



TWO/44/25

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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

**WORKING PARTY FOR ORNAMENTAL PLANTS
AND FOREST TREES**

Forty-Fourth Session
Fukuyama City, Hiroshima Prefecture, Japan
November 7 to 11, 2011

REPORT

adopted by the
Technical Working Party for Ornamental Plants and Forest Trees

Opening of the Session

1. The Technical Working Party for Ornamental Plants and Forest Trees (TWO) held its forty-fourth session in Fukuyama City, Hiroshima Prefecture, Japan, from November 7 to 11, 2011. The list of participants is reproduced in Annex I to this report.
2. The TWO was welcomed by Mr. Jyunya ENDO, Director, New Business and Intellectual Property Division, Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries. The welcome address made by Mr. Endo is provided in Annex II to this report.
3. The session was opened by Ms. Andrea Menne (Germany), Chairperson of the TWO, who welcomed the participants.

Adoption of the Agenda

4. The TWO adopted the agenda as reproduced in document TWO/44/1 Rev..

Short Reports on Developments in Plant Variety Protection

(a) Reports from Members and Observers

5. The TWO noted the information on development in plant variety protection from members and observers provided in document TWO/44/19. The TWO noted that reports submitted to the Office of the Union after November 1, 2011 would be included in an addendum to document TWO/44/19.

(b) Reports on Developments Within UPOV

6. The TWO received an oral report from the Office of the Union on the latest developments within UPOV, a copy of which is provided in document TWO/44/20.

Molecular techniques:

7. The TWO noted the developments reported in document TWO/44/2.

TGP Documents

8. The Office of the Union considered the TGP documents below on the basis of documents TWO/44/3.

TGP/7 Development of Test Guidelines

(i) Summary of revisions proposed for document TGP/7 "Development of Test Guidelines" (document TWO/44/11)

9. The TWO noted the summary of revisions proposed for document TGP/7 "Development of Test Guidelines", as set out in Part I of document TWO/44/11.

- Guidance on the number of plants to be examined (for distinctness)

10. The TWO considered the proposal in Annex I to document TWO/44/11, prepared by an expert from Germany, and the comments of the Technical Working Parties at their sessions in 2011, as set out in document TWO/44/11, paragraphs 15 to 25. The TWO agreed that the following aspects should be considered in relation to guidance on the number of plants to be examined for distinctness:

(a) for some Test Guidelines (e.g. cross-pollinated grasses), the number of plants are intended to represent a specific number, because of the possibility of different decisions on distinctness if a different number is used. However, in other Test Guidelines (e.g. for vegetatively propagated fruit, ornamental plants and vegetables), the number could be considered to be a minimum number without having any effect on decisions for distinctness if a larger number of plants were examined. The guidance in TGP/7 and the explanations in the Test Guidelines should provide an explanation of this aspect;

(b) guidance for the number of plants to be examined for distinctness of candidate varieties and the number of plants of varieties of common knowledge to be included in the DUS trial should be developed. In that regard it was noted that it might be appropriate to accept a lower number of plants of a variety of common knowledge in order to determine the typical expression, given the greater knowledge and experience that would be available;

(c) to develop guidance on the number of plants required to establish a variety description.

11. The TWO agreed that Ms. Andrea Menne (Germany) should be invited to participate in the development of guidance in order to ensure that the perspective of ornamental plants and forest trees would be explained.

- Guidance for method of observation

12. The TWO considered the background information concerning “Guidance for method of observation” (see document TWO/44/11, Annex II) and noted the comments by the TWPs at their sessions in 2010.

13. The TWO welcomed the observation by the Technical Working Party on Automation and Computer Programs (TWC), at its twenty-ninth session, held from June 7 to 10, 2011, that any records of observation by notes correspond to a visual (V) observation (see document TWO/44/11, paragraph 24). The TWO agreed that this guidance should be included in TGP/7.

(ii) Providing photographs with the Technical Questionnaire

14. The TWO considered document TWO/44/12.

15. The TWO agreed with the comments made by the Technical Working Party for Agricultural Crops (TWA), at its fortieth session, held in Brasilia, Brazil, from May 16 to 20, 2011, as set out in document TWO/44/12, paragraphs 16 and 17 and, in addition, proposed the following amendments:

para. 5	<u>Criteria for taking photographs</u> <u>Format</u> to amend “examination office” to read “examination authority”
para. 8	<u>Precisions on growing conditions</u> to replace the first two sentences with a request for the applicant to provide information on the date and location of the photograph. To delete the last two sentences.
para. 13	<u>Color characteristics</u> to delete explanation that “a photograph may broadly depict color”

(iii) Quantity of plant material required

16. The TWO noted the information provided in document TWO/44/17.

(iv) Example varieties

17. The TWO considered document TWO/44/18.

18. The TWO did not agree with the general view expressed by the TWV at its forty-fifth session, that example varieties in the UPOV Test Guidelines could not be expected to provide internationally harmonized variety descriptions. The TWO noted that example varieties could provide the basis for useful international harmonization of variety descriptions for ornamental varieties, as indicated in the model study for Petunia (document TWO/37/8) where it had been seen that there was a high level of consistency for the states of expression across varieties.

(v) Procedure for the development of Test Guidelines

19. The TWO noted that document TGP/7 states as follows:

“2.2.3.2 In cases where more than one TWP has proposed the development of Test Guidelines with the same coverage, the Technical Committee will decide which TWP should be responsible for the drafting of the Test Guidelines. This will be decided on the basis of the level of expertise in the TWPs concerned. In such cases, the Technical Committee will request the approval of all other interested TWPs before a draft is submitted for adoption.”

20. The TWO agreed with the proposal made by the TWV that consideration should be given, where possible, to allocate Test Guidelines to only one TWP on the basis that all TWPs would be informed on the development of all Test Guidelines and interested experts could participate in the relevant TWP.

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

21. The TWO considered document TWO/44/14.

*ANNEX I TGP/8 PART I: DUS TRIAL DESIGN AND DATA ANALYSIS**New Section 2 Data to be recorded*

22. The TWO agreed the following with regard to document TWO/44/14, Annex I:

General	To replace the term “crop expert” with “DUS expert”
	To review the text to avoid the inference that statistics are always applied to characteristics observed by measurement, which does not take into account MG observations (e.g. Section 2.4.3.2)
2.3.6	The TWO considered that paragraph “2.3.6 Scale levels for variety description” should be revised to reflect the use of notes and measurements for the examination of distinctness, as set out in TGP/9 “Examining Distinctness”.

Table 3	<p>Table 3 “Statistical procedures for the assessment of distinctness” (after Section 2.3.8.2).</p> <p>The TWO agreed that the contents of the table 3 should be checked, with particular regard to the use of techniques such as COYD, long term LSD and 2 out of 3 method for “MG” observations.</p>

23. The TWO agreed to provide written comments on the document, to the Office of the Union, by December 16, 2011.

ANNEX II – TGP/8 PART I: DUS TRIAL DESIGN AND DATA ANALYSIS

New Section 3 – Control of variation due to different observers

24. The TWO agreed that the Section “Testing the calibration” should be revised to reflect the likelihood that inexperienced observers would not be entrusted to make VG observations, whilst inexperienced observers might be entrusted to make MG and MS observations. The TWO agreed that the guidance on different types of training and calibration for DUS experts and for staff that would undertake specified measurements should be reflected in the document.

ANNEX III TGP/8 PART I: DUS TRIAL DESIGN AND DATA ANALYSIS

New Section 6 – Data processing for the assessment of distinctness and for producing variety descriptions

25. The TWO noted the information provided in document TWO/44/14, Annex III in conjunction with Annex VIII of that document. It agreed that the section should include an example of an ornamental variety, with consideration of the number of notes for a quantitative characteristic.

ANNEX IV TGP/8 PART I: DUS TRIAL DESIGN AND DATA ANALYSIS

New Section – Information of good agronomic practices for DUS field trials

26. The TWO noted the importance of employing good agronomic practice in the conduct of DUS trials and on the need to ensure that staff had the appropriate training and experience for conducting DUS trials. However, it agreed that it would not be desirable to seek to develop detailed guidance in document TGP/8.

ANNEX V TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section after COYU – Statistical Methods for very small sample sizes

27. The TWO agreed that realistic examples should be included in the document, based on actual cases. If no such cases could be provided, the section should be deleted. The TWO noted that the United Kingdom would try to provide an example.

ANNEX VI TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section 11 Examining DUS in bulk samples

28. The TWO agreed that the example of sugar beet should be replaced by a crop for which there are UPOV Test Guidelines.

ANNEX VII TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section 12 Examining characteristics using image analysis

29. The TWO agreed that Section 12.1 should be reworded to explain that image analysis would be an alternative method for observing a characteristic, rather than a principal method for observing a characteristic.

ANNEX VIII TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section 13 Methods for data processing for the assessment of distinctness and for producing variety descriptions

30. See comments for Annex III.

ANNEX IX TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section - Guidance of data analysis for blind randomized trials

31. The TWO noted that the experts from France would develop guidance on data analysis for blind randomized trials from their experience, including their use of blind randomized trials for disease resistance.

ANNEX X TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section - Statistical methods for visually observed characteristics

32. The TWO noted the proposals in Annex X.

ANNEX XI TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section - Guidance for the development of variety descriptions

33. The TWO noted the proposals in Annex XI.

ANNEX XII TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

Section 4 – 2x1 % Method - Minimum number of degrees of freedom for the 2x1% Method

34. The TWO noted the proposals in Annex XII.

ANNEX XIII TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

Section 9 - The Combined-Over-Years Uniformity Criterion (COYU) - Minimum number of degrees of freedom for COYU

35. The TWO noted the proposals in Annex XIII.

ANNEX XIV TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

Section 10 – Minimum number of comparable varieties for the Relative Variance Method

36. The TWO noted the proposals in Annex XIV.

TGP/12: Guidance on Certain Physiological Characteristics

37. The TWO noted the proposal for explanations for disease resistance characteristics in Test Guidelines and nomenclature of pathogens, as presented in the annex to document TWO/44/15.

TGP/14: Glossary of Terms Used in UPOV Documents

38. The TWO considered documents TWO/44/3, Annexes I and II and TWO/44/16.

(i) *Revision of existing sections of document TGP/14*

Developing Shape-Related Characteristics:

39. The TWO endorsed the overall observations and related considerations as set out in document TWO/44/3, Annex II, concerning the use of component and composite characteristics. In particular, it noted that each case would need to be considered on its merits.

40. With regard to the use of characteristics for ratios, it confirmed that it should be possible to use states such as “high” or “low”, provided that explanations and illustrations were provided to avoid any risk of confusion. In that regard, it considered that it would also be important for those explanations be included in the Technical Questionnaire. It agreed that it should be possible to use states such as “elongated” and “compressed” for characteristics that were worded as shapes, rather than ratios.

(ii) *New Section for Color Characteristics*

41. The TWO considered document TWO/44/16 “Revision of Document TGP/14: New Section for Color Characteristics”, and agreed the following with regard to Annex I:

<u>PART I: INTRODUCTION</u>	
1.	To add an explanation that “Color is complex and can be defined in terms of three main elements: HUE (distinguishes the different colors), SATURATION (the element of color that indicates the purity or grayness of the color) and the BRIGHTNESS (distinguishes the total amount of light that is reflected by the color, how the color is perceived by the eye on the dark to light scale).”

	In addition, to explain that, in some circles (e.g. industry), it is common practice to use a separation of two elements of color: COLOR and INTENSITY (= brightness): one-color; self-colored etc., but that such an approach is not necessarily followed in the Test Guidelines.
	<u>PART II: COLOR</u>
2.1	2.1 <i>Terms used for color</i> To be revised in accordance with changes below.
2.2	2.2 <i>States of expression for color characteristics</i> To explain that the level of precision of color used in states of expression will vary according to the circumstances. For example, the following states of expression reflect differing levels of precision): yellow; yellow orange; yellowish orange; light yellow; RHS Colour Chart reference)
2.3	title to read “2.3 <i>Observation of color</i> ”
2.4.1	2.4.1 <i>Type of expression</i> To be reviewed in accordance with changes to 2.2.
	<u>PART III: APPROACHES TO DESCRIBE COLORS AND COLOR PATTERNS</u>
New	To provide introduction based on Section 3.3
3.1	3.1 <i>General: The use of number of colors</i> - to be deleted
3.2.1	3.2.1 <i>Main color / secondary color</i> to amend the example to read: “The main color is the color with the largest surface area. In cases where the areas of the main and secondary color are approximately the same [the darkest color] / [the color ...[location]...] is considered to be the main color.]”
3.2.2	3.2.2 <i>Ground color / over color:</i> (a) <i>GROUND COLOR:</i> To explain that “Ground color” can be used in the following ways: (i) For organs which have two independent layers of tissue containing color pigmentation (e.g. apple), the two layers could be described as follows: “The ground color is the first color to appear chronologically during the development of the plant part. Other colors may develop in time in the form of spots, blotches, or a color flush or blush” (ii) The ground color of the upper side is the color that is the main color of the lower side of an organ. (iii) The ground color is the color which has a continuous dispersion across the surface of the plant part. It should also be explained that the ground color is not always the color occupying the largest surface area of the plant part concerned. It should

	also be explained, where appropriate, that the ground color is not always visible.
3.2.3	3.2.3 <i>Colors of defined parts of an organ</i> Example 1: to delete “ <u>Only varieties with one color:</u> ”
3.2.4	3.2.4 <i>Order of observation of colors based upon the RHS Colour Chart number of the color in question (“Lisbon” approach)</i> To add the example provided in document TG/HEUCH(proj.4) Example 1. to read “Leaf blade : secondary color (if present)”
3.2.5	3.2.5 <i>Variegation</i> To delete new proposal
3.2.7	3.2.7 <i>Conspicuousness</i> To delete “In some cases conspicuousness could be difficult to be observed, for instance for small organs (e.g. veins, hairs), or because they are not consistently expressed across the organ.”
3.2 (=3.3)	3.2 <i>Guidance for deciding which approach to use for the description of colors and color patterns</i> To be moved to become the introduction to Part III.
	<u>PART IV: COLOR DISTRIBUTION AND COLOR PATTERNS</u>
4.1	4.1 <i>Color distribution</i> To be reviewed
4.2	4.2 <i>Terms used for color distribution</i> To be deleted
4.3	4.3. <i>Terms used for Color Patterns</i> To use the schematic illustration of the different color patterns in Annex II to define terms for pattern, with necessary amendments, e.g. addition of missing terms from Sections 4.3.2 to 4.3.6 and modification of “central band” to “transverse band”. To incorporate the schematic in Annex II into the main document. Sections 4.3.2 to 4.3.6 to be replaced by schematic in Annex II.
4.5	4.5 <i>Illustrations</i> To check for consistency with Annex II / revised Section 4.3 To amend spelling of “BASAL THREE QUARTERS” in Section 4.5.2.
	<u>PART V: INDEX OF DEFINITIONS</u> To be created by links to table of contents.
	<u>ANNEX I</u>
	<u>Color names for the RHS Colour Chart</u> To update to include reference to latest RHS Colour Chart version To delete paragraph 1.3

42. With regard to the comments of the Technical Working Party on Automation and Computer Programs (TWC), at its twenty-ninth session, held in Geneva, from June 7 to 10, 2011 (see document TWO/44/16, paragraph 13, the TWO noted that the reference to inviting papers on how information on colors is used for DUS examination referred to the use of image analysis to assess color.

43. The TWO did not agree with the proposal made by the TWV at its forty-seventh session, that the new section for color characteristics should include guidance that the Test Guidelines should provide an explanation of the use of color terms that did not follow generally accepted rules, e.g. the use of “red” in onion for “purple” colors.

Variety Denominations

44. The TWO noted the report on developments provided in document TWO/44/4.

45. The TWO agreed to propose the creation of a new denomination class in document UPOV/INF/12/3 “Explanatory notes on variety denominations under the UPOV Convention”, Annex I: Part II. “Classes encompassing more than one genus” to cover relevant genera, e.g. Eupatorium L., Eutrochium Raf., Ageratina Spach, etc., as explained in document TWO/44/4, paragraphs 7 to 12.

Information and databases

(a) UPOV information databases

46. The TWO received a demonstration of the PLUTO Plant Variety Database.

47. The TWO noted the information provided in document TWO/44/5 and noted that Annex III to that document would be provided by the end of November 2011, with a request for comments by December 31, 2011. In response to a request, the Office of the Union confirmed that contributors of data to the Plant Variety Database should, where needed, request the Office of the Union for the creation of new UPOV codes at the earliest opportunity, but did not need to await UPOV codes before sending their data for the Plant Variety Database in the meantime.

(b) Variety description databases

48. The TWO noted the information provided in documents TWO/44/6 and TWO/44/13.

(c) Exchangeable software

49. The TWO noted the information provided in document TWO/44/7. It agreed that information on the cost and intellectual property rights should be considered with regard to software proposed for inclusion in document UPOV/INF/18/1 “Exchangeable Software”.

(d) Electronic application systems

50. The TWO noted the information provided in document TWO/44/8.

Uniformity assessment

(a) Method for calculation of COYU

51. The TWO noted the information contained in document TWO/44/10.

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

52. The TWO noted the information contained in document TWO/44/9.

Experiences with new types and species

53. The TWO agreed that document TGP/13 “Guidance for New Types and Species” provided effective guidance for dealing with new types and species.

Proposals for Partial Revisions / Corrections of Test Guidelines

54. The TWO agreed that a partial revision of the Test Guidelines for Kalanchoe (document TG/78/4), as set out in document TWO/44/21, should be put forward for adoption by the Technical Committee.

55. The TWO agreed that a partial revision of the Test Guidelines for New Guinea Impatiens (document TG/196/2), as set out in document TWO/44/22, should be put forward for adoption by the Technical Committee.

Matters to be resolved concerning Test Guidelines adopted by the Technical Committee

56. The TWO considered the proposed amendment to the explanation of characteristic 29 “Time of beginning of flowering” in the Test Guidelines for Buddleja, as agreed for adoption by the Technical Committee, at its forty-sixth session, held in Geneva from March 22 to 24, 2010, on the basis of document TG/BUDDL(proj.7).

57. The TWO agreed that the wording of Ad. 29 should be as follows:

“The time of beginning of flowering is when all plants have approximately 50% of inflorescences showing some open flowers.”

Discussion on draft Test Guidelines*Aglaonema* Schott.

58. The subgroup discussed document TG/AGLAO(proj.1), presented by Mr. Kenji Numaguchi (Japan), and agreed the following:

Cover page	to add English common name “Chinese Evergreen”
3.1	to read “The minimum duration of tests should normally be a single growing cycle.”
5.3	to amend in accordance with the Table of Chars.
Table of Chars.	- to review all indications of method of observation, with particular regard to those indicated as MS - to delete example variety “Black <i>Aglaonema</i> - to amend spelling of example variety “World Heritage”
Char. 1	to be deleted
Char. 2	to have the states: short (3); medium (5); tall (7)
Char. 3	to check whether to have characteristics for number of suckers and/or number of shoots and to add (+) and provide illustration and explanation
Char. 6	to correct spelling of “compressed”; to add (+) and provide illustration
Char. 7	to have the states; symmetric or slightly asymmetric (1); moderately asymmetric (2); strongly asymmetric (3) and to be indicated as QN
Char. 8	to provide illustration in form of grid (see TGP/14/1: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28)
Char. 9	to amend to observe apex or tip (not both) and to add (*)
Char. 10	to add (*)
Chars. 11 to 49	to replace with “Lisbon approach” in cooperation with approach for <i>Hosta</i> by Henk de Greef (NL)
Char. 50	to have the states: absent or weak (1); medium (2); strong (3) and to be indicated as QN
Char. 53	to have notes 1, 2, 3 and to add (*)
Char. 55	to amend to read “few” and “many”
Char. 56	to amend to read “short” and “long”
Char. 58	to be deleted
Char. 59	to read “Petiole: secondary color (if present)”
Char. 60	to check whether QL and to check order in Table of Chars.
Char. 61	to amend to read “short” and “long”
Char. 62	to provide meaningful states of expression
Char. 64	to read “Leaf sheath: secondary color of outer side (if present)” and to provide at least 3 states
8.1.2	to be modified according to Lisbon approach and to provide worked examples as for <i>Heuchera</i> .
TQ 6	to be replaced
TQ 9.3	to be deleted

Aloe L.

59. The subgroup discussed document TG/ALOE(proj.1), presented by Mr. Adriaan de Villiers (South Africa) and agreed the following:

Cover page	to read “UPOV Code: ALOEE” in French “Aloès”; German “Aloe”; Spanish “Aloe”
3.4.1	to refer to 10 plants
4.2.2	to read “1 off-type is allowed “ in one line
Table of Chars.	to provide example varieties
Char. 1	to read: “Plant: height”
Char. 5	“at base” to be replaced by “at broadest part”?
Char. 6	to provide illustration in form of grid (see TGP/14/1: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 8)
Char. 7	to check whether 9 states realistic
Char. 8	states or wording to be amended and to add (+) with illustration
Char. 9	to check whether applicable
Char.10	to be indicated as VG and to refer to TGP/14 for standard wording
Char. 10	to refer to TGP/14 for wording
Char. 11	to be deleted
Char. 12	to consider adding yellow green, brown green, blue green, purple green
Char. 13	to add state: absent (1) and renumber states accordingly
Char. 14	to check whether all states are applicable
Char. 16	to rename states: whitish (1); greenish (2); yellowish (3); orange (4); brown (5); red (6)
Char. 17	to be indicated as PQ
Char. 23	to read: states (1) “greenish only”; state (3) “reddish only”
Char. 24	to read: “Lateral raceme: attitude” with the states: upright (1); semi-upright (2); horizontal (3) and to add (+) and provide illustration
Char. 26	to refer to TGP/14 and to provide illustration
Char. 32	to read: state (3) “reddish”
Char. 35	to check whether 9 states are too many
Char. 37	to have notes (1); (2); (3) and to provide new illustration
Char. 39	to check whether 9 states are too many
Char. 40	to amend state (1) to read: “absent or weak”
Char. 44	to add (+) and provide illustration
Char. 45	to be indicated as QN and to have states: absent or weak (1); medium (2); strong (3)

Char. 46	to read: “Time of beginning of flowering” and to delete (*) and to provide explanation
Table of Chars.	to check whether sufficient number of (*) characteristics
8.1 (b)	to delete “In cases where it is difficult to determine the largest surface area, the darkest color is considered to be the main color.” – creates further doubt
8.1	to check whether to use “flowering stem” instead of “peduncle”, and check labeling of illustrations

Campanula L.

60. The subgroup discussed document TG/CAMPA(proj.1), presented by Miss Elizabeth Scott (United Kingdom) and agreed the following:

Cover page	to read in French “Campanule”; German “Glockenblume”; Spanish “Campánula”
5.3(e)	to read (characteristic 29)
5.3(e), (f), Table of Chars., TQ	to provide alternative term for “mauve”
Char. 1	to change format of state (5) example variety to: “Alba (<i>C. isophylla</i>)” or to select alternative example variety
Char. 2	to insert state: extremely short (1) and renumber accordingly and to combine illustration in Ad. 2
New Char.	to consider adding new Char. to read: “Plant: length” for trailing varieties
Char. 15	to add (+) with TGP/14 explanation
Chars. 18, 19, 20	to consider reducing to 5 states
Char. 22	to read: RHS Colour Chart (indicate reference number)
Char. 23	to read: “Calyx: arrangement of lobes” and to be indicated as QN and VG
Char. 24	to check whether it should read: “Flower: attitude”
Char. 25	to check how to represent states (3) and (4)
Char. 26	to update the example cvs and improve the illustration
Char. 29	to consider to read: “Corolla: main color of outer surface”
Char.32	to read “solid or nearly solid”
Char. 33	to delete “..or only”
Char. 37	to move after Char. 38 and to clarify the meaning in Ad. 37 and improve illustration
Chars. 37 to 40	to consider if relevant for corolla types rotate and with strap shaped lobes [states (3) and (4) in char 25.
Char. 39	to consider if this is a “Corolla: shape” characteristic (flower in profile) and to provide example variety for state (7)

New Char. after Char. 47	to consider adding Char. “Corolla lobe: pubescence” and to check location with example variety “Isabella Blue” (NL to make a proposal with full details)
New Char. after Char. 47	to consider adding Char. on “Leaf: hairiness”
Char.48	to read: “Pollen: conspicuousness” with states: weak (1); medium (2); strong (3) and to be indicated as QN. To check if note (c) is appropriate
Char.49	to read: “Pollen: color” with states: whitish (1); yellow (2); purplish (3); bluish (4)
Table of Chars.	to check whether sufficient number of (*) characteristics
8.1(b)	to consider whether to mention that the basal leaves are not looked at
Ad. 1	To show container in illustration to avoid confusion
Ad.2 and Ad. 3	to be combined under joint header
Ad. 4	to read: “This is an overall assessment of the density of the whole plant (i.e. including flowers and leaves).”
Ad. 23	to read: “Calyx: arrangement of lobes”
Ad.25	to remove lower images for states (3) and (4)
Ad. 26	to replace pictures
Ad. 27, 28	to be combined under joint header
Ad. 37	to improve presentation
Ad. 37, 38	to improve explanation and illustration
Ad. 39	to improve illustration
Ad. 41	to reverse illustrations for states 2 and 3
Ad. 43	to read: “To be observed at the widest part.”
TQ 5	to update accordingly
TQ 5.5, 5.6(ii), 5.7(ii), 5.8(ii)	to revise order: white; pink; [mauve]; purple; blue

Canna

61. The subgroup discussed document TG/CANNA(proj.8), presented by Mr. Richard Brand (France), and agreed the following:

Chars. 8, 9	to add: “(excluding veins)”
Char. 9	to have states: diffused (1); in sectors (2); marbled (3) and to have example variety “Cleopatra” for state (2)
Char. 13	to delete
Char. 14	to have state (3) “broad”
Chars. 17, 21	to change “base color” to “ground color”
Char. 17	to give wording from TWO/44/16 in explanation
Char. 19	to read: “Staminode: color of flames”

Ad. 9	to update illustration with states: diffused (1); in sectors (2); marbled (3) with photograph of example variety “Cleopatra” for state (2)
Ad. 22	to change “10%” to “50%”

Cosmos

62. The subgroup discussed document TG/COSMOS(proj.3), presented by Mr. Takayuki Mikuni (Japan) and agreed the following:

2.3	to reduce to 10 young plants
3.4.1	to reduce to 10 plants for vegetatively propagated varieties
4.1.4	to change “10” plants to “9” plants
4.2.3	to read: “10” plants
6.5	to read: “(a)-(c)”
Char. 4	to be deleted and to add state 1 “absent or very weak” for Char. 5
Char. 5	to delete underline part and state (1) to read: “absent or very weak”
Char. 6	to delete example variety for state (2)
Char. 11	to delete underlined part and to add “..only for divided leaves”
Char. 13	to check and MX to provide example varieties
Chars. 14, 16, 18, 25, 26,	to provide example varieties
Char. 17	to have states: very small (1); small (2); medium (3); large (4); very large (5)
Char. 19, 20	MX to provide example varieties
Char. 22	to be indicated as QN
Chars. 26, 27	to delete (+)
Char. 28	to delete “depth of”
Char. 32	to be indicated as PQ
Chars. 33, 34, 35	to replace “third color” with “tertiary color”
Char. 35	to add (+) and to be indicated as PQ
8.1 (c)	to replace “third” with “tertiary” and to add the sentence of TGP14 discussed in case of distribution of half
Ad. 2	to improve illustration
Ad.8 Ad.9	to delete [Ad.]in diagram
Ad. 17	to read: “In varieties with collate segments, the disk diameter should be observed excluding the collerette segments.”
Ad. 25, 26, 27	lines to be aligned correctly and to delete [Ad.27:Ray floret:ratio length/width
9.	to add additional literature proposed from MX
TQ 5	to add “Ray floret: secondary color of inner side”
TQ 5.3	To read: “type” with small “t”

Dianella

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

Cover page	to have English common names: “Flax-lily, Dianella”
Char. 1	to delete
Char. 3	to delete “ shoots” and to add (*)
Char. 4	to be indicated as VG/MG and to add example variety “ Goddess” for state (7)
Char. 5	to delete state (4)
Char. 7	to add example varieties
Char. 8	to have states: narrow (3); medium (5); wide (7)
Char. 9	to have states (1), (2), (3), (4)
Chars. 12	to consider same procedure for color characteristics as for Hebe
Char. 16	to explain shapes
Char. 18	to add (+) and provide illustration and to change state (5) to “ involute”
Chars 20 and 23	to be indicated as QN
Char. 21	unlikely to be QL
Char. 24	to add (*)
Char.25	to add (*) if they grouping characteristic and to add in TQ
Chars.26	to be indicated as PQ and VG and to read “ Flowering stem: color of middle third”
Char. 29	to move before Char. 26
Char. 30	to consider whether useful and to have notes (1), (2), (3)
Char. 32	to have states: yellow (1); orange (2); brown (3)
Char. 33	to check if necessary
Table of Chars.	to check whether sufficient number of (*) characteristics
8.1 (b)	to improve comments
Ad. 1	to delete
Ad. 6	to improve illustration
Ad. 9	to provide explanation and remove illustration
Ad. 16	to improve explanation
Ad. 17	to add diagram
9.	NZ to provide more literature
TQ 6	to provide new example

Dianthus (Revision)

64. The subgroup discussed document TG/25/9(proj.4), presented by Mr. Henk de Greef (Netherlands) and agreed the following:

2.3	to read “20 rooted cuttings”
3.3.3	to amend to standard wording
3.4.1	to amend to “20 plants”
4.2.2	to amend to “20 plants” and “1 off-type”
5.3 (a)	the explanation demonstrates that the characteristic does not fulfil the requirements for a DUS characteristic (manual removal of flower heads is not a characteristic of the variety) and to move to TQ
5.3 (c)	to read: “Petal: main color (characteristic 49) with the following groups:”
5.3 (d)	to read: “Petal: secondary color” and to add color groups
6.5	to add notes (a) to (g) as in Chapter 8.1
Char. 1	to be indicated as VG
Char. 2	to be indicated as QN and VG
New Char.	to read: “Plant: length of stem” with the states: short (3); medium (5); long (7)
New Char.	to read: “Plant: habitat” with the states: upright (1); semi-upright (2); horizontal (3) and to add an (+)
Char. 3	to read: “Plant: lateral flower buds or flowers of second order” and to be indicated as VG
Char. 4	to read: “ <u>Varieties with laterals with flower buds or flowers only:</u> <u>Plant:</u> arrangement of flowers” and be indicated as QN and VG
Char. 5	to read: “Plant: flower clustering on lateral branches” with the states: none (1); some (2); all (3) and to be indicated as QN and VG
Char. 6	to read: “Stem: length of internode” and to add (+) and to be indicated as MG
Char. 7	to have 3 states: thin (3); medium (5); thick (7) and to add (+) and to be indicated as MG
Table of Chars.	to renumber accordingly
Char. 9	to check whether QL
Char. 10	to check whether QL
Char. 11	to add (+) and provide illustration in form of grid (see TGP/14/1 Draft 9: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28)
Char. 14	state 5 to read “very strongly recurved”
Char. 15	to be indicated as QN
Char. 16	to read: “Leaf: colors”
Char. 17	to have three states: weak (1); medium (2); strong (3)
Char. 19	to provide illustration in a grid format
Char. 20	to be indicated as QN and to have three states

Char. 25	to read “lobes” instead of “leaves” and to be indicated as QN and to have three states
Char. 26	to be indicated as QN
Char. 27	to have notes (1); (2); (3)
Char. 28	to be indicated as QN
Char. 29	to have notes (1); (2); (3)
Char. 33	to delete
Char. 34	to move to after Char. 35
Char. 35	to read: “Anthocyanin coloration” with the states: weak (1); medium (2); strong (3)
Char. 37	to add (+) with illustration
Char. 40	to be indicated as PQ and to an additional type
Char. 41	to check whether to be indicated as QN with the states – ... folding: absent or weak (1); medium (2); strong (3) and to be indicated as PQ
Char. 42	to check whether QL – or whether to merge with Char. 44 and to provide example variety for state (1)
Char. 48	to develop characteristics concerning main color, secondary color and tertiary color and to add (+) with explanation
Chars. 49, 50	to check whether to use an approach where the “ground color” is the palest color (see TWO/44/16)? Ad. 48, state 2 does not look edged – it looks like it has a central patch. Ad. 49,50 explanation is more likely to cause confusion concerning e.g. Ad. 48 state 2 and to add (+) explanation and to check whether RHS Colour Chart is required or JP to suggest additional colors
Char. 51	to check whether QL, or whether to merge with Char. 52
Char. 53	to add (+) and provide illustration in form of grid (see TGP/14/1: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28)
Char. 54	to add (+) with explanation
Char. 55	to check whether QL
Char. 56	to read: “Style: number” and to be indicated as QN
Char. 57	to check whether 9 states is appropriate
Char. 58	to check whether QL
Char. 59	to add example varieties
Table of Chars.	to check whether sufficient number of (*) characteristics
8.1	KR to provide illustrations of example varieties

Echinacea

65. The subgroup discussed document TG/ECNCE(proj.4), presented by Miss Elizabeth Scott (United Kingdom), in conjunction with document TWO/44/24, and agreed the following:

4.3.3	to delete the paragraph relating to the stability of hybrid varieties
4.1.4.2	to change “ 15” to “ 30”
4.2 (a)	to delete wording for assessment of uniformity of seed propagated varieties which are self -pollinated
4.2 (c)	to delete wording for assessment of uniformity of seed propagated hybrid varieties
Char.2	to replace example variety Catharina for state (7) by variety Mount Hood
Char.9	to delete example variety Kim’s Mop Head for state (7) and to add example variety “ Polar Breeze” for state (5)
Chars. 9, 16	The denominations “Polar Breeze” and “ Pineapple Sundae” may not yet be approved by the CPVO. Need to check. If they are not approved, the breeders reference will need to be used – GB to check.
Char. 14	to change state (2) to “central zone”
Char.16	to be added example variety “ Pineapple Sundae” for state (4)
Char.18	to be deleted Catharina as example variety for state (3)
Char.23	to have four states semi-erect (1).horizontal (2),semi –drooping (3).drooping (4)
Char. 30	to add (+)
Char.36	to read Ray floret: profile in cross section
Chars.44 and 45	to read “ Disc: ratio height/diameter”
Ad.23	to be updated to match the new wording
Ad.36	to read Ray floret: profile in cross section
Ad.40	to improve indication (to move line for height to the maximum height)
Ad.44	to read “Disc: ratio height/diameter”
Chap. 9	To add list of literature from the TWV document

Eucalyptus

66. The subgroup discussed document TG/EUCAL(proj.5), presented by Mr. Nik Hulse (Australia) on behalf of Mrs. Daniela De Moraes Aviani (Brazil) and agreed the following:

5.3(d),(e)	to read as Chars.42 and 43 in the Table of Characteristics
Table of Characteristics	to provide example varieties (Chars.12 17,20,25,30,34,36,41,46,50,54)
Chars.8, 9	to combine
Char.11	to delete(*)
Char.13	to delete “blade”
Chars.14, 15,16	to check whether MS is needed

Char.16	to add (+)
Char.19, 20	to combine
Char.32	to indicate as VG/MG
Char.33	to indicate as VG
Char.34	to indicate as VG
Chars.35, 36	to combine
Char.38, 39	to indicate as VG
Char.40	to delete “on lower third crow”
Char.42	to read “Flower type” and indicate as VG
Char.43	to use standard wording (flower umbel)
Char.45	to check whether QL or 3 states needed
Char.54	to delete “Only varieties with rhytidome” in heading, to have states compact (1), moderately fibrous (2), fibrous (3)
Char.55	to delete “Only varieties with rhytidome” in heading
8.1.1	to review whether the same observations four times are necessary
8.2	to put in order and update according the Table of Characteristics
Chars. 3,14,30	to delete “in 3 year old plants
Chars. 8, 9, 19, 20, 35, 36	To add one illustration for combined Chars.
Ad.4,15,3 1	to replace by Leaf blade: ratio Ad.5,16,32
Ad.23	to improve illustration
Ad.42	to add missing notes
Ad.45	to reword
Ad.47	to add arrow to pedicel and to add Ad.48 to Ad.47, to change the notes for present and absent
Ad.54	to reword according the characteristic
TQ 6	to add example

Gladiolus (Revision)

67. The subgroup discussed document TG/108/4(proj.5), presented by Mr. Henk de Greef (Netherlands) and agreed the following:

Cover page	to read in English “Gladiolus”; in French “Glaïeul”; in German “Gladiole”; in Spanish “Gladiolo”
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2.3	to read 20 corns
Table of Chars.	to provide example varieties for Chars.6,9 ,18,22,26: to add example varieties for Chars.4,8,14,34, 37,38
Char. 11	to add (+) and provide illustration
Char. 13	to check and consider to replace “round by proper wording (pentagonal) and to add better illustration
Char.14	to provide illustration
Char. 15	to read Flower: width of broadest part
Char. 16	to delete
Char. 18	to indicate as PQ and read none, lighter towards the base, evenly shaded, lighter towards the tip
Char. 24	to read Outer tepal: shape of bade of broadest part
Chars. 25 and 26	to check whether states 9 necessary
Char.27	to delete
Char. 28	to read Inner tepal: length of stripe (if present)
Char.32	to read at base (1), between base and centre (2),central (3) and indicate QN
Char. 34	to provide better illustration for central macule
Char. 35	to delete (a)
Char. 36	to delete underlined part and (a)
Char. 37	to provide illustration
Char. 38	to delete
Char.39	to delete underlined part and read Inner tepal: width of marginal zone(if present)
Char.40	to delete underlined part and read Inner tepal: border of marginal zone (if present)
Char.41	to delete underlined part and read Inner tepal: color of marginal zone {if present)
Chars. 42 and 43	to delete underlined part
Char.44	to add (b)
Char.46	to read, same color (1) slightly different color (2),different color (3) and indicate QN
Char.47	to replace “connective” by “connective tissue”
Char.49	to read Style: main color (excluding base) and add (b)
Chars.50, 51 and 52	to provide illustration
8.1 (b)	to improve explanation
Ad.10,13, 34	to improve illustrations
Ad.11,14, 37,50,51	to provide illustrations
Ad.24	to improve diagram

Hebe Comm. ex Juss.

68. The subgroup discussed document TG/HEBE(proj.2), presented by Mr. Chris Barnaby (New Zealand) and agreed the following:

3.3.2	to delete last sentence
5.3 (d)	“cream” to be replaced by “yellowish white”
6.5 (a)-(d)	to read: (a)-(f)
Char. 2	to delete
Char. 10	to provide illustration
Char. 18	to add states: “towards the base” (1) and “towards the apex” (3)
Char. 19	to add (+) and provide illustration
Char. 20	to read: “Leaf blade: profile in cross section” and to be indicated as QN
Char. 22	to add example varieties
Char. 23	to amend explanation
Char. 25	State (7) to read: “irregular”
Char. 26	to read: “Leaf blade: area covered by secondary color”
Char. 27	to amend explanation
8.1 (d)	to read: “All observations on the leaf and petiole should be made on a leaf from the middle third of a flowering shoot. The inner side is the same as upper side.”
Table of Chars.	to check whether sufficient number of (*) characteristics
Ad. 2	to be deleted
Ad. 17	to improve diagram
Ad. 25	to improve illustration and to change state: “blotched” to “irregular”
Ad. 27	to read: “Leaf blade: tertiary color of inner side” with the explanation: “The tertiary color is determined as the color with the third largest surface area, usually observed as a defined pattern on the inner side of a leaf. For varieties with glaucosity, the waxy layer is removed.”
Ad. 32	to be provided
Ad. 33, 34	lines to be corrected
Ad. 37, 39	line for diameter to be improved
Ad. 41	to read: “The observation should be made when approx. 50% of inflorescences present have open flowers.”
TQ 4.2.1	to correct to: (a) (b) (c)
TQ 5.4(ii) (24)	to correct (23) and to add numbers: reddish purple (9); purple (10); purplish black (11)
TQ 6	to have example: Plant habit: semi-upright; spreading

Heuchera and Heucherella

69. The subgroup discussed document TG/HEUCH(proj.4), presented by Miss Elizabeth Scott (United Kingdom), and agreed the following:

General	to ensure consistent presentation throughout document for references to Heucherella : where scientific name is used [front cover, paragraph 1 TQ], to correct to: <i>xHeucherella</i> H. R. Wehrh. For general references [English name on cover, Chars, 28, 65, Ad. 4 to 19, Ad.36 to 52, Ad. 62, 63, 64 and 65, TQ 1.2]
Cover page	to add “Foamy Bells” as additional English name
Table of Chars.	to add (*) to all young leaf color Chars.
Char.28,65	to read “ Heucherella only”
Ad.4 to 19 and Ad. 36 to 52	to read” Heuchera and Heucherella”
Ad.4 to 19 and Ad. 36 to 52	to read: “Worked Example One – Pistache (variety with only one leaf color)” to read: “Worked Example Two – Venus (variety with several leaf colors)”
Ad. 32	to check if possible to get better definition of rugosity in images
Ad. 61	to provide enlarged photo for state 5
TQ 5.4,	to read “Young just expanded leaf blade:”
TQ 5.5, 5.6 and 5.7	to read: “Fully expanded leaf blade:”

Hosta

70. The subgroup discussed document TG/HOSTA(proj.5), presented by Mr. Henk de Greef (Netherlands), and agreed the following:

Table of Chars.	- further example varieties to be provided - to amend “MG” to “MG/VG” throughout Table of Chars. - to delete example variety H. sieboldii ‘Alba’ - to check all characteristics with scale 1-9 to check whether fewer notes would be more appropriate - to check whether to add (*) to further characteristics
Char. 3	to read “Plant: width” with the states: very narrow (1); narrow (3); medium (5); broad (7); very broad (9)
Char. 11	to re-arrange photographs, according to the grip of TGP/14/1: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28
Char. 12	states 1 and 2 to read; acute (1); obtuse (2)

Chars. 16, 17, 20, 21, 24, 25, 28, 29, 32, 33,	to be reviewed to cover all distributions and patterns (e.g. area surrounding stripe or spot) without overlapping between the two characteristics
Char. 34	to have the states: convex (1); flat (2); moderately concave (3); strongly concave (4)
Char. 39	to be indicated as QN and to add (+) and provide illustration
Char. 51	to add (+) and provide illustration/explanation
Char. 58	to add (+) and provide illustration in form of grid (see TGP/14/1: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28)
Char. 60	to add (+) and provide illustration
Char. 62	to add (+) and provide illustration in form of grid (see TGP/14/1: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28)
Char. 64	to have notes 1, 2, 3
Char. 68	to have notes 1, 2, 3
8.1 (c)	wording to be checked
8.1	to add "(e)" before "Characteristics on the bract should be observed on the bract of the first flower (when present)."
8.1	To add the following: "A photograph of the [relevant plant part] could be provided in conjunction with the description in order to clarify the color distribution and/or color pattern. However, a warning should be added to this photograph, explaining that the primary intent of the photograph is to show the distribution and/or pattern of colors on the plant part rather than the actual colors. Color on photographs can be affected by the technology of the camera and the facilities used to display the photograph (printer, overhead projector, etc.)."
Ad. 11	to add illustration for state: broad elliptic (note 9)
Ad. 17 etc.	- to explain which color is described - to add worked examples as for Heuchera
Ad. 36	to provide illustrations for all odd notes
Ad. 38, 51, 57	to be provided
Ad. 40	to be provided
Ad. 49 etc.	to include "tube" and "corolla" in the illustration
TQ 5	to be harmonized with grouping characteristics and to check wording corresponds to the Table of Chars.
TQ 9.3	to be deleted

Lilac (Syringa L.)

71. The subgroup discussed document TG/LILAC(proj.2), presented by Ms. Hongxia Cui (China) and agreed the following:

3.4.1	to delete "which should be divided between three replicates"
4.1.4	to have 5 plants instead of 8 plants
5.3(b)	to read as Char.9 in the Table of Characteristics

Table of Characteristics	to provide example varieties
Char. 1	to read “one or two” for state 1 and “more than two” for state 2
Chars. 8	to read “Leaf blade: incisions of margin” with the states absent or very shallow (1),shallow (2),medium (3),shallow (4),vary shallow (5): to indicate as QN,VG and to add a new illustration
Char. 9	to read “Only varieties with leaf type simple and incisions of margin absent: leaf blade shape and add (+) and provide illustration in form of grid (see TGP/14/1: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28)
Char. 10	to read “ Only varieties with leaf type simple and incisions of margin absent : leaf blade shape” and indicate as VG
Char. 11	to delete
Char. 12	to add (*)
Char. 13	to read “ Leaf blade: main color to add (*),(+) and explanation of “main color”
Char. 14	to add (*)
Char. 15	to change the states for (1),(2),(3)
Char. 18	to read expressions “upwards with state 1 and “ downwards” with state 2 and provide the photo
Char. 20	to indicate as QN
Char. 21	to replace with few, medium, many and add (a) indicate as VG
Char. 22	to delete (e)
Char. 26	to delete
Char.25	to add VG/MG
Char.27	to replace with short (1),medium(2),long (3) and add (*) and (a)
Char. 29	to add (+) and provide illustration in form of grid (see TGP/14/1: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28)
Char. 30	to reverse order of states 2 and 3
Char. 31	to replace by absent or short (1), medium (2), long (3) and indicate as QN
Char. 32	to read “ Corolla lobe: undulation with states absent or weak (1),medium (2) strong (3) indicate as QN and VG
Char. 33	to read “ Corolla lobe: degree of incurving “ with states absent (1), at apex (2) along whole margin and indicate as QN
Char. 35	to delete
Chars. 36, 37	to add (+) with explanation of main and secondary color
Char. 38	to delete

Char. 39	to delete.
Char. 40	to indicate as QL
8.1	to update
8.1(a)	to read “ Shoot observations on shoot of current year”
8.1(b)	to read “Leaf blade observations on middle part of shoot”
8.1(c)	to read ”Flower observations on inflorescence and floret in middle-upper part of canopy in blooming season”
8.1(d)	to delete
8.1 (e)	to move to Ad.22
8.1 (f)	to delete
8.1 (g)	to replace by (d)
8.2	to update according the Table of Characteristics
Ad.11,12, 13,29,36, 37	to add illustration and explanation
TQ 1	to request species details
TQ 1	to request species details
TQ 5.2	to add notes 1, 2,4,6,8,9
TQ Chars	to update
TQ 6	to provide Example
TQ 9.3	to check whether to be deleted

Lobelia erinus L.,

72. The subgroup discussed document TG/LOBEL(proj.1), presented by Ms. Ashley Balchin and agreed the following:

Table of Characteristics	to provide example varieties and to check whether to add (asterisk to further characteristics
3.4.1	to change to 15 plants
3.4.2	to change to 30 plants
4.2.3	to check standard wording for self-pollinating
5.3	to have color groups: Gr. 1: white: Gr. 2: light blue: Gr. 3 blue/violet: Gr. 4 red/purple
Char. 1	to check example varieties and to add (+) and provide illustration
Chars. 2	to delete underlined part and to add (+) and provide illustration
Char. 3, 15, 19	to delete

Char. 4	to delete underlined text
Char. 5	to add (a)
Char. 6	to reduce number of states to 5: very thin (1); thin (2); medium (3); thick (4); very thick (5)
Chars. 5, 8	to provide example varieties
Char. 12	to add (*)
Char. 13	to delete (*)
Char. 14	to check whether to delete
Char. 16	to delete (*)
New Char. before Char. 20	to read: underlined : “ <u>Only for varieties with flower type: double:</u> Flower: diameter”
New Char. Before Char. 20	to read: “ <u>Only for varieties with flower type: double:</u> Flower: main color” with RHS Colour Chart (indicate reference number)
Chars. 20, 21	to add (d)
Char.22	Terminology to be checked with document TGP/14/1 Draft 11: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I Shape
Char. 23	to delete “(if different from lower lip)” and to read: “ Upper lip: main color of inner side”
Char. 24	to delete “of middle lobe”
Char. 27	to delete
Char. 28	to add (+) and to provide illustration (particularly with regard to white varieties)
Char. 29	to have states: elongated only (1); elongated and rounded (2); rounded only (3); irregular (4)
Char. 30	to add (+) and to check whether to combine in illustration for Char. 28
Char. 31	to add example varieties
Chars. 32, 35, 37	to delete
Char. 34	to delete “slightly” in state (3)
Char. 36	to add (d)
Ad. General	to update in accordance with deletion in Table of Chars.
Ad. 21, 24, 25	to update illustration and indication of where to measure
Ad,13,14	to improve illustrations
Ad.20	to provide the photo or to improve illustration to add explanation of how to make this observation
Ad. 29	to add sentence to explain state (2) (as in TG for Osteospermum)
TQ 5.3	to update with new color groups
TQ 6	to change example to “ light blue” and “ white”

Lomandra Labill.

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

Cover page	to add English common names “Lomandra, Mat rush”
5.3	to amend in accordance with the Table of Chars. and to delete Char. 1
6.5	to read “(a)-(d)”
Char. 1	to be deleted
Char. 5	to add (*)
Char. 8	to be indicated as VG and to add state 4 “completely rolled”
Char. 9	to be deleted
Char. 10	to check whether QL and, if not, to combine with Char. 11
Char. 11	to read “Leaf: length of middle tooth”, with the states: very short (1); short (3); medium (5); long (6); very long (7) and to be indicated as VG.
Char. 12	to be indicated as VG
Char. 15	to be indicated as QN, to delete “?” after example varieties and to add (+) with explanation to observe the characteristic after removing the waxy layer.
Char. 16	to be indicated as VG and to add (+) with explanation to observe the characteristic after removing the waxy layer.
Char. 17	to delete “very” in state 1 and to be indicated as QN
Char. 18	to read “Leaf: pliability” and to reverse example varieties for states 3 and 7
Char. 20	to add (+) with explanation that the shredded margin should not be observed.
Char. 21	to read “Inflorescence: height position in relation to foliage” and to have the states: below (1); level (2); above (3).
Char. 22	to check whether the characteristic concerns the number of branches, angle or length and to review the illustration. To add (+).
Chars. 23, 24	to add (+)
Char. 25	to check whether to have the states: yellow green (1); green (2); greyed orange (3); red brown (4); brown (5)
Char. 26	to add (+)
Char. 27	to add (+) and provide illustration
Char. 28	to be deleted
Ad. 6	to be amended to Ad. 18 and to read “Assessed by folding middle third of leaf over index finger and observing the extent of splitting. Strong pliability is indicated by little or no splitting.”
Ad. 8	to provide illustration
Ad. 19	to be improved
Ad. 22	to be reviewed
TQ 1	Common name to read “Lomandra, Mat Rush”
TQ 6	to amend “drooping” to “spreading”
TQ 7	to add a request for information on sex expression of the variety

Mandevilla

74. The subgroup discussed document TG/MANDE(proj.3), presented by Mr. Henk de Greef (Netherlands) and agreed the following:

Cover page	to delete UPOV Code: MANDE and to remove brackets
Cover page	Mandevilla sanderi (Hemsl.) Woodson Dipladenia ×amoena T. Moore; Dipladenia sanderi Hemsl. Mandevilla ×amabilis (Backh. & Backh. f.) Dress Dipladenia ×amabilis Backh. & Backh. f.
4.1.4	to amend 10 to 9 to allow for off-type plant
5.3 (a),(b),(c),(d)	to read as in the Table of Characteristics (Chars.3,19,34,35)
5.3(e)	to add Gr. 2 “yellow” and renumber accordingly
Table of Chars.	to provide example varieties
Char. 2	to indicate VG/MG
Char. 3	to indicate VG/MG and provide illustration
Char. 4	to read “... intensity of green color”
Char. 7	to add (+) and provide illustration
Char. 9	to read “... intensity of green color” and add state (1) “not visible” and renumber and indicate as PQ
Char. 16	to read: acuminate for state (1) and to add (*) and to be indicated as QL
New Char.	to read: “ Leaf blade: shape of base” with states: acute (1); truncate (2); cordate (3) and with example varieties Summer Dress (1); Sunmandeho (2) and Rose Giant (3) and add (+) and provide illustration
Char. 17	to read “Leaf blade: intensity of green color of upper side excluding variegation”
New Char.	to read: “Leaf blade: variegation” with states: absent (1); present (9) with example variety “Tropical Dream” for state (9) and to deland to indicate as QL
Char. 18	to delete “very” in state 1
Chars.19, 27 to 30, 34, 35, 38 to 41, 43 to 47	to add (*)
Char. 19	to add (+) and provide illustration and to renumber states: 1, 2, 3, 4
Char. 21	to read “... intensity of green color”
Char. 23	to add (+) and provide illustration and renumber states: 1, 2, 3
Char. 26	to read “... intensity of green color”
Char. 29	to add (+) and provide illustration and to consider having at least 3 states: trullate (1); rhombic (2); obrullate (3) and to provide example variety for state (2) if possible
Char. 30	to add (+) with explanation
Char. 34	to indicate as VG/MG
Char. 35	to add (+) and provide illustration
Chars. 42, 43	to add (+) with explanation of how to observe (remove from plant?)

Char. 44	to have 3 states: symmetric or slightly asymmetric (1); moderately asymmetric (2); strongly asymmetric (3)
Chars. 48, 49	to add (+) and provide illustration
Ad. 3	to replace “measured” with “observed”
Ad. 16	State (1) to read: “acuminate”
Ad. 46, 47	to delete 2 nd sentence (two decisions to make - adds to confusion not to clarity)
9.	to be completed and formatted
TQ 1	to add 1.2 “Mandevilla xamabilis”
TQ 5	to update 5.3
TQ	to add characteristics 34 and 35 if they grouping characteristics

Oncidium Sw.

75. The subgroup discussed document TG/ONCID(proj.4), presented by Mr. Kenji Numaguchi (Japan) and agreed the following:

Cover page	to include hybrids for which JP PBR/DUS have experience
1.	to update accordingly to specific coverage
5.3(c),(d), (e),	to read them as in the Table of Characteristics (Chars.72,73,76)
5.3(f)	to read “color of bands (characteristics 79)
5.3(g)	to read “color of stripes(characteristics 80)
5.3(h),(i), (j)	to read them as in the Table of Characteristics (Chars.82,84,93)
Table of Chars.	to provide only the variety denomination for the example varieties (not GREX)
Table of Chars.	to add example varieties and to renumber Table of Characteristics
Chars. 2, 12,	to add note (b)
Char. 4	to provide illustration in form of grid (see TGP/14/1: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28)
Char. 5	to correct terms and to provide illustration in form of grid and to have the states: broad oblate (1); medium oblate (2); narrow oblate (3); circular (4)
Chars. 6, 7	to indicate as MG/MS
Chars. 8, 9, 14, 15, 17, 18, 22, 25, 26,	to indicate as VG/MG
Char. 10	to provide illustration in form of grid
Chars. 20, 21, 25 to 30, 45 to 51, 65 to 71, 85 to 92	to add note (c)
Char. 24	to be indicated as VG

Char. 27	to provide illustration in form of grid
Char. 35	to read: “Dorsal sepal: size of spots (if present)” and to have state: very small (1)
Char. 43	to read; “ Dorsal sepal: size of macule (if present)” and to have state: very small (1)
Chars. 45 to 64	to update lateral Sepal series of Chars. In the same way as Dorsal sepal series and Petal series
Char. 47	to provide illustration in form of grid
Char. 50	to provide illustration
Char. 67	to provide illustration in form of grid
Char. 70	to provide illustration
Chars.73, 76, 79, 80, 82, 84	to add (*) if they are grouping characteristics
Char.87	to read “same size” and to add explanation in Chapter 8.2: “The size of both lateral lobes compared to the size of the single apical lobe.”
Char. 89	to provide illustration in form of grid
Char. 91	to add (+) and provide illustration (orientation)
Char. 92	to add (+) and provide illustration (orientation)
Char. 93	to add (+) explanation of ground color in Chapter 8.2
Char. 96	to add “ (if present)” and to have state (1): very small
Char. 101	to read: “ Lip: apical lobe: width of marginal zone (if present)” and to have state (1) “very narrow”
Char. 102	to delete
Char. 104	to add (+) explanation on ground color in Chapter 8.2
Char. 108	to read: “ Lip: lateral lobe: color or marginal zone (if present)”
Char. 110	to read: “ surrounding”
Table of Chars.	to add (*) to Chars. 73, 76, 79, 80, 82, 84
Ad.29,49,69	to delete underline of the notes
Ad. 31, 52, 72, 93	to read: Ground color is the continuously dispersed color beside diffused over color, ...”
Ad. 85, 86	to correct illustration indications
8.1	to add last sentence: “Observations on the inflorescence should be made on the longest inflorescence.”
8.3	Column for denomination to delete GREX name
TQ 1	to complete Hybrid
TQ 5	to renumber and adjust references to Chars. in accordance with renumbering of Table of Chars.
TQ 9.3	to be deleted

Osteospermum (Revision)

76. The subgroup discussed document TG/176/5(proj.1), presented by Ms. Andrea Menne (Germany) and agreed the following:

5.3(d),(e), (f), (g)	to be read the same in 5.3 , in the Table of Characteristics and in TQ
Table of Chars.	to provide example varieties
Chars. 2, 3	to check if can be combined and to delete underlined part
Char. 21	to read: “Ray floret: degree of elongation” with the states: very weakly elongated (1); weakly elongated (2); moderately elongated (3); strongly elongated (4); very strongly elongated (5)
Char. 24	to read: “...length of part of ray floret with rolled margins”
Char. 25	to check whether to reduce number of notes
Char. 26	to delete underlined part
Char. 27	to delete “of upper side” and to specify “upper side” under 8.1(b) or to provide new explanation
Chars. 28, 29	to delete “of upper side”
Char. 31	to be indicated as QN
Char. 32	to delete state (13)
Ad. 9	to change second paragraph to reflect new wording agreed at TWO 2011
Ad. 18	to add “as viewed on the flower head” to “Corolla lobe, inner side”
Ad. 21	to provide explanation “The degree of elongation is determined by the ratio of the length to the width of the ray floret” and to update the illustration accordingly
Ad. 23	to delete notes “1” and “3”, but leave the wording
Ad. 29	to update text
Ad. 30	to provide alternative image for state: absent or weak (1)
TQ 5.	to renumber
TQ 6.	to read “similar” and “your” in bold

Phalaenopsis (Revision)

77. The subgroup discussed document TG/213/2(proj.4), presented by Mr. Henk de Greef (Netherlands), and agreed the following:

Cover page	English: Moth Orchid”; French: “Orchidée papillon; German: “Phalaenopsis; Schmetterlingsorchidee”
Table of Chars.	to add example varieties

Table of Chars.	to indicate VG/MG/MS for all characteristics indicated as MG
Char. 14	to add (*)
Chars. 16, 17	to be indicated as VG/MG/MS
Char. 18	to be indicated as VG/MG/MS and to have notes (1), (2) and (3)
Char. 20	to be indicated as VG
Chars. 21, 22	to be indicated as VG/MG/MS and to change the notes to (1) to (9) and JP to provide example varieties
Chars. 22, 33 to 35, 38, 40, 50, 51, 53, 59, 71, 77, 79, 82, 84, 86, 88, 90, 92	to add (*)
Chars. 20, 23, 24, 27 to 28 to 49, 52 to 54, 56 to 67, 71, 73, 74 to 97	to be indicated as VG
Chars. 1 to 4, 15 to 18, 21, 22, 25, 26, 50, 51, 55, 68, 69, 72	to be indicated as VG/MG/MS
Chars. 29, 30	to add (+) and provide illustration
Char. 35	to add example varieties
Char. 54, 55	to add (+) and provide illustration
Char. 57	to be indicated as QN
Char. 60	to have notes (3), (5), (7) and to update illustrations accordingly and JP to provide photographs of states (3) and (7)
Char. 73	to have states: absent or small (1); medium (2); large (3)
8.1 (a)	to read: Observations on the plant and the stem should be made when 50 % of the flowers have opened on the first inflorescence
8.1 (b)	to read: Observations on the leaves should be made on the largest fully expanded leaf.
8.1 (c)	to read: Observations on the flowers should be made on fully expanded flowers when 50 % of the flowers have opened.
Ad. 1	to provide better illustration to show plant length
Ad. 5	to delete empty columns
Ad. 7	to be provided
Ad. 20	to be provided
Ad. 29	to be provided
Ad. 30	to be provided
Ad.21, 22, 71	to adjust labels with correct indication (shift lines down) and to read: "Flower: width"
Ad. 60	JP to provide photos of states (3); (5) and (7)
Ad. 70	to select relevant shapes and add legend for axes (position of broadest part - ratio length/width (8 shapes)

TQ 5	to update in line with changes to Chars. 61, 64, 66
TQ 9.3	to check whether to be deleted

Tree Paeony

78. The subgroup discussed document TG/PAEON(proj.4), presented by Ms. Yuan Tao (China), and agreed the following:

Cover page	to read in English “Tree Paeony”, Moutan Paeony”
Cover page	to specify by species rather than by Section – for those species for which the Leading Expert has DUS testing experience
Char. 3	to add (+) and provide illustration
Chars.12,2 4,35,55	to add (*)
Char. 17	to have the states: absent or weak (1); medium (2); strong (3)
Char. 22	to read: “Flowering stem: presence of lateral flowers” with 3 states and to add (*)
Char. 23	to read: “Flower: most complex form” and to modify illustration for all states
Char. 24	to add (*)
Char. 25	to read: “Flower: height of most complex form” with the states: absent (1); short (2); medium (3); tall (4) and to add (*)
Chars. 26, 27	to indicate PQ
Char. 27	to combine with explanation provided in Ad. 28
Char. 28	to check whether to add state “none” (1)
Chars. 29, 30	to read: “Flower: petaloid stamens on most complex form” and to combine with states: none or very few (1); few (2); medium (3); many (4); very many (5)
Char. 31	to read: “Flower: type of petaloid stamens on most complex form” and to add (*)
Char. 32	to read: “Only varieties with flower petaloid stamens on most complex form: Flower: conspicuousness of anthers”
Char. 34	to delete “Only varieties with blotch:” and to indicate (h)
Char. 35	to delete “Only varieties with blotch:” and to add (*) and (h)
Char. 36	to delete “Only varieties with blotch:” and to add (h)
Char. 37	to delete “Only varieties with blotch:” and to add (h) and to be indicated as QN
Char. 38	to be deleted
Char. 39	to have state: absent or very weak (1)
Char. 40	to add (+) and provide illustration in form of grid (see TGP/14/1: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28)
Char. 44	state 3 to read “fully open”
Char. 48	to read: “Petaloid pistil on the most complex form” and to add (*)
Char. 49	to read: “Petaloid pistil on the most complex form: type”

Char. 50	to read: "Petaloid pistil on the most complex form: color"
Chars. 52, 53, 54	to be deleted
Char. 55	to add (*)
Ad. 4	to be provided
TQ 1	to request information on species
TQ 4.2.1	to be deleted
TQ 6	example to be provided

Zinnia L.

79. The subgroup discussed document TG/ZINNIA(proj.1), presented by Mr. José M. Mejía-Muñoz (Mexico) and agreed the following:

1.	to refer to <i>Zinnia</i> L. to delete "and their interspecific hybrids"
2.3	to change to 40 plants
3.4.1	to change to 40 plants
4.1.4	to delete second paragraph (repetition)
4.2.2	to check standard wording format
4.3.2	to check standard wording
5.3(c)	to delete
5.3(e)	to read (characteristic 26) and to delete Gr.1 (renumber Gr. Numbers accordingly)
6.5	to add "MG,MS,VG,VS - see Chapter 4.1.5"
Chars.1,2,8,15,26	to add (*)
Chars. 1	to indicate as VG/MG
Char. 2	to be indicated as PQ and to have notes (1), (2), (3) and to have VG
Chars. 3,6	to be indicated as VG
Chars. 4, 5	to be combined and to be indicated as QN with the states: absent or very weak (1); weak (3); medium (5); strong (7)
Chars.5,6	to be indicated as QN
Char. 6	to add state: absent or very sparse (1): sparse (2): medium (3): dense (4)
Char.7	to delete
New Chars.	to check if necessary to have new Chars. to read: "Leaf: length/width ratio" and "Leaf: position of broadest part" or to provide illustration in grid format
Char.9	to read: "Leaf: profile in cross-section" and to have states: flat (1); moderately concave (2); strongly concave (3) and to be indicated as QL
Char. 10	to read: "Leaf: undulation of margin" with the states: absent or weak (1); medium (2); strong (3) and to be indicated as QN
Char. 12	to have 5 states: very light (1); light (2); medium (3); dark (4); very dark (5) and to be indicated as VG

Char. 13	to read: “Leaf: anthocyanin coloration at the base” and to have states: absent of very weak (1); weak (2); medium (3); strong (4) and to be indicated as QN and VG and to provide (+) with explanation
Char. 14	to be indicated as VG/MG
Char. 15	to correct number of states and to add (+) and provide explanation “In semi-double varieties the disk is visible and in double varieties the disk is not.” and to have notes (1), (2), (3) and to be indicated as PQ
Char. 16	to check if necessary and, if so, to add (+) with illustration
Char. 17	to add “ <u>Only varieties with flower head type: single and semi-double:</u> ”
New Char.	to read: “ <u>Only varieties with flower head type: double:</u> Flower head: density” with the states: sparse (3); medium (5); dense (7) and to be indicated as QN and VG
Char. 18	to provide example varieties and to delete photographs
Char. 19	to consider adding Chars. concerning leaf shape (see TGs for similar types such as Dahlia)
Char. 20	to add illustration
Char. 21	to read: “Ray floret: profile in cross section” and to have states: flat (1); weakly concave (2); medium concave (3); strongly concave (4) (check appropriate states) and to be indicated as QN and VG
Char. 22	to be indicated as VG and to provide example varieties
Chars. 23, 24	to review presentation and states to replace by the shape of the apex and the depth of indentations
New Char.	to consider adding characteristic to describe the lengthways curvature of the ray floret
Chars. 25, 26	to be deleted
Char. 27	to delete underlined part and to refer to main color
Char. 28	to delete underlined part and to check whether to add more states (see TG for Chrysanthemum)
Char. 29	to check whether to add more states (see TG for Chrysanthemum)
Char. 30	to delete underlined part
Char. 31	to delete underlined part and to check to whether to add more states (see TG for Chrysanthemum)
Char. 32	to add (+) and explanation on where to examine and
Char. 33	to delete
All Chars.	to be indicated according to Chapter 4.1.5
Table of Chars.	to check whether sufficient number of (*) characteristics
8.1	Give explanation on what leaves to observe (Char. 13)
TQ header	to delete text in green
TQ 1	to add information on species
TQ 4.2.1	to insert “(please provide details)” instead of “(...Example Varieties..)”

TQ 4.2.1(c)	to update precise detailed required
TQ 5	to add all grouping characteristics (including “Plant: height”)
TQ 6	example to be provided
TQ 7	to provide details on use

Recommendations on draft Test Guidelines

80. The TWO agreed that the following draft Test Guidelines should be sent to the TC for adoption at its forty-eighth session, to be held in Geneva from March 26 to 28, 2012, on the basis of the following documents and the comments in this report:

New Test Guidelines

Canna	TG/CANNA (proj.8)
Echinacea (<i>Echinacea</i> Moench)	TG/ECNCE(proj.4)
Heuchera and Heucherella	TG/HEUCH (proj.4)
<i>Oncidium</i> Sw.	TG/ONCID (proj.4)
Tree Peony (<i>Paeonia</i> Sect. <i>Moutan</i>)	TG/PAEON (proj.4)

Partial Revisions

Kalanchoe	TG/78/4, TWO/44/21
New Guinea Impatiens	TG/196/2, TWO/44/22

81. In the case of the Test Guidelines for Echinacea, the TWO noted that the submission of the Test Guidelines for adoption by the Technical Committee would be subject to approval, by correspondence, by the Technical Working Party for Vegetables.

82. The TWO agreed to discuss drafts of the following Test Guidelines at its forty-fifth session:

<i>Aglaonema</i> Schott.
<i>Aloe</i> L.
<i>Campanula</i> L.
Cosmos (<i>Cosmos</i> Cav.)
Dianella (<i>Dianella</i> Lam. ex Juss.)
Dianthus (Revision)
Gladiolus (Revision)
<i>Hebe</i> Comm. ex Juss.
Hosta
Lilac (<i>Syringa</i> L.)

<i>Lobelia erinus</i> L.
<i>Lomandra</i> Labill.
Mandevilla
Osteospermum (Revision)
Phalaenopsis (Revision)
<i>Zinnia</i> L.
Eucalyptus (part of genus only)
<i>Callistephus chinensis</i> (L.) Nees (China Aster)

83. The TWO agreed that the following Test Guidelines should be discussed within the subgroup during 2012, and should be scheduled for discussion at the TWO session in 2013.

<i>Regal Pelargonium</i> (<i>Pelargonium</i> × <i>domesticum</i> L. H. Bailey)	TG/109/3
<i>Grevillea</i> (<i>Grevillea</i> R. Br. corr. R. Br.)	New
<i>Strelitzia</i> Ait. (Bird of Paradise Flower)	New

Guidance for drafters of Test Guidelines

84. The TWO considered document TC/47/3, Annex II “Practical Guide for Drafters (Leading Experts) of UPOV Test Guidelines”, Section “Test Guidelines for Discussion at the Technical Working Party” and agreed that draft Test Guidelines should not show revisions to previous versions and should not include comments, other than in an annex or separate document. It agreed that the Leading Expert should present a clear draft on the basis of the comments received by interested experts on the interim draft.

Date and place of the next session

85. At the invitation of the expert from the Republic of Korea, the TWO agreed to hold its forty-fifth session in Seoul, from August 6 to 10, 2012.

86. The TWO recalled that Australia and New Zealand had offered to jointly host, the TWO and TWF sessions, respectively, in April / May 2013 and that the TWO had expressed its support for that offer.

Future program

87. The TWO 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 (reports by the participants)
 - (b) Reports on developments within UPOV (report by the Office of the Union)
4. Molecular techniques:
 5. TGP documents
 6. Variety denominations
 7. Information and databases
 - (a) UPOV information databases
 - (b) Variety description databases
 - (c) Exchangeable software
 - (d) Electronic application systems
 8. Assessing uniformity by off-types on the basis of more than one sample or sub-samples
 9. Experiences with new types and species
 10. Proposals for Partial Revision/Corrections of Test Guidelines (if appropriate)
 11. Matters to be resolved concerning Test Guidelines adopted by the Technical Committee
 12. Discussion on draft Test Guidelines (Subgroups)
 13. Recommendations on draft Test Guidelines
 14. Guidance for drafters of Test Guidelines
 15. Date and place of next session
 16. Future program
 17. Adoption of the Report of the session (if time permits)
 18. Closing of the session

88. With regard to agenda item 3(a), the TWO agreed to invite experts to submit written reports to the Office of the Union in advance of the TWO session in order that a document could be prepared by the Office of the Union. In making that suggestion, the TWO noted that experts would still be invited to make a brief oral summary report at the session and would also be encouraged to make reports under agenda item 9. "Experiences with new types and species"

Technical visit

89. On Wednesday, November 9, 2011, the TWO visited the NISHI-NIHON Station, National Center for Seeds and Seedlings (NCSS), Incorporated Administrative Agency. The TWO was welcomed by Mr. Sanji Takemori, Manager of the NISHI-NIHON Station, who made a presentation on the Nishi-Nihon Station, which is attached as Annex III to this document.

80. The TWO adopted this report at the close of the session.

[Annexes follow]

TWO/44/25

ANNEX I
LIST OF PARTICIPANTS

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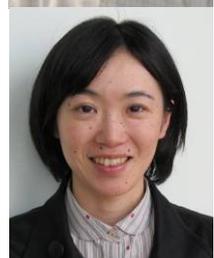
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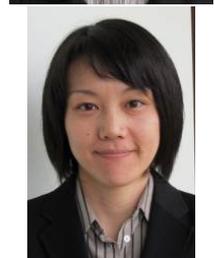
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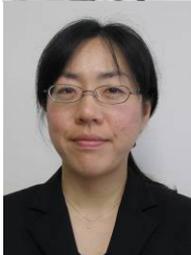
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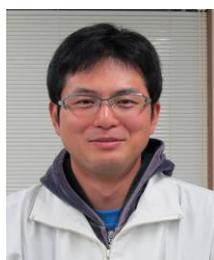
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IV. OFFICER

CHAIRPERSON



Andrea MENNE (Ms.), Chairperson

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[Annex II follows]

ANNEX II

WELCOME ADDRESS IN THE TWO OPENING SESSION

MR. JYUNYA ENDO, DIRECTOR,
NEW BUSINESS AND INTELLECTUAL PROPERTY DIVISION,
FOOD INDUSTRY AFFAIRS BUREAU,
MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES

Thank you, Chair.

I am Jyunya Endo, the Director of the New Business and Intellectual Property Division of the Ministry of Agriculture, Forestry and Fisheries. It is my great honor to make a remark, on behalf of Japanese government, for the opening of the 44th Session of the Technical Working Party for Ornamental Plants and Forest Trees (TWO).

First of all, I would like to express my hearty welcome to Japan, to all the participants to the TWO Session of this week. It's a great pressure to welcome 26 experts of ornamental plants and forest trees from 19 countries, here to the City of Fukuyama, for whom rose is designated as the City Flower, in the season when many ornamental plants are full in bloom. And I would like to express my sincere thanks to the UPOV Office for providing assistance to our staff for the preparation for this Session.

So, although I unfortunately was not able to attend the Council meeting last month, I heard from my staff that members of the Union have celebrated the 50th anniversary of UPOV and welcomed the 70th member, and that more than 10 thousand plant breeders' rights were newly granted last year, which hit the record level in the 50-year history of UPOV. The work of the TWPs has also made significant progress, and up to now, UPOV members have developed internationally-harmonized Test Guidelines for more than types of 260 plant.

In addition, we have also observed a rapid progress in cooperation among UPOV members and in support programs to prospective members of the Union. Currently, examination cooperation is in place between examination authorities with respect to more than 1,400 plant species, and such efforts are further growing. Also, if we are to focus only on here, the Asian region, various cooperative activities and technical assistance programs are conducted under the East-Asia PVP Forum with the participation of both members and non members of the Union, for the purpose of enhancing PVP system of the region as a whole.

Furthermore, in the last meeting of the Council, members have decided on the enhanced collaboration between UPOV and the International Treaty on Plant Genetic Resources (ITPGRFA), and Japan also welcomes the formation of the linkage between the two major international frameworks governing the process of plant breeding; access to plant genetic resources needed for plant breeding and protection of new varieties of plants developed as a result of breeding. Japan belatedly has initiated the process toward the ratification of ITPGRFA. And the National Center for Seed and Seedling is strengthening its function in relation to collection and management of genetic resources, in addition to DUS test for PVP, with the aim of realizing the one-stop public service regarding plant breeding.

On the other hand, the global situation may not allow for a solely optimistic outlook. In the face of rapid growth of global population, environmental changes and diversification of

markets, it would be of a greater importance to promote the breeding of elite varieties with specific characteristics regarding yield potential, resistance to biotic and abiotic stresses and marketability, and to enhance the PVP system as its prerequisite.

In addition, efforts should be accelerated also for the development of internationally-harmonized test guidelines. 260 TGs already developed by TWPs cover 90% of the applications for PVP filed globally. But, in light of diversification of cultivated plants, developments in breeding techniques and globalization of seed industry, internationally-harmonized TGs should cover a wider range of plant species.

With all this in mind, I recognize the work of the experts here for the development of internationally-harmonized TGs as truly important as the basis for tackling contemporary global issues. Our Ministry would be willing to reinforce our support to those important efforts of UPOV TWPs, taking our lead from the hosting of the sessions of TWO this week and TWF next week.

So, I would like to take this opportunity to present briefly on our latest efforts on PVP. Japan joined the Union in 1982 as its 16th member State, and acceded to its Act of 1991 in the year of its entry into force. During the 30 years since accession to UPOV, the annual number of application has increased consistently, and recently exceeds 1,000 every year with its peak of more than 1,400 in 2007, which is the third largest among the members of the Union. At the same time, we have made efforts for shortening the time period needed for examination through reinforcement of capacity for examination and enhancement of efficiency of the conduct of examination. Currently, on average, it takes the Japanese authority 2.5 years to complete the examination for novelty, DUS and variety denomination, for which we have set the target of further cutting 0.2 years to achieve an average of 2.3 years in 2014.

In addition, in order to promote international harmonization in examination and to provide the basis for cooperation with other members of the Union, our PVP Office is conducting a review and revision of our national test guidelines in accordance with the TGs developed by the TWPs. Many of our national TGs currently in force are those developed before the TWPs had started the efforts for developing UPOV TGs, and among them, 60 were fully revised to ensure the consistency with the corresponding UPOV TGs last year, and 51 were revised in 2009.

Last September, our Ministry experienced a major organizational reform. Our division was reorganized, from the “Intellectual Property Division” overseeing the policies relating to intellectual property with respect to agriculture, into the “New Business and Intellectual Property Division” with as many as 70 staff members, covering more widely the policies for developing new businesses utilizing intellectual property. In the area of intellectual property, the new division has also initiated the process for the consideration of the possibility of introducing Geographic Indications in Japan, and I recognize, has become one of the hot spots of our Ministry.

The New Business and Intellectual Property Division has largely strengthened the capacity for international affairs on PVP, too. On the 1st of October, Mr. Fujisada, who is going to join this Session from tomorrow, joined us as the Senior Advisor on PVP. We would be willing to further reinforce our efforts on international harmonization of examination and international cooperation in PVP.

Furthermore, taking the cue from the organizational reform of this time, we are also promoting policies for facilitating the utilization of plant breeders' rights as the driver of developing new businesses. A legislative measure was adopted in the so-called "Senary Industry Law," enacted this year, to reduce the amount of application fees and annual fees with respect to new varieties bred in accordance with the plan under the Act, in order to support new business activities utilizing elite varieties as their core. In addition, our new division has started the process of reviewing issues surrounding plant breeding, not only PVP but also collection and management of genetic resources and advances in breeding techniques, with the aim of developing a holistic strategy for further promoting the development, protection and utilization of new varieties of plants.

So, during the session, you are invited to a reception party hosted by our Ministry tomorrow evening, although, unfortunately, I will not be able to attend. And in the Wednesday afternoon, we will have a technical visit to the Nishinohon Station of NCSS, to present to you on-site the DUS tests of ornamental plants in Japan, followed by a BBQ party there. In addition, the exhibition of ornamental chrysanthemum is taking place in Fukuyama Castle nearby. Apart from the technical discussion, these would be a nice opportunity for you to experience Japanese ornamental plants, culture and foods, and I hope you enjoy them.

Then, I would like to finish my opening remark, hoping the 44th Session of the TWO will be in success and be fruitful in further promoting the international harmonization in PVP examination.

Thank you for your attention.

[Annex III follows]

西日本農場 NISHI-NIHON Station



独立行政法人 種苗管理センター
National Center for Seeds and Seedlings



History of NCSS

1986 : NCSS was established within MAFF by integration of

- 13 Foundation Seed Farms (potato, sugarcane, tea)
- 3 Seed Testing Laboratories(Branch offices of PVPSPD)

2001 : NCSS was separated from MAFF and reorganized into an Incorporated Administrative Agency. The first Medium-Term Plan (2001-2005) started.

2006 : The second Medium-Term Plan (2006-2010) started.

2011 : The third Medium-Term Plan (2011-2015) started.

PVPSPD: Plant Variety Protection and Seeds Division
MAFF: Ministry of Agriculture, Forestry and Fisheries

Main Duties of NCSS

— The only organization in Japan that performs comprehensive activities on seeds and seedlings —

1. DUS testing for variety registration

Under the UPOV Convention and the Plant Variety Protection and Seed Act, NCSS cultivates candidate varieties with similar existing varieties and evaluates the characteristics. The result of the testing shall be reported to the Minister of MAFF.



assessment

3. Seed inspection

Under the instruction of MAFF Minister, NCSS implements commercial seeds inspection on labeling and quality. ONCSS issues seed quality certificates as an accredited laboratory of ISTA based on the request of seed dealers.



Germination test Seed health test

2. Facilitation of Plant Variety Protection

Consultation service on Plant Variety Protection (PVP G-Men activities)
O Counseling and advice on infringement of PVR
OSimilarity test for variety identification: DNA analysis etc.
O Infringement records
ODisposition of evidence



consultation

4. Production of foundation seeds

NCSS produces and distributes disease-free and high quality foundation seeds of potato and sugarcane. Seed potato is the only designated plant for domestic quarantine.



Takahashi Potato Foundation Seeds Farm Virus-free seedlings

5. Conservation of plant genetic resources

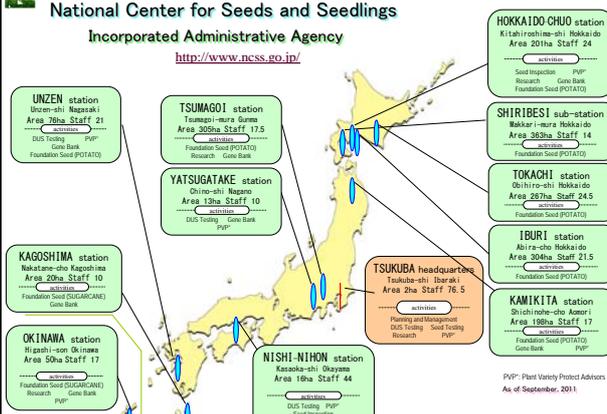
NCSS conserves vegetative crops (e.g. potatoes, fruit trees) as a sub-bank of "Gene Bank Project" in close cooperation with other NCSS activities.

6. Research and development

Research and development of new technologies to apply them to NCSS activities in cooperation with various research institutes

National Center for Seeds and Seedlings Incorporated Administrative Agency

<http://www.ncss.go.jp/>



PVP: Plant Variety Protection Affairs
As of September, 2011

DUS testing for variety registration

DUS testing and related activities of NCSS

Development of individual Draft Test Guidelines (TGs)

NCSS activities

On-site inspection
• Growing test
• Consideration of the Draft TGs by the Technical Working Parties
• Making Draft TGs

submit

Reference Collection

- OPreservation of seeds and vegetative propagation Plants :
 - Similar varieties
 - Example varieties
 - Standard varieties
- OConstructing and developing a Database

Manual for DUS tests

- OManual on cultivation techniques and relevant characteristics examination
- OManual on special characteristics: Ingredient test, Disease resistance test

Preservation of Registered Varieties
Seeds and Spawn of mushrooms of candidate varieties

submit

DUS Test procedures

1. Select Similar Varieties
2. Make Implementation Plan for DUS Test (location of the test, time limit for submitting the seedlings of candidate varieties, similar varieties, etc)
3. Make Work Plan for DUS Test
4. Conduct DUS Test
5. Make DUS Test Report

submit

PVP office (MAFF)

Application for PVR

Applicant (Breeder)

submit

Facilitation of Plant Variety Protection

PBR Holder

Detection Infringements

1st Secure the evidence

2nd Keeping the evidence

3rd Verify infringement

When your PBR is infringed, Please contact us.

PVP G-Men

Consultation Desk

Infringement Record

Deposition
Regeneration from a part of plant

Similarity Test
Characteristics Test
Growing Test
DNA Analysis

consult request request request

Location

Kasaoka-city, Okayama-ken

Nishi-Nihon station

Nishi-Nihon station is placed in Kasaoka city. Kasaoka city is in the southern western part of Okayama prefecture.

Weather is warm and small rain falls. Total rain falls and sunshine in a year is 1,163mm, and 2,001hr, respectively. Average temperature is 15.2°C.

Site area

Area [ha]	
Field	14.15
Cultivated land	11.85
Rain shield	1.22
Glass houses	1.08
Site of building	1.82
合計	15.77

Staff : 47 Part-time staff : 12

Legend:
 ■ Glass houses
 ■ Rain shield Plastic houses
 ■ FY '10 constructed

Organization and staff (as November '11)

Staff : 47, Part-time staff : 12

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  graph TD
    SM[Station manager] --- GAD[General affairs division : 4]
    SM --- BD[Business department (Director of department : 3)]
    SM --- AM[Assistant manager]
    BD --- DUS[DUS test : 28]
    BD --- PGR[Preservation of genetic resources : 4]
    BD --- SI[Seed inspection : 6]
    BD --- PVPI["(Plant Variety Protection in DUS & seed inspection : 3)"]
  
```

History of construction

- 1947**: CHIRAN (7 officers, 400 a) and KANAYA (7 officers, 260 a)
- 1951**: KANSAI (18 officers, 2 branches, 56.1 a)
- 1959**: KURUME (5 officers, 30 a)
- 2002**: Purchased OKAYAMA
- 2003**: NISHI-NIHON (21 officers, 1580 a) - includes '03 & '04 Green house etc, '06 & '07 Rain shed etc, '08 to '10 Rain shed etc
- 2007**: Acquisition of KANSAI and KURUME into NISHI-NIHON
- 2008**: Acquisition of CHIRAN into NISHI-NIHON
- 2009**: Acquisition of KANAYA into NISHI-NIHON

Contents of Works

- DUS test (Growing test) for plant varieties protection (Under the Plant Variety Protection and Seed Act)
- Protection of plant breeder's rights
- Inspection of seeds and seedlings (Designated seeds and seedlings systems as per the Plant Variety Protection and Seed Act)
- Preservation and re-multiplication of genetic resources
- Research and investigation on seed seedlings technology

DUS test for Garden balsam

Test for seed germination

1. DUS test (Growing test)

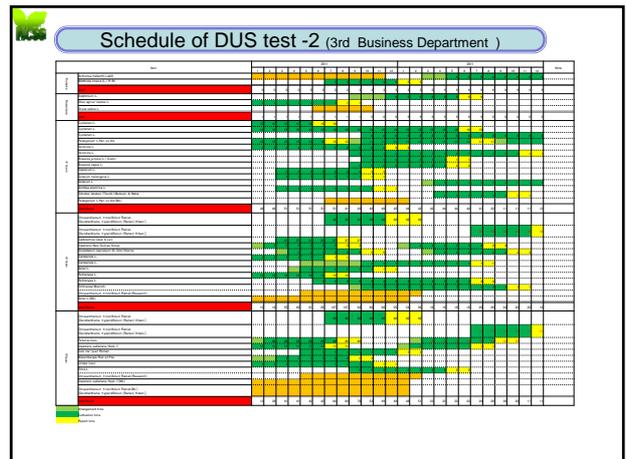
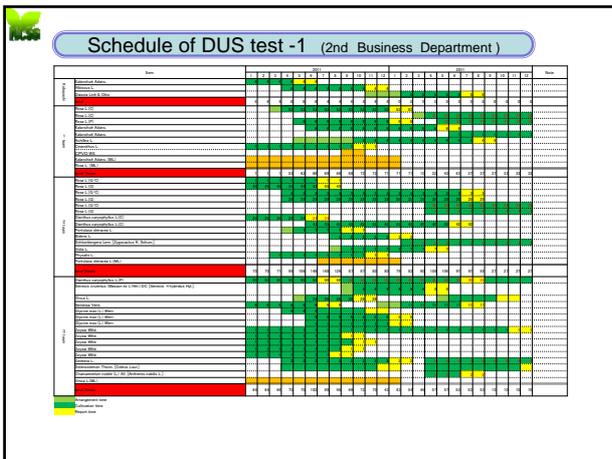
(1) Test design and test arrangement

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  graph TD
    HQ[Headquarters, NCSS] -- test design --> ST[Stations, NCSS]
    HQ -- arrangement --> ST
    ST -- test report --> HQ
    subgraph ST [Stations, NCSS]
      AT[Arrangement of the trial] --> C[Cultivation]
      C --> AS[Assessment]
      AS --> R[Report]
      AS --- AS_LIST["- distinctness  
- uniformity  
- stability"]
    end
  
```

test design

test report

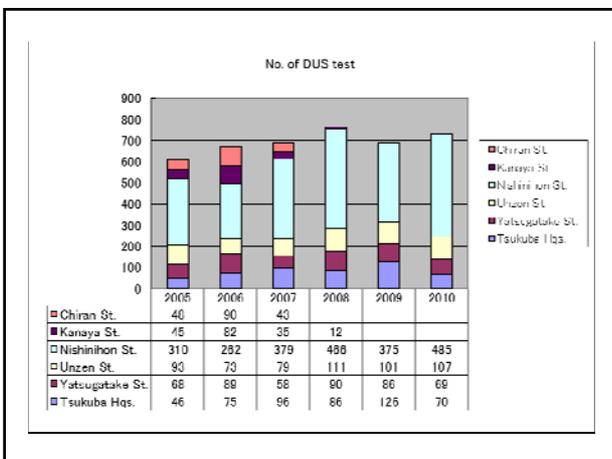


(2) Assessment in the field

- Assessment is conducted by 2 or more staffs
- Overview impression
- Uniformity of characteristics
- Observation and measurement of characteristics

(3) Assessment in the laboratory

- Detailed observation and measurement of characteristics



2. Protection of plant breeder's rights

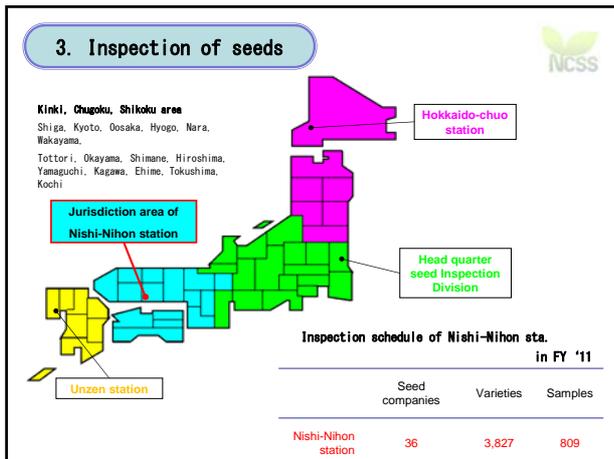
(1) The characteristics of similar varieties are compared with registered varieties by growing test or DNA analysis.

(2) Information about plant breeder's right are collected and announced.

In Nishi-Nihon station,

- 1 Examination of similarity of characteristics.
- 2 Counseling for breeders

Comparison of characteristics:
Observation and comparison of samples



4. Preservation and re-multiplication of genetic resources

Preservation of genetic resources of vegetative propagated plant genetic resources in FY2011

Kind of Plants	No. of varieties
Flowers and Ornamental plants	
Crysanthemum	484
Dendrobium	132
Azalea	234
Fruits tree	
Fig	50
Persimmon	125
Crops for special purpose	
Pyrethrum	42
Ramie	134
Taro (Colocasia esculenta)	110
Total	1,311

Information

Incorporated Administrative Agency
**National Center for Seeds and Seedlings,
Nishi-Nihon Station**

714-0054
Heisei-cho 91, Kasaoka-city, Okayama Pref

Phone : +81-865-69-6644
Fax : +81-865-66-0264

H. P. address : <http://www.ncss.go.jp>

2011. 11

UPOV-TWO
Welcom to Nishinihon st,

Thank you very much

LIST OF LEADING EXPERTS

**DRAFT TEST GUIDELINES TO BE SUBMITTED
TO THE TECHNICAL COMMITTEE IN 2012**

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

before December 5, 2011New Test Guidelines

Species	Basic Document	Leading expert(s)	Interested experts (States/Organizations) ¹
Echinacea (<i>Echinacea</i> Moench)	TG/ECNCE(proj.4) see agenda	Miss Scott (GB) / TWV Mrs. Borys (PL)	CA, CN, HU, NL, NZ, QZ, Office
Heuchera and Heucherella*	TG/HEUCH (proj.4)	Miss Scott (GB)	AU, CA, JP, NZ, QZ, Office
<i>Oncidium</i> Sw. *	TG/ONCID (proj.4)	Mr. Numaguchi (JP)	CN, KR, MX, NL, QZ, SG, Office
Tree Peony (<i>Paeonia</i> Sect. <i>Moutan</i>) *	TG/PAEON (proj.4)	Prof. Wang Lianying (Ms.) Ms. Yuan Tao, Mrs. Zhang Xiuxin (CN)	BG, JP, NL, UA, Office
Canna*	TG/CANNA (proj.8)	Mrs. Jourdan (FR)	AU, BG, CN, HU, MX, NL, NZ, QZ, UA, ZA, Office

Partial Revisions

Kalanchoe	TG/78/4, TWO/44/21		
New Guinea Impatiens	TG/196/2, TWO/44/22		

¹ for name of experts, see List of Participants

DRAFT TEST GUIDELINES TO BE DISCUSSED AT TWO/45

(* indicates possible final draft Test Guidelines)

**New draft to be submitted to the Office of the Union
before June 29, 2012**

(Guideline date for Subgroup draft to be circulated by Leading Expert: May 5, 2012

Guideline date for comments to Leading Expert by Subgroup: June 1, 2012

	Species	Basic Document	Leading expert(s)	Interested experts (States/Organizations) ²
1.	<i>Aglaonema</i> Schott.	TG/AGLOA(proj.2)	Mr. Numaguchi (JP)	AU, NL, NZ, QZ, ZA, Office
2.	<i>Aloe</i> L.	TG/ALOE(proj.2)	Mr. de Villiers (ZA)	AU, CN, DE, KE, MX, NL, Office
3.	* <i>Campanula</i> L.	TG/CAMPA(proj.2)	Miss Scott (GB)	CA, CN, DK, JP, NL, NZ, QZ, ZA, Office
4.	* <i>Cosmos</i> (<i>Cosmos Cav.</i>)	TG/COSMOS (proj.4)	Mr. Mikuni (JP)	GB, HU, KR, MX, NZ, RO, Office
5.	* <i>Dianella</i> (<i>Dianella Lam. ex Juss.</i>)	TG/DIANE(proj.3)	Mr. Hulse (AU)	GB, NZ, QZ, ZA, Office
6.	* <i>Dianthus</i> (Revision)	TG/25/9(proj.5)	Mr. de Greef (NL)	BG, CO, GB, IL, JP, KE, KR, MX, NZ, QZ, ZA, Office
7.	* <i>Eucalyptus</i> (part of genus only)	TG/EUCAL (proj.8)	Mrs. de Moraes Aviani (BR) / Mr. Luo Jianzhong (CN)	AU, FR, IL, KE, QZ, ZA, Office
8.	* <i>Gladiolus</i> (Revision)	TG/108/4(proj.6)	Mr. de Greef (NL)	BG, CN, CO, IL, JP, KR, MX, PL, QZ, RO, UA, ZA, Office
9.	* <i>Hebe</i> Comm. ex Juss.	TG/HEBE(proj.3)	Mr. Barnaby (NZ)	AU, CA, DE, DK, GB, NZ, QZ, ZA, Office
10.	* <i>Hosta</i>	TG/HOSTA (proj.6)	Mr. de Greef (NL)	CN, GB, HU, JP, KR, QZ, UA, ZA, Office
11.	Lilac (<i>Syringa</i> L.)	TG/LILAC(proj.3)	Dr. Cui Hongxia (Ms.) (CN)	DE, FR, GB, JP, KR, PL, QZ, UA, Office
12.	* <i>Lobelia erinus</i> L.	TG/LOBEL(proj.2)	Mrs. Ashley Balchin (CA)	DE, JP, ZA, Office
13.	* <i>Lomandra</i> Labill.	TG/LOMAN(proj.3)	Mr. Hulse (AU)	GB, NZ, QZ, ZA, Office
14.	* <i>Mandevilla</i>	TG/MANDE (proj.4)	Mr. de Greef (NL)	AU, IL, JP, KE, NZ, QZ, ZA, Office

² for name of experts, see List of Participants

	Species	Basic Document	Leading expert(s)	Interested experts (States/Organizations) ²
15.	* <i>Osteospermum</i> (Revision)	TG/176/4(proj.2)	Ms. Menne (DE)	AU, CA, GB, JP, NL, QZ, ZA, Office
16.	* <i>Phalaenopsis</i> (Revision)	TG/213/2(proj.5)	Mr. de Greef (NL)	BG, BR, CN, KR, JP, MX, QZ, SG, Office
17.	<i>Zinnia</i> L.	TG/ZINNIA(proj.2)	Mr. Mejia Muñoz (MX)	CN, GB, IL, JP, Office
18.	<i>Callistephus</i> <i>chinensis</i> (L.) Nees (China Aster)	New	Mr. Ohno (JP)	CO, DE, GB, MX, Office

Possible 2013 (Subgroup draft only in 2012)

	<i>Grevillea</i> (<i>Grevillea</i> R. Br. corr. R. Br.)	New	Mr. N. Hulse (AU)	KE, NZ, Office
	Regal Pelargonium (<i>Pelargonium</i> × <i>domesticum</i> L. H. Bailey) (Revision)	TG/109/3	Ms. A. Menne (DE)	AU, CA, JP, MX, QZ, ZA, Office
	<i>Strelitzia</i> Ait. (Bird of Paradise Flower)	New	Mr. P. Maluku (KE)	CO, JP, MX, NZ, ZA, Office

[End of Annex IV and of document]