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

|  |  |
| --- | --- |
| Technical Working Party for Fruit Crops  Fiftieth Session Budapest, Hungary, June 24 to June 28, 2019 | TWF/50/13  Original: English  Date: July 3, 2019 |

Report

adopted by the Technical Working Party for Fruit Crops

Disclaimer: this document does not represent UPOV policies or guidance

Opening of the session

The Technical Working Party for Fruit Crops (TWF) held its fiftieth session in Budapest, Hungary, from June 24 to 28, 2019. The list of participants is reproduced in Annex I to this report.

The session was opened by Mr. Jean Maison (European Union), Chairman of the TWF, who welcomed the participants and thanked Hungary for hosting the TWF session.

The TWF was welcomed by Mr. Tamás Tarpataki, Deputy State Secretary for Agricultural Markets, Ministry of Agriculture. Mr. Tarpataki gave a presentation on the agricultural sector in Hungary and on the National Agricultural Research and Innovation Centre (NARIC FRI). A copy of the presentation is provided in Annex II to this report.

The TWF received a presentation by Mr. György Pernesz, Head of the Variety Testing Department for Horticultural Crops, National Food Chain Safety Office (NÉBIH), on Hungary’s horticultural variety testing and registration. A copy of the presentation is provided in Annex III to this report.

The TWF received a presentation by Mr. Jean Maison on plant variety protection in the European Union. A copy of the presentation is provided in Annex IV to this report.

Adoption of the agenda

The TWF adopted the agenda as reproduced in document TWF/50/1 Rev. 2.

Short reports on developments in plant variety protection

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

The TWF noted the information on developments in plant variety protection from members and observers provided in document TWF/50/3 Prov. The TWF noted that reports submitted to the Office of the Union after June 14, 2019, would be included in the final version of document TWF/50/3.

*(b) Reports on developments within UPOV*

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

TGP documents

The TWF considered document TWP/3/1 Rev. and TWF/50/4.

### Matters for adoption by the Council in 2019

The TWF noted the revisions previously agreed by the TC to documents TGP/7, TGP/8, TGP/10, TGP/14 and TGP/15 that would be proposed for adoption by the Council at its fifty-third ordinary session, to be held in Geneva on November 1, 2019, subject to approval by the CAJ, at its seventy-sixth session, to be held in Geneva on October 30, 2019.

### Possible future revisions of TGP documents

#### TGP/7: Development of Test Guidelines

##### Characteristics which only apply to certain varieties

The TWF considered document TWP/3/9.

The TWF noted the request to provide suitable examples of quantitative and pseudo‑qualitative characteristics to demonstrate how the proposed approach might be used in a way that would not present risks for decisions on distinctness. The TWF also noted the request to provide suitable examples of unsuitable cases to demonstrate the risks for decisions on distinctness of excluding varieties from observation on the basis of a preceding quantitative or pseudo-qualitative characteristic.

The TWF agreed that the following quantitative characteristic from the Test Guidelines for Fig  (TG/265/1) was a suitable example to demonstrate how the proposed approach might be used in a way that would not present risks for decisions on distinctness.

Characteristic 17 (QN): “Leaf: predominant type: entire (1); three-lobed (2); five-lobed (3)

Characteristic 18: “Only varieties with predominant leaf type: entire: Leaf: shape…”

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

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

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

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

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

The TWF considered documents TWP/3/10 and TWF/50/12.

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

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

The TWF noted the additional information provided in Japan, as reproduced in document TWF/50/12.

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

#### Color names for the RHS Colour Chart

The TWF considered document TWP/3/11.

The TWF agreed with the proposal for the revision of the list of UPOV Color Groups in document TGP/14 “Glossary of Terms used in UPOV Documents” on the basis of the color groups set out in document TWP/3/11, Annex I.

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

The TWF noted that, in the European Union, the RHS group colour naming is used for the purpose of examining denominations.

The TWF noted that the RHS Colour Chart was not commonly used in the fruit sector for DUS examination. However, the TWF noted that it might be appropriate to refer to the guidance in document TGP/14 on the use of color charts to see when it could be relevant to be more precise in the description of color. The TWF agreed that it might be useful for variety descriptions but not in the case of distinctness assessment. The TWF was informed by an expert from New Zealand of a test done by a DUS expert in New Zealand, on the use of RHS Colour Chart in apricot DUS examination. The TWF invited the expert from New Zealand to make a presentation at is next session, under agenda item “matters relevant for DUS examination in the fruit sector” on the work done in New Zealand.

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

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

The TWF considered document TWP/3/12.

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

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

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

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

### New proposals for revisions of TGP documents

#### TGP/7: Development of Test Guidelines

##### Procedure for partial revision of UPOV Test Guidelines

The TWF noted that the TC had considered a proposal to revise the procedure for partial revisions of Test Guidelines. It further noted the request to clarify under which circumstances changes would need to be implemented to UPOV Test Guidelines at short notice, and to clarify the type of changes that were intended to be covered by the proposed procedure, by providing specific examples of changes intended to be covered by the proposed procedure.

The TWF welcomed the possibility to revise the procedure for partial revisions of Test Guidelines, allowing the possibility for experts to make new proposals in the course of the year and encouraging international harmonization of current practice for DUS examination. As requested by the TC, the TWF agreed the accelerated procedure should apply:

* For proposals to delete a characteristic
* For proposals to add a new state of expression and/or add a new illustration
* For proposals to add new example varieties

The TWF agreed that this accelerated procedure should not be applied:

* For proposals for grouping characteristics
* For proposals to add new characteristics

The TWF agreed that the accelerated procedure for partial revisions of Test Guidelines should respect the agreed timetable to prepare and circulate documents before the session, to allow sufficient time for consideration by members of the Union. It further highlighted the importance for all relevant TWP experts to be invited to comment on any proposal for new partial revisions of Test Guidelines in the forthcoming session and suggested, in that regard, to include all participants of the previous TWP session in the communication.

##### Proprietary method of assessment for male sterility

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

##### Suitability of characteristics in previous versions of Test Guidelines

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

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

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

The TWF welcomed the proposal to present the full scale of notes for QN characteristics in Test Guidelines as it would provide greater clarity for DUS examiners, in particular in the case of testing at breeders’ premises. It further agreed that it would improve the quality of the data provided.

#### TGP/12: Guidance on Certain Physiological Characteristics

##### Explanations on disease resistance characteristics

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

### Program for the development of TGP documents

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

## Access to plant material for the purpose of management of variety collections and DUS examination

The TWF received a presentation on “Canada’s experience in accessing plant material for DUS testing” by an expert from Canada as presented in document TWF/50/9. The TWF also received presentations on “China’s practice in accessing to plant materials for variety collection management and DUS test” by an expert from China and “Access to plant material for variety testing purposes: Status quo, problems and possible solutions” by an expert from Italy. Copies of these presentations would be published as an addendum to document TWF/50/9. The TWF also received oral reports by experts from the European Union and Spain on the situation in relation to access to plant material for the purpose of management of variety collections and DUS examination.

The TWF noted the following difficulties and challenges in relation to access to plant material for the purpose of management of variety collection and DUS examination:

* Plant health (risk to introduce pathogens in a variety collection)
* Importing plant material (phytosanitary measures)
* Lack of understanding from breeders on the merit to submit material of their varieties for reference purposes
* Lack of willingness of breeders to make their material available in cases where the DUS test takes place at the premises of another breeder
* Breeders requesting a guarantee about the use of the plant material provided
* Building, maintaining and renewing a collection of living plant material
* Often no access to plant material on the market, circulation of material in closed networks (club varieties)
* Limited use of technologies that could help: DNA, image analysis in limiting the necessity to transfer plant material
* Increasing number of protected and non protected varieties to be included. In the fruit sector, varieties are often developed worldwide and are adapted to grow in a wide range of environments
* Difficulty to access information (in particular when varieties are registered with different denominations or synonyms in national catalogues)

The TWF recalled the guidance provided in document TGP/4 “Constitution and maintenance of variety collections”, and in particular the importance of cooperation, as reproduced below:

“[…] 3.1.2.2 Sources of living plant material

3.1.2.2.4 Breeders are an important source of living plant material and cooperation with breeders is encouraged (see Section 3.2.3). In particular, for protected varieties, breeders have a particular incentive to maintain their varieties since lack of maintenance of a variety may lead to the cancellation of the plant breeder’s right. […]

3.2.2 Cooperation between authorities

3.2.2.1 For the establishment of variety collections, the availability of information on varieties of common knowledge is a key requirement. Exchange of information between authorities, breeders, botanic gardens, gene banks, and any other possible source of information is very important to define the list of varieties to be included in the collection (see Section 2.2). […]

3.2.3 Cooperation with breeders

3.2.3.1 Cooperation is a means by which authorities can increase the efficiency of the establishment and maintenance of variety collections, consequently strengthening plant breeders’ rights.

3.2.3.2 Breeders are particularly encouraged to cooperate in the provision of living plant material, on the basis that the inclusion of varieties in the growing tests and other trials is important for the quality of the examination of distinctness and in consequence the quality of protection for a variety.

3.2.3.3 Cooperation with breeders can involve, for example, breeders or breeders’ associations maintaining a collection of living plant material which is made available to the testing authority as required.”

The TWF agreed that breeders are an important source of information and living plant material and that it was in the interest of the breeders to cooperate in the constitution and maintenance of variety collections. The TWF noted the comment by a representative from CIOPORA on the importance to protect breeders’ interests when plant material is provided by breeders. They further commented on the risk perceived by breeders when examination offices performed breeding activities and how to ensure that the living collections were not used for breeding purposes. The TWF highlighted the need to have a high level of trust between PVP offices and breeders to ensure fruitful cooperation. The TWF noted that the European Union has adopted a policy on the use of plant material submitted for DUS testing purposes.

The TWF agreed to continue the discussion at its next session and invited the expert from Italy to prepare a document summarizing the issues faced by PVP offices and breeders, and to make proposals on how these issues might be addressed within UPOV. The TWF noted that experts from Canada, Chile, China, European Union, France, Germany, New Zealand, Spain and CIOPORA would help in preparing this document.

## DUS examination of mutant varieties of apple

The TWF considered document TWF/50/10 and received a presentation on “DUS examination of mutant varieties of apple” by an expert from the European Union. A copy of the presentation is provided in the Annex to document TWF/50/10 Rev..

The TWF noted the developments since the forty-ninth session of the TWF in 2018. The TWF noted that, without an appropriate variety collection for the DUS examination, the accuracy of the DUS report might be affected, which could inhibit cooperation and exchange of DUS reports between PVP Offices for apple mutant varieties.

The TWF was informed by the European Union that discussions were being held in the European Union on the possibility to observe applications for mutant varieties of apple in a different location because of the strong influence of the environment on the fruit color. It was observed that some varieties were bred in an environment quite different from the conditions under which the DUS testing was conducted in a centralized testing system. The TWF agreed that the current UPOV guidance provided for fruit crops explained that tests were normally conducted at a single location and it might not be appropriate to deviate from this guidance in particular cases (e.g. Gala mutant varieties).

The TWF noted the comment made by the expert from the European Union that measurements for characteristics (instead of visual observations) had proven to be useful in court cases based on DUS reports. The TWF agreed that image analysis could be considered for the observation of color but recalled that statistical analyses were not commonly used in the DUS examination for fruit crops.

The TWF invited the expert from the European Union make a presentation at its fifty-first session on further developments in the European Union on DUS examination of mutant varieties of apple.

## Matters relevant in DUS examination for the fruit sector

No presentation was prepared for consideration at the session. However, the TWF agreed to discuss the following topics, under this agenda item, at its fifty-first session:

* “Blueberry, new production techniques and its possible influence on the expression of characteristics”, to be prepared by experts from Canada and New Zealand;
* “Raspberry CPVO project”, to be presented by an expert from Germany;
* “Strawberry ring test”, to be presented by an expert from the European Union;
* “Test on the use of RHS Colour Chart in apricot DUS examination in New Zealand”, to be presented by an expert from New Zealand (see paragraph 24 of this document).

Guidance for drafters of Test Guidelines

The TWF considered document TWP/3/8.

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

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

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

The TWF received a demonstration by the Office of the Union and noted that training on the web-based TG template would be provided to all TWPs, at their sessions in 2019. The TWF thanked the Office of the Union for the development of this efficient tool and welcomed regular presentations at Technical Working Parties, as an introduction to new participants and as an opportunity for experienced users to clarify matters of concern.

## Molecular Techniques

The TWF considered document TWP/3/7.

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

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

The TWF noted the draft agenda for the BMT at its eighteenth session, as set out in document TWP/3/7, paragraph 73.

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

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

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

#### Cooperation between international organizations

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

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

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

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

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

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

The TWF endorsed the following elements for the inventory on the use of molecular marker techniques, by crop, proposed by the Office of the Union, with the additions suggested by the TWV to reflect the current status of molecular marker techniques (i.e. already in use or in development). (highlighted in grey):

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

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

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

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

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

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

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

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

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

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

#### Report of work on molecular techniques in relation to DUS examination

The TWF noted that the text from document UPOV/INF/18/1 would be introduced in document TGP/15 to clarify that it was the responsibility of the authority to decide on the reliability of the link between the gene and the expression of the characteristic, as set out in document TWP/3/7, paragraph 93.

The TWF noted that document TGP/15 would include an explanation that it is the responsibility of the respective TWP and the TC to assess whether the reliability of the link between the gene and the expression of the characteristic is satisfied in order to include a method in the Test Guidelines, as set out in document TWP/3/7, paragraph 94.

The TWF noted that matters concerning characteristic-specific markers with incomplete information on state of expression are considered in document TWP/3/12.

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

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

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

Following the subgroup discussions, the following information was provided by TWF participants:

Summary of crop and authorities currently using biochemical and molecular techniques in the fruit sector

|  |  |
| --- | --- |
| Czech Republic | Grapevine |
| France | Apple, Peach, Pear, Sweet Cherry, Apricot, Japanese Plum |
| Germany | Pear, Apple, Strawberry, Sweet Cherry, Sour Cherry |
| Republic of Korea | Apple, , Grapevine, Peach, Pear, Strawberry |
| Morocco | Citrus, Date Palm |
| Italy | Grapevine |
| Hungary | Grapevine, Peach, Cherry, Sour Cherry, Apricot, Plum, |
| Spain | Almond, Apricot, Avocado, Banana, Cherimoya, Citrus, Fig tree Grapevine, Hazelnut Mango, Peach, Pear, Pineapple, Strawberry, Sweet Cherry, Walnut, |
| Japan | Apple, Citrus, Pineapple, Japanese Pear, Sweet Cherry, Strawberry, Grapevine |

Summary of current use of biochemical and molecular techniques in the fruit sector

|  |
| --- |
| Use: |
| Management and description of variety collections |
| Genetic distance and molecular profiling |
| Uniformity assessment |
| Research purposes |
| Enforcement |
| Identification of varieties for certification scheme purposes. |
|  |
| Techniques: |
| SSR |
| SNPs |

Summary of possible areas of cooperation for the use of biochemical and molecular techniques in the fruit sector

#### 

|  |
| --- |
| Develop and share common databases (identifying a leading country and coordinator) |
| Sharing techniques |
| Harmonize projects/markers/methods/procedures |
| Exchange of knowledge and techniques |
| Encourage crop experts to attend BMT meetings |

#### Future program

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

Cooperation in examination

The TWF considered document TWP/3/14.

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

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

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

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

Following the subgroup discussions, the following information was provided by TWF participants:

Summary of current limits and obstacles for cooperation in DUS examination for fruit crops

|  |
| --- |
| Difficulty to exchange plant material between some countries (e.g. phytosanitary measures) |
| Different environmental conditions (need to be similar to take over reports) |
| No taking-over of tests in the case of breeder -testing |
| Need to establish agreement (bilateral agreements or case by case agreements) |
| International understanding of varieties of common knowledge |
| Easier to establish cooperation for major species, more difficult for minor species |
| Language barriers |
| Identification of contact persons |
| National Test Guidelines – lack of harmonization if no UPOV Test Guidelines |
| Reference varieties (different national rules on which ones are used) |
| Regulations in place in the country to perform all DUS examinations |
| Wish from breeders to use (or not) existing DUS reports |
| Appropriate reference collection/ set of example varieties |

Summary of possible areas for improvement of cooperation in DUS examination for fruit crops

|  |
| --- |
| Ensure the quality of the report produced |
| Facilitated administrative process for obtaining test reports |
| Encourage participation in UPOV sessions (e.g. TWPs) |
| Improve communication between countries (contact persons, specialist meetings, ring tests) |
| Wider access to information (e.g. provide more technical information in GENIE, displayed in a more user-friendly manner) |
| Enhance transparency in contact lists (include crop experts) |
| Create model/ template for standard cooperation agreement in relevant different languages (available on the UPOV Website) |
| Encourage the use of TGs to guarantee harmonization (differences between authorities) |
| Ensure follow-up in any DUS reports request |

## Matters to be resolved concerning Test Guidelines put forward for adoption by the Technical Committee

### \*Macadamia

The TWF considered document TWF/50/6, and agreed the following:

|  |  |
| --- | --- |
| 1. | - to delete “and their hybrids”  - to add GN3 from TGP/7: “Guidance on the use of Test Guidelines for interspecific hybrids that are not explicitly covered by Test Guidelines is provided in document TGP/13 ‘Guidance for New Types and Species’”.  *Leading Expert: agreed*  *TWF: agreed* |
| 3.1.2 | to be deleted  *Leading Expert: agreed*  *TWF: agreed* |
| 4.2.2 | delete “varieties” (duplication)  *Leading Expert: agreed*  *TWF: agreed* |
| [[1]](#footnote-2)#T.o.C | - to check coherence of example varieties (e.g. A16 = Hidden Valley A16, A4 = Hidden Valley A4, A38 = Hidden Valley A38, 660 = Keaau)  *Leading Expert: see table of corrections to example varieties below:*   |  |  |  | | --- | --- | --- | | *Replace* | *With* | *Comment* | | *A16* | *Hidden Valley A16* | *correct PBR denomination* | | *A4* | *Hidden Valley A4* | *correct PBR denomination* | | *A38* | *Hidden Valley A38* | *correct PBR denomination* | |  |  |  | | *246* | *Keauhou (HAES 246)* |  | | *333* | *Ikaika (HAES 333)* |  | | *660* | *Keaau (HAES 660)* |  | | *738* | *HAES 783* | *‘738’ in proj. 5 is a transcription error. It should be ‘783’* | | *849* | *HAES 849* |  | | *816* | *HAES 816* |  | | *H2* | *H2 Hinde* |  |   *HAES = Hawaii Agricultural Experiment Station*  *Number in brackets is the HAES reference. When the variety is named the HAES number is often also used in the literature.*  *TWF: agreed* |
| #Char. 3 | - state 2 to read “right-angle”  *Leading Expert: agreed*  *TWF: agreed*  - to add example variety for state 3  *Leading Expert: to add example variety “*A203” for state 3  *TWF: agreed* |
| #Char. 5 | to add the following example varieties:  “MCT1” for state “smooth”, “Hidden Valley A16” for state “medium”, “MiniMaca” for state “rough”  *Leading Expert: to be agreed by TWF*  *TWF: agreed* |
| Char. 9 | - to read “Leaf blade: …”  - to be moved after Characteristic 18  *TWF: agreed* |
| #Char. 12 | - to review order of states to have states ovate (1), lanceolate (2), elliptic (3), oblong (4), obovate (5), oblanceolate (6)  *Leading Expert: agreed*  *TWF: agreed*  - to add (a)  *Leading Expert: agreed*  *TWF: agreed*  - to add example varieties for states 1 to 3  *Leading Expert: I propose deleting ovate and lanceolate as no existing varieties could be identified. Although some literature refers to lanceolate and ovate leaves these do not seem to be present in known varieties.*  *For “oblong” I propose the example variety “HAES 781”.*  *TWF: agreed* |
| #Char. 13 | to add the following example varieties:  “H2 Hinde” for state “none”, “HAES 800” for state “apiculate”, “A268” for state “acuminate”, “Hidden Valley A38” for state “mucronate”  *Leading Expert: to be agreed by TWF*  *TWF: agreed* |
| #Chars. 14, 15 | to be deleted  *Leading Expert: agreed. Char. 12 “Leaf blade: shape” inherently includes apex and base so Chars. 14 and 15 are superfluous*  *TWF: agreed* |
| Char. 19 | - to be moved after Char. “Petiole: length”  - to read “Young leaf: color”  *Leading Expert: agreed*  *TWF: agreed* |
| Char. 20 | to read “Leaf blade: intensity of green color” and move “on upper side” to explanation in Chapter 8.2  *Leading Expert: agreed*  *TWF: agreed* |
| Char. 24 | to be indicated (b) instead of (a)  *Leading Expert: agreed*  *TWF: agreed* |
| #Char. 25 | to delete (b) and add illustration of apical point and possibly explanation  *Provided by Leading Expert:*  *“The apical point is the protrusion of the husk opposite to the stalk end.”*  husk-apical_point_v2  *TWF: agreed* |
| [[2]](#footnote-3)#Char. 26 | to read as follows:   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **26.** |  | **QN** | **VG** |  | **(b)** |  | | | | |  |  | |  | | --- | | **Husk: thickness of pericarp** | | | |  | | --- | | **Cosse : épaisseur du péricarpe** | | | |  | | --- | | **Hülle: Dicke des Perikarps** | | |  | | --- | | **Vaina: grosor del pericarpio** | |  |  | |  |  | thin | | mince | | dünn | delgado | Kabere | 1 | |  |  | medium | | moyen | | mittel | medio | EMB-1, KMB-3, KRG-15 | 3 | |  |  | thick | | épais | | dick | grueso | MRG-20,  MRG-25 | 5 |   *Leading Expert: agreed*  *TWF: agreed* |
| [[3]](#footnote-4)#Char. 27 | to read “Seed: size”  *Leading Expert: agreed. The reference to “shell” is not clear as it can be confused with the shell characteristics (Chars. 29, 30 and 31). It is better to use “seed”. Previously the term “nut” was used however macadamia is not a true nut.*  *TWF: agreed* |
| #Char. 28 | to read “Seed: shape”  *Leading Expert: agreed. See comment for Char. 27*  *TWF: agreed* |
| #Char. 29 | to use a 3 or 5-notes scale to have the mid-point in the middle of the scale  *Leading Expert: I propose a 5 note scale:*  *smooth (1)*  *slightly rough (2)*  *moderately rough (3)*  *moderately rough to very rough (4)*  *very rough (5)*  *The example varieties do not change and there are no example varieties for note 4.*  *TWF: agreed* |
| #Char. 33 | - to add example varieties “A16” for state 1 and “A38” for state 2  - to add example varieties for states 3 to 5  *Leading Expert: I propose to delete this characteristic*  *TWF: agreed* |
| Char. 34 | to read “Seed: micropyle”  *Leading Expert: agreed*  *TWF: agreed* |
| #8.1 (b) | - “f” to read “seed” instead of “shell”  - to improve current illustration of kernel and add indication of shell to new illustration  *Provided by Leading Expert*   |  |  | | --- | --- | | 8_1_b_V2 | a: neck  b: husk  c: micropyle  d: pericarp  e: suture  f: seed  g: kernel  h: shell |   *TWF: agreed* |
| Ad. 12 | to read “relative width” and remove information on ratio in brackets in the grid  *Leading Expert: agreed*  *TWF: agreed* |
| Ad. 34 | to read “The micropyle is the white spot on the seed that allows….”  *Leading Expert: agreed*  *TWF: agreed* |
| 8.3 | to be moved to the beginning of Chapter 8.1 as standalone paragraph  *Leading Expert: agreed*  *TWF: agreed* |
| TQ 5 | to add Characteristic 18  *Leading Expert: agreed*  *TWF: agreed* |

### Black Walnut

The TWF considered document TG/JUGLANS(proj.5) and TWF/50/5, presented by Ms. Nuria Urquía Fernández (Spain) and Ms. Neus Aletà Soler (Spain) and agreed the following:

|  |  |
| --- | --- |
| cover page | to correct German wording: Kalifornische Walnuss |
| 2.3 | to read “5 trees (one-year-old grafts) and 5 budsticks valid to graft 10 trees” |
| Char. 6 | growth stage to be indicated as Cf |
| Char. 10 | to read “Female flower: attitude of stigma” |
| 8.1 (a) | to read “...should be made on mature trees in the dormant season.” |
| 8.1 (c) | to delete “…minimum 25…” |
| 8.1 (e) | to be deleted |
| Chars. 17, 18 | to delete (+) |

## Discussion on draft Test Guidelines

### Apple (fruit varieties) (Revision) (Malus domestica Borkh.)

The subgroup discussed document TG/14/10(proj.2), presented by Mr. Erik Schulte (Germany). The subgroup agreed the following:

|  |  |
| --- | --- |
| 3.1.3 | to check whether to keep or to delete (will this be added as ASW to TGP/7?) |
| 3.3.3 | to be deleted |
| 4.2.3 | to read “For the assessment of uniformity of varieties resulting from crossing, a population standard….” |
| 4.2.4 | to read “For the assessment of uniformity of varieties resulting from mutation, a population standard….” |
| Table of Chars. | - to check use of example varieties “Royal Gala” and “Tenroy” and their synonyms  - to delete MS throughout table of Characteristics  - example variety “Prem A 153” to read “PremA153”  - to check growth stages  - to add example varieties  - to check whether to introduce characteristics for “Fruit: sweetness of flesh” and “Fruit: acidity of flesh” after characteristic 51, including explanations on methodology on how to observe |
| Char. 1 | to delete MG |
| Chars. 4, 6, 7 | to be deleted |
| Char. 8 | to reduce scale to 3 notes |
| Char. 14 | - to have states “absent or weak” (1), “medium” (2), “strong” (3) –  to check whether to be deleted |
| Char. 15 | - to move “(distal half)” to explanation in Chapter 8.2  - to check constituency between char. 15 and Ad. 15 (5 states in Ad.15) |
| Char. 16 | to be deleted |
| Char. 17 | to check whether to be deleted |
| Char. 18 | - state 2 and 3 are reversed in Ad.18 (to be checked)  - to check whether both states “strongly concave” and “slightly concave” are needed or whether one state “concave” is sufficient |
| Char. 19 | to have states from “very short” to “very long” |
| Char. 20 | to have states “very low” to “very high” (ratio) |
| Char. 21 | - to have states from “very small” to “very large”  - to check whether to reduce scale |
| Char. 22 | to check whether to be deleted |
| Char. 23 | to reduce scale to 5 notes |
| Char. 25 | - to read “Flower: intensity of…”  - to check whether to reduce scale  - to have states from “absent to very light” to “very dark” |
| Char. 27 | to revise example varieties in order show that there is no correlation with Char. 38 |
| Char. 30 | to reorder states (to have “very small” as state 1) and example varieties accordingly |
| Char. 33 | to have notes 1, 2, 3 |
| Char. 36 | to be moved after Char. 38 |
| Char. 37 | to move “(with bloom removed)” as explanation to Chapter 8.2 |
| Char. 40 | - to reduce scale to 3 notes  - to add example varieties |
| Char. 50 | to read “Fruit: calyx eye” |
| Chars. 52, 53, 54 | to check and clarify what is covered by these characteristics and whether they need to be improved/re-worded |
| Chars. 56, 57 | to add explanation |
| 8.1 (c) | to delete “vigorous” |
| 8.1 (f) | explanation is identical as growth stage; to keep one or the other |
| Ad. 15 | - to be improved to correspond to Characteristic 15 |
| Ad. 17 | to read: “Observations should be made…” |
| Ad. 18 | states 2 and 3 reversed in Char. 18 |
| Ad. 28 | to be improved |
| Ad. 31 | to review order of states in the grid (see TGP/14) |
| Ad. 45 | to delete “See Ad. 48” |
| Ad. 47 | to update number of characteristics next to illustration |
| Ad. 53 | to update according to changes to Characteristics 52, 53, 54 |
| 8.3 | - to delete duplication of “8.3”  - synonyms of example varieties: to add header to read “Other names of example varieties” and to become Chapter 8.4 |
| 9. | to be updated |
| TQ 4., 6. | to be completed |

### \*Apricot (Prunus armeniaca L.) (Revision)

The subgroup discussed document TG/70/5(proj.3), presented by Mr. Chris Barnaby (New Zealand), on behalf of the Leading Expert, Mr. Hennie Venter (South Africa), and agreed the following:

|  |  |
| --- | --- |
| 1. | to delete “Add comment, …” |
| 2.3 | to indicate number of dormant shoots |
| 3.3.2 | to be deleted |
| 3.4.1 | to read “Varieties resulting from crossing: ….” |
| 4.2.3 | to have two separate paragraphs for varieties resulting from crossing and mutation |
| Table of Chars. | - to check whether to show full scale for QN characteristics  - to check example varieties |
| Char. 1 | - to delete MG  - to check whether to remove from grouping characteristics |
| Char. 2 | to check whether to remove from grouping characteristics |
| Char. 3 | to check whether “Roxana” and “Roxanne” are two different varieties |
| Char. 5 | to be moved after Char. 7 (observed after Chars. 6 and 7) |
| Char. 7 | to check whether to add illustrations (see e.g. European Plum) |
| Char. 15 | to add to Chapter 5.3 as grouping characteristic and to TQ 5 |
| Char. 16 | state “strong” to have note 4 and to add state 5 “very strong” |
| Char. 17 | state 2 to read “flat or weakly concave” |
| Char. 21 | to add state 1 “absent or very weak” |
| Char. 27 | - to add (\*)  - to add to Chapter 5.3 as grouping characteristic and to TQ 5  - to check whether to add example variety for state 2  - to check whether state 3 to read “pink”  - to delete state 4 “dark pink” |
| Chars. 32, 33, 34 | to delete MS |
| Char. 40 | to read “Fruit: shape of apex in lateral view” |
| Char. 46 | to add definition of “ground color” (see document TGP/14) |
| Char. 47 | - to add definition of “over color” (see document TGP/14)  - to be moved after Char. 49 (see order of color characteristics in TGP/14) |
| Char. 57 | - to add (\*)  - to add to Chapter 5.3 as grouping characteristic and to TQ 5 |
| 8.1 | all explanations to read “Observations should be made…” to and delete indication of organ at the beginning of the explanations |
| 8.1 (d) | to delete second paragraph |
| Ad. 3 | to read “Observations should relate to…” |
| Ad. 5 | - to read “Observations should be made…”  - to specify “rapid growth” |
| Ad. 25 | illustrations for states 1 and 2 not clear; to be improved or replace with drawings (see e.g. TG Apple) |
| Ad. 27 | to delete “on lower side” |
| Ad. 31 | to correct illustration for “elliptic” |
| Ad. 41 | to improve illustrations to clarify difference between Chars. 40 and 41 |
| TQ 5.6, 5.8 | to add even states of expression |

### Argania (Argania spinosa (L.) Skeels)

The subgroup discussed document TG/ARGAN(proj.4), presented by Ms. Ibtihaj Belmehdi (Morocco), and agreed the following:

|  |  |
| --- | --- |
| Cover page | to check whether to delete synonym of main botanical name (see GRIN) |
| 2.3 | to reduce quantity of plant material from 8 to 5 |
| 3.4.1 | to reduce quantity of trees from 8 to 5 |
| 4.1.4 | to reduce number of plants or parts of plants from 8 to 5 |
| 4.2.3 | to reduce sample size from 8 to 5 |
| Table of Chars. | to add example varieties |
| Char. 8 | - to read “Leaf blade: intensity of green color…”  - to have states light (1), medium (2), dark (3) |
| Char. 9 | - to add illustration  - to have states narrow elliptic (1), broad elliptic (2), narrow obovate (3), broad obovate (4) |
| Char. 12 | to have notes 1, 2, 3 |
| Char. 13 | to have notes 1, 2, 3 |
| Char. 14 | to have notes 1, 3, 5 |
| Char. 15 | to have notes 1, 2, 3 |
| Char. 16 | - to be indicated as QL  - to have states in leaf axils (1), on branches (2), in leaf axils and on branches (3) |
| Char. 17 | - to read “Petal: color”  - to add (b) |
| Char. 18 | - to be indicated as VG  - to have states light brown (1), medium brown (2), dark brown (3), black (4) |
| Char. 19 | to have states ovate (1), elliptic (2), circular (3), fusiform (4) |
| Char. 20 | - to check whether to be indicated as VG/MG  - to have notes 1, 3, 5 |
| Char. 21 | - to check whether to be indicated as VG/MG  - to have notes 1, 3, 5 |
| Char. 22 | to have notes 1, 3, 5 |
| Char. 23 | - to be indicated as MG  - to have notes 1, 3, 5 |
| Char. 24 | - to check whether to add more states  - to have states rounded (1), broad elliptic (2), narrow elliptic (3) |
| Char. 25 | - to delete VS  - to have notes 1, 3, 5 |
| Char. 26 | - to be indicated as MS  - to have notes 1, 3, 5 |
| Char. 27 | to have notes 1, 3, 5 |
| Char. 29 | - to read “Stone: number of almond lodges”  - to add an illustration |
| Char. 30 | to add an explanation |
| Char. 31 | - to be indicated as MS  - to have notes 1, 3, 5 |
| Char. 32 | - to be indicated as MS  - to have notes 1, 3, 5 |
| Char. 33 | - to be indicated as MS  - to have note 1, 3, 5 |
| Char. 34 | to have note 1, 3, 5 |
| Char. 35 | to add an illustration |
| Char. 38 | - to move percentage indications to explanation in 8.2  - to add explanation  - to have notes 1, 2, 3 |
| Char. 40 | to add explanation |
| Char. 41 | - to read “Plant: self-incompatibility”  - to have states absent (1), present (9)  - to be indicated as QL  - to add explanation “A variety is self-incompatible when the fertile pollen of its own flower or of other flowers of the same variety is not able to fertilize the ovary.” |
| 8.1 (d) | to read “…should be made when 80% of the fruit on the tree are colored.” |
| Ad. 2 | to check whether to change illustration for state 3 or to use drawing from TGP/14 |
| Ad. 11 | to keep one picture for each state |
| Ad. 19 | to update illustration for state 4 |
| Ad. 24 | to improve illustration (same perspective, all stones in lateral or ventral view) |
| 9. | to be completed |

### Grapevine (Vitis L.) (Revision)

The subgroup discussed document TG/50/10(proj.2), presented by Mr. Roberto Carraro (Italy), on behalf of the Leading Expert, Mr. Luca Aggio (Italy), and agreed the following:

|  |  |
| --- | --- |
| 2.2 | to delete (c) and (d) |
| 2.3 | to delete last sentence “The competent Authority…” |
| 3.1.3 | to read “In particular, it is essential that the plants, excluding rootstock varieties producing no fruits, …” |
| 4.1.4 | to reduce number of plants or parts of plants to be examined for distinctness to 3 plants/parts of plants |
| 6.5 | - growth stage key reference to read 8.3  - to clarify for which characteristics the OIV code should be indicated  - 9 to read “B-“ |
| Table of Chars. | to check and harmonize example varieties and reduce number of varieties in the Test Guidelines |
| Char. 4 | to add example variety “Kyoho” to state 7 |
| Char. 6 | - state 4 to read “light brownish red”  - state 5 to read “medium brownish red”  - state 6 to read “dark brownish red” |
| Char. 7 | to read “Young leaf: density of prostrate hairs between main veins on lower side of blade” |
| Char. 8 | to read “Young leaf: density of erect hairs on main veins” |
| Char. 9 | growth stage to be indicated as “57-69” |
| Char. 13 | to be indicated as PQ |
| Char. 19 | to add example variety “Kyoho” to state 1 |
| Char. 20 | to be deleted |
| Char. 23 | to read “Only varieties with Mature leaf: number of lobes: more than one: Mature leaf: arrangement of lobes of upper lateral sinuses” |
| Char. 27 | to replace example variety “Aspiran” with “ Aramon noir” in state 4 |
| Char. 32, 33 | to be indicated as MG/VG |
| Char. 34 | to add example variety “Kyoho” to state 3 |
| Char. 36 | OIV code to be indicated as O-223 |
| Char. 37 | to check whether to add more shapes |
| Char. 38 | to check whether to read “Only varieties with Berry: shape: [add shape]” |
| Char. 39 | - to check wording of states and example varieties  - to check whether state 2 to read “yellow”  - to check whether state 3 to read “pink”  - to check whether state 4 to read “red”  - to add new state of expression “green” as state 1  - OIV code to be indicated as O-225 |
| Char. 42 | to read as in current adopted TG/50/9 |
| Char. 43 | - to check whether to read “Berry: seeds” or “Berry: presence of seeds”  - to check whether to add new characteristic number or size of seeds (applicable for table grapes only) |
| Char. 44 | - to read “Woody shoot: color”  - to correct state 5 to read “greyish brown” |

### Mulberry (Morus L.)

The subgroup discussed document TG/MORUS(proj.1), presented by Mr. Yosuke Abe (Japan), and agreed the following:

|  |  |
| --- | --- |
| General comments | to coordinate with TWO whether they wish to contribute to the revision |
| 2.3 | - to read 5 plants for varieties resulting from crossing  - to add “…10 plants for varieties from mutation”  - to check whether to include rootstocks |
| 4.2.3 | to add information for mutant varieties |
| Table of Chars. | - to present all possible states of expression for QN characteristics with abbreviated scale  - all characteristics with “branch” to be replaced with “shoot”  - to check whether to add new Char. (after Char. 17): “Leaf blade: symmetry” with states “absent”, “present” or as QN characteristic  - to check whether to add new Char. (after Char. 19): “Leaf blade: ratio length/width”  - to replace “fruit” by “infructescence”  - to check whether to add new Char. (before Char. 40) “Fruit: ration length/width” |
| Char. 1 | to be deleted and information on ploidy to be requested in the TQ |
| Char. 2 | to reduce scale to 3 notes |
| Char. 3 | to read spreading (3) drooping (4) |
| Char. 4 | - to reduce scale to 3 notes  - to add explanation |
| Char. 5 | to add illustrations |
| Chars. 6, 13 | to correct spelling of “grey” |
| Char. 7 | - to reduce scale to 3 notes  - to add illustrations |
| Chars. 8, 10 | - to check whether to be combined  - to check method of observation |
| Char. 9 | to be deleted |
| Char. 12 | to reduce scale to 3 notes |
| Char. 14 | to reduce scale to 3 notes |
| Char. 15 | to check whether to be deleted |
| Char. 16 | - to add illustration  - to add (\*) (grouping characteristic) |
| Char. 17 | to add illustrations |
| Chars. 18, 19 | - to check whether to add example varieties or to delete VG  - to check whether to reduce scale |
| Char. 22 | - to read: “leaf blade: shape”  - to add illustrations  - to check whether to add more state of expression |
| Char. 23 | to check whether to split in two characteristics (shape of base and arrangement of basal lobes with states “free”, “touching”, “overlapping”) or state 5 to read “overlapping” |
| Char. 24 | to be deleted |
| Char. 25 | to have states “absent or very shallow” (1) |
| Char. 26 | to read: “Leaf blade: incisions of margin” |
| Char. 27 | - to check whether to read “Leaf blade: texture”  - to add state “medium” as state 2, rough as state 3 |
| Char. 28 | - to read “Leaf blade: …”  - to check whether to be indicated as QN with states: absent to weak (1), medium (2), strong (3) |
| Char. 30 | to combine states 1 and 2 to read “absent or very weak” |
| Char. 32 | - to read: “Flower bud: color”  - to check range of colors |
| Char. 33 | - to read: “Inflorescence: number of …”  - to reduce scale to 3 notes |
| Char. 34 | - to add (\*) (grouping characteristic)  - to delete states 2 and 4 and have notes 1, 2, 3 |
| Char. 35 | to be deleted |
| Char. 36 | to be deleted |
| Chars. 37, 38 | - to reduce scale to 3 notes  - to check example varieties |
| Char. 39 | - to have states from “low” to “high”  - to delete VG  - to reduce scale to 3 notes  - to check example varieties |
| Char. 40 | to check wording of states 3 and 4 |
| Char. 41 | to be moved after characteristic 35 |
| Char. 42 | to move example variety “Kozaemon” to state 4 |
| Chars. 44, 45 | to delete MS |
| Char. 46 | to be deleted |
| Char. 47 | - to be indicated as MG/VG  - to reduce scale to 5 notes |
| Char. 48 | - to be indicated as MG/VG  - to reduce scale to 5 notes |
| Char. 49 | - to read: “Time of fruit ripening”  - to be indicated as MG/VG |
| Chars. 50, 51 | to be deleted |
| Ad. 26 | to check illustrations for state 4 and 6 |
| TQ 1 | to add 1.3 for indication of species |
| TQ 4.2 | to be completed |
| TQ 6 | to be completed |

### Oranges (Citrus L. - Group 2)

The subgroup discussed documents TG/202/1 Rev. and TWF/50/7, presented by Ms. Nuria Urquía Fernández (Spain) and Mr. Francisco José Fabado Guillem (Spain), and agreed the following:

|  |  |
| --- | --- |
| Char. 26 | - state 1 to read “absent or low”, example varieties: Washington Navel (SWO) Valencia Late (SWO)  - state 2 to read “medium”, example variety: Olinda (SWO)  - state 3 “high”, example variety: Comuna (SWO) |
| Ad. 26 | first paragraph to read “…pollination” |
| Char. 56 | to read “Fruit surface: presence of pitting and pebbling”  to adapt char. 57 accordingly by deleting “on oil glands” |
| Ad. 56 | - to read “Observations should be made on the proximal half of the fruit “  - to add illustration as follows (clean version to be provided): |
| Char. 64 | to be kept as in current adopted version and remove from the partial revision |
| Char. 65 (New) | to read “Only varieties with Fruit bicolored segments: present: Fruit: distribution of red coloration” and to read as changes proposed to Char. 64 in document TWF/50/7 |
| Ad. 83 (previously 84) | to read “Open pollination means natural pollination between trees of any variety.” |

### Pistachio (Pistacia L.)

The subgroup discussed document TG/PISTA(proj.3), presented by Ms. Urszula Braun-Mlodecka (European Union), and agreed the following:

|  |  |
| --- | --- |
| Cover page | to correct Spanish from “Alfóncigo” to “Alfónsigo”  to check coverage of the Test Guidelines “*Pistacia* L.” or “*Pistacia vera* L.”? |
| 3.1.1, 3.1.2 | to be deleted |
| 3.1.3 | - to replace “blossoming” by “flowering”  - for rootstocks = 1 growing cycle if *Pistacia* L. |
| 4.1.6 | to be deleted |
| Table of Chars. | - to indicate which example varieties are female (f) or male (m)  - to add present full scales for QN characteristics  - to check whether to add more example varieties |
| Char. 2 | to have states 1 “weak”, 2 “medium” 3 “strong” |
| Char. 8 | to check whether to delete VG |
| Chars. 13, 35, 36, 37 | to add (\*) (grouping characteristic) |
| Char. 20 | to add standard definition of ground color (see TGP/14) |
| Char. 21 | to add standard definition of over color (see TGP/14) |
| Char. 33 | to check whether to increase scale |
| Char.37 | - to check if example variety “Larnaka” could be added to state 1  - to check example varieties for states 4 and 5 |
| 8.1 | all explanations to read “Observations should be made…” to and delete indication of organ at the beginning of the explanations |
| 8.1 (e) | “c” to read “lateral leaflet” |
| Ad. 36 | to read “flowers” instead of “flower buds” |
| 9. | to check whether to be completed |
| TQ 1 | to check whether to add 1.3 for indication of species |
| TQ 4.1, 4.2 | to be completed |
| TQ 7 | to add request for main use (fruit, pollinizer rootstock, other) |

### Pummelo (Grapefruit and) (Citrus L. - Group 4)

The subgroup discussed documents TG/204/1 Rev. and TWF/50/8, presented by Ms. Nuria Urquía Fernández (Spain) and Mr. Francisco José Fabado Guillem (Spain), and agreed the following:

|  |  |
| --- | --- |
| Char. 30 | - state 1 to read “absent or low”, example varieties: Gregal (PUM), JR 13 (GRA); Star ruby (GRA)  - state 2 to read “medium”, example variety: none  - state 3 to read “high”, example varieties: Marsh (GRA), Duncan (GRA) |
| Ad. 26 | first paragraph to read “…pollination” |
| Char. 63 | state 1 to read “white” |
| Char. 65 | to be kept as in current adopted version and remove from the partial revision |
| Char. 66 (New) | to read “Only varieties with Fruit bicolored segments: present: Fruit: distribution of red coloration” and to read as changes proposed to Char. 65 in document TWF/50/8 |
| Char. 66 | state 7 to read “orange” |
| Ad. 81 (previously 82) | to read “Open pollination means natural pollination between trees of any variety.” |

### Strawberry (Fragaria L.) (Revision)

The subgroup discussed document TG/22/11(proj.1), presented by Mr. Erik Schulte (Germany), and agreed the following:

|  |  |
| --- | --- |
| 2.3 | to check whether to reduce number of plants to be submitted |
| 3.1.4 | to be reviewed |
| 3.3.2 | to be deleted |
| 3.4, 4.1.4 | to be reviewed |
| 4.2.2 | to add seed-propagated varieties |
| Table of Chars. | - to review and add example varieties  - to check whether to add new Char. “firmness of flesh” |
| Char. 4 | to reword states of expression to be more precise and avoid confusion with Char. 2 |
| Char. 6 | to check whether to replace “large” by “strong” (intensity or extent?) |
| Char. 8 | to read “Leaf: color …” |
| Char. 11 | to read “Terminal leaflet: ratio length/width” and to have states from “low” to “high” |
| Char. 14 | - to add explanation or illustration  - to read “shallow” instead of “narrow” |
| Char. 15 | to add illustration |
| Char. 17 | - to check whether to reword state 1 “adpressed”, state 2 “upwards”  - to check whether to add fifth state of expression |
| Char. 18 | to check whether to replace “stalk leaflets” with more appropriate term and reword accordingly |
| Char. 20 | to be deleted |
| Char. 21 | to be deleted |
| Char. 27 | to read “Petal: ratio length/width” and to have states from “low” to “high” |
| Char. 29 | to read “Fruit: ratio length/width” and to have states from “low” to “high” |
| Char. 34 | - “(excluding neck)” to be moved to 8.2  - state 4 to read “retuse” |
| Char. 35 | to add state “pink” with example variety “Mannyeonseol” |
| Char. 36 | to be deleted |
| Char. 37 | to be deleted |
| Char. 39 | to reduce scale to 3 states below surface (1), level with surface (2), above surface (3) |
| Char. 47 | to be deleted |
| Char. 48, 49 | to delete (\*) |
| Char. 50 | to be deleted and request this information in TQ 7.3 and use wording as in current adopted version of TG Strawberry or only use “absent” and “present” |
| Ad. 31 | to check whether to use a grid or explain how the states are distinguished |
| Ad. 45 | to add wording “Observations should be made excluding the core.” |
| TQ 4.2, 6 | to be completed |

### Sweet Cherry (Prunus avium L.) (Revision)

The subgroup discussed document TG/35/8(proj.1), presented by Ms. Carole Dirwimmer (France), and agreed the following:

|  |  |
| --- | --- |
| 5.3 | to add grouping characteristics |
| Table of Chars. | - to add more (\*)  - to check and correct methods of observation  - to add full range of states of expression for QN characteristics  - to add growth stages (BBCH) |
| Char. 3 | to check correlation with Char. 1 and whether to delete one or the other |
| Chars. 4, 5 | - to move “(during rapid growth)” to 8.2  - to move after Char. 8 |
| Char. 5 | to reduce scale to 5 notes |
| Char. 6 | - to have states: 1 “standard” and 2 “compact”  - to read “One-year-old shoot: Tree type” |
| Char. 7 | to check whether to reduce scale to 5 notes |
| Char. 8 | - to move “(at midlength)” to 8.2  - to check whether to be deleted (correlation with “tree: type…”) |
| Char. 9 | - to remove underlining  - to read: “Flower bud: shape of apex” |
| Char. 10 | to be indicated as QN |
| Char. 13 | to have states from “low” to “high” (ratio) |
| Char. 14 | to check whether reduce scale to 5 notes |
| Char. 16 | to have states from “low” to “high” (ratio) |
| Char. 17 | to be indicated as VG |
| Char. 19 | to check whether to have 3 states of expression “none”, “one or two”, “more than two” and to be indicated as QL |
| Char. 20 | to indicate MG/VG |
| Char. 23 | - to check whether to read: “Stamen: position compared to the top of the petals”  - to add explanation on when to be observed |
| Char. 24 | to add explanation on when to be observed |
| Char. 25 | - to indicate MG/VG  - to add explanation on what size refers to  - to check example varieties |
| Char. 26 | to check whether to add more characteristics on fruit shape (e.g. lateral and ventral view) |
| Char. 28 | - to read: ”Fruit: conspicuousness of suture”  - states of expression “weak”, “medium”, “strong” |
| Char. 30 | to reduce scale to 5 notes |
| Char. 31 | to be indicated as QN and have three states of expression |
| Char. 32 | to delete state 2 |
| Char. 33 | - to delete “Only yellow with blush varieties:”  - state 1 to read “absent or very small” |
| Char. 37 | to replace “cream” with “whitish yellow” |
| Char. 39 | to have notes 3, 5, 7, 9 |
| Char. 40 | to add time of observation |
| Char. 42 | to reduce scale to 5 notes |
| Char. 44 | - to check current states of expression and whether to add more states  - state1 to read “medium elliptic” |
| Char. 45 | to have states from “low” to “high” (ratio) |
| 8., 9., TQ | to be completed |

## Variety denominations

The TWF considered document TWP/3/6.

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

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

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

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

### Revision of the ninth edition of the ICNCP

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

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

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

### Non-acceptable terms

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

### Date and program of the next meeting

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

## Information and databases

### (a) UPOV information databases

The TWF considered documents TWP/3/4 and TWP/3/4 Add..

#### UPOV Code System

##### UPOV code developments

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

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

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

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

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

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

The TWF noted thatthe TC agreed not to delete the UPOV Codes for *Brassica oleracea*, therefore creating an exception to the “Guide to the UPOV Code System”, as set out in document TWP/3/4, paragraph 32.

The TWF noted that amendments to the “Guide to the UPOV Code System” would be considered by the TC, at its fifty-fifth session, to be held in Geneva on October 28 and 29, 2019, as set out in document TWP/3/4, paragraph 33.

##### TWP checking

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

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

#### PLUTO database

##### Program for improvements to the PLUTO database

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

##### Content of the PLUTO database

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

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

### (b) Variety description databases

The TWF considered document TWP/3/2.

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

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

### (c) Exchange and use of software and equipment

The TWF noted the information provided in document TWP/3/5.

#### Document UPOV/INF/16 “Exchangeable Software”

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

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

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

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

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

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

### (d) UPOV PRISMA

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

## Experiences with new types and species

The TWF noted that no experiences with new types and species were reported at the session.

## Differences in notes for the assessment of distinctness

The TWF considered document TWP/3/13.

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

The TWF agreed with the clarification provided in document TWP/3/13, paragraphs 10 to 13.

## Recommendations on draft Test Guidelines

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

The TWF agreed that the following draft Test Guidelines should be submitted to the TC for adoption on the basis of the following documents and the comments in this report:

|  |  |
| --- | --- |
| Subject | Basic Document(s) (2019) |
| Oranges (*Citrus* L. - Group 2) (Partial revision:  Characteristics 26, 56, 64, 81, 83) | TG/202/1 Rev., TWF/50/7 |
| Pummelo (Grapefruit and) (*Citrus* L. - Group 4)  (Partial revision: Characteristics 30, 50, 63, 65, 66, 81) | TG/204/1 Rev., TWF/50/8 |

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

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

|  |  |
| --- | --- |
| Subject | Basic Document(s) (2019) |
| Apple (fruit varieties) (Revision) (*Malus domestica* Borkh.) | TG/14/10(proj.2) |
| \*Apricot (*Prunus armeniaca* L.) (Revision) | TG/70/5(proj.3) |
| Argania (*Argania spinosa* (L.) Skeels) | TG/ARGAN(proj.4) |
| Date Palm (*Phoenix dactylifera*) | TG/PHOEN\_DAC (proj.1) |
| Grapevine (*Vitis* L.) (Revision) | TG/50/10(proj.2) |
| Guava (*Psidium guajava* L.) (Revision) | TG/110/3 |
| Goji (*Lycium* L.) | NEW |
| Hazelnut (*Corylus americana* Marshall) (Revision) | TG/71/3 |
| Lemon (Lemons and Limes (*Citrus* L. - Group 3)) (Partial revision: deletion of Characteristics 53, 56 and 67; changes to Characteristics 29, 68, 73 | TG/203/1 Rev. |
| Mandarin (*Citrus* L. – Group 1) (Partial revision: deletion of Characteristics 9 to 12, 15, 18, 19, 27, 35, 36, 38 to 40, 42, 43, 45 to 47, 50, 51, 58, 60, 65, 66, 68 to 70, 75, 90, 91, 93 and 104; changes to Characteristics 25, 67, 73, 91 and 98) | TG/201/1 Rev. |
| Mulberry (*Morus* L.) | TG/MORUS(proj.1) |
| \*Physic Nut (*Jatropha curcas* L.) | TG/JATRO\_CUR (proj.2) |
| \*Pistachio (*Pistacia* L.) | TG/PISTA(proj.3) |
| Seabuckthorn (*Hippophae rhamnoides* L.) (Partial revision:  Ad. 21) | TG/240/1 |
| Strawberry (*Fragaria* L.) (Revision) | TG/22/11(proj.1) |
| Sweet Cherry (*Prunus avium* L.) (Revision) | TG/35/8(proj.1) |
| Trifoliate Orange ((Poncirus) (*Citrus* L. - Group 5)) (Partial revision: deletion of Characteristics, 4, 20, 86; changes to Characteristics: 25, 100, 101 | TG/83/4 Rev. |

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

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

A list of Test Guidelines the TWF agreed to possibly discuss at its session in 2021 is presented in Annex VII to this report.

## Date and place of the next session

At the invitation of France, the TWF agreed to hold its fifty-first session in Nîmes, France, from July 6 to 10, 2020.

## Chairperson

The TWF agreed to propose to the TC that it recommend to the Council to elect Mr. Christopher Barnaby, from New Zealand, as the next chairperson of the TWF.

Future program

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

1. Opening of the Session
2. Adoption of the agenda
3. Short reports on developments in plant variety protection

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

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

1. Molecular Techniques (document to be prepared by the Office of the Union)
2. Developments in UPOV (document to be prepared by the Office of the Union)
3. Presentation on the use of molecular techniques in DUS examination (presentations invited from members of the Union)
4. TGP documents (documents to be prepared by the Office of the Union)
5. Variety denominations (document to be prepared by the Office of the Union)
6. Information and databases

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

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

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

(d) UPOV PRISMA (document to be prepared by the Office of the Union)

1. Experiences with new types and species (oral reports invited)
2. Access to plant material for the purpose of management of variety collections and DUS examination (Italy to prepare a document)
3. DUS examination of mutant varieties of apple (document to be prepared by the European Union)
4. Matters relevant in DUS examination for the fruit sector (presentations invited from members and observers)
5. Guidance for drafters of Test Guidelines
6. Matters to be resolved concerning Test Guidelines put forward for adoption by the Technical Committee (if appropriate)
7. Discussion on draft Test Guidelines (Subgroups)
8. Recommendations on draft Test Guidelines
9. Date and place of the next session
10. Future program
11. Adoption of the Report of the session (if time permits)
12. Closing of the session

Visit

On the morning of June 26, 2019, the TWF visited the NÉBIH testing station in Pölöske in the West Transdanubian Region. The TWF was welcomed by Mr. Ferenc Szili, Head of the Variety Testing Station Pölöske, NÉBIH, and Mr. Miklós Pöczik, Head of the Szombathely region, NÉBIH. The TWF received a presentation by Ms. Szilvia Márkne Deák, DUS Expert at the Agricultural Genetic Resources Directorate, NÉBIH, on the activities of the testing station, a copy of which is provided in Annex V.

During the afternoon of June 26, 2019, the TWF visited the Research Institute for Viticulture and Enology in Badacsony, one of the 16 institutes of the National Agricultural Research and Innovation Center (NARIC). The TWF was welcomed and received a presentation by Ms. Zora Annamaria Nagy, Research Associate, a copy of which is provided in Annex VI. The TWF then received a guided tour of the vineyards.

The TWF adopted this report at the end of the session.

[Annexes follow]

LIST OF PARTICIPANTS

|  |  |  |  |
| --- | --- | --- | --- |
|  | I.  MEMBERS | | |
|  | BOSNIA AND HERZEGOVINA | | |
|  | N:\AppDocMWin7\MDCS\Pictures\15589.jpg | Mirjana BRZICA (Ms.), Head, Department of seeds, seedling and protection of new varieties of plants, Administration of Bosnia and Herzegovina for Plant Health Protection, Ministry of Foreign Trade and Economic Relations, Titova 9A, 71000 Sarajevo  (tel.: +387 33 290 722 fax: +386 33 290 711 e-mail: mirjana.brzica@uzzb.gov.ba) | |
|  | C:\jm_Twf50\JM\participants\Ivana_Miletic_.JPG | Ivana MILETIC-DJERIC (Ms.), Senior Associate for Seeds and Planting Material and Protection of Varieties, Marsala Tita 9A, Sarajevo  (tel.: +387 33 290 721 fax: +387 33 290 711 e-mail: ivana.djeric@uzzb.gov.ba) | |
|  | brazil | | |
|  |  | Stefânia PALMA ARAÚJO (Ms.), Federal Agricultural Inspector, Head of Division, Serviço Nacional de Proteção de Cultivares (SNPC), Ministry of Agriculture, Livestock and Food Supply, Esplanada dos Ministérios, Bloco 'D', Anexo B, sala 350, 70043-900 Brasilia , D.F. (tel.: +55 61 3218 3460 fax: +55 61 3224 2842 e-mail: stefania.araujo@agricultura.gov.br) | |
|  | CANADA | | |
|  | D:\Users\longV\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\MarcdeWit.jpg | Marc DE WIT (Mr.), Examiner, Plant Breeders' Rights Office, Canadian Food Inspection Agency (CFIA), Room 59-IE-334, 59 Camelot Drive, Ottawa Ontario K1A 0Y9 (tel.: +1 613 773 7198 fax: +1 613 773 7115 e-mail: Marc.deWit@canada.ca) | |
|  | CHILE | | |
|  | N:\AppDocMWin7\MDCS\Pictures\20633.jpg | Alvaro ULLOA (Mr.), Fruit plant Examiner, PBR Department, Agricultural and Livestock Service, Ministry of Agriculture, Av. Presidente Bulnes 140, segundo piso, Casilla 4088, Santiago de Chile (tel.: 56 2 2 345 1565 e-mail: alvaro.ulloa@sag.gob.cl) | |
|  | CHINA | | |
|  | N:\AppDocMWin7\MDCS\Pictures\6830.jpg | Yongqi ZHENG (Mr.), Director, Laboratory for Molecular Testing of New Plant Varieties, Office of Protection of New Varieties of Plants, National Forestry and Grassland Administration, Dongxiaofu 1, Xiangshan Road, Haidian District, Beijing 100091  (tel.: +86 10 6288 8565 fax: +86 10 6287 2015 e-mail: zhengyq@caf.ac.cn) | |
|  | N:\AppDocMWin7\MDCS\Pictures\21661.jpg | Mei MA (Ms.), Division Director, Office of Protection of New Varieties of Plants, National Forestry and Grassland Administration, No. 18 Hepingli East Street, Beijing 100714  (tel.: +86 10 8423 8968 fax: +86 10 8423 8885 e-mail: mm5557@sina.com) | |
|  | czech republic | | |
|  | D:\Users\longV\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\fotoAndrea.jpg | Andrea POVOLNÁ (Ms.), Head of DUS Department, National Plant Variety Office, Central Institute for Supervising and Testing in Agriculture (UKZUZ), Hroznová 2, 656 06 Brno  (tel.: +420 737 267 221 e-mail: andrea.povolna@ukzuz.cz) | |
|  | C:\jm_Twf50\JM\participants\dusan.JPG | Dusan NESRSTA (Mr.), DUS Expert for fruit, Central Institute for Supervising and Testing in Agriculture (ÚKZÚZ), Hroznová 2, Brno 603 00  (e-mail: dusan.nesrsta@ukzuz.cz) | |
|  | C:\jm_Twf50\JM\participants\Jan_Tomas.JPG | Tomas JAN (Mr.), DUS Expert for fruit, Central Institute for Supervising and Testing in Agriculture (ÚKZÚZ), Hroznová 2, Brno 656 06  (tel.: +420 737 267 238 e-mail: tomas.jan@ukzuz.cz) | |
|  | C:\jm_Twf50\JM\participants\vit_rucki.JPG | Vít RUCKI (Mr.), DUS Expert for Grapevine, Central Institute for Supervising and Testing in Agriculture (ÚKZÚZ), Hroznová 2, Brno 603 00  (e-mail: vit.rucki@ukzuz.cz) | |
|  | European union | | |
|  |  | Jean MAISON (Mr.), Deputy Head, Technical Unit, Community Plant Variety Office (CPVO),  CS 10121, 49101 ANGERS Cedex 02, France (tel.: +33 2 4125 6435 e-mail: maison@cpvo.europa.eu) | |
|  |  | Urszula BRAUN-MLODECKA (Ms.), Ornamental Plants/Fruit Crops, Community Plant Variety Office (CPVO), 3, boulevard Maréchal Foch, CS 10121, 49101 Angers Cedex 02, France (tel.: +33 (0)2 41 25 64 49 e-mail: braun@cpvo.europa.eu) | |
|  | France | | |
|  | N:\AppDocMWin7\MDCS\Pictures\24131.jpg | Carole DIRWIMMER (Ms.), Manager of Fruit DUS team, Groupe d'étude et de contrôle des variétés et des semences (GEVES), 4790 route des Vignères, 84250 Le Thor  (tel.: +33 490 78 66 63 e-mail: carole.dirwimmer@geves.fr) | |
|  | Germany | | |
|  | N:\AppDocMWin7\MDCS\Pictures\9247.jpg | Swenja TAMS (Ms.), Head of Section General affairs of DUS testing, Bundessortenamt,  Osterfelddamm 80, 30627 Hanover  (tel.: +49 511 9566 5607 fax: +49 511 9566 9600  e-mail: Swenja.Tams@bundessortenamt.de) | |
|  |  | Erik SCHULTE (Mr.), Head of Section Fruit and Genebank, Testing Station Wurzen, Federal Plant Variety Office, Torgauer Str. 100, 04808 Wurzen (tel.: +49 3425 90 40 24 fax: +49 3425 90 40 20 e-mail: erik.schulte@bundessortenamt.de) | |
|  |  | Rudolf BECHER (Mr.), Examiner, Bundessortenamt, Pruefstelle Hassloch, Boehler Str. 100, 67454 Hassloch  (tel.: +49 63 24 92 40 11 fax: +49 63 24 92 40 30  e-mail: rudolf.becher@bundessortenamt.de) | |
|  | Hungary | | |
|  | C:\Users\vertesc\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\C0J9Y29W\Tarpataki Tamás.jpg | Tamás TARPATAKI (Mr.), Deputy State Secretary for Agricultural Markets,Ministry of Agriculture, Apáczai Csere János u. 9., 1052 Budapest (tel.: +36-1-795-8483 e-mail: aphat@am.gov.hu) | |
|  | cid:image001.jpg@01D525B2.1EBE1DC0 | Gergely MÉSZÁROS (Mr.), Expert, Department of Agricultural Genetic Resources, Ministry of Agriculture, Apáczai Csere János u. 9., 1052 Budapest (tel.: +36-1-795-4335 e-mail: [gergely.meszaros@am.gov.hu](mailto:gergely.meszaros@am.gov.hu)) | |
|  | ZsigmoncR.JPG | Richárd ZSIGMOND (Mr.), Director, Agricultural Genetic Resources Directorate, National Food Chain Safety Office (NÉBIH), Keleti K. u. 24, 1024 Budapest  (e-mail: mgei@nebih.gov.hu) | |
|  | \\srvfile01\home\perneszgyorgy\Dokumentumok\Képek\Gyuri\pernesz györgy.JPG | György PERNESZ (Mr.), Head, Variety Testing Department of Horticultural Crops, Agricultural Genetic Resources Directorate, National Food Chain Safety Office (NÉBIH), Keleti K. u. 24, 1024 Budapest  (tel.: +36 1 3369160 e-mail: perneszgy@nebih.gov.hu) | |
|  | Feri.jpg | Ferenc SZILI (Mr.), Head of the Variety Testing Station Pölöske, National Food Chain Safety Office (NÉBIH), 8929 Pölöske  (tel.: +36 30 5659 503 e-mail: szilif@nebih.gov.hu) | |
|  | Timi.JPG | Tímea UZONYI DEZSŐNÉ (Ms.), Deputy Head of the Variety Testing Station Pölöske, National Food Chain Safety Office (NÉBIH), 8929 Pölöske  (e-mail: uzonyid@nebih.gov.hu) | |
|  | N:\AppDocMWin7\MDCS\Pictures\8934.jpg | Zoltán CSÜRÖS (Mr.), Coordinator, DUS Expert, Variety Testing Dept. for Field Crops, National Food Chain Safety Office (NÉBIH), Keleti K. u. 24., 1024 Budapest  (tel.: +36 70 4360671 e-mail: csurosz@nebih.gov.hu) | |
|  | FóriIldi.jpg | Ildikó FÓRINÉ NÉMETH (Ms.), Coordinator, Variety Testing Department for Field Crops, Agricultural Genetic Resources Directorate, National Food Chain Safety Office (NÉBIH), Keleti K. u. 24., 1024 Budapest  (e-mail: forinei@nebih.gov.hu) | |
|  | N:\AppDocMWin7\MDCS\Pictures\22539.jpg | Szilvia MÁRKNÉ DEÁK (Ms.), DUS Expert, Agricultural Genetic Resources Directorate, National Food Chain Safety Office (NÉBIH), Keleti Károly u. 24., 1024 Budapest  (tel.: +36 70 436 0657 e-mail: DeakSz@nebih.gov.hu) | |
|  |  | Marianna FEHÉR (Ms.), DUS Expert for vegetables, Department for Variety Testing of Horticultural Plants, Agricultural Genetic Resources Directorate, National Food Chain Safety Office (NÉBIH), Keleti Károly utca 24, 1024 Budapest (tel.: +36 1 336 91 62 e-mail: feherm@nebih.gov.hu) | |
|  | photo_Szani Zsolt.jpg | Zsolt SZANI (Mr.), Fruit Expert, Variety Testing Dept. for Horticultural Crops, National Food Chain Safety Office (NÉBIH), Keleti K. u. 24., 1024 Budapest  (tel.: +36 70 436 0656 e-mail: szanizs@nebih.gov.hu) | |
|  | C:\Users\feketeda\Desktop\20190529_143845.jpg | Dávid FEKETE (Mr.), DUS expert, Variety Testing Department of Horticultural Crops, Agricultural Genetic Resources Directorate, National Food Chain Safety Office (NÉBIH), Keleti K. u. 24., 1024 Budapest  (tel.: +36 302421662 e-mail: feketeda@nebih.gov.hu) | |
|  |  | Ferenc KOVÁCS (Mr.), DUS expert, Variety Testing Department of Horticultural Crops, Agricultural Genetic Resources Directorate, National Food Chain Safety Office (NÉBIH), Keleti K. u. 24., 1024 Budapest  (e-mail: kovacsf@nebih.gov.hu) | |
|  | gyongyos.jpg | Gyöngyvér Éva SÓTONYI (Ms.), Variety Testing Department of Horticultural Crops , Agricultural Genetic Resources Directorate, National Food Chain Safety Office (NÉBIH), Keleti K. u. 24, 1024 Budapest  (e-mail: laszlogy@nebih.gov.hu) | |
|  | P1130534.jpg | Stefánia BALOGH (Ms.), Seed engineer, Seed Testing Department, Agricultural Genetic Resources Directorate, National Food Chain Safety Office (NÉBIH), Keleti K. u. 24., 1024 Budapest  (tel.: +36 704320467 e-mail: baloghs@nebih.gov.hu) | |
|  | SzabóZs.JPG | Zsuzsa SZABÓ, Coordinator, Seed Testing Department, Agricultural Genetic Resources Directorate, National Food Chain Safety Office (NÉBIH), Keleti K. u. 24, 1024 Budapest  (e-mail: szabozsu@nebih.gov.hu) | |
|  | Új kép | Ágnes KÓKAI-KUNNÉ SZABÓ (Ms.), Legal expert, Károli Gáspár University Faculty of Law, Viola u. 2-4, 1042 Budapest (tel.: +36-30 547 8456 e-mail: agnes.kokaikunneszabo@gmail.com) | |
|  | israel | | |
|  | N:\AppDocMWin7\MDCS\Pictures\17083.JPG | Ben-Zion ZAIDMAN (Mr.), DUS Examiner, Plant Breeders' Rights Unit, Ministry of Agriculture and Rural Development, P.O. Box 30, Beit-Dagan 50250  (tel.: +972 3 948 5833 fax: +972 3 9485839 e-mail: benzionz@moag.gov.il) | |
|  | italy | | |
|  | N:\AppDocMWin7\MDCS\Pictures\24331.jpg | Flavio Roberto DE SALVADOR (Mr.), DUS Expert, Via Costa Rotonda 27, 00040 Marino (Rome), 00040 Marino  (tel.: +39 338 289 5409 e-mail: fr.desalvador@gmail.com) | |
|  |  | Petra ENGEL (Ms.), DUS Expert, CREA-Council for Research in Agriculture and Economics (CREA), Office for International Cooperation, Via Po 14, 00198 Rome (tel.: +39 06 47836 681 fax: +39 06 79341630 e-mail: petra.engel@crea.gov.it) | |
|  | N:\AppDocMWin7\MDCS\Pictures\24672.jpg | Maria Antonietta PALOMBI (Ms.), Researcher, CREA-OFA - Research Center for Olive, Fruit and Citrus Trees, via Fioranello 52, 00134 Roma  (tel.: +390679348178 e-mail: mariaantonietta.palombi@crea.gov.int) | |
|  |  | Roberto CARRARO (Mr.), Researcher, CREA - Research Centre for Viticulture and Enology, via Casoni 13/A, 31058 Susegana (TV)  (tel.: +39 04 387 3264 e-mail: roberto.carraro@crea.gov.it) | |
|  | japan | | |
|  | N:\AppDocMWin7\MDCS\Pictures\24504.jpg | | Yosuke ABE (Mr.), Assistant Examiner, Plant Variety Protection Office, Intellectual Property Division Food Industry Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries (MAFF), 1-2-1 Kasumigaseki, Chiyoda-ku, 100-8950 Tokyo  (tel.: +81-3-6738-6466 fax: +81-3-3502-6572 e-mail: yosuke\_abe880@maff.go.jp) |
|  | MOROCCO | | |
|  |  | | Abdelaziz BENSAJJAY (Mr.), Chef de la division de contrôle des semences et plants, Direction de la Protection du Patrimoine Animal et Végétal, Office National de la Sécurité Sanitaire des Produits Alimentaires (ONSSA), Rue Sidi Al Hafiane Cherkaoui, B.P. 1308, Rabat-Instituts  (tel.: +212 6 73 99 78 32 fax: +212 5 37 77 98 52 e-mail: bensajjay.aziz@gmail.com) |
|  | D:\Users\besse\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\IMG_3050.jpg | | Ibtihaj BELMEHDI (Ms.), Head of Plant Control service, DUS Examiner / Expert in charge of the Control and Certification of Fruit species, Division of Seed and Plant Control, National Office of Sanitary Food Safety (ONSSA), Avenue Sidi Al Hafiane Cherkaoui, Al Irfane, Rabat Instituts, Rabat  (tel.: +212 537 778852 e-mail: ibtibelmehdi@hotmail.com) |
|  | N:\AppDocMWin7\MDCS\Pictures\18463.jpg | | Hamid BENYAHIA (Mr.), Coordinateur, Unité de Recherche Amélioration des plantes et Conservation des Ressources Phytogénétiques, Institut National de La Recherche Agronomique (INRA), Route Sidi Yahya du Gharb, Km 9, BP 257, Kénitra  (tel.: +212 660 157216 fax: +212 660 156327 e-mail: hamidbenyahia2002@yahoo.fr) |
|  | new zealand | | |
|  |  | | Christopher J. BARNABY (Mr.), Assistant Commissioner, Plant Variety Rights Office, Intellectual Property Office of New Zealand, Ministry of Business, Innovation and Employment, Private Bag 4714, 55 Wordsworth St., Christchurch 8140  (tel.: +64 3 9626206 e-mail: Chris.Barnaby@pvr.govt.nz) |
|  | REPUBLIC OF KOREA | | |
|  | N:\AppDocMWin7\MDCS\Pictures\13136.jpg | | Oh-woung KWON (Mr.), Director General, National Forest seed and variety center (NFSV), National Forest Seed & Variety Center, 72 Suhoeri-ro, Suanbo-myeon, Chungju-si, Chungcheongbuk-do 27495  (tel.: +82 43 850 3300 fax: +82 43 848 0451 e-mail: owkwon@korea.kr) |
|  | N:\AppDocMWin7\MDCS\Pictures\17625.jpg | | Sung-Ryul RYU (Mr.), Research Scientist, National Forest seed and variety center (NFSV), 72 Suhoeri-ro, Suanbo-myeon, Chungju-si, Chungcheonbuk-do 27495  (tel.: +82 43 850 3325 fax: +82 43 850 3392 e-mail: 25ryul@korea.kr) |
|  | N:\AppDocMWin7\MDCS\Pictures\6658.jpg | | Sang Don YUN (Mr.), Research Officer, International Seed Training Center, Korea Seed and Variety Service (KSVS), 145, Hyuksin-8-ro, Gimcheon-si, Gyeongsangbuk-do  (tel.: +82 54 840 1510 fax: +82 54 810 1550 e-mail: yunsd@korea.kr) |
|  | N:\AppDocMWin7\MDCS\Pictures\24715.jpg | | HyunWoo OH, DUS examiner, Korea Seed and Variety Service (KSVS), 7415, Jungsangandong-ro, Nam won-eup, Seogwipo-si, Jeju-do  (tel.: +82 64 900 3014 fax: +82 64 900 2997 e-mail: blackcow@korea.kr) |
|  | romania | | |
|  | C:\jm_Twf50\JM\participants\Cosmina_RO.JPG | Cosmina Luminita STANCIU (Ms.), Expert advisor in DUS testing for fruit trees, vines and small fruits, State Institute for Variety Testing and Registration (ISTIS), Bd. Marasti 61, sector 1, OP 25, CP 8, 011464 Bucarest  (tel.: +40 21 318 4380 fax: +40 21 318 4408 e-mail: cosminadiaconu@yahoo.com) | |
|  | Slovakia | | |
|  | N:\AppDocMWin7\MDCS\Pictures\7477.jpg | Bronislava BÁTOROVÁ (Ms.), National Coordinator for the Cooperation of the Slovak Republic with UPOV/ Senior Officer, Department of Variety Testing, Central Controlling and Testing Institute in Agriculture (ÚKSÚP), Matúskova 21, 833 16 Bratislava  (tel.: +421 2 59 880 204, +421 918 968 014 fax: +421 37 652 3086  e-mail: bronislava.batorova@uksup.sk) | |
|  | N:\AppDocMWin7\MDCS\Pictures\21194.jpg | Lubomir BASTA (Mr.), DUS expert for agricultural species, Variety Testing Department, Central Controling and Testing Institute in Agriculture Bratislava (UKSUP), Testing Station Partizánska 14, 053 61 Spisské Vlachy  (tel.: + 421 53 4495311 e-mail: lubomir.basta@uksup.sk) | |
|  | Spain | | |
|  | N:\AppDocMWin7\MDCS\Pictures\24392.jpg | Nuria URQUÍA (Ms.), Head of Area of the National Registry of Plant Varieties, Spanish Plant Variety Office (OEVV), Ministry of Agriculture, Fisheries and Food, Calle Almagro 33, 28010 Madrid  (tel.: +34 91 347 4508 e-mail: nurquia@mapa.es) | |
|  |  | Francisco José FABADO GUILLEM (Mr.), Citrus and other species DUS testing unit (UETIV) Manager, Instituto Valenciano de Investigaciones Agrarias (IVIA), CV-315, Km 10,7 (Carretera Moncada-Náquera, Km. 4., 46113 Moncada  (tel.: +34 676 368 970 e-mail: fabado\_fra@gva.es) | |
|  |  | Neus ALETÀ SOLER (Ms.), Responsable Centro de Examen de Juglans sp. y C. avellana, Instituto de Investigación y Tecnología Agroalimentaria (IRTA), Torre Marimon, 08140 Caldes de Montbui  (tel.: +34 902 789 449 Ext. 1325 e-mail: neus.aleta@irta.cat) | |

|  |  |  |  |
| --- | --- | --- | --- |
|  | II. organizations | | |
|  | International community of breeders of asexually reproduced ornamental and fruit varieties (ciopora) | | |
|  | N:\AppDocMWin7\MDCS\Pictures\24109.jpg | Micaela FILIPPO (Ms.), Legal Council, Deichstr. 29, 20459 Hamburg , Germany  (tel.: +49 40 555 63702 fax: +49 40 555 63703 e-mail: micaela.filippo@ciopora.org) | |
|  | N:\AppDocMWin7\MDCS\Pictures\9578.jpg | Dominique THÉVENON (Ms.), Board member, Treasurer - CIOPORA, AIGN®, International Community of Breeders of Asexually Reproduced Ornamental and Fruit Plants (CIOPORA), Deichstrasse 29, 20459 Hamburg , Germany  (tel.: +33 4 90347149 e-mail: t.dominique4@orange.fr) | |
|  | N:\AppDocMWin7\MDCS\Pictures\22922.jpg | Yael Victoria MIARA (Ms.), Vice Head Technical Expert Fruit, Grapa Varieties Ltd, 19 Hazait St., P.O. Box 2039, 30900 Zichron Yaakov, Israel  (tel.: +972 4 6292274 e-mail: vered@grapaes.com) | |
|  | N:\AppDocMWin7\MDCS\Pictures\14111.jpg | An VAN DEN PUTTE (Ms.), IP Manager, Better3fruit, 36, Steenberg, 3202 Rillaar, Belgium (tel.: +32 16 241610 fax: +32 16 228895 e-mail: an@better3fruit.com) | |
|  |  | Jan Wouter VAN ECK (Mr.), License and IP Manager / Crop expert - leader fruit section Strawberry, Fresh Forward Marketing BV, Wielseweg 38a, Eck en Wiel 4024 BK, Netherlands  (tel.: +31 613138532 e-mail: janwouter.vaneck@fresh-forward.nl) | |
|  |  | Sonia SOTO JOVER (Ms.), Technical Coordinator, SNFL S.L., Vereda de Fortuna 35, Cabezo de Torres, Murcia 30110, Spain  (tel.: +34 686 124 056 e-mail: sonia.soto@snfl.co.uk) | |
|  | III.  OFFICERS | | |
|  |  | | Jean MAISON (Mr.), Chair |
|  | IV.  OFFICE OF UPOV | | |
|  |  | | Ben RIVOIRE (Mr.), Technical/Regional Officer (Africa, Arab Countries), International Union for the Protection of New Varieties of Plants (UPOV), Chemin des Colombettes 34,  1211 Geneva 20, Switzerland (tel.: +41 22 338 8426 fax: +41 22 733 0336 e-mail: ben.rivoire@upov.int) |
|  |  | | Romy OERTEL (Ms.), Secretary II, International Union for the Protection of New Varieties of Plants (UPOV), Chemin des Colombettes 34, 1211 Geneva 20, Switzerland (tel.: +41 22 338 7293 fax: +41 22 733 0336 e-mail: romy.oertel@upov.int) |
|  |  | | Jessica MAY (Ms.), Secretary I, International Union for the Protection of New Varieties of Plants (UPOV), Chemin des Colombettes 34, 1211 Geneva 20, Switzerland  (tel.: +41 22 338 9359 fax: +41 22 733 0336 e-mail: jessica.may@upov.int) |

[Annex II follows]

[Annexes II to VI only available in the pdf version of this report]

[Annex VII follows]

LIST OF LEADING EXPERTS

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

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

**by August 9, 2019**

| Species | Basic Document(s) | Leading expert(s) |
| --- | --- | --- |
| Oranges (*Citrus* L. - Group 2) (Partial revision: Characteristics 26, 56, 64, 81, 83) | TG/202/1 Rev., TWF/50/7 | Ms. Nuria Urquía Fernández (ES) |
| Pummelo (Grapefruit and) (*Citrus* L. - Group 4)  (Partial revision: Characteristics 30, 50, 63, 65, 66, 81) | TG/204/1 Rev., TWF/50/8 | Ms. Nuria Urquía Fernández (ES) |

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

(\* indicates possible final draft Test Guidelines)

**(Guideline date for Subgroup draft to be circulated by Leading Expert: March 27, 2020**

**Guideline date for comments to Leading Expert by Subgroup: April 24, 2020)**

New draft to be submitted to the Office of the Union

**May 22, 2020**

| Species | Basic Document(s) | Leading expert(s) | Interested experts (States/Organizations) [[4]](#footnote-5) |
| --- | --- | --- | --- |
| Apple (fruit varieties) (Revision) (*Malus domestica* Borkh.) | TG/14/10(proj.2) | Mr. Erik Schulte (DE) | AU, BR, CA, CL, CN, CZ, FR, HU, JP, KR, MX, NL, NZ, PL, QZ, RU, ZA, CIOPORA, Office |
| \*Apricot (*Prunus armeniaca* L.) (Revision) | TG/70/5(proj.3) | Mr. Zsolt Szani (HU) | AU, BG, CN, CZ, ES, FR, HU, IL, IT, JP, KR, MA, NZ, PL, QZ, RO, CIOPORA, Office |
| Argania (*Argania spinosa* (L.) Skeels) | TG/ARGAN(proj.4) | Ms. Ibtihaj Belmehdi (MA) | IL, Office |
| Date Palm (*Phoenix dactylifera*) | TG/PHOEN\_DAC (proj.1) | Mr. Ben-Zion Zaidman (IL) | BR, MA, MX, OM, TN, Office |
| Grapevine (*Vitis* L.) (Revision) | TG/50/10(proj.2) | Mr. Luca Aggio (IT) | AU, BR, CA, CL, CN, CZ, DE, ES, FR, HU, JP, KR, MX, NZ, QZ, RU, SK, ZA, CIOPORA, Office |
| Guava (*Psidium guajava* L.) (Revision) | TG/110/3 | Ms. Ling Gao (CN) | BR, MX, QZ, Office |
| Goji (*Lycium* L.) | NEW | Ms. Chuanhong Zhang (CN) | DE, KR, QZ, Office |
| Hazelnut (*Corylus americana* Marshall) (Revision) | TG/71/3 | Mr. Flavio Roberto de Salvador (IT) | TWO, CZ, DE, ES, HU, QZ, Office |
| Lemon (Lemons and Limes (*Citrus* L. - Group 3)) (Partial revision: deletion of Characteristics 53, 56 and 67; changes to Characteristics 29, 68, 73 | TG/203/1 Rev. | Ms. Nuria Urquía Fernández (ES) | FR, IL, JP, MA, MX, QZ, Office |
| Mandarin (*Citrus* L. – Group 1) (Partial revision: deletion of Characteristics 9 to 12, 15, 18, 19, 27, 35, 36, 38 to 40, 42, 43, 45 to 47, 50, 51, 58, 60, 65, 66, 68 to 70, 75, 90, 91, 93 and 104; changes to Characteristics 25, 67, 73, 91 and 98) | TG/201/1 Rev. | Ms. Nuria Urquía Fernández (ES) | BR, FR, IL, JP, KR, MA, MX, NZ, QZ, Office |
| Mulberry (*Morus* L.) | TG/MORUS(proj.1) | Mr. Yosuke Abe (JP) | TWO, BR, CN, HU, IT, KR, QZ, Office |
| \*Physic Nut (*Jatropha curcas* L.) | TG/JATRO\_CUR (proj.2) | Mr. Alejandro Barrientos‑Priego (MX) | BR, IL, QZ, Office |
| \*Pistachio (*Pistacia* L.) | TG/PISTA(proj.3) | Ms. Urszula Braun-Mlodecka (QZ) | AU, ES, IT, KE, MX, ZA, Office |
| Seabuckthorn (*Hippophae rhamnoides* L.) (Partial revision:  Ad. 21) | TG/240/1 | Ms. Bronislava Bátorová (SK) | DE, QZ, Office |
| Strawberry (*Fragaria* L.) (Revision) | TG/22/11(proj.1) | Mr. Erik Schulte (DE) | AU, CA, CL, ES, JP, KR, MA, NZ, PL, PT, QZ, CIOPORA, Office |
| Sweet Cherry (*Prunus avium* L.) (Revision) | TG/35/8(proj.1) | Ms. Carole Dirwimmer (FR) | AU, BG, CA, CZ, DE, ES, HU, IT, JP, KR, NZ, PL, QZ, RO, SK, ZA, CIOPORA, Office |
| Trifoliate Orange ((Poncirus) (*Citrus* L. - Group 5)) (Partial revision: deletion of Characteristics, 4, 20, 86; changes to Characteristics: 25, 100, 101 | TG/83/4 Rev. | Ms. Nuria Urquía Fernández (ES) | FR, JP, MA, NZ, QZ, Office |

**POSSIBLE TEST GUIDELINES TO BE DISCUSSED IN 2021**

|  |  |
| --- | --- |
| Species | Basic Document(s) |
| Carambola (*Averrhoa carambola* L.) | NEW |
| Raspberry (Revision) | TG/43/7 |
| Sour Cherry (*Prunus cerasus* L.); Duke Cherry (*Prunus* *×gondouinii* (Poit. & Turpin) Rehder) (Revision) | TG/230/1 |

[End of Annex VII and of document]

1. # Indicates technical issues to be resolved [↑](#footnote-ref-2)
2. [↑](#footnote-ref-3)
3. # Indicates technical issues to be resolved [↑](#footnote-ref-4)
4. for name of experts, see List of Participants [↑](#footnote-ref-5)