



TWF/34/7

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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

**TECHNICAL WORKING PARTY
FOR
FRUIT CROPS****Thirty-Fourth Session
Niagara Falls, Canada, September 29 to October 3, 2003**

REPORT

*adopted by the Technical Working Party for Fruit Crops*Opening of the Session

*1. The Technical Working Party for Fruit Crops (TWF) held its thirty-fourth session in Niagara Falls, Canada, from September 29 to October 3, 2003. The list of participants is reproduced in Annex I to this report.

2. The TWF was welcomed by Mr. Glyn Chancey, Director of the Plant Production Division of the Canadian Food Inspection Agency (CFIA), and Ms. Valerie Sisson, Commissioner of the Plant Breeders' Rights Office, Canada. It was explained that the Plant Breeders' Rights Office was part of the CFIA which had been formed in 1997. The CFIA integrated the delivery of inspection and quarantine services that were previously provided by Agriculture and Agri-Food Canada, Health Canada, Industry Canada and the Department of Fisheries and Oceans. The Agency's mandate was to safeguard Canada's food supply which includes the plants and animals upon which safe and high quality food depends. The Commissioner explained that the president of the CFIA reports to the Minister of Agriculture and Agri-Food. The CFIA administers 13 pieces of legislation, one of them being the Plant

* An asterisk next to the paragraph number indicates that the text has been taken from the Report on the Conclusions (document TWF/34/6).

Breeders' Rights Act. The Canadian PBR Act came into effect on August 1, 1990, and is administered by the Plant Breeders' Rights Office of the CFIA. Canada became a member of UPOV in 1991, under the 1978 Act of the UPOV Convention. The PBR Act had required that a Ten Year report be prepared "as soon as practicable" after the Act had been in force for ten years. The purpose of the report was to indicate the impact of the legislation on investment in plant breeding in Canada, access to protected foreign varieties, protection of Canadian varieties abroad, and improvement of plant varieties to the public benefit. The report was completed and tabled in Parliament in June 2002. The overall findings were that there had been an increase in investment in plant breeding and an improvement in the access to foreign varieties in both the agricultural and horticultural sectors since the enactment of the PBR Act. Plant Breeders' Rights appeared to be one factor which had had a positive impact on the availability of improved varieties. The report also indicated that PBR had not had the predicted negative impacts such as increased seed prices and reduction in the number of varieties available. The Ten Year Report recommended that Canada move towards ratification of the 1991 Act of the UPOV convention as soon as possible. Recent initiatives on the part of the CFIA, with solid support from the plant breeding industry, were gaining momentum and it was hopeful that the amendments would be introduced during the fall session of Parliament. Once these changes to our Act were in effect, Canada would move towards ratifying the 1991 Act of the UPOV Convention. The Commissioner noted that as a member of UPOV, Canada has benefited from the many years of experience of other member countries. Because of increasing global markets, there were many fruit varieties which were now protected in several member countries. Participation in a meeting such as the TWF meeting was very valuable for the exchange of information and for an understanding of the various plant breeders' rights systems throughout the world. It was stated that it was through cooperation with UPOV colleagues that it was possible to implement fair and consistent policies with regards to the protection of the intellectual property of fruit breeders around the world. The Commissioner expressed her pleasure that there were participants from at least 15 countries and six continents. It had been decided to choose to hold the meeting in Niagara Falls because that region was the area of greatest horticultural crop production in Eastern Canada and was host to the Niagara fruit industry, fruit breeding programs and research facilities and the celebrated Niagara vineyards.

*3. The session was opened by Mr. Erik Schulte (Germany), Chairman of the TWF, who welcomed the participants, and in particular new participants, to the TWF.

Adoption of the Agenda

*4. The TWF adopted the revised agenda as reproduced in document TWF/34/1 Rev., whilst noting that document TGP/14.2.1 Draft 2 had been replaced by document TGP/14.2.1 Draft 2 Rev.

Short Reports on Developments in Plant Variety Protection in Fruit Crops

5. The TWF received a presentation on Plant Breeders' Rights in Canada from Ms. Sandy Marshall. A copy of the presentation is attached as Annex II to this document.

6. The expert from Argentina reported that fruit varieties represented approximately 7% of the total number of varieties which had been granted plant breeders' rights or officially registered. A total of 82 fruit varieties had been granted protection, mainly for varieties of

apple, strawberry and peach. In 2002, 29 applications had been made and 3 varieties, all being blueberry, had been granted protection.

7. The expert from France advised that there were around 55 national applications for fruit varieties in France each year, mainly for apple, apricot, cherry, peach, pear, plum and strawberry, as well as for some nut species, and around a further 50 applications examined in France on behalf of the Community Plant Variety Office (CPVO). At the invitation of the Chairman he also made a brief presentation on the GAÏA software which had been developed by experts from France, explaining that the purpose of that software was to help crop experts to compare plant varieties. It computed a phenotypic distance between pairs of varieties and shows the characteristics which differed for each variety-pair. The TWF was informed that more information on the GAÏA software could be found on the TWF page on the UPOV Website.

8. The report from the expert from Germany noted that, as of July 31, 2003, 1,600 horticultural varieties had been granted protection, of which 190 were fruit varieties. The fees concerning PBR had been revised to take account of the adoption of the Euro in Germany, resulting in a slight increase in the application fee and a reduction in the annual fees. He also reported that the DUS testing section responsible for fruit had taken on responsibility for the testing of varieties of Petunia and Calibrachoa.

9. The expert from Hungary informed the TWF that Hungary had enacted a new PBR law and had become bound by the 1991 Act of the UPOV Convention on January 1, 2003. In 2002, it had granted protection for varieties of apple (2 varieties), cherry (3) and grapevine (4).

10. The TWF heard from the expert from Israel that, since the introduction of PBR in Israel, it had received around 3,500 applications, of which ornamentals represented approximately 70%. With regard to fruit varieties, applications in recent years had focussed on avocado, citrus, grapevine (particularly seedless varieties), Japanese plums, olive and strawberries. He noted that cooperation with other countries played a very important role in the DUS examination.

11. The expert from Japan reported that the number of applications for plant breeders' rights had been increasing since Japan became a member of the Union in 1982. More than 1,000 applications had been received in 2002. The vast majority of applications (85%) were for ornamentals, followed by vegetables, agricultural crops and then fruit, with fruit varieties representing between 3% and 4% of the total. It was also reported that the number of applications for foreign-bred varieties was increasing. In 2002, 37 applications had been received for fruit varieties including apple (8 varieties), peach (7), persimmon (5) and citrus (5). These applications included four for foreign-bred varieties, from New Zealand (2 varieties), Australia (1 variety) and the United States of America (1 variety). It was reported that the need to strengthen measures for adequate enforcement of plant breeders' rights on harvested material had been increasing and Japan had amended the Seeds and Seedlings Law in June 2003, to expand the scope of penal provisions to include traffickers of not only seeds and seedlings, but also harvested varieties.

12. The TWF heard from the expert from Mexico that applications in Mexico had been received for 537 varieties, including strawberry (42 varieties), raspberry (13) and avocado (10), with fruit varieties accounting for 17% of the overall applications. Of the

537 applications, 60% were made by non-residents, including the United States of America (37% of applications), France (9%), the Netherlands (8%) and Germany (3%).

13. The expert from New Zealand informed the TWF that around 50% of applications in New Zealand related to varieties bred in other countries which were imported into New Zealand. He noted that the importation of plant material for DUS testing caused many difficulties and because of quarantine measures could result in substantial delays in conducting the DUS test. As an example, he reported that all varieties of citrus had to be quarantined at the University of California in the United States of America prior to importation.

14. The TWF heard from the expert from Spain that, whilst the number of Spanish national applications was decreasing, there was an increase in the number of applications being examined on behalf of the CPVO. It was explained that, because of its expertise, the national Office (the “Oficina Española de Variedades Vegetales – OEVV”) undertakes the technical examination for DUS both for the purposes of plant breeders’ rights and for official registration. New centers of DUS examination for avocado, walnut and hazelnut were being prepared. He reported that molecular markers were, where possible, being used in the examination of varieties, but as complementary information.

15. The expert from the Republic of Korea recalled that the Republic of Korea had become the 50th contracting party to the UPOV Convention after the deposit of its instrument of accession to the 1991 Act on December 7, 2001. Its government had enacted the Seed Industry Law on December 6, 1995, and introduced the plant variety protection system on December 31, 1977. Currently, 113 plant genera and species were eligible for plant variety protection. Protection had been granted to 541 plant varieties divided into cereals (53%), vegetables (14%), fruits (8%), ornamentals (13%), forage (1%) and industrial crops (11%). Fruit varieties accounted for 44 titles of protection including apple (11 varieties), grape (3), peach (13) and pear (17). Applications for 520 varieties were made by foreign breeders from Germany, Italy, Japan, Netherlands, New Zealand and United States of America. Most of the varieties for which applications were made by foreign breeders were of Rose, Chrysanthemum, Impatiens, Kalanchoe, Poinsettia, Petunia, Dendrobium and Hot Pepper, with 23 varieties having been granted protection.

16. The report made by the expert from the United Kingdom noted that applications for varieties of apple, gooseberry, pear and red currant were currently being examined in the United Kingdom. The examinations related to national applications as well as to applications being conducted under bilateral agreements and for the CPVO.

17. In the report from the experts from the CPVO, the TWF was informed that the CPVO had received 125 applications for fruit varieties in 2002, out of a total of 2,205 applications, which was a slight increase for fruit varieties. Technical protocols, based on the UPOV Test Guidelines, for technical examination of four fruit species (apple, peach, pear and strawberry) were adopted in October 2002 and March 2003. The TWF heard that the fees structure of the CPVO had been modified as from April 1, 2003. The application fee was unchanged (900 euros), but the examination fee now depended on the species/fee group. The annual fee was reduced to a flat-rate fee. All these figures were available on the CPVO Website. It was also reported that DUS testing for apple was being rationalized on the basis of mutation groups, with centers having been established in France (GEVES), Germany (Bundessortenamt) and the United Kingdom (Brogdale), although DUS testing at the latter was

to be discontinued. The TWF heard that, in 2004, the CPVO would introduce rules concerning the postponement of testing in relation to fruit trees.

*18. The TWF received an oral report from the Office of the Union on the latest developments within UPOV. It also received a report from the Chairman of the Technical Working Party for Ornamental Plants and Forest Trees (TWO) that the TWO had agreed that the Office of the Union, in conjunction with the Chairman of the TWO, would prepare and issue a questionnaire seeking information on the proportion of plants which would need to be affected by a mutation or variation in order to be considered to be an off-type, e.g. whether a single atypical leaf or petal would render the plant an off-type. The TWF agreed that this questionnaire should also be sent to members of the TWF to obtain information on how the matter is handled for fruit crops. The results of the survey would be presented to the TWO and the TWF, in 2004, at their thirty-seventh and thirty-fifth sessions, respectively.

Molecular Techniques

*19. The TWF received an oral report from the Office of the Union on the latest developments concerning the use of molecular techniques in DUS testing within UPOV, based on document TC/38/14 Add.-CAJ/45/5 Add. It noted that the BMT had not been requested to consider any proposals for the establishment of a crop subgroup concerning a fruit crop.

Project to Consider the Publication of Variety Descriptions

*20. The TWF considered document TWF/34/2 and received oral reports from Mrs. Alison Lean (United Kingdom) and Mr. Baruch Bar-Tel (Israel), Coordinators of the model studies on apple and strawberry, respectively.

*21. With regard to the model study on apple, the TWF agreed with the proposal of the Coordinator that this should proceed with 10 varieties, using all characteristics included in the Test Guidelines for Apple. It was noted that the varieties might be known by different names in different countries, and it was agreed that the requests for descriptions should also indicate other names of the variety to ensure that as many descriptions of a variety as possible could be obtained. It was also agreed that all interested parties should be invited to contribute descriptions, including those which had not originally indicated that they had descriptions for the varieties concerned, on the basis that they might know the variety by another name. The selected varieties were as follows:

<u>Denomination</u>	<u>Also known as</u>
Caudle	Cameo
Hidala	Hillwell
Honeycrisp	Minnesota Crunch
Jonagored	
Lena	
Lochbuie Red Braeburn	
Pinova	Corail
Scigold	
Sciros	Sciros Pacific Rose
Tenroy	Royal Gala

*22. The TWF welcomed the choice of varieties, noting that it represented a good split between seedling and mutation varieties. It was agreed that interested parties should be encouraged to submit descriptions of varieties other than official descriptions and that descriptions developed according to different versions of the Test Guidelines would be welcomed. It was noted that the contributors would have a column in the descriptions to indicate the status of the variety descriptions provided, e.g. whether they were official. The expert from South Africa requested to be added to the list of interested parties.

*23. With regard to the model study on strawberry, the TWF heard that the Coordinator had received lists of varieties from six parties, covering around 170 varieties, and that around 20 varieties occurred in the list of more than one territory. It was agreed that the Coordinator should circulate, to the TWF, by the end of October 2003, a list of all varieties occurring on the list of more than one territory, together with his proposal for a shortlist of 10 varieties on which to conduct the study and a request for comments. On the basis of these comments, the list of 10 varieties would be finalized and the Office would issue a request for descriptions to all interested parties. The expert from South Africa requested to be added to the list of interested parties. The expert from France noted that the Coordinator would be able to obtain descriptions of strawberry varieties, developed by France, from their CD-ROM of vegetable variety descriptions.

Review of UPOV Information Databases

*24. The TWF received an oral report from the Office of the Union, based on document TWF/34/3.

*25. To provide a check on the codes presented in Annexes I to III of document TWF/34/3, it was agreed that all experts should check species in which they had particular expertise and, in addition, the experts listed below would check the pages of the Annexes as shown:

Mrs. Sandy Marshall (CA)	pages 1 and 2 of Annexes I and II plus all Annex III
Mr. Richard Brand (FR)	pages 3 and 4 of Annexes I and II plus all Annex III
Mrs. Alison Lean (GB)	pages 5 and 6 of Annexes I and II plus all Annex III
Mr. Alejandro F. Barrientos Priego (MX)	pages 7 and 8 of Annexes I and II plus all Annex III
Mr. Chris Barnaby (NZ)	pages 9 and 10 of Annexes I and II plus all Annex III
Mr. Sergio Semon (CPVO)	pages 11 and 12 of Annexes I and II plus all Annex III

*26. The TWF agreed with the proposals for changes to the proposed UPOV codes, as recommended by the Chairman of the TWF in paragraph 20 of document TWF/34/3, but agreed that separate codes PHYLT_AMA and PHYLT_NIR should be retained because both species were recognized by ISTA.

Explanation of the Growing Cycle for Fruit Crops

*27. The TWF considered document TWF/34/4 when reviewing document TGP/7 Draft 3 (see below, Annex 2: Additional Standard Wording (ASW) for the TG Template: New ASW).

TGP Documents

(a) TGP/7 Draft 3: Development of Test Guidelines

*28. The TWF agreed to propose the following amendments to document TGP/7 “Development of Test Guidelines” Draft 3:

- 1.3 section 4 to be removed and incorporated into section 3.3 “Guidance Notes (GN) for the TG Template”
- 2.1.2 to be revised to reflect the fact that the draft Test Guidelines are no longer sent to the international professional organizations as a separate step.
- 2.2.7.1 as proposed by the TWO, to include an additional sentence, clarifying that it is not the role of the TC-EDC to conduct a substantive technical review of the Test Guidelines.
- 2.5.2.1 / 2.5.3.2 / 2.5.4 as proposed by the TWV, it should be made more clear that this is an example of a route and not the typical route for the adoption of Test Guidelines. A second simpler example for each section should be developed.
- Section 4: General Comment: It was recommended that this section should be incorporated into Guidance Notes 25 to 27.
- 4.2.1 noted that the reference to Annex 3 would be changed to Annex 4.
- 4.3.2 noted that the word “categories” would be replaced by “types of expression”.
- 4.4.3.2.2 agreed with the proposal of the TWA that this should read “In cases where there is a discontinuous separation between absence and presence, the characteristic should have the states absent (note 1) and present (note 9).”
- 4.5.2 to be deleted
- 4.5.4.1.4 to add a further sentence to read “Where the range of expression of a quantitative characteristic, for all varieties of common knowledge, is not sufficiently large to justify the use of the full 1-9 scale, it is possible to use a condensed range (see section 4.5.5)”.

- 4.5.4.1.4 to add a paragraph covering the 1, 3, 5 scale, as used, for example, for growth habit.
- 4.5.4.2.1.2 third sentence to be amended to read “Where necessary, the even states can be worded by combining the wording of the preceding and following states, in that order, by using the word ‘to’, e.g. ‘very weak to weak (2)’” as proposed by the TWV.
- 4.5.5.1 proposal of TWA and TWO to be modified to explain that the condensed range should only be used for the given type of examples, where one point (not end) of the scale is fixed. An extra paragraph to be introduced to allow the use of an extra state (state 4) for certain situations, e.g. Angle: acute (1); right angle (2); moderately obtuse (3); strongly obtuse (4). The examples to be linked to the table in 4.5.5.2.
- 4.6.2 to be deleted
- 4.6.3.3 to be amended as proposed by the TWV, such that state 2 would be worded as “green”, rather than “medium green” and wording in the first sentence to be modified accordingly. Reference to be made to TGP/14.2.
- 4.6.3.4 to be amended to read “For plane shapes, the ‘medium’ state does not need a qualifying adjective to make the states mutually exclusive.” Reference to be made to TGP/14.2.
- Annex 1: TG Template
 - Cover page: field for UPOV code to be provided.
 - Cover page: field for information on the drafting country to be provided.
 - Cover page: the purpose of the Test Guidelines should be included on the cover page. Words “certain of” on the first line to be deleted and reference to TG/1/3 to be added after “General Introduction” as suggested by the TWC.
 - 3.1: the highlighted text shown as the first sentence to be deleted (see comments on Annex 1, 4.1.2)
 - 3.2: second sentence of 3.2 to read: “If any characteristics of the variety, which are relevant for the examination of DUS, cannot be observed at that place, the variety may, where considered appropriate by the authority, be tested at an additional place”, as proposed by the TWA.
 - 4.1.2: to be retained, but to be amended. The TWF considered the wording proposed by the TWA (“One means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic by at least two independent observations. However, the differences observed between varieties could be so clear that a second growing cycle may not be necessary. In addition, in some circumstances, the influence of the environment is not such that a second growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent.”) and shared the view of the TWO that this implied that a single growing cycle would be an exception, whereas it was the normal situation in

ornamental varieties. It proposed that any amended wording should reflect the fact that a single growing cycle was the normal situation in ornamental varieties.

- TQ 7.2: format and wording to follow style in TQ 7.1.
 - TQ 7.3: Guidance Note to be developed for introducing a section on “use” of the variety.
 - TQ 9: first sentence to read “Information on plant material to be examined / submitted for examination.”
 - TQ 9.2(b): section in brackets to read “(e.g. growth retardant, pesticide)”
 - TQ 9.3: to be moved from TG Template to Annex 2 as Additional Standard Wording and word “disease” to be replaced by “pathogen”.
- Annex 2: Additional Standard Wording (ASW) for the TG Template
 - New ASW: on the basis of document TWF/34/4, the TWF agreed that two additional standard wording options should be developed for section 3.1 concerning an explanation for the growing cycle in fruit crops as follows:
 - “Fruit species with clearly defined dormant period*
 - “The growing cycle is considered to be the duration of a single growing season, beginning with flowering and/or vegetative bud burst, flowering and fruit harvest, concluding when the following dormant period ends with the swelling of new season buds.
 - “Fruit species with no clearly defined dormant period*
 - “The growing cycle is considered to be the period ranging from the beginning of active vegetative growth or flowering continuing through active vegetative growth or flowering and fruit development, concluding with the harvesting of fruit.”
 - ASW 10: supported proposal of TWV to add at the beginning “Where appropriate, or in cases of doubt ...”.
 - ASW 15, 4.1.1(c): word “totally” to be deleted.
 - ASW 15, 4.1.3: to read “Discovery and development”.
 - ASW 15 second option to be provide without 4.1.2 “Mutation” section, as proposed by the TWA.
 - ASW 16: the retention of the option to include a request for a photograph of the variety to be provided with the Technical Questionnaire was strongly supported. The TWF noted the view of the International Seed Federation (ISF), that “a picture could very often give a wrong feeling of certainty whilst it is often useless and misleading” and its opinion that “The interest of a picture would depend on

the stage of development of the plant, the location of the trial, etc. It could also be useless without a picture of the checks and other varieties.” The TWF noted that authorities were aware of the limitations of photographs and that a request for a photograph was only included in those Test Guidelines where it was necessary to help the authority to conduct its examination of distinctness in a more efficient way.

- Annex 3: Guidance Notes for the TG Template

- GN 1: “Latin” name to be replaced by “botanical” name, as proposed by the TWV.

- GN 5: Words “(not in italics)” to be deleted.

- GN 7: agreed with the proposal of the TWA, for a review by the TC, of the quantity of plant material to be supplied, in existing Test Guidelines on the basis of crop type to provide some general guidance for drafters of Test Guidelines.

- GN 8: to be modified to reflect the development of the proposed new ASW concerning an explanation of the growing cycle for fruit crops.

- GN 11: agreed with the proposal of the TWA, that the TWC should include, in TGP/10, some practical guidance for choosing an appropriate uniformity standard, based on uniformity standards used in the existing Test Guidelines.

- GN 12: agreed with the TWA that paragraph 3 should read: “Where a grouping characteristic is included in the Table of Characteristics, it should, in general, receive an asterisk in the Table of Characteristics and be included in the Technical Questionnaire. A particular exception to this general rule is for disease resistance characteristics, where particular care should be given before allocating an asterisk.”

- GN 13(a)(i): first sentence on page 55 to read “Example varieties are important to adjust the description of the characteristics for the year and location effects, as far as possible”, as proposed by the TWA.

- GN 13(a)(ii): fifth line on page 56, the word “environmental” to be replaced by “location”. Ninth line on page 56, the word “comparable” to be replaced by “the same”, as proposed by the TWA.

- GN 13(b)(i): the words “or addition” after “alternative”, as proposed by the TWA.

- GN 13(b)(ii): proposed that, with regard to the flow diagram on page 58, the box “Yes e.g. QN, PQ” should read “Yes or maybe e.g. QN, PQ” and the box after the dotted line diamond should read “Yes or maybe” instead of “Yes”. In addition, the TWF agreed with the TWA that: the dotted line section should be presented as a separate diagram; bottom left-hand box should read only “Example varieties required”; and a separate diamond box should be introduced on the right-hand side, after “Yes e.g. QN (PQ)”, asking if the environment is controlled.

- GN 13(c): the TWF proposed that leading experts should, when starting to draft Test Guidelines, be encouraged to seek lists of varieties from interested parties to identify example varieties with the widest availability.

- GN 13(e): as proposed by the TWO, the first bullet point to be amended to read:

“Quantitative characteristics:

“(a) 1-9 scale: to provide example varieties for at least three states of expression (e.g. (3), (5), (7)) although, in exceptional cases, example varieties for only two states of expression may be accepted;

“(b) 1-3 scale (‘condensed range’): to provide, example varieties for at least two states of expression (e.g. (1) and (2))

- GN 13(h)(i): the TWF agreed that the first paragraph should be rewritten to emphasize the value of regional sets of example varieties for harmonization within regions. It should also indicate that, where appropriate, correlation between sets of regional example varieties could be established, but that in some cases such correlation was unnecessary (see paragraph 3).

- GN 13(h)(i): the TWF supported an Option 3 approach (UPOV Website) on the basis that it was modified as proposed by the TWA, namely that:

(a) the relevant TWP would agree the contributors of regional lists of varieties, to ensure cohesion;

(b) where known that regional sets of example varieties were being developed, and would be included on the UPOV Website, this should be stated in the Test Guidelines; and

(c) the lists would be presented in the format suggested in Option 2 of GN 13(h)(i).

- GN 25 to 27: to be modified to incorporate Section 4.

- GN 25(c): to be reworded to clarify that it would not be necessary to make reference to preceding characteristics in cases where it was obvious that the subsequent characteristics only applied to certain types of variety, e.g. in the case degrees of presence of anthocyanin, following absence / presence.

- GN 25(d): to be moved to GN 14.

- GN 26: brief explanation to be provided, indicating that the wording of the states should be according to how the wording of the variety description should appear e.g. avoid states which include a range such as “10-15%” and, where these are necessary for explaining the state, provide these elements in Chapter 8 explanations.

- GN 26(c)(ii): reference to be made to the section on color in TGP/14.2 “Botanical Terms”.

- GN 26(c)(iii): first sentence to be deleted.
- GN 26(c)(iv): to read as follows:

“When presenting attitude / growth habit using, for example, the erect to horizontal / upright to prostrate, or the erect to reflexed / upright to pendulous, weeping, etc. range, the most upright state (e.g. erect, upright, fastigate) is always presented as state 1. This is because the most upright state is the only fixed state for all versions of this characteristic, whilst the other end of the scale might end with “prostrate”, “reflexed,” etc. according to the individual circumstances.

- GN 26(d): to be deleted, because not appropriate in all cases.

- GN 30: second sentence in highlighted paragraph to read “Furthermore, the characteristics contained in the Test Guidelines can be formulated in a different way, if breeders would then be able to describe them more precisely and the information would be useful for performing the test.”

- GN 31: the TWF considered the comments of the TWA and TWO and proposed that GN 30 should read as follows: “Drafters of Test Guidelines may provide a suitable example for the individual Test Guidelines concerned.”

- Annex 4: Collection of Approved Characteristics

The TWF agreed that the database should be organized such that different sections would be presented separately e.g. section on shape, section on color etc. It also agreed that the full ranges should be presented in all cases (e.g. states 1, 3, 5, 7 and 9, for characteristics applying the “1-9” scale).

(b) Explanation of the “Schematic Overview of TGP/3 (Varieties of Common Knowledge), TGP/4 (Management of Variety Collections) and TGP/9 (Examining Distinctness)”

*29. The TWF considered the schematic overview of TGP/3, TGP/4 and TGP/9, as presented in document TC/39/6 Add., and concluded as follows:

4.2 Management of Variety Collections: A section should be introduced to explain the ways in which cooperation can be used in the management of variety collections, as proposed by the TWO.

9.4 / 9.5 The TWF agreed with the restructuring proposals made by the TWA, with regard to sections 9.4 and 9.5. It also agreed with the recommendation of the TWO that the categorization of varieties, according to types of propagation, should follow the categorization established in the General Introduction. With regard to the development of section 9.4.3.3 “Use of randomized ‘blind’ testing”, the experts from Germany, New Zealand and South Africa agreed to help the Office in its drafting of this section.

9.6 It was agreed that the title of section 6 should be amended to avoid any inference that there were different approaches to examining distinctness.

TGP/4.2: Variety Collections for Tree and Perennial Species

*30. The TWF considered document TGP/4.2 Draft 1. It noted that the content of this document would be amalgamated into the overall draft of TGP/4, as explained in document TC/39/6 Add., and accordingly did not comment on the presentation within the document. It agreed with the view of the TWO that the consolidated draft of TGP/4 would need to elaborate clearly what was meant by the terms “permanent” and “variety collection”, in order to avoid confusion.

(c) TGP/13: Guidelines for New Types and Species

*31. The TWF noted that a new restructured version of document TGP/13 Draft 1 was under development and agreed that it would be more appropriate to delay comment until this new version was available. It also noted that this TGP document was of particular relevance to the TWO and noted that the TWO had proposed to take over the responsibility for the development of the document.

(d) TGP/14.2: Botanical Terms

*32. The TWF considered document TWF/34/5 and agreed with the proposed structure of TGP/14.2 as presented in that document.

TGP/14.2.1: Botanical Terms: Plant Shapes

*33. Document TGP/14.2.1 Draft 2 Rev. was presented by Mrs. Alison Lean (United Kingdom).

*34. The TWF agreed the following:

General: (i) the illustrations from all sections to be combined into a single section on illustrations at the beginning of the document and the size of the individual illustrations to be reduced as much as possible to aid the use of the document;

(ii) the plural of the defined terms to be indicated in the explanatory text;

(iii) general section on presenting asymmetric and irregular shapes to be developed;

(iv) Mr. Alejandro Barrientos Priego (Mexico) to be included in the TGP/14 subgroup;

(v) further comments on the document to be sent to the drafter Mrs. Elise Buitendag (South Africa) at: elise@itsg2.agric.za.

1. Plane / Two-Dimensional Shapes

Illustrations to be presented in a grid with each shape type presented on a single line. Length of shape to be constant in all illustrations. Duplicate illustrations for the same shapes to be avoided. Alternative terms to be presented where different degrees of differentiation are needed (e.g. see comments concerning page 10 below).

1.1 *Full Plane Shapes: Illustrations*

page 8 to read: narrow oblate; oblate; broad oblate. Terms referring to transverse elliptic to be deleted.

page 9 “trapezoidal” to be added.

page 10 shapes to be presented as follows:

(illustration)	(illustration)	(illustration)	(illustration)	(illustration)
very narrow ovate	narrow ovate	ovate	broad ovate	very broad ovate
(general term: Lanceolate)				

page 11 to be deleted.

page 15 to be expanded to cover other less common shapes, e.g. half-shapes, such as semi broad elliptic and semi oblate (see Persimmon TG/92/4(proj.2), characteristic 44).

1.1.6 “deltate” to be used for 2-D shapes and “deltoid” for 3-D shapes.

1.1.8 to change the word “uniformly” to “evenly”.

1.1.14 current wording agreed.

1.1.26 “orbicular” to be retained as a term but to indicate that UPOV uses the term “circular” for this shape.

1.1.30 “rectangular” to be retained as a term but to indicate that UPOV uses the term “oblong” for this shape.

1.1.35 to be retained on the basis that the illustration demonstrates that it is useful for differentiating shapes.

1.1.39 term to be retained and illustration to be provided.

1.2 *Base: Illustrations*

page 24 illustrations for “acute” and “obtuse” to be harmonized in terms of curvature. Cuneate to be presented as follows:

(illustration)	(illustration)
Acute	Obtuse
Cuneate	

page 24 oblique (1.2.8) to be deleted because not a feature uniquely restricted to the shape illustrated.

1.3 Apex: Illustrations

- page 28 proposals for differentiating between apex and tip shapes, where both can exist independently on the same organ (e.g. acute/pungent; obtuse/pungent), to be sent to the drafter.
- page 28 oblique (1.3.12) to be deleted because not a feature uniquely restricted to the shape illustrated.
- page 28 illustration of “retuse” and “emarginated” to be modified to clarify the difference between these shapes.

2. Three-Dimensional Shapes

Illustrations to be provided.

Acicular to be added to 3-D shapes

5. Plant Habit, Attitude of Plant Parts

Illustrations to be provided.

States “Upwards”, “Outwards” and “Downwards” to be included.

5.6 AL comment to be incorporated.

7. General

“Distal” to be included.

TGP/14.2.2: Botanical Terms: Hair Types

*35. Document TGP/14.2.2 Draft 1 was presented by Mr. Chris Barnaby (New Zealand). The TWF agreed that the document should provide diagrams and example plant varieties and should include an entry for “spines”.

TGP/14.2.3: Botanical Terms: Color

*36. The TWF considered document TGP/14.2.3 Draft 1. It noted that a new draft containing an explanation of the background to the document and its purpose was to be developed by the TWO and that the new draft would cover previous versions of the RHS Colour Chart.

Discussion on Draft Test Guidelines (Subgroups)

(A) “FINAL” DRAFT TEST GUIDELINES

TG/70/4(proj.2): Apricot (Revision)

*37. The subgroup, chaired by Mr. József Harsanyi (Hungary), agreed the following changes to document TG/70/4(proj.2):

5.3 Char. 43 to be added as grouping characteristic

6.4 It was noted that the TWF, at its thirty-third session, had agreed that different sets of example varieties should be developed for Mediterranean and Continental types of varieties and an explanation provided on how these types can be clearly differentiated. However, it was concluded by the subgroup that it would not be possible to clearly differentiate these types and agreed that different sets of example varieties should not be developed. The subgroup noted that some example varieties were not readily available to all users of the Test Guidelines and agreed that particular care was required to ensure that, for asterisked characteristics, readily available characteristics would be included.

7. Table of Characteristics

- Char. 1 example variety: Canino (5) to be added.
- Char. 2 example variety: Canino (3) to be added.
- Char. 3 to read “Tree: degree of branching”. State 3 to read “weak”.
- Char. 4 example varieties: Nugget (1), Veecot (2), Amal, Ouardi (3) to be added. Example varieties: Ferriana, San Castrese to be deleted.
- Char. 6 example varieties: Polonais (2) and Blenheim (3) to be added. Example varieties: Ceglédi óriás and Royal to be deleted.
- Char. 11 to read “Leaf blade: intensity of green color of upper side”.
- Char. 13 to be indicated as QN. To have the notes 1, 3, 5, 7.
- Char. 18 example varieties: Veecot (3); Bergeron, Hargrand (5) to be added. Example varieties: Polonais and Magyar kajszai to be deleted.
- Char. 19 example varieties: Harcot (1); Bergeron (5); Bebeco, Flaming Gold (7); to be added. Example varieties: Magyar kajszai and Polonais to be deleted.
- Char. 20 example varieties: Veecot, Flaming Gold (3) to be added. Example variety: Veecot (5) to be deleted.
- Char. 21 example varieties: Bebeco, Bhart, Cafona (5); Harogem (7) to be added. Example varieties: Frater and Borsi rózsa to be deleted.
- Char. 23 example variety: Ceglédi óriás (5) to be added. Example varieties: Bergeron and Magyar kajszai to be deleted.
- Char. 24 example varieties: Polonais (5) and Hargrand (7) to be added.
- Char. 25 example varieties: Harmat (1); Hargrand (2); Polonais (3) to be added.
- Char. 26 state 3 to read “oblate”. Example varieties: Harcot (2); Polonais (3) to be added. NZ note to be deleted.
- Char. 28 example varieties: Polonais (3); Harcot (5) to be added.
- Char. 29 example variety: Borsi rózsa (3) to be added.

- Char. 30 state 4 to read “oblate” and state 8 to read “oblique rhombic”. ZA note to be deleted. Example varieties: Sundrop, Blenheim (1); Precoce d’Imola, Wenatchee (2); Ouardi, Earle Orange (3); Nugget, Korai zamatos (4); Trevatt (7) to be added.
- Char. 31 state 4 to read “oblate”. Example varieties: Hargrand (1); Yerevani (2); Viceroy (3); Nugget (4); Mandulakajsi (5) to be added. Example variety: Hargrand to be deleted from state 6.
- New Char (i). (after 31)
to read “Fruit: height” with states: short (3); medium (5); long (7). Example varieties to be provided. To be indicated as QN.
- New Char (ii). (after 31)
to read “Fruit: lateral width” with states: narrow (3); medium (5); broad (7). Example varieties to be provided. To be indicated as QN.
- New Char (iii). (after 31)
to read “Fruit: ventral width” with states: narrow (3); medium (5); broad (7). Example varieties to be provided. To be indicated as QN.
- Char. 32 example varieties: Korai zamatos (3); Magyar kajsi (5) to be added. Example variety: Peeka to be deleted.
- Char. 33 example variety: Vesna (3) to be added.
- Char. 34 example variety: Canino (1) to be added.
- Char. 35 example varieties: Canino, Bergeron (5) to be added. Example varieties: Peeka, Ceglédi óriás to be deleted.
- Char. 36 example varieties: Harlayne (3); Blenheim, Magyar kajsi (5); Ceglédi óriás (7) to be added. Example variety: Royal to be deleted.
- Char. 37 example varieties: Mandulakajsi (1); Sungiant (2); Hargrand (3); Perfection (4) to be added.
- Char. 38 example variety: Canino (1) to be added.
- Char. 39 (*) to be deleted. Example variety: Ceglédi óriás (2) to be added. NZ note to be deleted.
- Char. 40 example variety: Canino (9) to be added.
- Char. 41 state 2 to read “medium”. Example varieties: Korai zamatos (1); Canino (2); Sun Glo (3) to be added.
- Char. 42 example variety: Hargrand (4) to be added.
- Char. 43 example variety: Yerevani (1) to be added. Example varieties: Veecot, Portici to be deleted.
- Char. 45 example variety: Harmat (3) to be added.
- Char. 46 example variety: Harmat (4) to be added.
- Char. 47 example varieties: Harlayne (3); Magyar kajsi (5) to be added.
- Char. 48 example varieties: Ambrosia (1); Magyar kajsi (5) to be added.
- Char. 49 to read “Fruit: weight of stone relative to weight of fruit”. Example varieties: Badami (3); Blenheim (5); Borsi rózsa (7) to be added. Example varieties: De Jouy and Royal to be deleted.
- Char. 50 example variety: Sirena (3) to be added.
- Char. 51 example variety: Monaco Bello (4) to be added.
- Char. 52 example varieties: Ceglédi arany (3); Harlayne (5) to be added.
- Char. 54 example variety: Tardif de Tain (9) to be added. Example variety: Kechpshar to be deleted.

8. Explanations on the Table of Characteristics

to be updated in accordance with the changes to the Table of Characteristics and:

Ad. 2: to be replaced with new illustration
Ads 13, 26, 30-33, 37: illustrations to be improved.

10. Technical Questionnaire

to be updated in accordance with the changes to the Table of Characteristics and:

4.2 Method of propagating the variety

to read as follows:

“4.2.1 Vegetative propagation

- (a) cuttings
- (b) other (state method)

4.2.2 Other

(please provide details)”

TG/CPEAR(proj.2): Cactus Pear

*38. The subgroup, chaired by Mr. Alejandro Barrientos Priego (Mexico), agreed the following changes to document TG/CPEAR(proj.2):

General: Corrections to Spanish translation, provided by the leading expert at the meeting, to be incorporated in the finalized draft.

Title page: Title to read “Cactus Pear and Xoconostles / *Opuntia* spp. Groups 1 and 2”

Title page: Alternative names to read as follows:

<i>Latin</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Opuntia</i> : Group 1	Cactus pear, Prickly pear	Figuier de Barbarie	Feigenkaktus	Chumbera, Nopal tunero, Tuna
<i>Opuntia</i> : Group 2	Xoconostles	Xoconostles	Xoconostles	Xoconostles

1. Subject of these Test Guidelines

To read as follows:

“These Test Guidelines apply to all varieties of the following *Opuntia* groups and species:

Group 1 Cactus Pear

Opuntia amyclaea Tenore, *O. ficus-indica* (L.) Mill., *O. streptacantha* Lemaire, *O. megacantha* Salm-Dyck, *O. duranguensis* Britton et Rose, *O. lasyacantha* Pfeiffer, *O. robusta* Wendland, *O. hyptiacantha* Weber

Group 2 Xoconostles

Opuntia joconostle Weber, *O. matudae* Sheinvar, *O. oligacantha* Shienvar, *O. leucotrica* DC, *O. heliabravoana* Sheinvar, *O. spinulifera* Sheinvar”

2.3 to read:

“The minimum quantity of plant material, to be supplied by the applicant, should be:

5 three-year-old plants, or if accepted by the competent authority,
7 branches which include three successive cladodes, each sufficient to propagate 5 plants.”

2.4 second sentence to be deleted.

3.4.1 to refer to “5 plants”

3.5 to replace “6 plants” with “5 plants”.

4.2.2 second sentence to read “In the case of a sample size of 5 plants, no off-types are allowed.”

5.5 to be deleted.

7. Table of Characteristics:

General: Spanish translation to be corrected as specified by the leading expert.

Example varieties: the example varieties for characteristics 1 to 33 to be checked and notified by the leading expert within 6 weeks.

The following example varieties to be deleted:

	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34	Tapona de Mayo	3
	Rojo Pelón	5
	Montesa	7
35	Rubí Reyna	3
	Rojo Pelón	5
36	Burrona, Reyna	3
	Blanca de Castilla, Rojo Pelón	5
	Rubí Reyna	7

	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
38	Tapón de Mayo	3
	Cristalina	5
	Rubí Reyna	7
41	Copena T-5, Reyna	3
	Sanjuanera	7
42	Rojo Pelón	1
	Amarilla	2
	Rubí Reyna	3
43	Montesa, Rubí Reyna	3
	Cristalina, Pico Chulo	5
44	Montesa, Reyna	3
	Cristalina	5
	Burrona, Fafayuca, Mango	7
45	Reyna	3
	Cristalina, Montesa	5
	Burrona, Chapeada	7
46	Duraznillo	1
	Charola	3
	Chapeado, Pico Chulo	5
	Amarillo Montesa, Naranjón Legítimo	7
47	Cascarón	3
	Chapeada, Fafayuca	5
	Cristalina, Reyna	7
53	Cardón, Charola, Montesa	3
	Copena T-5, Cristalina, Reyna	5
	Burrona	7
55	Burrona, Cardona, Tapón	3
	Pico Chulo	5
	Charola, Reyna	7
56	Burrona, Tapón	3
	Cristalina, Pico Chulo, Rojo Pelón	5
	Reyna	7

- Char. 10 to have the states: very weak (1); weak (3); moderate (5); strong (7).
- Char. 11 to read “Cladode: pubescence of surface”.
- Char. 15 state 1 to read “none or very few”.
- Char. 16 to read “Spine: main color”
- Char. 17 to read “Spine: number of colors”
- Char. 18 to be moved to before char. 16.
- Char. 19 to read “Central spine: attitude ”. To have the notes 1, 3, 5. To be moved after char. 20.
- Char. 20 to read “Spine: surface”. To be indicated as PQ. State 2 to read “grooved”. To be moved to after Char. 17.
- Char. 21 to read “Central spine: flexibility”. To be indicated as PQ. State 2 to read “firm”.
- Char. 22 to read “Central spine: curvature (excluding base)”. To be indicated as “PQ”.
- Char. 23 to read “Central spine: twisting”

- Char. 24 to read “Central spine: shape in dorsal view”. To have the states: aciculate (1); narrow triangular (2). To be indicated as QL.
- Char. 25 to read “Central spine: shape in cross section”
- Char. 26 to have the notes 1, 2, 3.
- Char. 30 state 5 to read “orange red”.
- Char. 33 to be indicated as QL.
- Char. 37 to have the states: oblong (1); narrow ellipse (2); ellipse (3); circular (4); oblate (5); obovate (6).
- Char. 42 to have the states: absent or slightly depressed (1); moderately depressed (2); strongly depressed (3).
- Char. 44 (*) to be added
- Char. 48 to read “Fruit: evenness of color of surface”
- Char. 49 to read “Fruit: main color of surface”
- Char. 54 to read “Seed: size”.
- Char. 55 (+) to be added. States 1 and 9 to read “absent or very few” and “very many”, respectively. Example varieties: Solferino, Memelo (1); Blanca San José; Copena T-2 (9) to be added.
- Char. 60 (+) to be added and explanation to be provided. (*) to be added.

8. Explanations on the Table of Characteristics

to be updated in accordance with the changes to the Table of Characteristics and:

- 8.1(b) to read “Unless otherwise stated, all observations on the areole, spine and glochide should be made on intact cladodes or intact fruits, as appropriate.”
- Ad. 1 photographs to be replaced with illustration
- Ad. 22 central spine to be indicated on illustration
- Ad. 55 to read “Absolute number to be observed, rather than the proportion in relation to the number of fully developed seeds”

Table of synonyms to be deleted.

10. Technical Questionnaire

to be updated in accordance with the changes to the Table of Characteristics and:

1. Subject of the Technical Questionnaire to read as follows:

- | | | | |
|-----|-------------|----------------|--|
| 1.1 | Latin name | <i>Opuntia</i> | Group 1
(please state species if known) |
| 1.2 | Common name | Cactus Pear | |
| | | | |
| 2.1 | Latin name | <i>Opuntia</i> | Group 2
(please state species if known) |
| 2.2 | Common name | Xoconostles | |

4.2 Method of propagating the variety

to read as follows:

“4.2.1 Vegetative propagation

- (a) cuttings
- (b) other (state method)

4.2.2 Other

(please provide details)”

5. Characteristics of the variety to be indicated

Char. 44 to be added.

Char. 60 to be added.

5.1 to be deleted.

5.3 to 5.13 to be deleted.

5.15 to be deleted.

5.16 to be deleted.

6. Example to be Fruit: length / short / medium

TG/92/4(proj.2): Persimmon (Revision)

*39. The TWF agreed the following changes to document TG/92/4(proj.2):

2.3 wording after “5 plants” to be deleted.

3.1 standard wording, to explain that the growing cycle refers to the fruiting cycle, to be introduced.

5.3(f) to refer to (New) Char. 52.

7. Table of Characteristics:

Char. 10 to have the states: triangular (1); broad ovate (2); circular (3).

Char. 23 state 2 to read “obtuse”.

Char. 37 to read “Varieties which are always or sometimes non-astringent only:
Fruit color of skin”

Char. 38 to read “Varieties which are always astringent only: Fruit color of skin”

Char. 39 to read “Varieties which are always or sometimes non-astringent only:
Fruit color of flesh”

Char. 40 to read “Varieties which are always astringent only: Fruit color of flesh”

Char. 44 to have the states: narrow elliptic (1); ovate (2); broad ovate (3); semi broad elliptic (4); semi oblate (5).

Char. 48 to read “Varieties which are always or sometimes non-astringent only:
Time of ripeness for eating”.

- Char. 49 to read "Varieties which are always astringent only: Time of ripeness for eating".
- (New) Char. 50 to read "Fruit: presence of seed (hand pollination)". To have the states: always absent (1); sometimes present (2); always present (3). To be indicated as QL. (+) to be added.
- (New) Char. 51 to read "Varieties with seed always or sometimes present only: Fruit: number of seeds" with the states: few (3); medium (5); many (7). To be indicated as QN.
- (New) Char. 52 to read "Fruit: astringency". To have the states: always absent (1); sometimes present (2); always present (3). To be indicated as QL. (+) to be added.
- (New) Char. 53 to read "Fruit: change of color of flesh". To have the states: always absent (1); sometimes present (2). To be indicated as QL. (+) to be added.

8. Explanations on the Table of Characteristics

to be updated in accordance with the changes to the Table of Characteristics and:

- Ad. (New) 50 to read "Some varieties do not consistently produce seed. The presence of seed is variable and is determined by the variety / environment interaction. For "pollination constant" (PC) varieties, with hand pollination, the variety will always produce seed (state 3) or will always not produce seed (state 1). For "pollination variant" (PV) varieties (state 2), with hand pollination, the variety may or may not produce seed."
- Ad. (New) 52 to read "For some varieties astringency is not consistent (state 2). For those varieties the presence and number of seeds determines astringency."
- Ad. (New) 53 to read "For some varieties color change is not consistent (state 2). For those varieties the presence and number of seeds influence color change."

Table (page 30)

Varieties "Amankaki" and "Lantern" to be deleted.

Footnote to read as follows:

PC: Pollination Constant (see Ad. 50)
PV: Pollination Variant (see Ad. 50)
A: Astringent
NA: Non-astringent

	State 1 (always absent)	State 2 (sometimes present)	State 3 (always present)
(New) Char. 50 Fruit: presence of seed (hand pollination)	PC	PV	PC
(New) Char. 52 Fruit: astringency	PCNA	PVNA	PVA PCA
(New) Char. 53 Fruit: change of color of flesh	PCNA PCA	PVA PVNA	

Table (page 31) to be deleted.

10. Technical Questionnaire

to be updated in accordance with the changes to the Table of Characteristics.

(B) OTHER DRAFT TEST GUIDELINES

TG/73/7(proj.1): Blackberry and Hybrid berries (Revision)

*40. The subgroup, chaired by Mr. Erik Schulte (Germany), agreed the following changes to document TG/73/7(proj.1):

Title page Correct Latin name to be provided

Title page German common name to read "Brombeere". "Mora" to be added as Spanish common name.

1. Subject of these Test Guidelines

To be modified in accordance with the Test Guidelines for Raspberry.

2.3, 3.4.1 to refer to 5 plants

4.2.2 to be deleted.

5.3 Chars. 22, 25 and 39 to be added.

7. Table of Characteristics

Char. 1	PQ	to have the states: upright (1); upright to semi-upright (2); semi-upright (3); semi-upright to spreading (4); spreading (5).
Char. 2	QN	
Char. 3	QN	
Char. 4	QN	
Char. 5	QN	
Char. 6	QN	to read "Dormant cane: number of branches". To have the states: few (3); medium (5); many (7).

Char. 7	PQ	to read “Dormant cane: predominant position of branches”
Char. 8	PQ	no change
Char. 9	QL	
Char. 10	QN	
Char. 11	QN	
New Char. (after 11)	PQ / (a)	to read “Prickle: shape in lateral view”
Char. 12	QN	to read “Prickle: attitude of tip in relation to cane”. To have the notes 1, 2, 3.
Char. 13	QN / (new note (i))	to read “Young shoot: anthocyanin coloration (during rapid growth)”.
Char. 14	QN / (new note (i))	to read “Young shoot: intensity of green color”.
Char. 15		to be deleted.
New Char. (after 14)	QL / (new note (i))	to read “Young shoot: glandular hair on surface”, with the states: absent (1); present (9).
New Char. (after 14)	QN / (new note (i))	to read “Young shoot: number of glandular hairs”, with the states: very few (1) to very many (9). Example varieties: Silvin (1) and Karaka Black (9).
New Char. (after 14)	QN / (new note (i))	to read “Young shoot: length of glandular hairs”, with the states: very short (1) to very long (9). Example varieties: Silvin (1) and Karaka Black (9).
Char. 16	QL	to read “Flowering: habit”, with the states: both on previous year’s cane and current year’s cane (1); on previous year’s only (2). To be moved after Char. 39. (+) to be added with explanation as for Test Guidelines for Raspberry. Example varieties to be replaced.
Char. 17	QN	
Char. 18	QN	
Char. 19	QL	to read “Terminal leaflet: form”
Char. 20	QL	
Char. 21	QL	to check if “revolute” would be an appropriate term.
Char. 22	PQ	to have the states: three (1); five (2); seven (3). Marionberry to be checked as example variety for state 1.
Char. 23	QN	
Char. 24	QN	
Char. 25	QL	(+) to be added with illustration.
Char. 26	QN	to read “Leaf: intensity of green color of upper side”.
Char. 27	QN	
Char. 28	QL	state 2 to read “bi-serrate”.
Char. 29	QN	
Char. 30	QN	
Char. 31	PQ	state 2 to read “pinkish”. To check if further states should be added.
New Char. (after 31)		To check possible new characteristic for multiple fruiting lateral branches at node (absence and degrees of presence)
Char. 32	QN	
Char. 33	QN	

New Char. (after 33)	QN	to read “Fruit: number of drupelets”, with the states: very few (1); few (3); medium (5); many (7); very many (9). To have example variety “Karaka Black” for state 9 and Marionberry to be checked as example variety for state 3.
Char. 34	QN	to read “Fruit: size of drupelet”.
Char. 35	PQ	to read “Fruit: shape in longitudinal section”. State 5 to read “trapezoidal”.
Char. 36	QN	
Char. 37	PQ	
Char. 38	QN	example varieties: Wilson’s Early (3); Black satin (5); Jumbo (7).
Char. 39	QN	to read “Time of beginning of flowering on previous year’s cane”. Hybrid berry example varieties to be added.
New Char. (after 39)	QN	to read “ <u>For varieties which flower on current year’s cane</u> : Time of beginning of flowering on current year’s cane”. Hybrid berry example varieties to be added.
Char. 40	QN	hybrid berry example varieties to be added.
Char. 41		to be deleted.

8. Explanations on the Table of Characteristics

to be updated in accordance with the changes to the Table of Characteristics and:

8.1 new note to be added after (a) – see references to new note (i) in Table of Characteristics - to read “All observations on the young shoot should be made during rapid growth and before flowering”.

Ad. 40 to read “The time of beginning of fruit ripening is when the fruit is most easily removed from the plant”.

10. Technical Questionnaire

to be updated in accordance with the changes to the Table of Characteristics and:

4.2 Method of propagating the variety

to read as follows:

“4.2.1 Vegetative propagation

- (a) cuttings
- (b) other (state method)

4.2.2 Other (please provide details)”

5. All grouping characteristics from 5.3 to be added.

TG/COFFEE(proj.2): Coffee

*41. The TWF commented on document TG/COFFEE(proj.2) as follows:

Title page Alternative Names: Latin name to read "*Coffea arabica* L."

- 2.3 to make provision for vegetatively propagated varieties of *Coffea arabica* L. To advise on whether seed-propagated varieties are self- or cross-pollinated.
- 3.3 to specify that there must be a satisfactory crop of fruit in each of the growing cycles and that the first fruiting cycle should not be considered to produce a satisfactory crop.
- 3.5.2 to consider if a special provision is really needed for varieties obtained by mutation.
- 4.2.2 to 4.2.4 uniformity standards to be considered according to type of propagation (i.e. off-types for vegetatively propagated and self-pollinated varieties only) and the type of propagation to be indicated.
- 6.4 example varieties to be provided for other species than just *Coffea arabica* L. The TWF expert from Mexico to provide example varieties to the leading TWA expert.
7. Table of Characteristics
 - Char. 1 illustration needed. Wording to be reviewed to consider including: spheroid; ellipsoid; narrow conical.
 - Char. 5 to have the states: few (3); medium (5); many (7).
 - Char. 6 (*) to be added. to read "Branch: length of internodes".
 - Char. 7 (*) to be added. (+) to be added and illustration to be provided.
 - Char. 8 to be reworded when explanation provided ("plagiotropic" is contradictory to states "erect" and "semi-erect")
 - New Char. (after 8) to read "Plagiotropic branch: flexibility" with the states: flexible (1); firm (2); rigid (3).
 - Char. 10 state 3 to read "broad".
 - Char. 11 to check if state "obovate" should be added.
 - New Char. (after 11) to read "Leaf: shape of apex" with the states: apiculate (1); aristate (2); acuminate (3); caudate (4) and maybe others.
 - Char. 12 to read "Young leaf: color". To be checked if state 2 should read "greenish bronze".
 - Char. 13 to read "Mature leaf: color". Hyphens to be deleted.
 - Char. 14 "the" to be deleted.
 - Char. 15 to read "Leaf: degree of undulation of margin". state 1 to read "weak".
 - Char. 16 to read "veins" not "vein".
 - New Char. (after 16) to read "Leaf: texture" with the states: papery (1); intermediate (2); leathery (3).
 - Char. 17 (+) to be added and illustration to be provided.
 - New Char. (after 17) to read "Leaf: position of domatia" with the states: axillary (1); basal (2).
 - Char. 18 to read "Domatia: pilosity". (*) to be added.
 - New Char. (after 18) to read "Stipule: shape" with the states: semi-circular (1); semi-elliptical (2); triangular (3); trapezoidal (4).

- Char. 19 (*) to be added. To have the states: few (3); medium (5); many (7).
New Char. (after 19) to read “Flower: length of corolla tube”, with the states: short (3); medium(5); long (7).
New Char. (after 19) to read “Flower: aroma” with the states: weak (3); medium (5); strong (7).
New Char. (after 19) to read “Inflorescence: bracts” with the states: inconspicuous (1); conspicuous (2).
New Char. (after 19) to consider if there are useful petal characteristics.
Char. 20 comments to be provided after explanation received.
Char. 21 to consider if this characteristic is suitable for DUS.
Char. 23 to read “Fruit shape in lateral view”. State 1 to read “circular” and further shapes to be considered (see IPGRI descriptor).
Char. 24 to add the states “red” and “purple” and consider if further states are required.
Char. 25 to check if the correct term is “calyx” rather than “sepal” and “persistent” rather than “dehiscent”.
Char. 27 (*) to be added.
Char. 28 state 7 to read “broad”.
Char. 31 to be indicated as QN. To have the states: light (3); medium (5); dark (7).
Char. 33 (+) to be added and explanation provided.
Char. 34 propose to be deleted.
Char. 36 to check if “Canephora” is a variety denomination.

8. Explanations on the Table of Characteristics

to be updated in accordance with the changes to the Table of Characteristics and:

- 8.1(b) replace “summer” with “the main growing season”.
Ad. 11 illustrations to be improved.
Ad. 29 clarification of “flat seeds” required.
Ad. 33, 37 term “mature” to be defined.

TG/14/9(proj.2): Apple (Revision)

*42. The TWF commented on document TG/14/9(proj.2) as follows:

Title page to refer to Apple: varieties grown for fruit production

Title page (Associated Documents) to include reference to Test Guidelines for Ornamental Apple and Apple Rootstocks.

1. Subject of these Test Guidelines

To read “These Test Guidelines apply to all varieties of *Malus* Mill. grown for fruit production.”

2.3(b) to read “Varieties resulting from mutation: ...”

3.3.1 “] ” at end of sentence to be deleted.

- 3.4.1, 3.4.2, 3.5 to be reworded to clarify the number of plants according to varieties resulting from crossing or mutation.
- 4.2.2 to be deleted.
- 5.3 Chars. 2, 3, 37 to be added and wording of existing characteristics to be updated in accordance with changes in the Table of Characteristics. Char. 41 to be deleted.
- 6.4 to add the following sentence: “The states of expression of the example varieties provided in these Test Guidelines are the states expressed when the example varieties are grown on M9 rootstock.
7. Table of Characteristics:
- General: “VG” and “MG” to be re-positioned above letter notes.
- spelling of example variety “Schone van Boskoop” to be corrected.
- Char. 1 state 9 to be deleted. Note (a) to be deleted. Example variety “Schone van Boskoop” to be deleted.
- Char. 2 to be indicated as QL. (+) to be added and explanation of “columnar” to be provided. Example variety “MacExel” (1) to be added.
- Char. 5 to be indicated as “MG/VG”.
- Char. 6 to be indicated as “MG/VG”. State 9 to be deleted. Example variety “MacExel” (1) to be added.
- Char. 7 spelling of “colour” to be amended to “color”.
- Char. 8 “upper” to be replaced by “distal”.
- Char. 10 state 2 to read “outwards”.
- Char. 11 note “1” to be added for state: very short.
- Char. 13 to be indicated as “MG”.
- Char. 14 to read “Leaf blade: intensity of green color”.
- Char. 15 to have the states: crenate (1); bicrenate (2); serrate type 1 (3); serrate type 2 (4); biserrate (5). Example varieties for new states: Elstar, Gala (3); Sirprize (4).
- Char. 16 state 2 to read “medium”.
- Char. 17 to be indicated as “MG / VG”.
- Char. 18 to read “Petiole: extent of anthocyanin coloration from base”. To have the states: small (3); medium (5); large (7). Example varieties to be checked.
- Char. 19 to read “Flower: predominant color at balloon stage”. Example varieties to be spelt as “Schöner aus Herrenhut” and Kidd’s Orange Red”.
- Char. 20 to be indicated as “MG / VG”. Example variety to read “Spätblühender Taffettapfel”, but alternative example variety to be sought.
- Char. 21 to be indicated as PQ and to have the states: free (1); intermediate (2); overlapping (3). Example varieties: Worcester Pearmain (1); Golden Delicious, Jonagold, Topaz (2); Schone van Boskoop (3).

- Char. 23 to read “Young fruit: extent of anthocyanin overcolor”, with the states: absent or very small (1) ... very large (9).
- Char. 24 to read “Fruit: maximum height”.
- Char. 25 to read “Fruit: maximum width”.
- Char. 26 to read “Fruit: ratio maximum height / maximum width”. To be indicated as “MG”.
- Char. 27 to consider deletion of characteristic or, if not, to delete state 1.
- Char. 28 proposed to delete even states, subject to any further comments from interested experts.
- Char. 29 / 29A these two proposals to be considered along with the presentation of shape characteristics in the German and French national guidelines.
- Char. 30 example variety “Reinette Russet” to be considered for state 3.
- Char. 34 spelling of “Jonathan” to be corrected.
- Char. 35 notes 1, 2, 3 to be added.
- Char. 36 example variety “Silken” to be added for state 2.
- Char. 38 (*) to be added. To read “Fruit: hue of over color (with any bloom removed)”.
- Char. 39 (*) to be added. (+) to be added. Table of example varieties (color x intensity) to be provided in explanations.
- Char. 40 note (e) to be replaced by (f). To have the states: only solid flush (1); solid flush with weakly defined stripes (2); solid flush with strongly defined stripes (3); weakly defined flush with strong stripes (4); only stripes (no flush) (5); flushed and mottled (6); flushed, striped and mottled. Example variety “CrownGold” to be replaced by “Jonagold”.
- Char. 41 and 42 to be considered if both characteristics are necessary.
- Char. 41 note (e) to be replaced by (f). To read “Fruit: number of stripes”. State 7 to have the example variety “Cherry Gala”.
- Char. 42 note (e) to be replaced by (f). To read “Fruit: width of stripes”. State 3 to have the example variety “Eden” and state 7 to have the example variety “Caudle”.
- Char. 43 to be deleted.
- Char. 44 “(if present)” to be deleted. To have the states: absent or small (1); medium (2); large (3). Example varieties: Elstar, Granny Smith, Piros (1); Alkmene (2); Egremont Russet, Kaiser Wilhelm (3).
- Char. 45 “(if present)” to be deleted. To have the states: absent or small (1); medium (2); large (3). Example varieties: Golden Noble (1); Karmijn de Sonnaville (2); Egremont Russet, Zabergäu Reinette (3).
- Char. 46 “(if present)” to be deleted. To have the states: absent or small (1); medium (2); large (3). Example varieties: Golden Noble (1); Cox’s Orange Pippin (2); Arlet (3).
- Char. 49 to be indicated as MG / VG. Example variety Pinova (9) to be considered.
- Char. 51 to be indicated as MG / VG.
- Char. 52 to be indicated as MG / VG.
- Char. 53 to be indicated as MG / VG.
- Char. 54 to be indicated as MG / VG. Comma to be added after Worcester Pearmain.
- Char. 55 example variety “Scifresh” (9) to be added.
- Char. 56 to have the states: white (1); cream (2); yellowish (3); greenish (4); pinkish (5); reddish (6). State 2 to read “cremefarben” in German.
- Char. 58 example variety “Anna” to be added for state 1.

Char. 59 to read “Time for harvest”. Notes to be corrected. Proposed to delete even states, subject to any further comments from interested experts.

Char. 60 (*) to be deleted. To read “Time of ripeness for eating”.

8. Explanations on the Table of Characteristics

to be updated in accordance with the changes to the Table of Characteristics and:

8.1(a) to read “Tree: type and habit: ...”

8.1(f) to read “... at the time of ripeness for eating. The ...”

Ad. 19 last sentence to be deleted.

Table of synonyms: Paper in support of retention of table of synonyms to be prepared, by the Office, in conjunction with the experts from Germany, Hungary, New Zealand and the United Kingdom, for submission with the Test Guidelines.

10. Technical Questionnaire

to be updated in accordance with the changes to the Table of Characteristics and:

1. extra lines to be deleted.

4.2 Method of propagating the variety

to read as follows:

“4.2.1 Vegetative propagation

(a) grafting

(b) other (state method)

4.2.2 Other

(please provide details)”

5. All grouping characteristics from 5.3 to be included.

6. to be modified.

TG/112/04(proj.2): Mango (Revision)

*43. The TWF commented on document TG/112/04(proj.2) as follows:

1. to read “*Mangifera indica* L.”.

2.3 to read “budsticks” instead of “graft sticks”. “(6)” to be deleted.

4.2.2 “(6)” to be deleted.

7. *Table of Characteristics*

- Char. 1 state 2 to read “spreading”. To have the notes 1, 2, 3 with example variety “Carabao” to be added for state 2.
- Char. 2 to read “Young leaf: color” with the states: light green (1); dark green (2); light reddish (3); medium reddish (4); dark reddish (5).
- Chars. 3 to 8 to be deleted.
- Char. 9 to read “Leaf blade: length”.
- Char. 10 to read “Leaf blade: width”.
- Char. 11 to read “Leaf blade: ratio length / width”.
- Char. 12 to read “Leaf blade; shape” with the states: linear (1); oblong (2); elliptic (3); ovate (4); obovate (5).
- Char. 13 to read “Leaf blade: color”. State 3 to be deleted. New state “light green” (3) to be added if example varieties are provided.
- Char. 14 to read “Leaf blade: twisting”.
- Char. 15 to read “Leaf blade: shape in cross section”.
- Chars. 16 to 19 to be deleted.
- Char. 20 to read “Leaf blade: spacing of secondary veins”.
- Char. 21 to be deleted.
- Char. 22 to read “Leaf blade: undulation of margin” with the states: absent or weak (1); medium (2); strong (3).
- Char. 23 to read “Leaf blade: shape of apex”.
- Char. 24 to read “Leaf blade: shape of base”.
- Char. 25 to be deleted.
- Char. 26 to read “Petiole: attitude in relation to shoot”. State 7 to read “moderately recurved”.
- Char. 27 to read “Petiole: length”.
- Char. 28 to be deleted.
- Chars. 29, 31, 32 (+) to be added and illustration to be provided.
- Char. 32 to read “Inflorescence: number of primary branches”.
- Char. 33 Israel and Mexico to provide example varieties for state 8.
- Chars. 34 to 40 to be deleted.
- Char. 42 to be deleted.
- Chars. 43 to 69 to delete the word “Mature”
- Char. 43 Israel and Mexico to provide example varieties for state 1.
- Char. 46 To be indicated as PQ and have the states 1, 2, 3.
- Char. 47 to have the states: only yellow (1); only green (2); green and yellow (3); green and orange (4); green and pink (5); green and red (6); green and purple (7).
- Char. 48 to be deleted.
- Char. 49 to read “Fruit: bloom” with the states: absent or weak (1); medium (2); strong (3).
- Char. 53 (g) to be deleted.
- Char. 57 to read “Fruit: length of neck” with the states: short (3); medium (5); long (7).
- Chars. 58, 60 to 63 to replace “left” with “ventral”.
- Char. 59 to read “Fruit: shape of dorsal shoulder”.
- Char. 62 to have the states: absent or weak (1); medium (2); strong (3).
- Char. 63 to consider whether to delete.
- Char. 64 to read “Fruit: sinus”.

- Char. 65 to read “Fruit: depth of sinus”, with the states: shallow (3); medium (5); deep (7).
- Char. 67 to be deleted.
- Char. 68 (+) to be added and illustration to be provided.
- Char. 69 to read “Fruit: diameter of stalk attachment” and to review example varieties accordingly.
- Char. 70 to be deleted.
- Char. 71 to insert the state “yellow orange” after state 5, with the example variety: Pico.
- Char. 72 to be deleted.
- Char. 73 characteristic to be checked.
- Char. 74 characteristic to be checked.
- Char. 81 to read “Ripe fruit: amount of fiber attached to stone” and example varieties to be reviewed accordingly.
- Char. 82 to read “Ripe fruit: amount of fiber underneath the skin” and example varieties to be reviewed accordingly.
- Char. 84 to be deleted.
- Chars. 86 to 89 to be deleted.
- Char. 91 to be deleted.
- Char. 92 to have the states: oblong (1); reniform (2) and to be indicated as QL.
- Char. 94 to read “Time of beginning of flowering” and example varieties to be reviewed accordingly.

8. Explanations on the Table of Characteristics

to be updated in accordance with the changes to the Table of Characteristics and:

Ad. 58 to 63 to add illustration showing the dorsal and ventral shoulder.

9. Literature

“Mango Number” reference to be completed.

10. Technical Questionnaire

to be updated in accordance with the changes to the Table of Characteristics.

TG/97/4(proj.2): Avocado (Revision)

44. The TWF commented on document TG/97/4(proj.2), as presented by Mr. Alejandro Barrientos Priego (Mexico), as follows:

Cover page: Spanish name to be amended to “Palto”.

Subject of the Test Guidelines: Family name to be deleted. It was noted that the Test Guidelines would cover tropical and sub-tropical types and, because of the hybridization between types, a single set of example varieties would be developed.

2.4 Second sentence to be deleted.

3.3.2 to be deleted

3.5 to read: “Unless otherwise indicated, all observations should be made on five plants or parts taken from each of five plants.”

7. *Table of Characteristics*

Example varieties to be added where required

- Char. 2 to be indicated as QL. To have the states: absent (1); present (9)
- Char. 3 example varieties needed for states 1 and 4. Spelling of “Benedict” to be amended
- Char. 4 to be deleted
- Char. 6 to have the states: upwards (1); outwards (2); downwards (3).
- Char. 8 to read: “Leaf blade: cross-section” with the states: flat (1); involute (2); folded (3). Example variety “Collinson” to be used for state 2.
- Char. 12 order of states to be: lanceolate (1); ovate (2); elliptic (3); circular (4); obovate (5).
- Char. 13 to have the states: caudate (1); acuminate (2); acute (3); obtuse (4); rounded (5).
- Char. 15 to be indicated as QN
- Char. 17 to be deleted
- Char. 18 state 2 to read: “level”
- Char. 19 to be indicated as QN
- Char. 24 to read: “Flower: pubescence of sepal”. To have the notes 1 and 9.
- Char. 25 to be indicated as QN
- Char. 26 wording in brackets to be deleted. To have the notes 1 and 2.
- Char. 29 example variety “Santana” to be deleted.
- Char. 30 to read: “Mature fruit: shape of stalk end”. (+) to be added.
- Char. 33 to be deleted
- Char. 34 to read: “Mature fruit: form at stylar end”. To consider if state 3 should read: “truncate”.
- Char. 37 to be moved before Char. 35.
- Char. 38 (+) to be added. Wording of states to be reviewed.
- Char. 39 to be indicated as QN. State 1 to read: “absent or weak”.
- Char. 40 to read: “Mature fruit: texture of surface”. To be indicated as QN.
- Char. 41 to be indicated as QN. To have the states: absent or weak (1); moderate (2); strong (3).
- Chars. 42 and 43 to be moved before Char. 33.
- Char. 44 (+) to be added
- Char. 45 (+) to be added. To be moved before Char. 44.
- Char. 46 to read: “Pedicel: thickness compared to peduncle”. State 1 to read: “same size”.
- Char. 49 state: brown (5) to be added.
- Char. 50 to consider combining with Char. 48.
- Char. 51 to have the states: yellow green (1); green (2); dark green (3); reddish (4); purple (5); dark purple or black (6).
- Char. 52 example varieties for state 9: Dickinson.
- Char. 53 to read: “Ripe fruit: consistency of peel”. To be indicated as PQ.
- Char. 54 to read: “Ripe fruit: adherence of peel to flesh”. To be indicated as QN.

- Char. 55 to have the states: whitish (1); cream (2); yellow (3); light green (4).
Char. 56 to read: “Ripe fruit: color of layer of next to peel”. Order of states to be: light green (1); yellow green (2); green (3).
Char. 57 to read: “Ripe fruit: width of layer of next to peel”. state 7 to read: “broad”.
Char. 59 to be deleted
New Char.
(after Char. 58) to read: “Ripe fruit: consistency of flesh”.
Char. 61 to be deleted.
Char. 62 wording of states to be reviewed.
Char. 63 to read: “Ripe fruit: ratio: fruit length to seed length”. Example varieties for states 3 and 7 to be exchanged.
Char. 65 shapes to be reviewed
Char. 66 to be indicated as PQ
Char. 67 (+) to be added. To be moved to end of Table of Characteristics.
Char. 68 to have the states: absent (1); to embryo (2); to flesh (3).
Char. 70 to be deleted
Char. 71 to read: “Cotyledon: wrinkling”, with states: absent (1); present (9).
To be indicated as QL.
Char. 72 to be indicated as QN
Char. 73 to be deleted
Char. 74 to be indicated as QN.
Char. 75 to be deleted.

8. *Explanations on the Table of Characteristics*

to be updated in accordance with the changes to the Table of Characteristics and:

- Ad. 7 illustration for state 9 to be amended.
Ad. 14 illustration for state 1 to be amended
Ad. 30 to be provided
Ad. 34 illustration for states 1 and 2 to be improved.
Ad. 44 illustration of peduncle to be provided
Ad. 45 illustration to be provided
Ad. 46 indication of characteristic to be improved.
Ad. 48 illustration to be improved
Ad. 66 to note that this relates to Char. 65.
Ad. 67 illustration to be provided

10. *Technical Questionnaire*

6. Example to be replaced.

TG/PECAN(proj.1): Pecan nut

45. The TWF commented on document TG/PECAN(proj.1), as presented by Ms. Guadalupe Montes (Argentina), as follows:

- Cover page: to read: “*Carya illinoensis* (Wangenh.) K. Koch”
to read: “Nogal pecanero” in Spanish.

1. to read: “*Carya illinoensis* (Wangenh.) K. Koch”
- 2.3 to read: “...8 grafted plants or 10 dormant shoots”.
- 2.4 following to be added: “In the case of grafted plants, the rootstock should be named when the plant material is supplied. The competent authorities may prescribe the rootstock on which the variety should be grafted.”
- 3.3 following to be added: “In particular, it is essential that the plants produce a satisfactory crop of fruit in each of the two growing cycles.”
- 3.4.1 and 3.5 to refer to five trees.
- 4.2.2 to read: “For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95 % should be applied. In the case of a sample size of 5 plants, no off-types are allowed.”

7. *Table of Characteristics*

Asterisked, Grouping and Technical Questionnaire characteristics to be proposed

- | | |
|----------|---|
| Char. 1 | (+) to be added |
| Char. 2 | to be reviewed |
| Char. 3 | to read: “Tree: attitude of branches”, with the states: erect (1); semi erect (2); spreading (3). To be indicated as PQ. |
| Char. 6 | to read: “Tree: persistence of rachis” and to swap the states. To be moved to end of Table of Characteristics. (+) to be added |
| Char. 7 | (+) to be added |
| Char. 11 | to read: “Husk: ribbing”. To add state: Absent or very weak (1). |
| Char. 12 | to read: “Tree: persistence of husk after nut fall”. To be indicated as QL. (+) to be added. |
| Char. 13 | (+) to be added. (*) to be added. |
| Char. 14 | to read: “Nut: width in <u>lateral view</u> ”. To have the states: narrow (3); medium (5); broad (7). (+) to be added. (*) to be added. |
| Char. 15 | to read: “Nut: width in <u>ventral view</u> ”. To have the states: narrow (3); medium (5); broad (7). (+) to be added. (*) to be added. |
| Char. 16 | to read: “Nut: shape in <u>lateral view</u> ”. States to be reviewed. Wording in brackets to be moved to Chapter 8. (+) to be added. |
| Char. 17 | to read: “Nut: shape in <u>ventral view</u> ”. States to be reviewed. Wording in brackets to be moved to Chapter 8. (+) to be added. |
| Char. 18 | states to be reviewed |
| Char. 21 | to have the states: light brown (1); medium brown (2); dark brown (3). To check if pink colored varieties exist. |
| Char. 22 | wording of characteristic to be reviewed. |
| Char. 24 | to read: “Nut: adherence of the two halves of shell along suture”. (+) to be added. |
| Char. 25 | to check if should refer to thickness of pellicle. |
| Char. 27 | to read: “Kernel: intensity of ground color”, with the states: very light brown (1); light brown (3); brown (5). (+) to be added. |
| Char. 28 | to have the states: small (3); medium (5); large (7) |

- Char. 29 to read: “Kernel: adherence to shell”, with the states: weak (3); medium (5); strong (7).
- Char. 31 to be moved to end of Table of Characteristics
- Char. 37 to be deleted
- Char. 38 to be deleted
- Char. 40 to be deleted

New Chars. to check if useful inflorescence characteristics e.g. length of male catkin. Also to check Test Guidelines for Chestnut (TG/124/3) and for Macadamia (TG/111/3) for useful characteristics.

8. *Explanations on the Table of Characteristics*

to be updated in accordance with the changes to the Table of Characteristics and:

- Ad. 1 to read: “The vigor of the plant should be considered as the overall abundance of vegetative growth.”
- Ad. 6 explanation of when to observe to be provided.
- Ad. 7 explanation of when to observe to be provided.
- Ad. 12 explanation to be provided
- Ad. 14 illustration to be provided
- Ad. 15 illustration to be provided
- Ad. 16 see Char. 16
- Ad. 17 see Char. 17
- Ad. 24 method to be provided
- Ad. 25 illustration to be provided
- Ad. 27 explanation that must be observed immediately after harvest

Note: The sections after Section 7 “Table of Characteristics” were not considered due to lack of time.

Recommendations on Draft Test Guidelines (Plenary)

*46. The TWF agreed that the following draft Test Guidelines should be submitted to the TC for approval at its fortieth session, on the basis of the amendments presented in paragraphs 25 to 27 of this document, which would be introduced by the Office with information provided by the leading expert:

- | | |
|----------------------|-----------------------------|
| Apricot (Revision) | (document TG/70/4(proj.2)) |
| Cactus Pear | (document TG/CPEAR(proj.2)) |
| Persimmon (Revision) | (document TG/92/4(proj.2)) |

*47. The TWF decided to discuss further the following draft Test Guidelines at its next session:

- | | |
|---|---|
| Apple (Revision) | (document to be prepared by United Kingdom) |
| Avocado (Revision) | (document to be prepared by Mexico) |
| Blackberry and Hybrid berries
(Revision) | (document to be prepared by Germany) |
| Coffee | (document to be prepared by TWA) |

Mango (Revision) (document to be prepared by South Africa)
Pecan nut (document to be prepared by Argentina)

*48. The TWF decided to discuss the following new draft Test Guidelines at its next session:

Banana (*Musa* spp.) (Revision) (document to be prepared by Brazil)
Cherry (Revision) (document to be prepared by Hungary)
Crataegus spp. (Hawthorn) (document to be prepared by Mexico)
Hop (document to be prepared by TWA)
Fig (document to be prepared by Israel)
Passion Fruit (edible species) (document to be prepared by Israel)
Pineapple (document to be prepared by France)

*49. The TWF decided to discuss the following new draft Test Guidelines at its 2005 session:

Blackcurrant (Revision) (document to be prepared by New Zealand)

*50. The interested experts for the draft Test Guidelines listed in paragraphs 35 and 36 are presented in Annex III.

Future Program, Date and Place of the Next Session

*51. At the invitation of the expert from Germany, the TWF agreed to hold its thirty-fifth session in Marquardt, Potsdam (near Berlin), from July 19 to 23, 2004. During the thirty-fifth session, the TWF planned to discuss or re-discuss the following items:

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 (brief oral reports by the participants)
 - (b) report on developments within UPOV (oral report by the Office of the Union)
4. Molecular techniques
5. Project to consider the Publication of Variety Descriptions
6. UPOV Databases
7. Criteria for determining off-type plants
8. Definition of Maturity of Fruit (document to be prepared by New Zealand)
9. TGP documents
10. Discussions on draft Test Guidelines (Subgroups):
11. Recommendations on draft Test Guidelines (plenary)
12. Date and place of the next session
13. Future program

14. Report on the conclusions of the session (if time permits)
15. Closing of the session

Technical Visit

52. On the afternoon of October 2, 2003, the TWF visited the Vineland Station site at the Horticultural Research Station of the University of Guelph, Department of Plant Agriculture, Ontario. The TWF was hosted by Dr. Jay Subramanian and received a tour and explanation of the work of the Station on stone fruit and, in particular, its breeding work on plum. Later that day, the TWF visited the Grape Research Station of the Horticultural Research Station, where it was received by Dr. Helen Fisher. The afternoon visits were concluded with a tour of the Peller Estates Winery at Niagara-on-the-Lake, Ontario.

53. On September 27, 2003, several of the participants of the TWF and the TWO visited Rosa Flora Limited, Dunnville, Ontario, where the host, Mr. Otto Bulk, provided a guided tour of their cut-flower production unit. Later the same day, a visit was made to the Berry Research Station at the Simcoe Campus of the University of Guelph, Department of Agriculture. Dr. Adam Dale hosted the visit.

54. This report has been adopted by correspondence.

[Annex I follows]

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IV. OFFICE OF UPOV

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[Annex II follows]

PLANT BREEDERS' RIGHTS IN CANADA

1

**Plant Breeders' Rights in
Canada**

UPOV
Technical Working Party for Ornamental Plants and Forest Trees
and
Technical Working Party for Fruit Crops
September/October 2003
Niagara Falls, Ontario

2

**Plant Breeders' Rights
Advisory Committee**

- Act requires formation of PBR Advisory Committee consisting of breeders, growers and reps. from interested groups
- Adv. Cttee recommended implementation of Act on species by species basis
- Since Dec. 1998 all plant species, excluding bacteria, fungi and algae are eligible
- Adv. Cttee endorsed adoption of Australian type breeder testing system

3

Plant Breeders' Rights Office

- Commissioner
- 5 examiners
- 1 part-time project coordinator
- 1 part-time admin. assistant

4

**Duties of Plant Breeders'
Rights Office**

- Review and acceptance of applications
- Site examination of every DUS trial
- Examination of data and comparative descriptions from DUS trials
- Writing of variety descriptions and publication of the Plant Varieties Journal
- Granting of rights

5

**Duties of Plant Breeders'
Rights Office (cont'd)**

- Development of objective description forms based on UPOV test guidelines
- Development of national guidelines where no UPOV TG exists
- Drafting regulations and consultation with Adv. Cttee on regulatory change
- International cooperation & communication
- Development of internal policies

6

Fees for PBR

- Fees charged to applicants are:

Application	\$250
Examination	\$750
Grant of Rights	\$500
Annual renewal	\$300
- No increase in fees since Act was implemented

7

Other fees

Protective direction fee	\$50
Claim of priority	\$50
Filing objection	\$200
Application for compulsory license	\$250

☞ PBRO now nearing full cost recovery

8

Use of PBR in Canada

	Applications	Rights Granted
Agricultural	881	342
Horticultural	2956	1208
TOTAL	3837	1550

Note: PBRO has no backlog of applications

9

Horticultural Crops

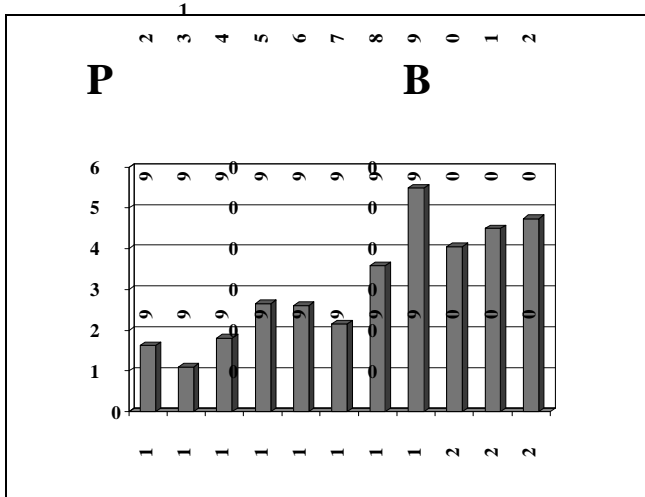
	Applications	Rights Granted
Fruit	197	66
Ornamental	2480	1013
Vegetable	269	129
Miscellaneous	10	0

10

National vs. Foreign Varieties

	Canadian	Foreign
Fruit	91	106
Ornamental	38	2480
Vegetable	30	239
Miscellaneous	2	8

1



1

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13

DUS Tests

- Canada has no formal accreditation system
- BUT..... most ornamental trials (~90%) are now conducted by 2 private companies which specialize in DUS testing
- Some breeders continue to conduct their own trials (e.g. fruit and field crops)
- Every trial is visited by an examiner from the PBR Office

14

Objective Description Forms

- Recommends testing protocol such as number of plants, years, grouping characteristics etc.
- Based on UPOV test guidelines
- For characteristics of plant parts the tester records state of expression for candidate and each comparison variety (from UPOV TG's)
- Illustrations and explanations are important to ensure consistent interpretation of terminology

15

Site Examination Request

- In January every applicant/agent is asked to submit site exam requests for the coming year
- Requests and fees due by May 1st
- Applicant must justify choice of reference variety(ies) that will be included in trials
- Examiners schedule site visit with applicant
- 433 varieties are in DUS trials in 2003 (366 have been completed to date this year)

16

Site Examination

- Examiner confirms that trials have been conducted according to guidelines
- Examiner verifies uniformity of plants in trials
- Examiner describes candidate in comparison to reference varieties, concentrating on distinguishing characteristics
- Examiner takes comparative photographs
- Examiner writes report for the variety file

17

Review of trial results

- Applicant/agent must submit trial data, comparative descriptions (ODF) and photos within 6 months of examiner's visit
- Examiner reviews submission and compares results to the site exam report
- Examiner drafts official variety description for publication in Plant Varieties Journal

18

Publication

- Draft description is sent to breeder or agent who conducted trials for review/revision
- Finalized descriptions and photos are published in next issue of Journal
- Six month objection period begins following release date of Plant Varieties Journal
- At end of objection period the file is reviewed by a different examiner & the Commissioner

Grant of Rights

- If no objections, the applicant is notified that variety is eligible for grant of rights
- Applicant must pay fee (\$500) and verify variety denomination and holder of rights
- Rights are granted on the day that all submissions are received in the PBR Office
- One month before the anniversary date each year a notice sent out requesting annual fee

[Annex III follows]

ANNEX III

LIST OF LEADING EXPERTS

DRAFT TEST GUIDELINES TO BE SUBMITTED
TO THE TECHNICAL COMMITTEE IN 2004

All requested information to be submitted to the Office of the Union
before November 14, 2003

Test Guidelines	Document	Leading expert(s)
Apricot (Revision)	TG/70/4(proj.2)	Mr. Harsanyi (HU)
Cactus Pear	TG/CPEAR(proj.2)	Mr. Barrientos Priego (MX)
Persimmon (Revision)	TG/92/4(proj.2)	Mr. Atsuta (JP)

POSSIBLE "FINAL" DRAFT TEST GUIDELINES
TO BE DISCUSSED AT TWF/35

New draft to be submitted to the Office of the Union
before June 4, 2004

Species	Basic Document	Leading expert(s)	Interested experts (countries) (for name of experts see List of Participants to be annexed to draft report)
Apple (Revision)	TG/14/9(proj.2)	Mrs. Lean (GB)	AR, AU, CA, CZ, DE, ES, FR, HU, JP, MX, NZ, NL, PL, PT, RO, ZA, CPVO, IPGRI
Avocado (Revision)	TG/97/4(proj.2)	Mr. Barrientos-Priego (MX)	AU, BR, ES, FR, IL, NZ, ZA, IPGRI
Mango (Revision)	TG/112/4(proj.2)	Mrs. Costa (AU) and Mrs. Buitendag (ZA)	BR, ES, IL, MX, IPGRI

DRAFT TEST GUIDELINES TO BE DISCUSSED AT TWF/35

New draft to be submitted to the Office of the Union
before June 18, 2004

Species	Basic Document	Leading expert(s)	Interested experts (countries) (for name of experts, see List of Participants)
Banana (<i>Musa</i> spp) (Revision)	TG/123/3	Mrs. Machado (BR)	ES, FR, IL, KE, IPGRI
Blackberry and Hybrid berries	TG/73/7(proj.1)	Mr. Schulte (DE) Mr. Barnaby (NZ)	GB, HU, IPGRI
Cherry (Revision)	TG/35/6	Mr. Harsanyi (HU)	CA, CZ ¹ , DE, FR, JP, NL, NZ, ZA, CPVO
Coffee	TG/COFFEE(proj.2)	Mr. Eva (BR) (TWA)	IL, BR, FR, KY, MX, IPGRI
<i>Crataegus</i> spp. (Hawthorn)	New	Mr. Barrientos-Priego (MX)	DE
Fig (<i>Ficus carica</i>)	TWF/30/4	Mr. Bar-Tel (IL) and Mr. Bergamini (IT)	AR, DE, ES, FR, JP, PT, IPGRI
Hop	New	Mrs. Rucker (DE) (TWA)	GB, CPVO
Passion Fruit (Fruit species)	New	Mr. Bar-Tel (IL) and Mrs. Buitendag (ZA)	BR, KE, ZA, MX, JP, IPGRI
Pecan nut	TG/PECAN(proj.1)	Mrs. Montes (AR)	IL, BR, MX, IPGRI
Pineapple (<i>Ananas comosus</i>)	New	Mr. Brand (FR) and Mr. Salaices (ES)	BR, JP, KE, MX, PT, ZA, IPGRI

2005

Blackcurrant (Revision)		Mr. Barnaby (NZ)	CZ ¹
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[End of Annex III and of document]

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Notified to the Office of the Union after the thirty-fourth session of the TWF.