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| International Union for the Protection of New Varieties of Plants |  |

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| Technical Working Party for Ornamental Plants and Forest Trees  Fiftieth Session Victoria, British Columbia, Canada, September 11 to 15, 2017 | TWO/50/14  Original: English  Date: September 15, 2017 |

Report

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

Disclaimer: this document does not represent UPOV policies or guidance

Opening of the session

The Technical Working Party for Ornamental Plants and Forest Trees (TWO) held its fiftieth session in Victoria, British Columbia, Canada, from September 11 to 15, 2017. The list of participants is reproduced in Annex I to this report.

The session was opened by Mr. Kenji Numaguchi (Japan), Chairman of the TWO, who welcomed the participants and thanked Canada for hosting the TWO session.

The TWO was welcomed by Mr. Anthony Parker, Commissioner, Plant Breeders' Rights Office, Canadian Food Inspection Agency (CFIA).

The TWO received a presentation by Mr. Parker on the Canadian ornamental sector and on the Plant Breeders' Rights Office. A copy of the presentation is provided in Annex II to this report.

## Adoption of the agenda

The TWO adopted the agenda as reproduced in document TWO/50/1 Rev.

Short Reports on Developments in Plant Variety Protection

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

The TWO noted the information on developments in plant variety protection from members and observers provided in document TWO/50/3 Prov. The TWO noted that reports submitted to the Office of the Union after August 31, 2017, would be included in the final version of document TWO/50/3.

The TWO noted the report and presentation prepared by an expert from the Netherlands on “Increasing participation of new members of the Union in the work of the TC and TWPs”, reproduced in document [TWP/1/19](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_9.pdf).

The TWO agreed to propose that the Technical Committee (TC) explore possibilities to improve communication as a means of increasing the participation of experts currently not attending TWP sessions, such as the establishment of video-links for the discussion of certain draft Test Guidelines. The TWO agreed to propose that another seminar on DUS examination be held in Geneva to raise awareness of the work of the TC and the TWPs for participants usually attending other meetings of UPOV bodies. The TWO also agreed to propose the allocation of an experienced UPOV member to act as a mentor to new UPOV members.

### (b) Reports on developments within UPOV

The TWO received a presentation from the Office of the Union on latest developments within UPOV, a copy of which is provided in document TWO/50/2.

## Organization of the UPOV sessions

The TWO considered document [TWP/1/24](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_24.pdf).

The TWO noted that the Council had decided:

1. to organize a single set of sessions of the bodies that meet in Geneva from 2018, in the period of October/November;
2. that the Enlarged Editorial Committee (TC-EDC) would meet twice a year, once in the period March/April and once in conjunction with the TC sessions later in the year;
3. that Test Guidelines that could not be prepared in time for adoption by the TC at its session could be adopted by correspondence on the basis of the recommendations by the TC-EDC;
4. to adopt the following contingency measures for 2018:
5. for Test Guidelines proposed for adoption in 2018, to use a procedure for adoption by correspondence as follows:

* Draft Test Guidelines would be prepared as agreed by the TWPs and circulated with the recommendations of the TC-EDC,
* In the absence of any objections the Test Guidelines would be adopted;
* In the case of objections, the objections would be referred to the relevant TWP for consideration at their 2018 session, and the Test Guidelines considered for adoption by the TC at its fifty-fourth session, in 2018,
* TC-EDC to meet on March 26 and 27, 2018, and in conjunction with the TC at its fifty‑fourth session, in 2018, if necessary;

1. for TGP documents, to invite the TC-EDC to consolidate comments made by the TWPs at their sessions in 2017 and, in the absence of consensus between the TWPs, formulate  proposals for further consideration by the TWPs at their sessions in 2018;
2. all other matters to be considered at the fifty-fourth session of the TC in 2018 in the normal way.

The TWO noted that the TC had agreed to propose that the meetings of the BMT be held on an annual basis.

The TWO noted that the TC had agreed to propose that consideration be given to organizing the sessions of the TWC and BMT back-to-back in the same location to facilitate exchange of information.

The TWO noted that the TC had agreed that the preparatory workshops in 2018 should be organized on the Monday/Tuesday of the TWPs sessions to encourage participation by all TWP participants.

The TWO noted that from 2017, for certain documents, the TWPs would be invited to consider the same document on a particular topic, using a common document code.

## TGP documents

The TWO considered documents TWP/1/1 Rev. and TWO/50/11.

The TWO noted the revisions to documents TGP/7, TGP/8 and TGP/14 agreed by the TC, as set out in document [TWP/1/1 Rev.](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_1_rev.pdf), paragraphs 6 to 14 and Annexes I and II.

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

### TGP/5:  Section 1: Model Administrative Agreement for International Cooperation in the Testing of Varieties

#### Confidentiality of molecular information

The TWO considered document [TWP/1/9](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_9.pdf).

The TWO considered the proposed guidance on confidentiality of molecular information for inclusion in document TGP/5, Section 1, as set out in document TWP/1/9, paragraph 4, and agreed with the proposal by the TWA and the TWV that Article 4(2) should read as follows:

“(2) Except with the specific authorization of the Receiving Authority and the applicant, the Executing Authority shall refrain from passing on to a third person any material, including DNA, or molecular information of the varieties for which testing has been requested.”

The TWO noted that applications for plant variety protection and related information could be subject to freedom of information measures under national legislation in some members.

### TGP/7: Development of Test Guidelines

#### Duration of DUS tests

The TWO considered document [TWP/1/11](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_11.pdf).

The TWO considered the proposed revision of document TGP/7 to clarify the duration of DUS testing, as set out in document TWP/1/11, paragraph 11.

The TWO agreed with the TWA and the TWV that the term “normally” was preferred and should be used throughout the guidance in ASW 2.

The TWO agreed with the TWA and the TWV that the current standard wording in Test Guidelines allowed the examination of a candidate variety to be terminated earlier in case the differences observed between varieties were so clear that more than one growing cycle was not necessary.

The TWO agreed that it should also be possible to terminate the examination of a candidate variety before the normal duration for reasons other than having achieved a conclusion on DUS examination, such as when there were problems with the plant material submitted.

The TWO agreed that the term “growing cycle” was not precise for explaining the duration of DUS examination as it referred primarily to the life cycle of a crop. The TWO agreed to consider the possibility of replacing the term “growing cycle” by “testing cycle” in ASW 2(a) and (b) to clarify that the duration of DUS examination was related to the period of testing of a variety, regardless of the number of life cycles the crop would have completed during DUS examination.

The TWO welcomed the offer by an expert from the European Union to propose definitions for growing cycle and testing cycle for ornamental plants to be presented at its next session.

#### Characteristics which only apply to certain varieties

The TWO considered document [TWP/1/12](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_12.pdf).

The TWO noted that the scope of some Test Guidelines for ornamental plants covered an entire plant genus and some characteristics would only be applicable to particular groups of crops. The TWO agreed with the TWA and the TWV on the possibility to exclude varieties from observation on the basis of a preceding pseudo-qualitative or quantitative characteristic under particular circumstances, such as the impossibility to describe an organ that was not present in a variety or when variation existed only within a particular group of a crop.

The TWO agreed with the TWV that the approach of excluding varieties from observation on the basis of preceding PQ or QN characteristics should be used carefully and based on experience and discussions during the drafting of Test Guidelines, in order to be fully aware on the consequences.

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

#### The Combined-Over-Years Uniformity Criterion (COYU)

The TWO noted the report on developments concerning the improved method of calculation of the Combined-Over-Years Uniformity Criterion (COYU), as set out in document [TWP/1/13](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_13.pdf). The TWO noted that the expert from the United Kingdom would report on the progress of development of probability levels for the improved method of calculation of COYU to the TWC, at its thirty-fifth session.

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

The TWO considered document [TWP/1/15](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_15.pdf).

The TWO considered the updated version of the “Comparison of methods used for producing variety descriptions: Results of the practical exercise” provided by experts from France, as set out in document TWP/1/15, Annex II.

The TWO noted that the TC had agreed to invite the experts from France to check the highlighted values in the table in document TWP/1/15, Annex II “Comparison of methods used for producing variety descriptions: results of the practical exercise”, paragraph 6, for possible data inconsistency. The TWO noted that the expert from France planned to provide further information to the TWC, at its thirty-fifth session.

The TWO noted that the TC had agreed to invite participants in the practical exercise to provide a short description of their methods to transform measurements into notes and provide examples when these methods might be used, such as for particular characteristics, types of propagation or different situations, on the basis of the short descriptions provided by France and the United Kingdom, as set out in document TWP/1/15, Annexes III to V.

### TGP/10: Examining Uniformity

#### Assessing Uniformity by Off-Types on the Basis of More than One Growing Cycle or on the Basis of Sub-Samples

The TWO considered document TWP/1/17 Rev.

The TWO considered the draft guidance presented in Annexes I and II of document TWP/1/17 Rev. as amended by the TWPs, at their sessions in 2016, for inclusion in a future revision of document TGP/10.

The TWO considered information provided by members of the Union on the criteria for selecting the most suitable approach for the assessment of off-types on different types of crops.

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

#### Illustrations for shape and ratio characteristics

The TWO considered document [TWP/1/18](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_18.pdf).

The TWO agreed that guidance on providing illustrations for shape and ratio characteristics in document TGP/14 should be amended to clarify that the base of a structure was at the point of attachment.

The TWO noted the examples of illustrations for shape and ratio characteristics provided in document TGP/14 and agreed that no further examples were necessary to improve the guidance. The TWO noted that characteristics with very few states of expression could be displayed in a single row as in the first two examples in document TWP/1/18, provided that the basis for the different states of expression was clear to readers.

#### UPOV Color Groups

The TWO considered documents [TWO/50/4](http://www.upov.int/edocs/mdocs/upov/en/two_50/two_50_4.pdf), TWO/50/4 Add. and TWO/50/5.

The TWO agreed to propose the revision of the list of UPOV Color Groups in document TGP/14 “Glossary of Terms used in UPOV Documents” on the basis of the color groups set out in document TWO/50/4, paragraph 8, subject to confirmation of color groups 69 to 71 (light, medium and dark grey) by the expert from Germany.

The TWO noted that editorial changes would be required in document TGP/14 to reflect the introduction of the revised list of UPOV Color Groups.

The TWO agreed that document TGP/14 should be revised to include the following guidance on the factors to be considered for creating color groups for grouping of varieties and organizing the growing trial:

“Factors to be considered for creating color groups

“When using the color of a plant part for grouping of varieties, a very clear and large difference between the colors is required. However, the color groups are also used in the Technical Questionnaire for applicants who have no RHS Colour Chart. Therefore the groups need to be small enough so that applicants are able to give an adequate state of expression for the characteristic.

“The following factors have to be considered when creating color groups for grouping:

1. range of variation of the color of the plant part within the species
2. difference between colors for varieties to be considered clearly distinguishable
3. possible influence of the environment on the color of the plant part.

“Depending on the species and the plant part observed the color groups for grouping can be different. Examples for color groups in grouping characteristics of different Test Guidelines are listed in the following table.

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| --- | --- | --- | --- | --- |
| Test Guideline | **Campanula** (TG/305/1) | **Hosta** (TG/299/1) | **Cordyline** (TG/317/1) | **Osteospermum** (TG/175/5) |
| Characteristic | Corolla: main color of inner side | Leaf blade: color covering the largest surface area | Leaf: secondary color | Ray floret: main color of middle part |
| Color groups  for grouping | white | white | white | white |
| pink | light yellow | yellow | yellow |
|  | purple red | medium yellow | green | orange |
|  | purple | dark yellow | red | pink |
|  | blue | light green | purple | red |
|  |  | medium green | brown | purple |
|  |  | dark green | blackish | violet |
|  |  | blue green |  |  |

“It should be emphasized that not all groups are necessarily clearly distinct from each other when information is used that does not come from the same source (same location, same observer) and cannot always be used to exclude varieties from the trial. E.g. in Cordyline for the characteristic ‘Leaf: secondary color’ it might not be possible to clearly distinguish between ‘brown’ and ‘blackish’ when looking at photos on the internet or in a plant catalogue.”

## Case study on minimum distances between vegetatively reproduced ornamental and fruit varieties

The TWO considered document TWO/50/8 and received a presentation by an expert from the Netherlands.

The TWO noted the results of the case study provided in document TWO/50/8 and agreed that further discussions were necessary on the basis of living plants and real cases of possible lack of distinctness for improving mutual understanding.

The TWO noted that one of the outcomes of the case study was a request for clarification on whether characteristics used for uniformity and stability could differ from those used for distinctness.

The TWO agreed that breeders’ organizations should ensure stronger involvement of breeders in discussions for drafting and revising Test Guidelines and noted that the results of the case study would be reported to the TC, at its fifty-fourth session.

The TWO agreed to invite presentations at its next session to explain the approach used by breeders of vegetatively reproduced ornamental varieties for defining the importance of a characteristic to be used in the examination of distinctness.

## Report on court cases dealing with technical matters

The TWO noted document TWO/50/9 and received a presentation by an expert from the European Union.

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

The TWO considered document TWO/50/12 and received a presentation by an expert from the United Kingdom.

The TWO recalled the invitation by the Royal Horticultural Society (RHS) to suggest missing colors from the 6th Edition of the RHS Colour Charts based on practical experience. The TWO agreed that substantial gaps identified by experts from the members of the Union should be sent to the expert from the United Kingdom by August 31, 2018, along with the full name of the plant and part trying to color match and the nearest match on the RHS 6th Edition Colour Charts.

## Characteristic expression between years or environments for ornamental varieties

The TWO considered document [TWO/50/13](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_18.pdf) and received a presentation on “Using variety descriptions as an examination tool: Interpreting variety variation” by an expert from New Zealand, a copy of which would be provided as an addendum to document TWO/50/13.

The TWO agreed that additional information accompanying the variety description such as the example varieties used could be relevant to interpret test results and the environmental influence over certain characteristics.

The TWO noted document TGP/5 Section 6 “UPOV report on technical examination and UPOV variety description” required some information on the growing trial and agreed that Authorities exchanging DUS test reports should be able to obtain additional information upon request.

The TWO noted that, in Australia, information on varieties excluded from the growing trial was usually recorded.

## Variety denominations

The TWO considered document [TWP/1/6](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_6.pdf).

The TWO noted the developments concerning a possible revision of document UPOV/INF/12 “Explanatory Notes on Variety Denominations under the UPOV Convention”, as set out in document TWP/1/6, paragraphs 5 to 12.

The TWO noted the developments concerning a UPOV similarity search tool for variety denomination purposes, as set out in document TWP/1/6, paragraphs 13 to 20.

The TWO noted the developments concerning the possible expansion of the content of the PLUTO Database, as set out in document TWP/1/6, paragraphs 21 to 26.

The TWO noted the developments concerning non‑acceptable terms, as set out in document TWP/1/6, paragraphs 27 to 32.

The TWO noted the agenda of the fourth meeting of the Working Group on Variety Denominations (WG‑DEN), as set out in document TWP/1/6, and noted that the meeting would be held in Geneva, on October 27, 2017.

The TWO noted that variety denominations were particularly relevant for ornamental varieties and noted that it was difficult to identify varieties on the market due to the use of commercial names other than the variety denomination. The TWO noted that in some cases the same variety could be commercialized with different trade names by different growers within a same territory.

The TWO agreed to encourage participants providing information to support the work of the WG-DEN and to complete the survey on re-use of variety denominations by the deadline of September 15, 2017.

## Molecular Techniques

The TWO considered document [TWP/1/7](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_7.pdf).

### Developments in the TC, the TWPs and the BMT in 2016

The TWO noted the report on developments in the TC, the TWPs and the BMT, as set out in document TWP/1/7, paragraphs 5 to 24.

### OECD/UPOV/ISTA/AOSA Joint Workshop on Molecular Techniques

The TWO noted that a Joint OECD/UPOV/ISTA/AOSA Workshop on Biochemical and Molecular Methods had been held in Paris on June 8, 2016, and that the recommendations of the Joint OECD/UPOV/ISTA/AOSA Workshop, as reproduced below, had been approved by the Annual Meeting of the OECD Seed Schemes, held in Paris on June 9 and 10, 2016:

“(a) To develop a joint document explaining the principal features (e.g. DUS, variety identification, variety purity, etc.) of the systems of OECD, UPOV, AOSA and ISTA and, for mutual understanding, to repeat the joint workshop at relevant meetings of the OECD and ISTA;

1. To carry out a joint inventory by UPOV, OECD, AOSA and ISTA of the use of molecular marker techniques, by crop, with a view to developing a document containing that information. The OECD will contribute to the document by sharing the ongoing list of molecular techniques used by National Designated Authorities (NDAs) and continuously collected by the Secretariat;
2. To develop a list of terms and their definitions as used by OECD, UPOV, AOSA and ISTA and to make an attempt to harmonize these;
3. To consider organizing another similar workshop in three years’ time; and
4. To consider replacing the term used in the OECD Seed Schemes for the status of DNA based techniques from “internationally validated” to another term such as “internationally harmonized.”

### Presentation of information on the situation in UPOV with regard to the use of molecular techniques

The TWO noted that the following question and answer (FAQ) concerning the information on the situation in UPOV with regard to the use of molecular techniques for a wider audience, including the public in general, had been adopted by the Council, at its fiftieth ordinary session held in Geneva on October 28, 2016:

“Is it possible to obtain protection of a variety on the basis of its DNA-profile?

“For a variety to be protected, it needs to be clearly distinguishable from all existing varieties on the basis of characteristics that are physically expressed, e.g. plant height, time of flowering, fruit color, disease resistance etc. The DNA-profile is not the basis for obtaining the protection of a variety, although this information may be used as supporting information.

“A more detailed explanation is provided in the FAQ ‘Does UPOV allow molecular techniques (DNA profiles) in the examination of Distinctness, Uniformity and Stability (‘DUS’)?

“See also: ‘Wh at are the requirements for protecting a new plant variety?’ ”

The TWO noted that the TC, at its session in 2017, had agreed that possible future collaboration between UPOV, the Organization for Economic Co-operation and Development (OECD) and the International Seed Testing Association (ISTA) might include the harmonization of terms and methodologies used for different crops and the possible development of standards, after agreement by those organizations.

The TWO noted that a first practical workshop “DNA Techniques and Variety Identification” had been held in Roelofarendsveen, Netherlands, from May 8 to 10, 2017, and that a second practical workshop was planned for September 20 to 22, 2017.

The TWO noted that the TC had agreed that UPOV and the OECD should consider making progress in collaboration on the matters above if ISTA was unable to participate in the near future.

The TWO noted that the TC had agreed to propose that the meetings of the BMT be held on an annual basis and that consideration be given to organizing the sessions of the TWC and BMT back-to-back in the same location to facilitate exchange of information.

## Guidance for drafters of Test Guidelines

The TWO considered document [TWP/1/8](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_8.pdf).

The TWO noted the items resolved in Version 1.0 of the web-based TG template, as set out in document TWP/1/8, paragraph 18.

The TWO noted that a general revision of the software code was underway to eliminate remaining reported malfunctioning issues and to stabilize the system.

The TWO noted the issues to be considered for inclusion in Version 2 of the web-based TG Template, as set out in document TWP/1/8, paragraph 21.

The TWO noted the issues on the web-based TG template agreed by the TC, at its fifty-third session, as set out in document TWP/1/8, paragraphs 25 to 27.

The TWO agreed that explanations covering all characteristics should be able to be displayed before Chapter 8.1 “Explanations covering several characteristics” without a note in the Table of Chars, as set out in document TWP/1/8, paragraphs 28 and 29.

The TWO noted that training on the use of the web-based TG template would be offered to the TWPs at their sessions in 2017, during the preparatory workshops of the sessions and during discussions on agenda item “guidance for drafters of Test Guidelines”. The TWO agreed to propose that practical training on drafting Test Guidelines be offered during the Preparatory Workshops for the TWPs in 2018.

The TWO received a demonstration by the Office of the Union on the use of the web-based TG Template for Leading and Interested Experts.

The TWO noted that feedback and questions could be provided directly to the Office of the Union via the web-based TG template using “Feedback” button on the dashboard.

## Procedure for partial revision of UPOV Test Guidelines

The TWO considered document [TWP/1/20](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_20.pdf).

The TWO noted the procedures for notification of new characteristics or states of expression in document TGP/5, Section 10: “Notification of additional characteristics and states of expression”.

The TWO noted that the TC had encouraged authorities to notify the use of new characteristics or states expression using the procedure established in document TGP/5, Section 10.

The TWO noted the concern expressed by the European Union that the notification of additional states of expression by different authorities for the same characteristic could lead to inconsistent variety descriptions in the case that an identical note was attributed to different states of expression.

## Number of growing cycles in DUS examination

The TWO considered document [TWP/1/21](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_21.pdf).

The TWO noted the presentations made to the TWPs at their sessions in 2016, simulating the impact of using different numbers of growing cycles on DUS decisions using actual data, as set out in the Annexes to document TWP/1/21.

The TWO noted that the TC had agreed that the number of growing cycles for DUS examination should be the minimum necessary for a robust DUS decision and the establishment of a reliable variety description.

The TWO noted that the TC had agreed that it was not appropriate to generalize that ornamental varieties should be examined in a single growing trial while other types of crops should be examined in two growing cycles. It noted further that the TC had agreed that the typical number of growing cycles should be established on a crop‑by-crop basis.

## Development of calculated thresholds for excluding varieties of common knowledge from the second growing cycle when COYD is used

The TWO considered document [TWP/1/22](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_22.pdf).

The TWO noted that further developments on calculated thresholds for excluding varieties of common knowledge from the second growing cycle when COYD was used would be reported to the TWC at its thirty‑fifth session, to be held in 2017.

## Statistical methods for visually observed characteristics

The TWO considered document [TWP/1/23](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_23.pdf).

The TWO noted that an expert from France would make a report to the TWC, at its thirty-fifth session, on the study to develop software to implement the method developed by experts from Denmark and Poland.

The TWO noted that the TC, at its fifty-third session, had agreed that the appropriate naming and drafting of guidance on the method developed by experts from Denmark and Poland should be considered once further experience had been acquired and software had been made available to facilitate its use in DUS examination.

The TWO noted that China had made a presentation at the thirty-fourth session of the TWC to describe the statistical methods used in the DUSTC software package for the analysis of distinctness and uniformity.

## Image analysis

The TWO considered document [TWP/1/10](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_10.pdf) and noted the invitation of China for experts to join its project for the improvement of software for image analysis and the plans of the TWC to discuss image analysis during its thirty-fifth session.

## Management of variety collections

The TWO considered document [TWP/1/14](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_14.pdf) and noted the developments reported to the TWC, at its thirty‑fourth session in 2016, and the TC, at its fifty-third session in 2017, on management of variety collections.

## Software for statistical analysis

The TWO considered document [TWP/1/16](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_16.pdf) and noted the developments concerning software for statistical analysis in DUS examination, as set out in document TWP/1/16, paragraphs 3 to 7.

The TWO noted that the ring-test comparing three different software packages for COYD using the statistical packages developed in China (DUSTC), Germany (SAS) and the United Kingdom (DUST) had produced the same result.

## Experiences with new types and species

The TWO received a presentation on “Difficulties in the application of TG/296/1 Eucalyptus” by an expert from the European Union, as reproduced in document [TWO/50/10](http://www.upov.int/edocs/mdocs/upov/en/two_50/two_50_10.pdf). The TWO noted the practical difficulties reported with the scope of the Test Guidelines and total duration of tests. The TWO noted that the European Union would develop regional test guidelines for the crop focusing on the assessment of juvenile characteristics.

The TWO suggested consideration of the following possibilities :

* to assess older plant material at a testing site in cooperation with the applicant;
* to use biochemical and molecular techniques to complement DUS information;
* to use examination offices outside of the European Union.

An expert from Australia reported on an application for a new hybrid variety of Lavender with large bracts along the full length of the spike. The TWO agreed that the experts from Australia, France and New Zealand should discuss the need for the establishment of new inflorescence characteristics and report to the TWO at its fifty-first session.

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

### Test Guidelines requiring approval of the TWO by correspondence

On the basis of the recommendations by the Enlarged Editorial Committee (TC-EDC), at its meetings on January 11 and 12, 2017, and April 3 and 4, 2017, the TC adopted the Test Guidelines for Abelia, Aglaonema, Freesia and Petunia subject to approval by correspondence by the TWO of the following issues (see document TC/53/31 “Report”, Annex II):

#### Abelia (*Abelia* R. Br.)

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| 4.2 | to be numbered 4.2.1 and add new paragraph as 4.2.2 (see document TGP/7/5):  “These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5 “Testing Uniformity” should be followed.” |
| Char. 34 | to add explanation (to add limits within the scale of notes)  *Leading Expert: to add example variety “Bridal Bouquet” for state 3 “strong”* |

(see documents [TG/ABELI(PROJ.6)](http://upov.int/meetings/en/doc_details.jsp?meeting_id=42485&doc_id=368582) and [TC/53/31](http://www.upov.int/edocs/mdocs/upov/en/tc_53/tc_53_31.pdf))

#### Aglaonema (*Aglaonema* Schott.)

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| 4.2 | to be numbered 4.2.1 and add new paragraph as 4.2.2 (see document TGP/7/5):  “These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5 “Testing Uniformity” should be followed.”  *to be approved by TWO by correspondence* |

(see documents [TG/AGLAO(PROJ.9)](http://upov.int/meetings/en/doc_details.jsp?meeting_id=42485&doc_id=368696) and [TC/53/31](http://www.upov.int/edocs/mdocs/upov/en/tc_53/tc_53_31.pdf))

#### Freesia (*Freesia* Eckl. *ex* Klatt)

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| --- | --- |
| 4.2 | to be numbered 4.2.1 and add new paragraph as 4.2.2 (see document TGP/7/5):  “These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5 “Testing Uniformity” should be followed.”  *to be approved by TWO by correspondence* |

(see documents [TG/27/7(PROJ.5)](http://upov.int/meetings/en/doc_details.jsp?meeting_id=42485&doc_id=368604) and [TC/53/31](http://www.upov.int/edocs/mdocs/upov/en/tc_53/tc_53_31.pdf))

#### Petunia (*Petunia* Juss.; x*Petchoa* J. M. H. Shaw)

|  |  |
| --- | --- |
| 4.2 | to be numbered 4.2.1 and add new paragraph as 4.2.2 (see document TGP/7/5):  “These Test Guidelines have been developed for the examination of vegetatively propagated and self-pollinated seed propagated varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5 “Testing Uniformity” should be followed.”  *to be approved by TWO by correspondence* |

(see documents [TG/212/2(PROJ.5)](http://upov.int/meetings/en/doc_details.jsp?meeting_id=42485&doc_id=368587) and [TC/53/31](http://www.upov.int/edocs/mdocs/upov/en/tc_53/tc_53_31.pdf))

The TWO noted that no objections had been received by the deadline for comments and that the Test Guidelines for Abelia, Aglaonema, Freesia and Petunia had, therefore, been adopted by the TC, with the amendments indicated above.

## Discussion on draft Test Guidelines

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

The subgroup discussed document TG/29/8(proj.2), presented by Mr. Henk de Greef (Netherlands) on behalf of Ms. Katie de Pont (Netherlands), and agreed the following:

|  |  |
| --- | --- |
| 1. | to read “These Test Guidelines apply to all vegetatively propagated varieties of Alstroemeria L.” |
| Char. 3 | to delete (+) |
| Char. 4 | state 4 to read “throughout” |
| Char. 5 | to add (+) and illustration |
| Char. 7 | to be indicated only as VG |
| Char. 8 | * to check whether to move “(silvery colored stripe excluded)” to Ad. 8 * to add asterisk (grouping characteristic) * to read “… colors on outer side …” and improve explanation/illustrations |
| Char. 9 | * to check whether to replace “silvery” * to read “…. stripes” |
| Char. 13 | to check whether “purple pink” in new color group (see TWO/50/4) |
| Char. 17 | to read “Flower: height” |
| Char. 18 | to replace “moderately” by “medium” in states 1 and 4 |
| Char. 23 | to read: “Outer tepal: main color of top zone of inner side (green area excluded)” |
| Char. 25 | to read: “Outer tepal: main color of basal zone of inner side (green area excluded)” |
| Char. 27 | to check whether to add explanation of marginal zone |
| Char. 28 | * to read "Inner lateral tepal:…” * to replace “moderately” by “medium” in states 2 and 4 |
| Char. 30 | to add (+) and explanation on “(tip excluded)” [Ad. 30] |
| Char. 41 | * to be indicated as QN * to read “Filament: spots” * to use a 5-notes scale (to add to have medium as middle point) |
| Char. 42 | to check whether better illustrations to be provided |
| 8.1(a) | to read “Unless otherwise indicated, all observations should be made on the first fully developed stem when 50% of the flowers are open.” (to use standard wording) |
| 8.1(b) | to read "… should be made on leaves from the middle third…” |
| 8.1(c) | to remove red underline from text in illustrations |
| 8.1(d) | to read “…, the darker color …” |
| Ad.2 | to read "…should be assessed at…” |
| Ad.3 | to be deleted (illustration of color) |
| Ad.7 | * to read: “Leaf blade: attitude” * to improve picture of state 5 |
| Ad.10 | to precise indication of end point or ray (beginning of corolla?) |
| Ad.17 | to change color of arrows to increase contrast (red on pink) |
| Ad.21 | states 3 and 7 to read small and large |
| 9. | to read “Grunert, Ch., …”  and to specify number of pages for |
| TQ 4.2 | * to add in vitro propagation * to add seed propagated |
| TQ 5.1 | to include even notes and states of expression |
| TQ 1.1 | *to check whether possible to add a second box to read “Alstroemeria L. and its hybrids”* |

*Berberis (*Berberis *L.)*

The subgroup discussed document TG/68/4(proj.1), presented by Mr. Kévin Daubigney (France), and agreed the following:

|  |  |
| --- | --- |
| Char. 1 | to read “Plant: growth habit” with states “upright”; “semi-upright”; “rounded”; “spreading” |
| Char. 2 | to read “Plant: branch attitude” with states “erect”; “semi erect”; “horizontal”; “spreading” |
| Char. 3 | to add states 1 and 9 and example varieties |
| Char. 5 | to be deleted |
| Char. 6, 7, 13, 15, 24, 28, 33, 35, 36 | to be indicated as PQ |
| Char. 6, 7, 8, 9, 13, 28, 32, 33 | to be observed as VG |
| Char. 6, 7 | to invert order of states “yellow” and “green” (green first) |
| Char. 7 | to add state 3 “orange” with example variety and renumber |
| Char. 8 | * to read “Stem: type of spine” * to delete state 1 “absent” |
| Char. 9 | * to read “Stem: spine length” * to have sates 1 to 5 |
| Char. 10 | * to read: “Plant: type” and move as char. 1 * to be indicated as QN * to add (+) and explanation on time of observation * to be added to grouping characteristics * to correct spelling in state 1 to read "deciduous” |
| Char. 11 | to read “Leaf: length” |
| Char. 13 | state 2 to read “circular” |
| Char. 16 | * to check whether RHS Colour chart is applicable on green leaved varieties * to be added to grouping characteristics |
| Char. 17 | to invert order of states “yellow” and “green” (green first) |
| Char. 18 | state 1 “none” to be deleted |
| Char. 19, 21 | to invert order of states “yellow” and “green” (green first) |
| Char. 20, 22 | to be deleted |
| Char. 24 | * to add (+) and illustrations * state 1 to read “absent or slightly curved”, state 2 “moderately curved”, state 3 “revolute” |
| Char. 25 | * to be indicated as QN * to correct spelling “undulation” |
| Char. 26 | * to be indicated as MG * to read “Stem: leaves per node” * to be moved before characteristic 10 |
| Char. 27 | state 1 to read “solitary” |
| Char. 31 | to replace indication of seasons (e.g. by number of flower bearing periods per growing cycle or other) and to check whether flowers appear on different woods |
| Char. 33 | to have states ovate, oblong and circular |
| Char. 34 | to be indicated as QN with states 1 “absent or weak”, 2 “medium” and 3 “strong” |
| Char. 35 | to read “Fruit: color of skin” |
| Char. 36 | * to add (+) and illustrations * to read “Fruit: shape of apex” |
| 8.1 | to check whether to add (+) and illustrations |
| Ad.15 | to improve illustrations (e.g. use photographs from Ad. 14) |
| Ad.16 | explanation on main color to be consolidated with 8.1(e) |
| Ad.30 | to check whether to provide better illustration |
| Ad.35 | to read “… after removing wax …” |

*Calendula* (Calendula *L.*)

The subgroup discussed document TG/CALEN(proj.2), presented by Mr. Koji Nakanishi (Japan), and agreed the following:

|  |  |
| --- | --- |
| Cover page | to include common name in Spanish “Calendula; Mercadela” |
| 4.2.2 | to read: “…for cross-pollinated seed-propagated varieties…” |
| 4.2.3 | to be deleted |
| 4.2.4 | to add: “These Test Guidelines have been developed for the examination of cross-pollinated seed propagated and vegetatively propagated varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5 “Testing Uniformity” should be followed.” |
| Char. 2 | to check whether to add missing example varieties |
| Char. 3 | to add missing example varieties |
| Char. 4 | to be indicated as MS/VG |
| Char. 11 | * to read “Branch: number of flower heads” * to add illustration |
| Char. 15 | to check whether to add missing example varieties |
| Char. 16 | * to check whether to add missing example varieties * to add “Only varieties with Flower head: type: semi-double and double:…” |
| Char. 18, 19 | to check whether to add missing example varieties |
| Char. 20 | to add (+) and illustrations of states “low” and “high” |
| New Char. 21 | to read “Ray floret: cross-section” with explanation to be observed at mid-point and states of expression “moderately concave; weakly concave; flat; weakly convex; moderately convex” |
| Char. 33 | to check whether state “brown” should be placed after “dark purple” |
| 8.1(a) | to read "Observations should be made…” (delete “Unless otherwise indicated all”) |
| 8.1(b) | to delete “typical” |
| 8.1(c) | to delete “the typical” |
| Ad.1 | to delete photographs and keep illustrations only |
| Ad.8 | to check whether to have state “oblong” as note (2) and state “oblanceolate” as note (3) |
| Ad.11 | to read "…assessed including…” (no comma) “…open flowers and faded…” (no comma) and “Observations…” (spelling) |
| 9. | to check whether to add literature |
| TQ 1. | to add another box to indicate species name |
| 5.2, 5.4 | to add even notes and states of expression |
| 6. | to replace “Flower head: type” with “Plant: height” (short / medium) |

### \*Coleus (Plectranthus scutellarioides (L.) R. Br.)

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

|  |  |
| --- | --- |
| 4.2.2 | to read "These Test Guidelines have been developed for the examination of cross-pollinated seed propagated varieties and vegetatively propagated varieties. For varieties with …” |
|  |  |
| 5.3(a), (b) | to invert the order of presenting color groups 2 and 3 to have following sequence: white>green>yellow green…  to be included in TQ 5 |
| Char. 2 | to add example variety “Highway mosaic” (note 3) |
| Char. 3 | to add example variety “Splash Yellow” (note 5) |
| Char. 5 | to delete (\*) |
| Char. 6 | * to replace example variety “COL-06-076C” by "Carefree White" * to add example variety for note (5) “Wizard Scarlet” |
| Char. 7 | to add example variety “Glecom Orange Marmalade” (note 7) |
| Char. 10 | to be deleted (illustration in Ad. to be re-used in Char. 12) |
| Char. 12 | * to delete “absent” from state (1) to read “very shallow” * to display state (9) ‘very deep” and use illustration from Char. 10 |
| Char. 37 | * to delete (\*) * to add example variety “Wizard Scarlet” (note 1); “Zigzag” note (2); “UF0843” note (3) |
| 8.1(c) | to be replaced by 8.1 (e) |
| 8.1(e) | state (1) to read “single colored or none” |
| Ad.5 | in diagram to read “Leaf blade: width” (in diagram word “width” missing) |
| Ad.10 | to use illustration for state (9) of Char. “Depth of incisions of margin” |
| TQ. 4.2.1 | to add (b) Cross-pollination |
| 4.2.2 | to be displayed as 4.2.1 (reverse order of presentation) |
| 4.2.4 | to be renumbered 4.2.3 |
| 5. | to include characteristics 1, 2 and 12 as grouping characteristics in section 5.3 |
| 5.2 | to add even states (full scale) |
| 5.3 | to add even states and full scale |
| 6. | to replace “deep” with “medium” |

### Coreopsis (Coreopsis L.)

The subgroup discussed document TG/COREO(proj.1), presented by Ms. Hilary Papworth (United Kingdom), and agreed the following:

|  |  |
| --- | --- |
| Cover page | to add “Coreopsis” as English common name and reflect in TQ.1.2 |
| 5.3 | to add char. 16 “leaflet…” |
| ToC | General: to add example varieties |
| Char. 1 | to check whether semi-spreading is a useful state of expression |
| Char. 5 | * states of expression to read “simple; simple and divided; divided” (delete “predominant”) * to add explanation in Ad. 5 that some varieties have both types of leaves and the assessment of the characteristic should be made on the predominant type of leaf and that state “simple and divided” has no predominant type or similar amount of both types of leaves. |
| Char. 20 | * state 1 to read “below and at same level” * to check whether state 4 to be renamed “far above” |
| New char. 29 | to describe distribution of main color and re-number subsequence accordingly |
| Char. 29 | * to delete “the” in states 2 to 13 and 15 * to delete “in” in states 4 to 13 |
| Char 31, 34 | to replace “striped” with “flushed” |
| Char 38 | to be deleted |
| Char 41 | to reduce scale to 5 states of expression (1 to 5) |
| Char 42 | to check whether needed (covered by 41?) |
| Char 43 | state 5 to read “blackish purple” |
| 8.1(a) | to be moved to general paragraph under 8.1 |
| 8.1(d) | to read “…on the inner surface” |
| Ad.8 | to insert “For varieties with simple and divided leaves, the simple ones should be assessed.” |
| Ad.17 | to insert “only observed on divided leaves” |
| Ad.20 | to improve illustrations of states 2 and 3 |
| Ad.34 | to correct cross-reference (Ad. 31) |
| Ad.40 | to improve illustrations |

### Gazania (Gazania Gaertn.)

The subgroup discussed document TG/GAZAN(proj.2), presented by Ms. Hilary Papworth (United Kingdom) on behalf of Mr. Adriaan de Villiers (South Africa), and agreed the following:

|  |  |
| --- | --- |
| General | to remove all references to seed-propagated varieties |
| 2.3 | to delete “Seed-propagated varieties: sufficient seed to produce 40 plants” |
| 4.2.2 | to read “These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5 “Testing Uniformity” should be followed |
| 5.3(e) | to be deleted |
| 5.3(f) | to be deleted |
| 5.3(g) | to check whether to be added to TQ 5 (a new functionality in the TG template will be deployed soon to address this situation) |
| Char. 4 | to have states “few” to “many” |
| Char. 7 | to delete (+) (there is no Ad.7) |
| Char. 21, 23, 25, 27, 37 | to correct formatting to read “RHS Colour Chart (indicate reference number)” on same cell |
| Char. 23, 25, 27 | to read “Ray floret: color two”  to delete “(if present)” |
| Char. 24, 26, 28 | to add state 1 “none” |
| Char. 29 | * to explain “at mid-point” in Ad. 29 * to read “Ray floret: profile in cross section” |
| Char. 29, 30, 31 | to move before char 21 |
| Char. 32 | * to add (c) and (d) * to be combined with Char. 33 and to have states “none”, “white”, “yellow” * to be indicated as PQ |
| Char. 34 | to read “Only varieties with disc type: Daisy: Disc: color” |
| Char. 36 | to add (c) |
| 8.1(a) | to delete “typical” (2x) |
| Ad.1 | to add additional explanation to the different states of expression |
| Ad. 4 | to add illustrations of example varieties |
| Ad.16 | to complete scale and to replace photographs with illustrations |
| Ad. 29 | * to add instruction “to be observed at mid-point” * to read “Ray floret: profile in cross section” |
| Ad.31 | to add illustration for note 1 “acuminate” |
| 8.3 | to be moved to 8.1 |
| 5.2 | to add even states |
| 7.3 | to be moved to section 5 when the template allows |

*\*Grevillea* (Grevillea *R. Br. Corr. R. Br.*)

The subgroup discussed document TG/GREVI(proj.6), presented by Mr. Nik Hulse (Australia) and agreed the following:

|  |  |
| --- | --- |
| 4.1.4 | to read “… to be made on 9 plants…” |
| 5.3 | to delete the color groups listed (they are the same as in Char. 49 and in TQ 5) |
| Char. 4, 5 | to use the following order of colors: green>yellow green>orange>purple… |
| Char. 6, 7, 11 | to be deleted |
| Char. 8 | to have states “erect; semi erect; horizontal” (to deleted other states) and use notes 1 to 3 |
| Char. 12 | to read “Leaf: depth of sinus of primary division” (to delete rest of header) |
|  | * to read "Only varieties with Leaf: type of division of blade: entire:…” * to be moved after Char. 10 |
| Char. 14 | to delete even states and renumber erect, semi erect and horizontal notes 1 to 3 |
| Char. 14 to 19 | to delete “Only varieties with divided leaves:” |
| Char. 28 | * to delete state (2) and move example variety to state (1) erect * to merge states (3) and (4) to read (2) semi erect * to merge states (5) and (6) to become (3) horizontal * to merge states from (7) to (9) to become (4) drooping |
| Char. 39 to 61 | to add (f) |
| 8.1 | to provide original illustrations to the Office (improved image quality in final document to TC) |
| 8.1(d) | at the broadest part. |
| Ad.9 | to adjust font size |
| Ad.45 | to delete “perianth” from illustration on “perianth limb” |
| Ad.48 | to correct cross-reference to Ad. 47 |
| TQ 6. | to replace “spreading” with “semi-upright” |

*\*Guzmania (*Guzmania *Ruiz et Pav.) (Revision)*

The subgroup discussed document TG/182/4(proj.3), presented by Mr. Henk de Greef (Netherlands), and agreed the following:

|  |  |
| --- | --- |
| 4.1.4 | * to read “… to be examined” * to reduce number of plants to be observed for distinctness from 20 to 19 and from 40 to 38 |
| 4.2.3 | to read “… 2 off-types are allowed.” |
| 5.3 | to add color groups (white, yellow, orange, red, purple red, purple) |
| Char. 2 | states 3 and 7 to read “narrow” and “broad” |
| Char. 9, 12 | state “grey green” to read “medium blue green” |
| Char. 9 to 11 | to check whether to read “... of inner side” |
| Char. 10 | * to delete “(d)” * to display state (9) “very strong” without example variety |
| Char. 11 | * to delete “(d)” * to delete (+) and explanation |
| Char. 13 | to display state (9) without example varieties |
| Char. 23, 25 | to capitalize first letter on Characteristic header |
| Char. 24 | to add example variety “Rana” for state “long” |
| Char. 26 | to add (e) |
| Char. 30, 31, 32, 40, 41, 42 | to be observed as “VG” |
| Char. 34 | to adjust formatting of header (remove extra space after “Floral”) |
| 8.1(a) | to read “…be made when the flowers in the middle third of the flowering part are open.” |
| 8.1(c) | to read “Observations on the bract...” “…largest bract in the middle…” |
| Ad.24 | to replace “flowering bract” with “floral bract” |
| Ad.36 | to read "… when more than…” |
| Ad.37 | to read "See Ad. 36” |
| 9. | to add the total number of pages to reference “Rauh, W.” |
| 4.2.1 | * to read “(b) Hybrid” * to delete “(i) Population” * to read “(c) Other (please provide details) |
| 5.1 | to add all states of expression |
| 5.2, 5.4, 5.5 | as in section 5.3 (d) for grouping characteristics |

*\*Hardy Geranium (*Geranium *L.)*

The subgroup discussed document TG/GERAN(proj.3), presented by Ms. Hilary Papworth (United Kingdom) on behalf of Ms. Elizabeth Scott (United Kingdom), and agreed the following:

|  |  |
| --- | --- |
| Cover page | to add “Hardy Geranium” to common name |
| 4.2.1 | to add “These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5 “Testing Uniformity” should be followed.” |
| 5.3(c) | to add color group “whitish” |
| 5.3(f) | Gr. 4 to read “dark pink” |
| Char. 1 | to have states “upright; semi-upright; spreading; horizontal” |
| Char. 10, 13 | * to be moved before Char. 9 and 12, respectively * to state “none” to be deleted from “distribution” characteristics and included in Chars. 9 and 12 (secondary and tertiary colors) |
| Char. 26 | * to have state “green” as note (1) and “yellow green” as note (2) * to revise order of colors (e.g. to have purple states of expression before brown |
| Char. 28 | to capitalize “Inflorescence” |
| Char. 29 | state 4 to read “downwards” (to delete “slightly”) |
| Char. 32 | to read “…flower type: double…” (add semi-colon after “type”) |
| Char. 33 | to add new explanation in 8.1 applicable to Chars 33 to 48 to read “In double flowered varieties to be observed on the outer whorl of petals” |
| 8.1(a) | to become a standalone paragraph under 8 |
| 8.1(b) | to delete “Observations are not made on the basal leaves of the plant.” |
| 8.1(c) | to read “…, the darker color …” |
| 8.1(f) | to read “…the inner surface…, the darker color…” |
| Ad. 1 | * to delete illustration for state (3) and reorder * to provide original illustrations to the UPOV Office * to correct “upright” without capital letter |
| Ad.5 | to read “Observe the leaf…” |
| Ad.6 | to read “Observe at …” |
| Ad.29 | state (4) to read “downwards” (to delete “slightly”) |
| Ad.30 | to read “…has petaloids in addition to…” |
| Ad.34 | to remove underlining from states of expression 4 and 5 |
| Ad.43 | to correct cross-reference (to be renumbered Ad. 40 |
| Ad.45 | to read “See Ad. 42” |
| Ad.47, Ad.48 | to read: “Only observe this characteristic when characteristic 46 is observed to be weak or higher, and only to apply to the conspicuous part of the vein.” |
| TQ 1.1 | * to be renamed “Genus” * to add additional box for indication of “Species” |
| TQ 1.2 | to replace “Crane’s Bill” by “Hardy Geranium” |
| TQ 4.2.1 | to add boxes for “Seed-propagated” varieties |
| TQ 5.1 | to display example varieties in Char. 1 |
| TQ 5.2 | to include even states of expression and respective notes |
| TQ 5.6 | state 4 to read “downwards” (to delete “slightly”) |

### Hydrangea (Hydrangea L.)

The subgroup discussed document TG/133/5(proj.2), presented by Mr. Bernard Le Pautremat and Mr. Kévin Daubigney (France) on behalf of Ms. Françoise Jourdan (France), and agreed the following:

|  |  |
| --- | --- |
| 2.2 | to read “The material is to be supplied in the form of plants capable of expressing all characteristics in the first growing cycle.” |
| 3.1.1 | to read “… normally be one…” |
| 3.1.2 | to be deleted |
| 3.1.3 | to be deleted |
| 4.1.6 | to be deleted |
| 4.2.1 | to add: “These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5 “Testing Uniformity” should be followed.” |
| 5.3(c), (e) | to check whether to be removed (color groups – already appear in T.o.C.) |
| Char. 2 | * to add example varieties for all species * to provide explanation on the different groups of example varieties * to underline first part of characteristic header |
| Char. 5 | to add state of expression “green and black” (5) and add example variety “Napo” |
| Char. 6 | * to check whether to split into two characteristics (1) QL absent/present and (2) QN number of lenticels * state 4 to read “many” |
| Char. 7 | example variety for state 2 to read “Bergfink” |
| Char. 8 | to delete (\*) |
| Char. 9, 10 | to be indicated as MS/VG |
| Char. 14 | example variety for state 2 to read “Hamburg” |
| Char. 15 | to add note (c) |
| Char. 16 | to add note (d) |
| Char. 17 | * to have state of expression “yellow” as note (5) (after green) * to add note (d) * to add new state of expression “purple” * to delete state “not visible” |
| Char. 18 | * to add state “absent” * to add states “purple”; “green” * to deleted state “white and yellow” * to delete “only” in states “white only” and “yellow only” * to add note (d) |
| Char. 19 | * to check whether to add (\*) (grouping characteristic) * to read “Leaf blade: area of secondary color” with states “absent or very small” to “very large” |
| Char. 24 | example variety for state 4 to read “H2002” |
| Char. 25 to 44 | to add explanation on when to be observed and which inflorescence to be observed (primary inflorescence, main stem?) |
| Char. 26 | to read “Inflorescence: width” |
| Char. 27 | to be indicated as QN |
| Char. 28 | to underline introductory part of the characteristic header |
| Char. 29 | * to delete restriction (the characteristic should be observed for all varieties) * to add photographs to illustrate flattened type inflorescence density |
| Char. 30 | to be indicated as MG/MS |
| Char. 31 | to delete (+) and explanation |
| Char. 31, 32, 33, 34, 35 | to read “Sterile flower:” (singular) |
| Char. 34 | to replace example varieties |
| Char. 37 | state (1) to read “absent or weak” |
| Char. 40 | to be deleted (information provided in subsequent characteristic) |
| Char. 41 | to be indicated with (\*) and to be included as grouping characteristic |
| Char. 42 | * state “absent” to read “none” * to delete (+) and illustration * to delete state “blue” |
| Char. 43 | to be deleted |
| New char. 43 | to read “Sterile flower: distribution of secondary color or inner side of sepal” with states “distal part” “marginal zone” “central zone” “at base” and “ throughout” |
| New char. 44 | to read: “Sterile flower: pattern of secondary color of inner side” with states “solid; flush; and irregular” |
| Char. 45 | to be deleted |
| Char. 46 | to check characteristic (improve explanation on characteristic expression) |
| Char. 47 | * to check characteristic header according to the different “types” to be created * to read “… red color at aging” (replace “senescence”) |
| 8.1(d) | * 1st paragraph to be deleted * 2nd to read “… the darker color…” |
| Ad.4 | to improve indication of fasciation in the photograph |
| Ad. 19 | to check whether to be deleted (not appropriate to use photographs to illustrate intensity of colors) |
| Ad. 23 | to check spelling “petiole” |
| Ad. 28 | to replace photographs by illustrations |
| Ad. 30 | to read “The observations should…” |
| Ad. 31 | to be deleted |
| Ad. 33 | state (3) to read “emarginated” (as in Char. 33) |
| Ad. 35 | to improve illustration for state (2) |
| Ad. 42 | to be deleted (not suitable to illustrate colors) |
| TQ. 1.2 | to add name box for species |
| 5.6 | to be deleted |
| 5.8 | to be deleted |
| 5.13 | to be deleted |

*Kangaroo Paw (*Anigozanthos *Labill.) (Revision)*

The subgroup discussed document TG/175/4(proj.1), presented by Mr. Nik Hulse (Australia), and agreed the following:

|  |  |
| --- | --- |
| Cover page | * to add in box “and Macropidia (Hook) Druce” * to add under alternative names “*Macropidia fuliginosa* – Black Kangaroo Paw” |
| 2.3 | to read “10 plants” |
| 5.3 | to add char. 10, 18, 23 as grouping characteristics |
| ToC | to check currency of example varieties |
| Char. 1, 3, 4, 12, 15, 16 | to add MG to method of observation |
| Char. 5 | * to check whether to improve wording for state 3 * to check whether to add illustrations |
| Char. 6 | to check whether to add illustrations |
| Char. 7 | * state “grey green” should be ordered after “purplish green” * to add (+) and explanation |
| Char. 8 | to reduce to 3 states (1, 2, 3) |
| Char. 9 | states to read “absent or weak, medium, strong” |
| Char. 10 | to be combined with Char. 11 and have states “absent (1), primary (2), secondary (3), tertiary (4)” |
| Char. 12 | to add (+) and explanation |
| Char. 14 | to complete header with standard text “(indicate reference number)” |
| Char. 15, 16 | to add (+) and illustration |
| Char. 18 | * to order states of expression pink>red (swap current order) * to add state “black” |
| Char. 19 | to read “Perianth tube: hair: number of colors” |
| Char. 20 | * to read “Perianth tube: hairs: color of upper third” * to complete header with standard text “(indicate reference number)” |
| Char. 21 | * to read “Perianth tube: hairs: color of middle third” * to replace with color groups |
| Char. 22 | * to add notes 3, 2, 1 and reverse the order of states of expression * to check whether 3 states are sufficient |
| Char. 24 | to be indicated as QL |
| Char. 25 | to complete header with standard text “(indicate reference number)” |
| 8. | to add “8. Explanations on the Table of Characteristics *8.1 Explanations covering several characteristics* All observations should be made at the time of full flowering.”  and re-number Explanations covering individual characteristics to 8.2 |
| Ad.11 | to check whether to improve illustrations |
| Ad. 24 | to improve illustrations |
| 9. | * to add reference for Macropidia * to update reference to Australian Cultivar … * to read “Marchant et al., …” |
| TQ 4. | to be completed |
| TQ 5. | * to add Char. 10, 18 and 23 as grouping characteristics in section 5.3 * to include full states of expression |
| TQ 6. | to be completed |
| TQ 7.3 | to add photographs |

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

The subgroup discussed document TG/95/4(proj.1), presented by Mr. Bernard Le Pautremat and Mr. Kévin Daubigney (France) on behalf of Ms. Françoise Jourdan (France), and agreed the following:

|  |  |
| --- | --- |
| 3.4, 4.2.2 | to adjust number of plants to 6 and use standard wording |
| 4.1.4 | to use standard wording from TG template (“…one off—type is allowed…”) |
| 5.3(c) | to add color group |
| Char.1 | * to read “Time of bud burst * to move before Char. 34 * to add states of expression: 1 to 9 or 1 to 5 |
| Char.2 | * state 2 to read “semi-upright” * to have notes 1 to 3 |
| Char.3 | to be moved as Char. 1 |
| Char.7 | to have states low to high |
| Char.9 | to be indicated as QN |
| Char.10, Char.11 | to be combined  to read “Leaf blade: anthocyanin coloration” with states “absent”, “along margin” “central” and “throughout” |
| New char. 14 | to describe variegation (with JP) |
| Char.14 | to have states 1 to 5 |
| Char.15 | to read “Plant: number of thyrses” or “Plant: number of flowers per thyrse” |
| Char.17 | to have scale from short to long with notes (revert current order) |
| New char. | New characteristic 20 to read “Flower bud: extent of anthocyanin coloration” with 3 states low, medium, high, and renumber subsequent characteristic |
| Char.20 | * to correct spelling “anthocyanin” * to check whether 9 states is appropriate |
| Char.21 | to reduce scale to 1, 2, 3 |
| Char.22, 23, 24 | to read “… inner side …” |
| Char.26 | to use scale weak, medium, strong |
| Char.29 | state 3 to read “large” |
| Char.30 | to check whether other states of expression between ellipsoid and globular |
| Char.32, 33 | to check whether to be indicated as QN and have states “absent or very shallow”, “shallow”, “deep” |
| Char.35 | to be deleted |
| 8.1 | to specify time of assessment of characteristics |
| Ad.2 | to have states 3 upright, 5 semi-upright, 7 spreading |
| TQ 5.1 | to reflect change in ToC |
| TQ 5.2, 5.7 | to add all states of expression |

*Oncidium (*Oncidium *Sw*.; xOncidesa *Hort*.; xIonocidium *Hort*.; xZelenkocidium *J.M.H.Shaw) (Partial Revision)* (document TG/283/1, TWO/50/6)

The subgroup discussed document TWO/50/6, presented by Mr. Kenji Numaguchi (Japan) and agreed that no further changes were necessary to the document.

*Phalaenopsis (*Phalaenopsis *Bl.) (Partial Revision)* (document TG/213/2)

The subgroup discussed document TWO/50/7, presented by Mr. Henk de Greef (Netherlands) and agreed the following:

|  |  |
| --- | --- |
| new 1 “Lip: shape” | to read “Lip: fusion of lobes to apical lip” with states either  - free (1); slightly (2); moderately (3); strongly (4); completely fused (5)  or  - free; up to a quarter of length; up to half the length; up to three quarters of length; full length |
| Ad. new 1 | to add indication of apical/lateral lobes in variety with fused lobes (arrows |
| new 2 “Lip: shape of pseudopeloria” | to read: “Lip: type of fused lobes” (to check whether “extension/prolongation”) |
| Char. 70 | to add new state 7 “obovate” (F: obovale, G: verkehrt eiförmig, S: oboval) with example variety “Nobby’s Amy” and renumber subsequent states to 8 and 9 |
| Char. 76 | to delete repeated example variety “SOGO F-1016” (in both states of expression where it appears) |

*Ranunculus (*Ranunculus *L.)*

The subgroup discussed document TG/RANUN(proj.1), presented by Mr. Tetsuya Takahashi (Japan), and agreed the following:

|  |  |
| --- | --- |
| 4.2.2 | to confirm uniformity standards according to the types of propagation considered (seed-propagated varieties?) |
| 4.2.3 | to add:  “These Test Guidelines have been developed for the examination of vegetatively propagated varieties and seed-propagated self-pollinated varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5 “Testing Uniformity” should be followed.” |
| 5.3 | to add Char. 16 “Flower: type” as grouping characteristic |
| ToC | to check whether to suggest as method of observation those currently being used by the Leading Expert and Interested Experts |
| Char. 15 | state 1 to read “very thin” |
| Char. 16 | * to add (+) and explanation * to check whether to add state of expression “semi-double” |
| Char. 18 | to use scale from short to tall |
| Char. 19 | to restrict observations to semi-double and double flowers |
| Char. 20 | to read “center” (US spelling) |
| Char. 23 | * to check whether to add (+) and illustrations for states low and high * to add example varieties |
| Ad. 1 | to read: “… top of the tallest flower.” |
| TQ 1 | * to add box for “species name” * to delete 1.2.1 and 1.2.2 |
| TQ 4.2.2(a) | to read “corms” |
| TQ 5 | * to add Char. 25 (used as grouping characteristic in section 5.3) * to add 5.4, 5.5 and 5.8 as grouping characteristics in section 5.3) * to add even notes and states of expression in 5.1 and 5.6 |
| 5.8(26) | state “other” to be ordered last in list after state “basal quarter” |
| 6. | to provide example characteristic and states of expression |
| 7. | to add standard text in case a photograph of the variety is required |

## Information and databases

### Variety description databases

The TWO considered document [TWP/1/2](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_2.pdf).

The TWO noted the information on presentations on databases made at the BMT, TWC and TWV at their sessions in 2016, and that the expert from Germany had offered to report on the potato database currently under development within European Union to the TWV, at its session in 2017.

The TWO noted that the TC had agreed that UPOV might be able to facilitate cooperation in the establishment of common databases containing molecular information by the provision of training and sharing of Information. It further noted that the TC had agreed on the value of inviting the contribution of breeders and academic institutions to UPOV’s work on the constitution and maintenance of databases.

The TWO noted that the TC had agreed to request the Office of the Union to collect data on existing databases with morphological and/or molecular data. The TWO noted that information collected could be included in the GENIE database, subject to the availability of resources for the modification of the GENIE database.

### Electronic application systems

The TWO considered document [TWP/1/3](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_3.pdf) and noted the developments concerning the development of an electronic application form.

The TWO received a presentation on the “UPOV PBR Application Tool - Electronic Application Form (EAF) - Report to Technical Working Parties” by the Office of the Union.

The TWO noted that Version 1 of the EAF had been available online since January 2017 (see <http://www.upov.int/upoveaf>), and that Version 1.1 had been released in July 2017, offering the possibility for users to submit PBR application data to more authorities. The TWO noted that Version 2.0 would cover more authorities and more crops.

The TWO agreed on the need to communicate more about the UPOV PBR application tool and to invite the authorities in charge of DUS examination to publicize the EAF, using the available communication materials and tools (e.g. leaflet in different languages, posters, providing a link to the EAF on their websites).

The TWO noted that the EAF could be used by different Authorities as their own electronic application form and agreed that utilizing the EAF in that way could save the cost of developing similar electronic forms for domestic use. The TWO noted the potential advantage of establishing a “subscription rate” for UPOV members that wished to use the EAF as their own electronic application form in exchange for supporting the cost of the EAF service for breeders.

### UPOV information databases

The TWO considered document [TWP/1/4](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_4.pdf).

#### GENIE database

The TWO noted that a specification document explaining the data structure and functions of the GENIE database was being developed by the Office of the Union in order that IT-related maintenance could be provided in the future.

#### UPOV code system

The TWO noted that:

1. 173 new UPOV codes had been created in 2016 and that a total of 8,149 UPOV codes were included in the GENIE database.
2. the Office of the Union had received a request from the European Commission to create new UPOV codes for 191 forest-tree species in international trade under the OECD certification schemes.
3. the TC, at its fifty-third session, had agreed that it would not be appropriate to revise the Guide to the UPOV Code System in relation to the principal botanical name for inter-generic and inter-specific hybrids, as set out in document TWP/1/4, paragraph 18.
4. the TC had noted that, in order to avoid any misinterpretation, the CPVO would make it clear that the information provided to the Office of the Union would be in alphabetical order.

The TWO noted the invitation to check the amendments to UPOV codes, the new UPOV codes or new information added for existing UPOV codes, and the UPOV codes used in the PLUTO database for the first time, which were provided in Annex II of document TWP/1/4. The TWO noted that comments were to be submitted to the Office of the Union by October 31, 2017.

#### PLUTO database

The TWO noted the summary of contributions to the PLUTO database from 2013 to 2016 and the current situation of members of the Union on data contribution, as presented in document TWP/1/4, Annex I.

The TWO noted that the WG-DEN, at its third meeting, held in Geneva on April 7, 2017, had agreed that agenda item 5 “Expansion of the content of the PLUTO database” would be considered at a later meeting on the basis of the document presented at its second meeting.

### Exchange and use of software and equipment

The TWO considered document [TWP/1/5](http://www.upov.int/edocs/mdocs/upov/en/twa_46/twp_1_5.pdf).

The TWO noted that the Council, at its fiftieth ordinary session, held in Geneva, on October 28, 2016, had adopted document UPOV/INF/16/6 “Exchangeable Software”, with the deletion of the SIVAVE software.

The TWO noted that the TC, at its fifty-third session, had agreed that the proposed revision of document UPOV/INF/16/6 in conjunction with the comments of the TC, as set out in Annex I of document TWP/1/5, be reported to the CAJ at its seventy-fourth session, on October 23 and 24, 2017 and, if agreed by the CAJ, that a draft document UPOV/INF/16/7 “Exchangeable Software” be presented for adoption by the Council at its fifty-first ordinary session, on October 26, 2017, on that basis.

The TWO noted that the TC had agreed that the information presented in document UPOV/INF/16 should be made available in a searchable form on the UPOV website, and had noted that the Office of the Union would investigate a tool for that purpose.

Recommendations on draft Test Guidelines

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

The TWO agreed that the following draft Test Guidelines should be submitted to the TC for adoption at its fifty-fourth session, to be held in Geneva on October 29 and 30, 2018, on the basis of the following documents and the amendments in this report:

|  |  |
| --- | --- |
| Subject | Relevant document(s) |
| \*Coleus (*Plectranthus scutellarioides* (L.) R. Br.) | TG/SOLEN\_SCU (proj.3) |
| \*Grevillea (*Grevillea* R. Br. corr. R. Br.) | TG/GREVI(proj.6) |
| \*Guzmania (*Guzmania* Ruiz et Pav.) (Revision) | TG/182/4(proj.3) |
| \*Hardy Geranium (*Geranium* L.) | TG/GERAN(proj.3) |
| \*Oncidium (*Oncidium* Sw.; x*Oncidesa* Hort.; x*Ionocidium* Hort.; x*Zelenkocidium* J.M.H.Shaw.) (Partial Revision) | TG/283/1, TWO/50/6 |

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

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

|  |  |
| --- | --- |
| Subject | Relevant document(s) |
| \*Alstroemeria (*Alstroemeria* L.) (Revision) | TG/29/8(proj.2) |
| Berberis (*Berberis* L.) (Revision) | TG/68/4(proj.1) |
| \*Calendula (*Calendula* L.) | TG/CALEN(proj.2) |
| \*Coreopsis (*Coreopsis* L.) | TG/COREO(proj.1) |
| Eustoma (*Eustoma grandiflorum* (Raf.) Shinners) (Revision) | TG/197/1 |
| \*Gazania (*Gazania* Gaertn.) | TG/GAZAN(proj.2) |
| \*Hydrangea (*Hydrangea* L.) (Revision) | TG/133/5(proj.2) |
| \*Kangaroo Paw (*Anigozanthos* Labill.) (Revision) | TG/175/4(proj.1) |
| Lagerstroemia (*Lagerstroemia* L.) (Revision) | TG/95/4(proj.1) |
| Narcissus (*Narcissus* L.) (revision) | TG/87/2 |
| \*Phalaenopsis (*Phalaenopsis* Bl.) (Partial Revision) | TG/213/2, TWO/50/7 |
| Portulaca (*Portulaca oleracea* L.) (Revision) | TG/242/1 |
| Ranunculus (*Ranunculus* L.) | TG/RANUN(proj.1) |
| \*Zinnia (*Zinnia* L.) | TG/ZINNIA(proj.7) |

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

### (c) Possible Test Guidelines to be discussed in 2020

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

|  |
| --- |
| Amaryllis (*Hippeastrum* Herb.) (Revision) |
| China-rose (*Hibiscus rosa‑sinensis* L.) |
| Eucalyptus (*Eucalyptus* L'Hér.) (partial revision) |
| Lavender (*Lavandula* L.) (Partial revision) |
| Paphiopedilum (*Paphiopedilum* Pfitzer) |
| Poinsettia (*Euphorbia pulcherrima* Willd. ex Klotzsch) (revision) |

## Date and place of the next session

At the invitation of New Zealand, the TWO agreed to hold its fifty-first session in Christchurch, from February 18 to 22, 2019, with the preparatory workshop on the afternoon of February 17, 2019. The date in February is subject to confirmation. The alternative date would be February 25 to March 1, 2019, with the preparatory workshop on the afternoon of February 24, 2019.

## Chairperson

The TWO thanked Mr. Kenji Numaguchi for his chairmanship and noted that he was awarded a UPOV bronze medal in recognition of his chairmanship of the TWO from 2015 to 2017.

Future program

The TWO agreed to discuss the following items at its next session:

1. Opening of the session

2. Adoption of the agenda

3. Short reports on developments in plant variety protection

(a) Reports from members and observers (written reports to be prepared by members and observers)

(b) Reports on developments within UPOV (oral report by the Office of the Union)

4. Molecular techniques (document to be prepared by the Office of the Union)

5. TGP documents (documents to be prepared by the Office of the Union)

6. Variety denominations (document to be prepared by the Office of the Union)

7. Information and databases

(a) UPOV information databases (document to be prepared by the Office of the Union)

(b) Variety description databases (document to be prepared by the Office of the Union and documents invited)

(c) Exchange and use of software and equipment (document to be prepared by the Office of the Union)

(d) Electronic application systems (document to be prepared by the Office of the Union and documents invited)

8. Minimum distances between vegetatively reproduced ornamental and fruit varieties (documents invited)

9. Number of growing cycles in DUS examination (document to be prepared by the Office of the Union and documents invited)

10. Report on court cases dealing with technical matters (document invited)

11. Experiences with defining trees, shrubs and vines (document to be prepared by the European Union and documents invited)

12. Experience with the RHS Colour Chart and possible future addition of colors (document to be prepared by the United Kingdom)

13. Inconsistencies between TQ information and plant material submitted for trial (document to be prepared by the European Union and documents invited)

14. Experiences with taxonomic databases (document to be prepared by Australia, the United Kingdom and documents invited)

15. Experiences with characteristics assessed on the basis of bulk samples (document to be prepared by the United Kingdom and documents invited)

16. Defining “growing cycle” for ornamental species (document to be prepared by the European Union and documents invited)

17. Experiences with new types and species (oral reports invited)

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

19. Proposals for partial revision/correction of Test Guidelines

20. Discussion on draft Test Guidelines (Subgroups)

21. Recommendations on draft Test Guidelines

22. Guidance for drafters of Test Guidelines

23. Date and place of the next session

24. Future program

25. Adoption of the Report on the session (if time permits)

26. Closing of the session

Visit

On Wednesday, September 13, 2017, the TWO visited the Butchart Gardens, in Brentwood Bay, British Columbia, Canada. The TWO visited the greenhouses producing ornamental plants for the Gardens with a range of varieties from different crop types and for different climatic zones, including varieties of Berberis, Coleus, Gazania, Hydrangea, Hardy Geranium, Kangaroo Paw and Lagerstroemia. The TWO visited different floral display gardens and a collection of garden rose varieties.

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

[Annexes follow]

TWO/50/14

[Annexes I and II only available in the pdf version of this report]

[Annex III follows]

TWO/50/14

ANNEX III

LIST OF LEADING EXPERTS

**DRAFT TEST GUIDELINES TO BE SUBMITTED   
TO THE TECHNICAL COMMITTEE IN 2018**

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

**by October 27, 2017**

| Species | Basic Document(s) | Leading expert(s) |
| --- | --- | --- |
| \*Coleus (*Plectranthus scutellarioides* (L.) R. Br.) | TG/SOLEN\_SCU (proj.3) | Mr. Takayuki Mikuni (JP) |
| \*Grevillea (*Grevillea* R. Br. corr. R. Br.) | TG/GREVI(proj.6) | Mr. Nik Hulse (AU) |
| \*Guzmania (*Guzmania* Ruiz et Pav.) (Revision) | TG/182/4(proj.3) | Mr. Henk de Greef (NL) |
| \*Hardy Geranium (*Geranium* L.) | TG/GERAN(proj.3) | Ms. Elizabeth Scott (GB) |
| \*Oncidium (*Oncidium* Sw.; x*Oncidesa* Hort.; x*Ionocidium* Hort.; x*Zelenkocidium* J.M.H.Shaw.) (Partial Revision) | TG/283/1, TWO/50/6 | Mr. Kenji Numaguchi (JP) |

**DRAFT TEST GUIDELINES TO BE DISCUSSED AT TWO/51**

(\* indicates possible final draft Test Guidelines)

**(Guideline date for Subgroup draft to be submitted by Leading Expert: November 9, 2018**

**Guideline date for comments to Leading Expert by Subgroup: December 7, 2018)**

New draft to be submitted to the Office of the Union

**before January 4, 2019**

| Species | Basic Document(s) | Leading expert(s) | Interested experts (States/Organizations) [[1]](#footnote-1) |
| --- | --- | --- | --- |
| \*Alstroemeria (*Alstroemeria* L.) (Revision) | TG/29/8(proj.2) | Mr. Henk de Greef (NL) | AU, CA, KR, JP, MX, NZ, QZ, ZA, Office |
| Berberis (*Berberis* L.) (Revision) | TG/68/4(proj.1) | Mr. Kévin Daubigney (FR) | CA, PL, QZ, Office |
| \*Calendula (*Calendula* L.) | TG/CALEN(proj.2) | Mr. Koji Nakanishi (JP) | DE, GB, KR, MX, QZ, ZA, Office |
| \*Coreopsis (*Coreopsis* L.) | TG/COREO(proj.1) | Mr. Peter Baker (GB) | AU, CA, DE, FR, JP, KR, MX, NZ, QZ, Office |
| Eustoma (*Eustoma grandiflorum* (Raf.) Shinners) (Revision) | TG/197/1 | Mr. Kenji Numaguchi (JP) | DE, KR, QZ, Office |
| \*Gazania (*Gazania* Gaertn.) | TG/GAZAN(proj.2) | Mr. Adriaan de Villiers (ZA) | AU, DE, GB, JP, KR, MX, NZ, QZ, CIOPORA, Office |
| \*Hydrangea (*Hydrangea* L.) (Revision) | TG/133/5(proj.2) | Mr. Kévin Daubigney (FR) | AU, CA, DE, JP, KR, MX, NZ, QZ, ZA, CIOPORA, Office |
| \*Kangaroo Paw (*Anigozanthos* Labill.) (Revision) | TG/175/4(proj.1) | Mr. Nik Hulse (AU) | DE, GB, JP, KR, NZ, QZ, Office |
| Lagerstroemia (*Lagerstroemia* L.) (Revision) | TG/95/4(proj.1) | Mr. Kévin Daubigney (FR) | AU, JP, KR, QZ, Office |
| Narcissus (*Narcissus* L.) (Revision) | TG/87/2 | Ms. Hilary Papworth (GB) | JP, KR, MX, NL, PL, QZ, Office |
| \*Phalaenopsis (*Phalaenopsis* Bl.) (Partial Revision) | TG/213/2, TWO/50/7 | Mr. Henk de Greef (NL) | AU, JP, KR, QZ, Office |
| Portulaca (*Portulaca oleracea* L.) (Revision) | TG/242/1 | Ms. Andrea Menne (DE) | JP, MX, NL, QZ, Office |
| Ranunculus (*Ranunculus* L.) | TG/RANUN(proj.1) | Mr. Tetsuya Takahashi (JP) | DK, KR, QZ, CIOPORA, Office |
| \*Zinnia (*Zinnia* L.) | TG/ZINNIA(proj.7) | Mr. Jose Mejía Muñoz (MX) | CN, FR, GB, IL, JP, KR, NL, QZ, Office |

**DRAFT TEST GUIDELINES TO POSSIBLY BE DISCUSSED IN 2020**

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

[End of Annex III and of Report]

1. for name of experts, see List of Participants. [↑](#footnote-ref-1)