UPOV codes for Digitalis, Isoplexis and hybrids between Digitalis and Isoplexis*

102. The TWO agreed to delete the UPOV Codes ISOPL, DGISO, ISOPL\_CAN and DGISO\_PCA, as set out in document TWP/3/4, paragraph 56.

*UPOV codes for Lobivia and Echinopsis chamaecereus*

103. The TWO agreed to delete the UPOV Codes LOBIV and LOBIV\_SIL, as set out in document TWP/3/4, paragraph 63.

*UPOV codes for Ascocentrum and Neofinetia, hybrids between Ascocentrum and Neofinetia and Neofinetia falcata*

104. The TWO agreed to delete the UPOV Codes ASCOC, ASNEO, NEOFI and NEOFI\_FAL, as set out in document TWP/3/4, paragraph 64

*UPOV codes for Haworthia species*

105. The TWO agreed to delete the UPOV Codes HAWOR\_FAS, HAWOR\_LIM, HAWOR\_LFA and HAWOR\_MAR, as set out in document TWP/3/4, paragraph 68.

*UPOV codes for Mahonia and its species*

106. The TWO agreed to delete the UPOV Codes MAHON, MAHON\_ACA, MAHON\_AQU, MAHON\_BEA, MAHON\_JAP, MAHON\_LOM, MAHON\_PUM and MAHON\_REP, as set out in document TWP/3/4, paragraph 72.

107. The TWO noted the reclassification of the genus *Mahonia* to *Berberis* and agreed that this information should be reported to the subgroup discussing the draft Test Guidelines for *Berberis*.

*UPOV codes for Homalocladium and its species*

108. The TWO agreed to delete the UPOV Codes HOMLC and HOMLC\_PLA, as set out in document TWP/3/4, paragraph 76.

*TWP checking*

109. The TWO noted the invitation to check the amendments to UPOV codes, the new UPOV codes or new information added for existing UPOV codes, and the UPOV codes used in the PLUTO database for the first time, which are provided in document TWP/3/4, Annex II, by December 31, 2019.

110. The TWO noted the invitation to submit comments on Annex II, part A "UPOV codes amendments to be checked", part B "New UPOV codes or new information", and part C "Crop type(s) of UPOV codes used in the PLUTO database for the first time" to the Office of the Union by December 31, 2019.

PLUTO database

*Program for improvements to the PLUTO database*

111. The TWO noted the summary of contributions to the PLUTO database from 2015 to 2018 and the current situation of members of the Union on data contribution, as presented in document TWP/3/4, Annex I.

*Content of the PLUTO database*

112. The TWO noted developments concerning possible expansion of the content of the PLUTO database, as set out in document TWP/3/4, paragraph 87.

113. The TWO noted that the proposals by the WG-DEN at its fifth session concerning possible expansion of the content of the PLUTO database would be considered by the CAJ, at its seventy-sixth session, to be held in Geneva on October 30, 2019, as set out in document TWP/3/4, paragraph 89.

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

114. The TWO considered document TWP/3/5.

Document UPOV/INF/16 “Exchangeable Software”

115. The TWO noted that the Council, at its fifty-second ordinary session, held in Geneva, on November 2, 2018, had adopted document UPOV/INF/16/8 “Exchangeable Software.”

116. The TWO noted that the Office of the Union would issue a circular, inviting the designated persons of the members of the Union in the TC to provide or update information regarding the use of the software included in document UPOV/INF/16.

117. The TWO noted that the Office of the Union would make the information in documents UPOV/INF/16 and UPOV/INF/22 available in a searchable format on the UPOV website on the basis of the approach demonstrated at the fifty-fourth session of the TC in 2019.

Document UPOV/INF/22 “Software and equipment used by members of the Union”

118. The TWO noted that the Council, at its fifty-second ordinary session, held in Geneva, on November 2, 2018, had adopted document UPOV/INF/22/5 “Software and equipment used by members of the Union”.

119. The TWO noted that the Office of the Union would issue a circular, inviting the designated persons of the members of the Union in the TC to provide or update information for document UPOV/INF/22.

Variety denominations

120. The TWO considered document TWP/3/6.

*Possible revision of document UPOV/INF/12 “Explanatory Notes on Variety Denominations under the UPOV Convention”*

121. The TWO noted developments concerning a possible revision of document UPOV/INF/12 “Explanatory Notes on Variety Denominations under the UPOV Convention”, as set out in document TWP/3/6, paragraphs 6 to 8.

122. The TWO noted that the CAJ, at its seventy-fifth session, had agreed to request the TC to consider proposals received by the WG-DEN to revise the list of classes in document UPOV/INF/12/5, as set out in document TWP/3/6, paragraph 9:

123. The TWO noted the proposals to revise the list of classes 203 and 205 in document UPOV/INF/12/5, as set out in document TWP/3/6, paragraph 9, in anticipation of consideration of this matter by the Technical Committee.

*Revision of the ninth edition of the ICNCP*

124. The TWO noted that the CAJ had agreed that the Office of the Union contribute to the revision of the ninth edition of the ICNCP on the basis of document UPOV/INF/12/5 and the work of the WG DEN, as set out in document TWP/3/6, paragraph 14.

*Possible development of a UPOV similarity search tool for variety denomination purposes*

125. The TWO noted that the WG-DEN, at its fifth meeting, had agreed that the Office of the Union should restart its work to explore possibilities to improve the UPOV Denomination Similarity Search Tool in conjunction with the Community Plant Variety Office of the European Union (CPVO).

*Non-acceptable terms*

126. The TWO noted that the WG-DEN, at its fifth meeting, had agreed to propose not to pursue further the matter in relation to the item “Non-acceptable terms”.

*Date and program of the next meeting*

127. The TWO noted that the WG-DEN, at its sixth meeting, to be held in Geneva, in the evening of October 29, 2019, had agreed to discuss the revision of document UPOV/INF/12/5 “Explanatory Notes on Variety Denominations under the UPOV Convention.

Recommendations on draft Test Guidelines

(a) *Test Guidelines to be put forward for adoption by the Technical Committee*

128. The TWO agreed that the following draft Test Guidelines should be submitted to the TC for adoption at its fifty-fifth session, to be held in Geneva on October 28 and 29, 2019, on the basis of the following documents and the amendments in this report:

Subject	Relevant document(s)
*Alstroemeria ( <i>Alstroemeria</i> L.) (Revision)	TG/29/8(proj.3)
*Calendula ( <i>Calendula</i> L.)	TG/CALEN(proj.3)
*Coreopsis ( <i>Coreopsis</i> L.)	TG/COREO(proj.2)
*Gazania ( <i>Gazania</i> Gaertn.)	TG/GAZAN(proj.3)
*Kangaroo Paw ( <i>Anigozanthos</i> Labill., <i>Macropidia fuliginosa</i> (Hook.) Druce) (Revision)	TG/175/4(proj.2)
*Phalaenopsis ( <i>Phalaenopsis</i> Bl.) (Partial Revision)	TG/213/2, TWO/51/7
Portulaca ( <i>Portulaca oleracea</i> L.) (Revision)	TG/242/2(proj.1)

(b) *Test Guidelines to be discussed at the fifty-second session*

129. The TWO agreed to discuss the following draft Test Guidelines at its fifty-second session:

Subject	Relevant document(s)
Anthurium ( <i>Anthurium</i> Schott) (Revision)	TG/86/5 Corr.
Berberis ( <i>Berberis</i> L.) (Revision)	TG/68/4(proj.2)
Echinacea ( <i>Echinacea</i> Moench.) (Revision)	TG/281/1
*Eustoma ( <i>Eustoma grandiflorum</i> (Raf.) Shinnery) (Revision)	TG/197/2(proj.1)
*Hydrangea ( <i>Hydrangea</i> L.) (Revision)	TG/133/5(proj.3)
*Lagerstroemia ( <i>Lagerstroemia</i> L.) (Revision)	TG/95/4(proj.2)
Ling, Scots Heather ( <i>Calluna vulgaris</i> (L.) Hull) (Revision)	TG/94/6 Corr.
Magnolia ( <i>Magnolia</i> L.)	NEW
*Ranunculus ( <i>Ranunculus</i> L.)	TG/RANUN(proj.2)
Statice ( <i>Limonium</i> Mill., <i>Goniolimon</i> Boiss. and <i>Psylliostachys</i> (Jaub. & Spach) Nevski) (Revision)	TG/168/3
*Zinnia ( <i>Zinnia</i> L.)	TG/ZINNIA(proj.7)

130. The leading experts, interested experts and timetables for the development of the Test Guidelines are set out in Annex III to this report.

(c) *Possible Test Guidelines to be discussed in 2021*

131. The TWO agreed that it should consider the development of Test Guidelines for the following at a future session:

Amaryllis ( <i>Hippeastrum</i> Herb.) (Revision)
China-rose ( <i>Hibiscus rosa-sinensis</i> L.)
Eucalyptus ( <i>Eucalyptus</i> L'Hér.) (Partial revision)
Lavender ( <i>Lavandula</i> L.) (Partial revision)
Paphiopedilum ( <i>Paphiopedilum</i> Pfitzer)
Poinsettia ( <i>Euphorbia pulcherrima</i> Willd. ex Klotzsch) (Revision)

Date and place of the next session

132. At the invitation of the Netherlands, the TWO agreed to hold its fifty-second session in Roelofarendsveen, Netherlands, from June 8 to 12, 2020.

Future program

133. The TWO agreed 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 (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. TGP documents (documents to be prepared by the Office of the Union)
5. Molecular techniques (document to be prepared by the Office of the Union)
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) Exchange and use of software and equipment (document to be prepared by the Office of the Union)
  - (d) UPOV PRISMA (document to be prepared by the Office of the Union and reports invited on providing information on trees and vines to UPOV PRISMA)
8. Minimum distances between vegetatively reproduced ornamental varieties (document to be prepared by the European Union and CIOFORA and documents invited)
9. New issues arising for DUS examination (documents invited)
10. Report on court cases dealing with technical matters (document invited)
11. Experiences with new types and species (oral reports invited)
12. Matters to be resolved concerning Test Guidelines adopted by the Technical Committee
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. Adoption of the Report on the session (if time permits)

19. Closing of the session

Visit

134. On the afternoon of Wednesday, February 20, 2019, the TWO visited the Broadfield New Zealand Gardens near Rolleston, and was welcomed by Mr. David Hobbs, owner of the Broadfield New Zealand Gardens. The TWO visited different sections of the Gardens with New Zealand native ornamental species such as *Agathis*, *Clianthus*, *Neopanax* and *Pseudopanax*. The TWO also visited the Manaaki Whenua Landcare Research, at the Canterbury Agriculture and Science Centre Lincoln (CASC) and the DUS trials for *Geranium*, *Daphne* and *Leucothoe* conducted on behalf of the New Zealand Plant Variety Rights Office. The TWO visited the variety collections for *Cordyline*, *Hebe* and *Zantedeschia* and received information on the Agapanthus breeding program by Mr. Murray Dawson, Researcher, CASC. The TWO visited the New Zealand Flax (*Phormium*) collection CASC, and received a demonstration on the extraction of Flax leaves fibers by Ms. Katarina Tawiri, Curator of the collection.

135. *The TWO adopted this report at the close of its session.*

[Annexes follow]

LIST OF PARTICIPANTS

I. MEMBERS

AUSTRALIA



Nik HULSE (Mr.), Chief of Plant Breeders' Rights, Plant Breeder's Rights Office, IP Australia, 47 Bowes Street, Woden ACT 2606  
(tel.: +61 2 6283 7982 e-mail: [nik.hulse@ipaaustralia.gov.au](mailto:nik.hulse@ipaaustralia.gov.au))



Andrew HALLINAN (Mr.), PBR Examiner, Plant Breeder's Rights Office, IP Australia, PO Box 200, Woden ACT 2606  
(tel.: +61 2 6283 2801 e-mail: [andrew.hallinan@ipaaustralia.gov.au](mailto:andrew.hallinan@ipaaustralia.gov.au))

BRAZIL



Luiz Claudio AUGUSTO DE OLIVEIRA (Mr.), Federal Agriculture Inspector, National Plant Variety Protection Service (SNPC), Ministry of Agriculture, Livestock and Food Supply, Esplanada dos Ministérios, Bloco D, Anexo A, Sala 248, Brasília D.F. 70043-900  
(tel.: +55 61 32182938 fax: +55 61 3224 2842 e-mail: [luiz.oliveira@agricultura.gov.br](mailto:luiz.oliveira@agricultura.gov.br))

CANADA



Ashley BALCHIN (Ms.), Examiner, Plant Breeders' Rights Office, Canadian Food Inspection Agency (CFIA), Camelot Drive, Ottawa, Ontario  
(tel.: +1 613 773 7532 fax: +1 613 773 7261 e-mail: [ashley.balchin@canada.ca](mailto:ashley.balchin@canada.ca))

CHINA



Sanqun LONG (Mr.), Deputy Director, Office of Protection of New Varieties of Plants, National Forestry and Grassland Administration, No. 18, Hepingli East Street, Dongcheng District, Beijing  
(tel.: +86 10 84238968 fax: +86 10 84238753 e-mail: [LSQ9106@126.com](mailto:LSQ9106@126.com))



Yongqi ZHENG (Mr.), Research Professor, Office of Protection of New Varieties of Plants, National Forestry and Grassland Administration, Dongxiaofu 1, Xiangshan Road, Haidian district, Beijing 100091  
(tel.: +86 10 6288 8565 fax: +86 10 6287 2015 e-mail: zhengyq@caf.ac.cn)

#### EUROPEAN UNION



Jens WEGNER (Mr.), Technical Expert for Ornamental Plants, Community Plant Variety Office (CPVO), 3 boulevard Maréchal Foch, CS 10121, 49101 Angers, France  
(tel.: +33 2 4125 6453 e-mail: wegner@cpvo.europa.eu)



Laetitia DENECHÉAU (Ms.), Technical Expert for Ornamental Plants, Community Plant Variety Office (CPVO), 3 boulevard Maréchal Foch, CS 10121, 49101 Angers, France  
(tel.: +33 2 4125 6432 e-mail: denecheau@cpvo.europa.eu)

#### FRANCE



Stéphanie CHRISTIEN (Ms.), Ornamental DUS Manager, Groupe d'étude et de contrôle des variétés et des semences (GEVES), Domaine de la Boisselière, 49250 Les Bois d'Anjou  
(tel.: +33 2 41 5703 70 fax: +33 2 41 57 46 19 e-mail: stephanie.christien@geves.fr)



Kévin DAUBIGNEY (Mr.), Ornamental DUS Examiner, Groupe d'étude et de contrôle des variétés et des semences (GEVES), Domaine de Boisselière, 49250 Les Bois d'Anjou  
(tel.: +33 241 57 2322 fax: +33 241 57 4619 e-mail: kevin.daubigney@geves.fr)

#### GERMANY



Andrea MENNE (Ms.), Head, Section DUS Testing Ornamentals, Bundessortenamt, Osterfelddamm 80, 30627 Hannover  
(tel.: +49 511 9566 9600 fax: +49 511 9566 5719  
e-mail: andrea.menne@bundessortenamt.de)

JAPAN



Koji NAKANISHI (Mr.), Senior Staff, DUS Test Division, Nishi-Nihon station, National Center for Seeds and Seedlings (NCSS), 91 Heisei-cho, Kasaoka, Okayama prefecture 714-0054  
(tel.: +81 865 69 6644 fax: +81 865 66 0264 e-mail: konaka@affrc.go.jp)



Kazunari HORIGUCHI (Mr.), Examiner, Plant Variety Protection Office, Intellectual Property Division, Food Industry Affairs Bureau, 1-2-1 Kasumigaseki, Chiyoda-ku, 100-8950 Tokyo  
(tel.: +81 3 6738 6464 fax: +81 3 3502 6572 e-mail: kazunari\_horiguch480@maff.go.jp)



Satoshi FUJISAKO (Mr.), Assistant Examiner, Plant Variety Protection Office, Intellectual Property Division, Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries (MAFF), 1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo 100-8950  
(tel.: +81 3 6738 6445 fax: +81 865660264 e-mail: satoshi\_fujisako020@maff.go.jp)

NETHERLANDS



Marco HOFFMAN (Mr.), Taxonomist / DUS Ornamental and Fruit Crops Specialist, Team DUS Ornamental and Fruit Crops, Naktuinbouw, Sotaweg 22, 2370 GD Roelofarendsveen  
(tel.: +31 646 84 10 20 e-mail: m.hoffman@naktuinbouw.nl)

NEW ZEALAND



Simon GALLAGHER (Mr.), National Manager, Intellectual Property Office of New Zealand, Wellington  
(tel.: +64 4 978 7594 e-mail: simon.gallagher@iponz.govt.nz)



Christopher J. BARNABY (Mr.), Assistant Commissioner / Principal Examiner for Plant Variety Rights, Plant Variety Rights Office, Intellectual Property Office of New Zealand, Ministry of Business, Innovation and Employment, Private Bag 4714, Christchurch 8140  
(tel.: +64 3 9626206 e-mail: Chris.Barnaby@pvr.govt.nz)



Cecilia REQUEJO-JACKMAN (Ms.), Senior Plant Variety Rights Examiner, Plant Variety Rights Office, Intellectual Property Office of New Zealand, Christchurch  
(tel.: +64 3 943 4178 e-mail: Cecilia.R-Jackman@pvr.govt.nz)



Kylie MILLER (Ms.), Plant Variety Rights Examiner, Plant Variety Rights Office, Intellectual Property Office of New Zealand, Hawkes Bay Research Centre, Havelock North  
(tel.: +64 21 852 901 e-mail: Kylie.Miller@pvr.govt.nz)



Chris HARDY (Mr.), Examiner, Plant Variety Rights, Plant Variety Rights Office of New Zealand, 55 Wordsworth Street, Private Bag 4717, Christchurch 8140  
(tel.: +64 21 827 574 e-mail: christopher.hardy@pvr.govt.nz)



Tanya CARTER (Ms.), Senior Stakeholder Engagement Advisor, Intellectual Property Office of New Zealand, Wellington  
(tel.: +64 4 978 3979 e-mail: Tanya.Carter@iponz.govt.nz)



Tao MORTON (Ms.), Stakeholder Engagement Manager, Intellectual Property Office of New Zealand, Wellington  
(tel.: +64 4 978 7579 e-mail: tao.morton@iponz.govt.nz)

## REPUBLIC OF KOREA



Lakjung CHOE (Mr.), Agricultural Researcher, Korea Seed & Variety Service (KSVS), Ministry of Agriculture, Food and Rural Affairs (MAFRA), 219-66 Daegwanryoung-ro, Daegwanryong-gun, 25343 Gangwondo  
(tel.: +82-33-336-6243 fax: +82 33 335 9722 e-mail: clj1216@korea.kr)



Jun-Hwan CHOI (Mr.), Agricultural Researcher, Variety Testing Division, Korea Seed and Variety Service (KSVS), 119 Hyeoksin 8-ro, Yeongtong-gu, Gimcheon-si, Gyeongsangbuk-do  
(tel.: +82 54 912 0208 fax: +82 31 203 7431 e-mail: seed@korea.kr)

UNITED KINGDOM



Hilary PAPWORTH (Ms.), Technical Manager, Ornamental Crops Characterisation, National Institute of Agricultural Botany (NIAB), Hungtingdon Road, Cambridge CB3 0LE (tel.: +44 1223 342295 fax: +44 1223 342229 e-mail: hilary.papworth@niab.com)

II. OBSERVERS

INDONESIA



Nurdini KHADIJAH (Ms.), PVP Examiner/Head of DUS testing station Manoko, Center for Plant Variety Protection and Agricultural Permits, Jl Harsono RM No. 3 Ragunan, Pasar Minggu, 12550 Jakarta Selatan (tel.: + 62 21 788 40 405 e-mail: nunuy.khadijah@gmail.com)



Lia AMALIA (Ms.), PVP Examiner, Center for Plant Variety Protection and Agricultural Permits, Ministry of Agriculture, B Building, 5th floor, Jl Harsono RM 3, Ragunan Pasar Minggu, Jakarta Selatan 12550 (tel.: +62 21 788 40405 fax: +62 21 788 40389 e-mail: amaliaed12@gmail.com)

III. ORGANIZATIONS

INTERNATIONAL COMMUNITY OF BREEDERS OF ASEXUALLY REPRODUCED ORNAMENTALS AND FRUIT VARIETIES (CIOPORA)



Silvia SARTORELLI (Ms.), Head Technical Expert (HTE) for ornamental crops, Rua Dálías 723, conjunto 6, Holambra, Brazil (tel.: +55 19 3802 3163 fax: +55 19 3902 4161 e-mail: silvia@cultivarprotection.com.br)

IV. OFFICERS



Nik HULSE (Mr.), Chair

V. OFFICE OF UPOV



Leontino TAVEIRA (Mr.), Technical/Regional Officer (Latin America, Caribbean), International Union for the Protection of New Varieties of Plants (UPOV), Geneva 1211, Switzerland  
(tel.: +41 22 338 9565 fax: +41 22 733 0336 e-mail: leontino.taveira@upov.int)



Romy OERTEL (Ms.), Secretary II, International Union for the Protection of New Varieties of Plants (UPOV), Chemin des Colombettes 34, 1211 Geneva 20, Switzerland  
(tel.: +41 22 338 7293 fax: +41 22 733 0336 e-mail: romy.oertel@upov.int)

[Annex II follows]

PRESENTATION BY MR. CHRIS BARNABY, ASSISTANT COMMISSIONER / PRINCIPAL EXAMINER FOR PLANT VARIETY RIGHTS, PLANT VARIETY RIGHTS OFFICE, IPONZ, ON PLANT VARIETY RIGHTS IN NEW ZEALAND

 **NEW ZEALAND  
INTELLECTUAL  
PROPERTY OFFICE**

# PLANT VARIETY RIGHTS IN NEW ZEALAND

TWO 51, Christchurch, New Zealand



 **MINISTRY OF BUSINESS,  
INNOVATION & EMPLOYMENT**  
HĪKINA WHAKATUTUKI

[New Zealand Government](#)

 **NEW ZEALAND  
INTELLECTUAL  
PROPERTY OFFICE**

 **Ministry of Business,  
Innovation & Employment**

- **Wellington**  
Intellectual Property Office Headquarters
- **Christchurch**  
Southern Business Centre  
Plant Variety Rights Office &  
other MBIE groups.

 **MINISTRY OF BUSINESS,  
INNOVATION & EMPLOYMENT**  
HĪKINA WHAKATUTUKI

[New Zealand Government](#)

## DEVELOPMENT OF PVR IN NEW ZEALAND

- 1861 NZ Patent No. 1 granted for:  
“An Invention for the preparation of the fibre of the  
*Phormium tenax* (flax) and other plants for manufacturing purposes”
- 1973 Original legislation - limited in scope
- 1976 First PVR registered for Rose variety ‘Matangi’
- 1981 - all higher plants included and UPOV membership
- 1987 - original act amended and currently in force,  
- complies with UPOV 1978
- 1994 – fungi is added

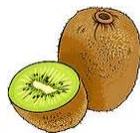


## PVR and the Economy

Improved plant varieties are the very basis  
of primary production



Grasses for the dairy industry: export  
value \$14 billion



Kiwifruit: export value \$950 million

Apples: export value \$750 million



## NZ Ornamentals Market

- A small domestic market concentrated in the upper North Island
- Dominated by garden plants and outdoor growing
- Floriculture is a minor export component
- Sub tropical to cool temperate environments provide opportunities for a wide range of genera

## NEW ZEALAND AND UPOV

- Joined UPOV 1981

Signatory to 1991 UPOV Convention

Current law based on 1978 Convention with the review of the Act currently underway

Significant benefits of UPOV membership for a small scheme

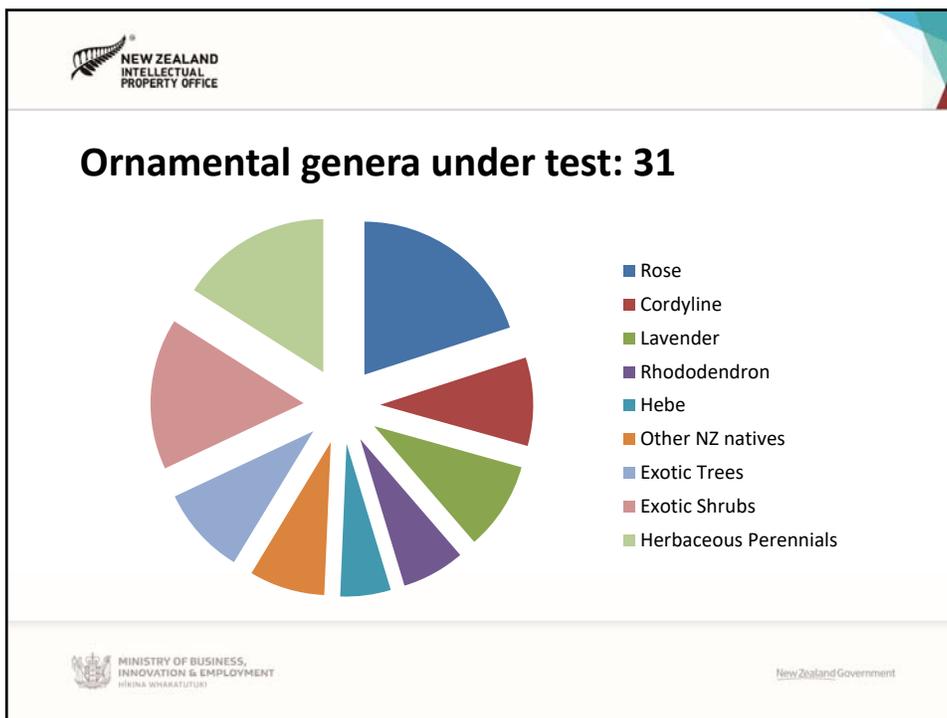
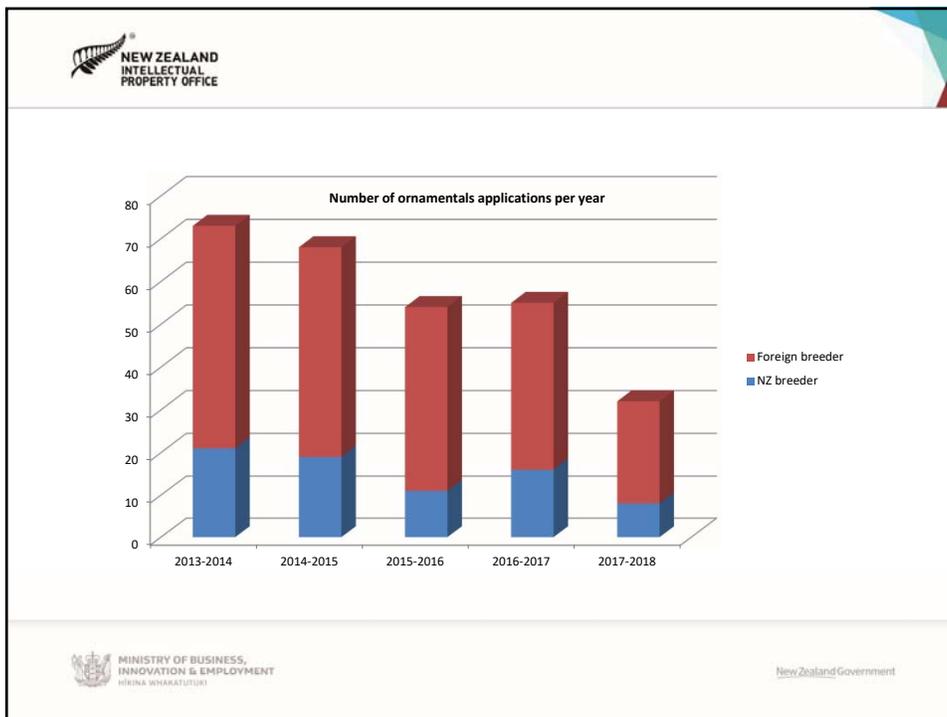
## Functions of the Office

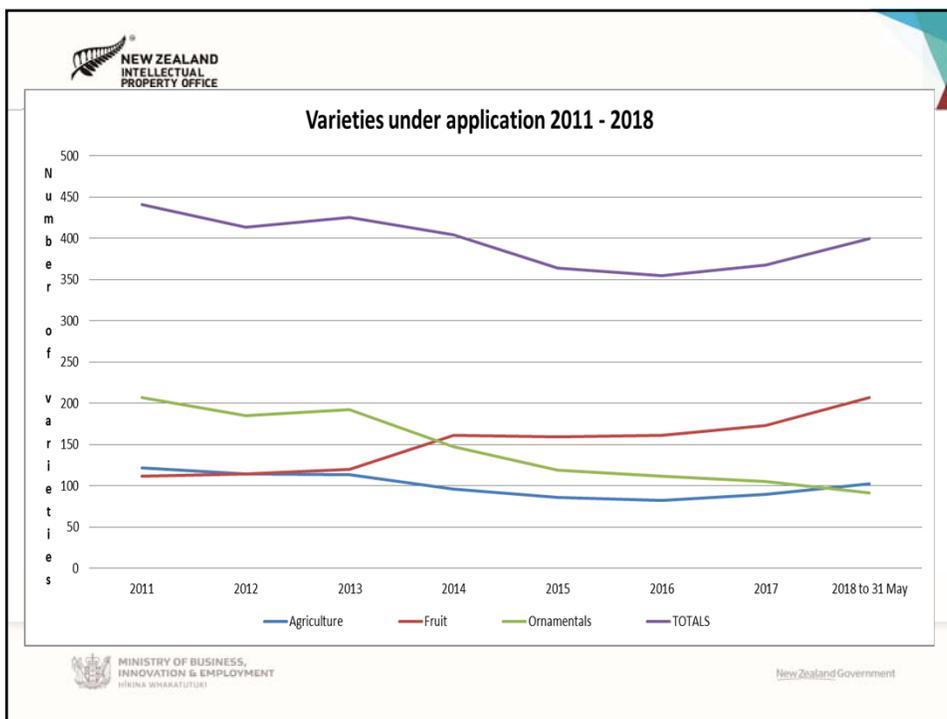
- Examine applications and Grant Rights for eligible plant varieties according to the Plant Variety Rights Act 1987.
- Carry out variety testing to determine distinctness, uniformity and stability.
- Development and maintenance of testing and examination protocols.
- Contribute to legislative and policy matters.



## APPLICATION NUMBERS

- 110 - 130 total applications per year
- 35% - ornamental
- 20% - agricultural and vegetable
- 45% - fruit
  
- 60% from foreign breeders





**NEW ZEALAND INTELLECTUAL PROPERTY OFFICE**

### PVR FEES - COST TO OBTAIN PVR

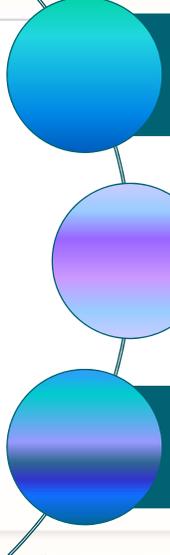
Ornamentals	\$800
Fruit	\$800
Potatoes	\$2,100
Wheat	\$5,100
Pasture Plants	\$6,900

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT  
HĪKINA WHAKATUTUKI

New Zealand Government

## PVR OFFICE - RESOURCES

- Small office - involved only with PVR
- Staff 3 full time + 1 part time
- supported by regional describers (as required)
- does not own land, glasshouses, field equipment

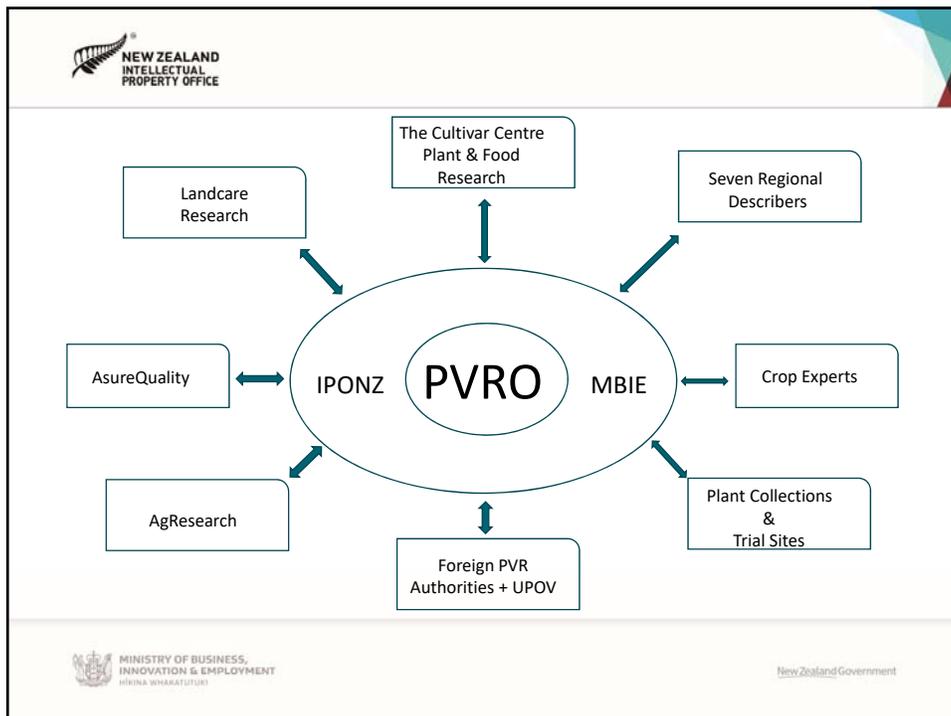
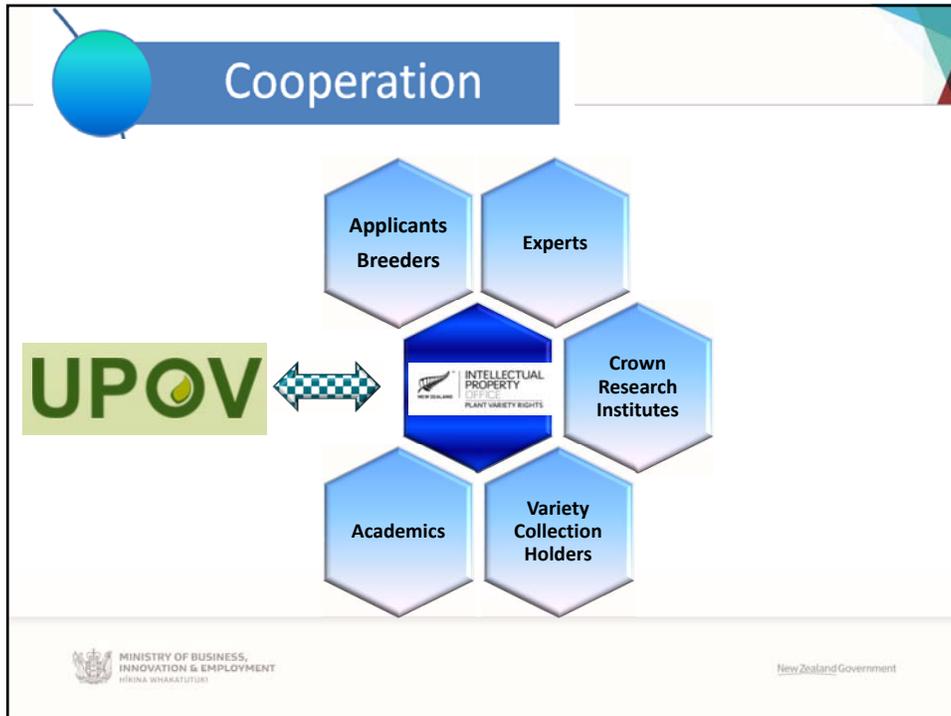


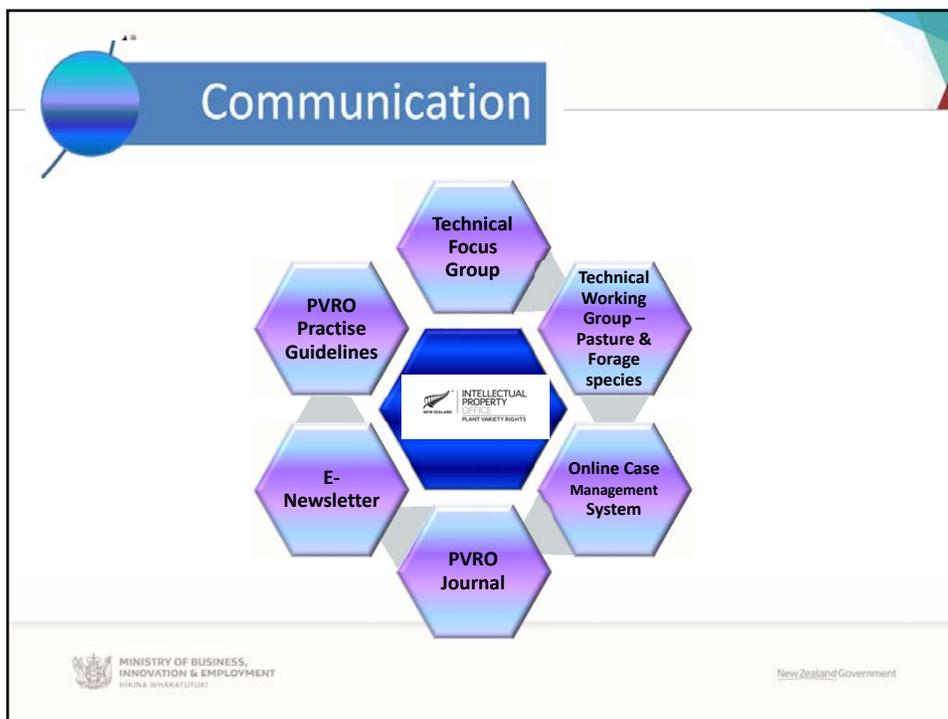
# Cooperation



NEW ZEALAND  
INTELLECTUAL  
PROPERTY  
OFFICE  
PLANT VARIETY RIGHTS

# Communication





## Engagement with primary industries and plant breeders

- Annual Meetings      Technical Focus Group.  
   Technical Working Group for Pasture Species.

**NZPPI New Zealand Plant Producers Incorporated**



The footer includes the Ministry of Business, Innovation & Employment logo and the text "New Zealand Government".

 NEW ZEALAND  
INTELLECTUAL  
PROPERTY OFFICE



**TESTING FOR DISTINCTNESS, UNIFORMITY  
AND STABILITY**

 MINISTRY OF BUSINESS,  
INNOVATION & EMPLOYMENT  
HĪKINA WHAKATUTUKI

 New Zealand Government

 NEW ZEALAND  
INTELLECTUAL  
PROPERTY OFFICE

## Testing for Agricultural and Vegetable Varieties

- Centralised trials e.g pasture plants, cereals, potatoes.  
Testing contracted to a government business
- Breeder testing e.g vegetables, minor pasture species  
The breeder is responsible for the trial and evaluation,  
under PVRO direction

 MINISTRY OF BUSINESS,  
INNOVATION & EMPLOYMENT  
HĪKINA WHAKATUTUKI

 New Zealand Government

## Test Methods for Fruit Varieties

- centralised trials e.g *apples, peach, avocado*

Testing contracted to research centre or industry organisation

- in cooperation with the breeder - usually on the breeder's property where they are responsible for the growing and maintenance of the trial plants. Requirements for the trial and DUS evaluation are the responsibility of the PVR Office.

## Test Methods for Ornamental Varieties

- centralised trials e.g *Roses, Zantedeschia*

- in cooperation with the breeder - usually on the breeder's property where they are responsible for the growing and maintenance of the trial plants. Requirements for the trial and DUS evaluation are the responsibility of the PVR Office.

## Purchase of foreign test reports

- Foreign test reports can be used for a variety belonging to any plant genera.
- The decision is made variety by variety and set criteria are used.
- When a test report is taken over from a foreign authority, a growing trial in New Zealand is usually not necessary.

## INFORMATION AND PUBLICATIONS

- Web site - [www.iponz.govt.nz/cms/pvr](http://www.iponz.govt.nz/cms/pvr)
- Includes – guide, journal, practice notes, searchable variety database





## IPONZ Case Management System

A proprietary intellectual property management product  
Active since December 2012

Provides:

1. On line applications
2. Searchable database
3. Records management
4. Letter and form templates
5. Correspondence with applicants





## Online Case Management System

Agent Account Inbox

- My Account
- Trade Mark
- Patent
- Design
- Plant Variety Right
- Proceeding
- Information Requests

### Tasks

Search Tasks

0 Task(s)

Task	Case Number	Case Title	Case Type	Owner	Case Contact	Client Reference	Task Due Date
Respond to TM Opposition Report	956076	Tawana	Trade Mark	IPONZ Nurseries	BSC Lawyers	Tawana	27 Mar 2013
Pay Fee	31149	Green Shadow	PVR	IPONZ Nurseries	BSC Lawyers	JTReference1	29 Apr 2013
File Certified English Translation	602824	2-PYRIDYL SUBSTITUTED IMIDAZOLES AS THERAPEUTIC ALK3 AND/OR ALK4 INHIBITORS	National Entry PCT	EWHA UNIVERSITY-INDUSTRY COLLABORATION FOUNDATION	BSC Lawyers	J123	21 May 2013
Respond to Examination Notice	31149	Green Shadow	PVR	IPONZ Nurseries	BSC Lawyers	JTReference1	28 Jun 2013
Respond to Examination Report	415821	A hand basin	Design	Great Wall Airlines Company Limited	BSC Lawyers	SIPA1	03 Aug 2013
Respond to Examination Report	415832	New Basin	Design	Great Wall Airlines Company Limited	BSC Lawyers	SIPA Delegation	04 Aug 2013
Respond to Examination Report	602740	Mechanism for Joint on Robotic Arm	Complete Patent	Arnold Schwarzenegger	BSC Lawyers	mechanism for joint on robotic arm	08 Jul 2014
Respond to Examination Report	602723	Mechanism for Joint on Robotic Arm	Complete Patent	Arnold Schwarzenegger	BSC Lawyers	Mechanism for Joint on Robotic Arm	08 Jul 2014

Show / Hide columns

### Discussions

Search Discussions

1 Discussion(s)

Title	Case Number	Case Title	Case Contact	Update Date	Creation date	Status
PYR Application Yahlietel	31149	Green Shadow	BSC Lawyers	11 Apr 2013 11:53:01 a.m.	11 Apr 2013	Closed






## IPONZ Case Management System

- At present 95% of applications are made electronically

### Further improvements

- Improved access to the PVR Journal
- Improved photo management
- Searching functionality
- Editable technical questionnaires



New Zealand Government

A close-up photograph of a vibrant pink rose, filling the entire frame. The petals are layered and detailed, with a rich magenta color.

**LOOKING FORWARD**

## Change and development

- A new law compatible with UPOV 91

Government approved the proposal to review the current Plant Variety Rights Act 1987 in 2018 and the formal consultation with interested parties is underway.

## Change and development in New Zealand

- Partnerships for cooperation in testing and plant collections

The limited resources of the Office requires on going assessment and review of existing relationships and consideration of new possibilities

- New technologies

Molecular markers, image analysis, *in vitro* collections

How could these be integrated into existing and future testing?



## Change and development in New Zealand

- New genera and species

New fungi, ornamentals and arable crops

Research and advice is necessary to learn about botany, morphology and cultivation leading to the most suitable testing arrangement and test guideline

- Improve efficiency and productivity

Increasing productivity is a government priority. A key component is the on line environment and use of the website <https://www.iponz.govt.nz/about-ip/pvr/>



[Annex III follows]

TWO/51/12

ANNEX III

LIST OF LEADING EXPERTS

**DRAFT TEST GUIDELINES TO BE SUBMITTED  
TO THE TECHNICAL COMMITTEE IN 2019**

All requested information to be submitted to the Office of the Union

**by April 5, 2019**

Species	Basic Document(s)	Leading expert(s)
*Alstroemeria ( <i>Alstroemeria</i> L.) (Revision)	TG/29/8(proj.3)	Mr. Henk de Greef (NL)
*Calendula ( <i>Calendula</i> L.)	TG/CALEN(proj.3)	Mr. Koji Nakanishi (JP)
*Coreopsis ( <i>Coreopsis</i> L.)	TG/COREO(proj.2)	Mr. Peter Baker (GB)
*Gazania ( <i>Gazania</i> Gaertn.)	TG/GAZAN(proj.3)	Mr. Adriaan de Villiers (ZA)
*Kangaroo Paw ( <i>Anigozanthos</i> Labill., <i>Macropidia fuliginosa</i> (Hook.) Druce) (Revision)	TG/175/4(proj.2)	Mr. Nik Hulse (AU)
*Phalaenopsis ( <i>Phalaenopsis</i> Bl.) (Partial Revision)	TG/213/2, TWO/51/7	Mr. Henk de Greef (NL)
Portulaca ( <i>Portulaca oleracea</i> L.) (Revision)	TG/242/2(proj.1)	Ms. Andrea Menne (DE)

**DRAFT TEST GUIDELINES TO BE DISCUSSED AT TWO/52**

(\* indicates possible final draft Test Guidelines)

**(Guideline date for Subgroup draft to be submitted by Leading Expert: February 28, 2020**

**Guideline date for comments to Leading Expert by Subgroup: March 27, 2020)**

New draft to be submitted to the Office of the Union

**before April 24, 2020**

Species	Basic Document(s)	Leading expert(s)	Interested experts (States/Organizations) <sup>1</sup>
Anthurium ( <i>Anthurium</i> Schott) (Revision)	TG/86/5 Corr.	Mr. Koji Nakanishi (JP)	AU, NL, QZ, CIOPORA, Office
Berberis ( <i>Berberis</i> L.) (Revision)	TG/68/4(proj.2)	Mr. Kévin Daubigny (FR)	CA, PL, QZ, Office
Echinacea ( <i>Echinacea</i> Moench.) (Revision)	TG/281/1	Ms. Hilary Papworth (GB)	CA, FR, JP, NZ, QZ, Office
*Eustoma ( <i>Eustoma grandiflorum</i> (Raf.) Shinnery) (Revision)	TG/197/2(proj.1)	Mr. Kazunari Horiguchi (JP)	DE, KR, QZ, Office
*Hydrangea ( <i>Hydrangea</i> L.) (Revision)	TG/133/5(proj.3)	Mr. Kévin Daubigny (FR)	AU, CA, DE, JP, KR, MX, NZ, QZ, ZA, CIOPORA, Office
*Lagerstroemia ( <i>Lagerstroemia</i> L.) (Revision)	TG/95/4(proj.2)	Ms. Stéphanie Christien (FR)	AU, JP, KR, QZ, Office
Ling, Scots Heather ( <i>Calluna vulgaris</i> (L.) Hull) (Revision)	TG/94/6 Corr.	Ms. Andrea Menne (DE)	FR, GB, QZ, Office
Magnolia ( <i>Magnolia</i> L.)	NEW	Ms. Wang Yaling (CN)	AU, CA, FR, JP, KR, NZ, QZ, Office
*Ranunculus ( <i>Ranunculus</i> L.)	TG/RANUN(proj.2)	Mr. Satoshi Fujisako (JP)	DE, DK, KR, QZ, CIOPORA, Office
Statice ( <i>Limonium</i> Mill., <i>Goniolimon</i> Boiss. and <i>Psylliostachys</i> (Jaub. & Spach) Nevski) (Revision)	TG/168/3	Mr. Henk de Greef (NL)	JP, KR, NZ, QZ, Office
*Zinnia ( <i>Zinnia</i> L.)	TG/ZINNIA(proj.7)	Mr. Jose Mejía Muñoz (MX)	CN, FR, GB, IL, JP, KR, NL, QZ, Office

<sup>1</sup> for name of experts, see List of Participants.

**DRAFT TEST GUIDELINES TO POSSIBLY BE DISCUSSED IN 2021**

Species	Basic Document(s)
Amaryllis ( <i>Hippeastrum</i> Herb.) (Revision)	TG/181/3
China-rose ( <i>Hibiscus rosa-sinensis</i> L.)	New
Eucalyptus ( <i>Eucalyptus</i> L'Hér.) (Partial revision)	TG/296/1
Lavender ( <i>Lavandula</i> L.) (Partial revision)	TG/194/1
Paphiopedilum ( <i>Paphiopedilum</i> Pfitzer)	New
Poinsettia ( <i>Euphorbia pulcherrima</i> Willd. ex Klotzsch) (Revision)	TG/24/6

[End of Annex III and of document]