E

TWF/40/17
ORIGINAL: English
DATE: September 25, 2009

UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

TECHNICAL WORKING PARTY FOR FRUIT CROPS

Fortieth Session
Angers, France, September 21 to 25, 2009

REPORT

adopted by the Technical Working Party for Fruit Crops (TWF)

Opening of the Session

1. The Technical Working Party for Fruit Crops (TWF) held its fortieth session in Angers, France, from September 21 to 25, 2009. The list of participants is reproduced in Annex I to this report.

2. The session was opened by Mrs. Bronislava Bátorová (Slovakia), Chairperson of the TWF, who welcomed the participants and, in particular, the new participants to the TWF.

3. The TWF was welcomed by Mrs. Sylvie Dutartre, Directrice of the *Groupe d'Étude et de contrôle des Variétés et des Semences* (GEVES), Mr. Jean-François Thibault, President of the *Institut National de la Recherche Agronomique* (INRA), and Mr. Laurent Peron, *Administrateur* of Vegepolys. Their welcome addresses are reproduced in Annexes II, III and IV to this report, respectively.

Adoption of the Agenda

4. The TWF adopted the revised agenda as reproduced in document TWF/40/1 Rev., subject to the addition of an item for "Development of a set of example varieties for North East Asia for the Test Guidelines for Strawberry", the addition of document TWF/40/15 Add., under agenda item 15, replacement of document TWF/40/3Add. with document

TWF/40/3Add.Rev., under agenda item 5, and document TG/51/7(proj.1) with document TG/51/7(proj.1)Rev., under agenda item 17, on the basis of the program agreed by the TWF.

Short Reports on Developments in Plant Variety Protection

(a) Reports from Members and Observers

5. The expert from Australia reported that the number of applications received for the 2008-2009 financial year was 324, compared to 320 in the 2007-2008 financial year. In the same period, 267 grants were issued compared to 170 in the previous year. Over the preceding 12 months, 19% of applications filed were for fruit varieties. That number was comparable to previous years. The genera with the most applications were *Prunus* (28 applications) and *Vaccinium* (15 applications). Other genera included *Citrus, Garcinia, Malus, Pyrus, Rubus* and *Vitis*. Perhaps the most significant development in the last 12 months had been a review on plant breeders' rights (PBR) enforcement conducted by the Advisory Council on Intellectual Property (ACIP). In the review, ACIP was considering possible strategies that might assist Australian PBR holders to enforce their valid rights. The scope of the review covered areas of Australian law (exclusive/extended rights, exhaustion of PBR, lack of clarity, pre-grant enforcement, essentially derived varieties), procedures (Federal Magistrates Court, alternative dispute resolution, civil versus criminal, burden of proof), remedies/evidence (inspection orders, exemplary damages, customs), sector-generated support (education and awareness, central body/third party involved in evidence collection and/or royalty collection, end point royalties, standard contracts). An options paper discussing these issues had been released by ACIP and following consideration of any further submissions or investigations, a final report to the Government was expected in the near future.

6. The expert from Brazil reported that since 1998, Brazil had received 1,787 applications, of which 1,268 titles were granted and 247 applications were under analysis. For fruit species, Brazil had received 81 applications, representing 10% of the total, out of which 43 titles were granted and 36 applications were under analysis. Those numbers reflected that in Brazil, the number of applications for fruit crops had increased, especially in the preceding two years. Brazil was working on three new Test Guidelines for new cross-pollinated species from the Amazonia area, for which breeding had started only a few years previously, making it difficult to establish an appropriate protocol for DUS testing.

7. The expert from Canada reported that in 2008, 348 applications were filed in the Office, 26 of which were for fruit varieties, accounting for approximately 7% of all applications received in the Office. That number was slightly above the average number of 20 applications received annually for fruit varieties in Canada. The average number of applications for 2009 would be maintained, however it could represent a higher percentage of total applications as numbers had dropped off in other crop areas (i.e. ornamental varieties). To date, applications had been received for 21 fruit genera, with the highest numbers of applications for apples (100), strawberries (89), cherries (30), raspberries (20) and pears (17). The expert reported that there was no change regarding Canada's intentions to ratify the 1991 Act of the UPOV Convention and that there seemed to be no particular political interest in amending the legislation at that time.

8. The expert from the Community Plant Variety Office (CPVO) of the European Community reported that, in 2008, the Office had received 3,014 applications for Community plant variety rights (CPVR), a slight increase of 1% from the previous year, although it had granted fewer titles than in 2007. However, as a reflection of the global economic crisis, the CPVO had seen an important 16% decrease of applications in the first eight months of 2009, so the Office anticipated that 2009 would be the first time that fewer applications for Community rights would be filed with respect to the previous year. Following the implementation of the "one key, several doors" principle, whereby DUS test reports produced by any authority in the EU were accepted for listing or protection purposes throughout the Community, an independent technical audit of the CPVO commenced operations in September 2008. Its first task was to establish rules for "quality requirements" to be followed by examination offices, and these were adopted by the CPVO's Administrative Council in March 2009. Having already undertaken a few "mock audits" with the assistance of certain examination offices, the first formal quality audits using external technical audit experts would commence in 2010. Internally, the CPVO was establishing processes to become a "paperless" Office, so that all documents were scanned into its database and treated electronically. At the same time the CPVO was making good progress in being able to offer to applicants the possibility of e-filing applications for Community rights by the end of 2009, which would enable an application for Community rights to be filed on-line via a secured site. That would lead to gains in time and efficiency to both the applicant and the CPVO, and ultimately to examination offices as well. The CPVO staged the Technical Working Party for Ornamental Plants and Forest Trees (TWO) in Angers during the previous week (September 14 to 18, 2009), making it the first time it had hosted a UPOV Technical Working Party. The CPVO has also offered to stage the Technical Working Party on Automation and Computer Programs (TWC) in June 2010. Applications in the fruit sector in 2008 increased to an all-time high of 181, which was a noticeable 12% increase in comparison to 2007; the first eight months of 2009 though, had seen a 4% drop in fruit figures in comparison to the same time in 2008. With respect to research and development (R&D) projects, the CPVO was co-funding a three-year collaborative project between its four peach examination offices into better ways of managing peach tree reference collections using phenotypic, visual and molecular techniques. At the half-way stage of the project, the results obtained to date showed encouraging signs that the project's objectives would be accomplished. A detailed description of the R&D project would be given together with GEVES/INRA during the course of the fortieth session of the TWF. The CPVO was analyzing a joint R&D proposal from its examination offices for apple to look at better ways of identifying new candidate apple mutation varieties; a description of the problems faced by the CPVO's apple examination office on that issue, would also be given together with GEVES/INRA during the course of the fortieth session of the TWF. Finally, the CPVO had commenced investigating strategies into the feasibility of having reductions in the duration/costs of technical examinations for fruit crops. That review, which would be done in close collaboration with CIOPORA and the CPVO's examination offices in fruit would look at areas such as: (i) the sending of older/more developed plant material for DUS testing; (ii) reducing the number of obligatory observation periods for candidate varieties; (iii) strategies for the rationalization/harmonization of reference collections, including alternative ways of maintaining reference collections; and (iv) shorter lists of characteristics in CPVO protocols.

9. The expert from France reported that GEVES had been certified for quality management, under NF EN ISO 9001:2008, for the following activities: study and control of new plant varieties in the framework of national and EU catalogues and PBR, analyses of seeds and seedlings for seed lot certification and international trade, monitoring of laboratory networks, and biochemical and molecular analysis of varieties and seeds. In 2009, the

GEVES head office moved from Versailles to Angers, near to the National Seed Station (SNES-GEVES). The new address was: GEVES, rue Morel, BP 90024, 49071 Beaucouzé cedex. The CTPS General Secretary (French National Committee for Variety Registration) was located at the same address, and the field crop DUS unit also moved to Angers. GEVES was conducting DUS fruit tests for *Malus*, *Pyrus* and *Prunus*, as well as *Vitis* for PBR and listings (i.e. entry to the certification scheme). The main fruit crops were peach, apricot, apple and cherry. About 100 applications a year were received. Some 500 applications were followed each year, and the DUS examination took an average of four years. A significant part of the DUS GEVES examinations were conducted on the behalf of CPVO and European national authorities. The DUS examinations were delegated to INRA in France and to other European Union authorities (Germany, Spain, Italy). In France, four Fruit INRA experimental locations were involved: Angers (apple and pear), Avignon (peach and apricot), Bordeaux (cherry) and Montpellier (grape). They assured the maintenance of large and reliable DUS reference collections in the field: 4,500 varieties were maintained (1,700 for apple, 700 for pear, 1,800 for plum, cherry, and apricot) and 300 rootstocks. Special attention was carried out to the sanitary status of the material inside the DUS collections. Peach and apricot were maintained under insect-proof plastic tunnels. Programs were underway for DNA characterization of varieties, in order to deliver tools for structuring the reference collections and for the varietal control of certified material of fruits and forest plants (*Prunus, Malus, Vitis, Castanea, Olea, Populus* and *Aracaceae -Palmae*). GEVES and INRA were conducting methodological projects to permit the development of fruit DUS examinations with new challenges. Those included optimization and reliability of reference collections, and minimal distances required. The goal of the CPVO Peach Program was to optimize DUS reference collections such as management by descriptions, photos and DNA data (France, Italy, Hungary, Spain). The draft apple program sought to develop a methodology to analyze color mutants of apple by visual data, and spectrocolorimetric analysis.

10. The expert from Germany reported that there were 144 fruit varieties under test at that time, relating to 15 different species, among which the most important were strawberry (32 running procedures), blueberry (31), apple (24), and raspberry (15). About ¾ of those procedures were tested on behalf of the CPVO. In summer 2008, the Bundessortenamt reviewed its plant material requirements, in particular listed up viruses and phytoplasma diseases, the submitted material had to be tested against and found free from viruses, before the examination started. It was further reported that the German Genebank for Apple had been officially opened by the Minister of Agriculture in February 2009. That was to fulfill the national obligations of the Federal Republic of Germany in the field of germplasm conservation. The Bundessortenamt, by contract, formed one of the maintainers of germplasm material for apple, strawberry, and sour cherry.

11. The expert from Japan reported that a total of 23,874 applications were filed during the period from 1978 to 2008 in Japan. The total number of granted titles was 18,154. In 2008, 1,246 applications had been filed, showing a decrease of 19% compared to 2007. 463 applications representing 37% of the total were filed by foreign applicants. As for fruit tree crop varieties, 1,259 applications had been filed (5.3% of the total) and 1,054 titles were granted. In 2008, 55 applications were filed, showing an increase of 7 varieties compared to the previous year. The average duration of the examination procedure (from application to registration), which was 2.6 years in 2008, would be reduced to 2.5 years in 2009, depending on the national objectives. It was decided to harmonize around 160 national test guidelines (out of 585) which overlapped with UPOV Test Guidelines. Out of 81 national test guidelines which had been harmonized since April 2008, 13 were related to fruit tree crops, such as peach, Japanese plum, sweet cherry, blueberry, persimmon; others would be harmonized in

the future. The East Asia Plant Variety Protection (PVP) Forum was established in 2008, by the members of the Association of Southeast Asian Nations (ASEAN), plus three countries and some guest countries. The second meeting of the East Asian PVP forum had been held in Beijing, China. It confirmed its goal to promote the cooperation activity for developing plant variety protections system through the Forum activity. In that regard, Japan would establish a program of in-country training and workshop in 2009. Members of the Forum were cooperating in developing some test guidelines, for instance draft test guidelines for *Aglaonema*, which was an important foliage plant. In August 2008, the organizational structure of the Ministry of Agriculture, Forestry and Fisheries (MAFF) was altered. The name of the Plant Variety Protection and Seeds Division changed to Intellectual Properties Division and the number of assistant examiners was increased by five people.

12. The expert from Mexico reported that there had been no relevant changes in the Plant Variety Protection Office since the last TWF session. Up to September 2008, 988 applications had been filed for 82 species, out of which 44.3% were for agricultural crops, 27.7 % for ornamentals, 19.2% for fruit crops and 7.4% for vegetables. Of the total applications, 22.3% were filed for maize, 19.3% for rose and 7.1% for strawberry. For fruit crops, 70 applications had been filed for strawberry, 21 for raspberry, 19 for grapevine, 13 for avocado, 13 for blueberry, 10 for apple, 7 for blackberry and 27 for other fruit species such as mango, mandarin, lime, olive, banana, pineapple, kiwifruit, walnut, papaya and apple. Applications from other countries accounted for 68.7%, the main country being the United States of America with 37.2% of the applications, followed by the Netherlands with 14.7% and France with 7.2%.

13. The expert from New Zealand reported that applications for fruit varieties were steady, with increasing applications for kiwifruit varieties. Applications for foreign-owned strawberry and other berry fruit varieties had decreased, with variety testing on indefinite hold due to barriers caused by revised plant quarantine regulations for those genera. Plant importation regulations in general continued to make the importation of fruit crops difficult and contribute to lengthy periods of provisional protection for most imported fruit varieties. The Plant Variety Rights Office was aware of some overseas fruit breeders who did not release their varieties in New Zealand because of the strict importation requirements. The Office completed a revised protocol for the centralized testing of apple varieties and that was available to breeders on request. As an example of how fruit crop breeding and crop interest could be cyclical, the testing of six varieties of *Acca sellowiana* had begun after almost a decade of testing inactivity in this genus.

14. The expert from Poland reported that the total number of protected varieties at the beginning of September 2009 was 1,387, of which 129 were fruit plants. A total of 42 candidate fruit plant varieties for 13 species were being tested, including apple (14), strawberry (7), sour cherry (4), apricot (4), grapevine (3), plum (2), blackberry (2), raspberry (2), as well as pear, hazelnut, blackcurrant and gooseberry (1 for each species). The tests were carried out for listing and granting PBR purposes. According to the bilateral agreement, the Research Centre for Cultivar Testing (COBORU) was testing 15 varieties of fruit plants for 5 species on behalf of Lithuania. In 2009, 94 varieties of the (6) most important fruit plants for the Descriptive Variety Lists were being tested. The tests were conducted in five places. For the first time, in 2009, first post-registration tests (PDO) for strawberry and raspberry had been undertaken. The costs of tests were covered by local governments and the industrial sector. The expert also reported on the visit of a CPVO fruit expert in 2008, and of a meeting with DUS experts from Estonia which took place in 2009.

15. An expert from the Republic of Korea, in charge of plant variety protection for forest plant species at the Korea Forest Seed & Variety Center (KFSV), Korea Forest Service, reported that, in the Republic of Korea, according to the Seed and Industrial Act, the KFSV was responsible for PVP in the forestry sector including ornamental trees, plant flowers and fruits and mushrooms. For that purpose, the Korea Forest Service was newly established in the KFSV in 2008. According to the Seed and Industrial Act 11, all forest species including chestnuts, mushrooms and others, were entitled to variety protection by the Ordinance of the Ministry of Food, Agriculture, Forestry and Fisheries (MIFAFF). To date, 45 applications in chestnuts, mushrooms and others had been received and were being tested for DUS. Test guidelines for many forest species were being prepared, including, for example, wild Japanese Black Pine (*Pinus thunbergii*) and mushrooms (*Sparassis crispa*). An expert from the Korea Seed and Variety Service (KSVS), reported that 3,663 applications for plant variety protection were filed and 2,832 titles were granted in the Republic of Korea as of June 30, 2009. Those titles were granted for cereals (19%), vegetables (14%), fruits (4.5%), ornamentals (56%), industrial crops (0.5%), and others (6%). Fruit varieties accounted for 128 titles of protection, including apple (22.7%), pear (18.0%), peach (43.0%), grape (10.9%) and kiwi fruit (5.5%). Protection was extended to all plant genera and species as of May 2009, except for strawberry, raspberry, blueberry, cherry, tangerine, and sea plants. For that reason, 21 varieties of new 8 different species were applied from May 1 to July 31, 2009. An electronic application system was launched in June 2005. In 2008, 86% of applications had been received using that system. The KSVS had started to add picture images of ornamentals with variety denominations in its official gazette homepage. The expert reported that the third session of the PVP Training Course, which was held from June 18 to July 3, 2009, was attended by 15 participants from 10 countries, including Indonesia and Zambia. The Republic of Korea hosted the thirty-eighth session of the Technical Working Party for Agricultural Crops (TWA), in Seoul, from August 31 to September 4, 2009. The TWA session was preceded by an International Symposium on the Impact of Plant Variety Protection System held in Seoul on August 28, 2009, to which nine speakers from Argentina, Australia, Canada, China, the European Union, Japan, Kenya, Poland and the Republic of Korea were invited.

16. The expert from Slovakia reported that the legislation on plant breeder's rights, Law No. 22/1996, which amended the previous Law No. 132/1989, was cancelled and the new Law No. 202/2009 approved on April 29, 2009 came into force on June 1, 2009. The new law was in conformity with the 1991 Act of the UPOV Convention. From 1990 until December 31, 2008, 1,166 applications for plant breeder's rights had been filed and 604 rights had been granted. In 2008, the Ministry of Agriculture had received 22 applications for plant breeder's rights and 61 titles had been issued. Thirty titles had ceased to be in force and 431 titles were in force on December 31, 2008. The majority of applications concerned agricultural species, particularly cereals and maize. Since Slovakia became a member of the European Union, there had been a significant decrease in the number of applications for plant breeders' rights and a reduction in the number of breeders of small fruit, with grapevine breeding representing the main area of activity. Plant breeder's rights were granted for apple, strawberry, raspberry, apricot, black and red currant, plum and wine.

17. The expert from South Africa reported that in South Africa, to be eligible for protection in terms of the PBR Act, the plants from which new varieties were developed should be declared by the Minister in accordance with the regulations Act. The PBR Act in South Africa was under review. There were approximately 360 taxa declared in terms of the PBR Act and they were grouped as follows: 53% ornamentals, 27% agricultural crops, 10% fruit crops and 10% vegetable crops. By December 2008, 2,076 varieties had valid PBRs in South Africa as follows: agricultural crops had 713 varieties (37% of total), fruit had 349

varieties (17% of total), ornamentals had 762 varieties (37% of total) and vegetable varieties 252 (12% of total). About 60% of those varieties were owned by foreign nationals and 40% by locals. Of the locally owned varieties, about 15% were owned by public institutions. With regard to the fruit crops, there had been an increase from 250 varieties with valid PBRs in 2007 to 349 until 2008. The top fruit crops with valid PBRs in 2008 were nectarine (62 varieties), apple (51), grape (48) and peach (47). The Directorate Genetic Resources was facilitating the development of the Plant Variety Registration database, which was still at the development stage.

18. An expert from Spain reported that the number of applications received in 2009 for fruit varieties was similar to precedent years, i.e. about 40, mainly for *Citrus*, strawberry and peach. Spain was involved in DUS testing for a large number of fruit species (Mediterranean, continental or subtropical species). DUS tests were used not only for plant breeders' rights but also for official registration of varieties ("listing"), particularly in the case of vine, olive, fig, etc. The Office (OEVV) was now focusing on training and coordinating the work of experts, considering that it was a specialized work. At the European Union level, there was a project to use UPOV Test Guidelines or CPVO Protocols as references for the variety management for listing, certification and commercialization rules.

19. The expert from the International Community of Breeders of Asexually Reproduced Ornamental and Fruit Plants (CIOPORA) reported that a CIOPORA position paper on biodiversity had been adopted in March 2009 at its Annual General Meeting (AGM) in Campinas, Brazil (document available at *www.ciopora.org/publications*) and that a working group on biotechnology had been established. The expert reported that CIOPORA had approached Ethiopia with regard to the establishment of an effective PBR system: it had commented on the Ethiopian PBR law, participated in a conference on Plant Breeders' Rights in Addis Ababa in May 2009 and had developed a roadmap for the establishment of an effective PBR system. CIOPORA had also commented on the Indian Plant Breeders' Rights law, but had not received any reaction from the Indian government at that time. In March 2009, CIOPORA had organized the largest conference on PBR ever in Brazil, resulting in the Carta of Campinas, in which the participants of the conference (breeders, researchers, growers, traders) urged the Brazilian Government to improve the level of PBR protection in Brazil, as soon as possible. The expert also reported that CIOPORA had issued a new campaign on anti-infringement entitled "Find the fault". Finally, it informed the TWF that the next international PBR conference would take place on March 3, 2010, in Seville, Spain.

20. The expert from the International Seed Federation (ISF) reported that, since the previous TWF session, Mr. Orlando de Ponti had been appointed as President of ISF.

(b) Reports on Developments Within UPOV

21. The TWF received an oral report from the Office of the Union on the latest developments within UPOV, a copy of which is provided as Annex V.

Molecular Techniques

22. The TWF noted the report of developments in document TWF/39/2.

TGP Documents

23. The Office of the Union considered the TGP documents below on the basis of documents TWF/40/3, TWF/40/3 Add.Rev. and TWF/40/3 Add.2.

(a) New TGP Documents

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

24. The TWF considered documents TWF/40/3, TWF/40/3 Add.Rev., TWF/40/3 Add.2, TGP/8/1 Draft 13 and TWF/40/10.

25. The TWF made no comments on documents TGP/8/1 Draft 13 and TWF/40/10.

TGP/11: Examining Stability

26. The TWF noted the developments concerning document TGP/11/1 Draft 5, as set out in document TWF/40/3.

27. Mr. Sergio Semon (European Community), drafter of document TGP/11, reported that he had already discussed the examination of stability with an expert from Australia at the Technical Working Party for Vegetables (TWV) and would also take the opportunity to discuss the matter with the expert from Australia attending the TWF session. He invited other experts to provide practical examples of how stability is examined for vegetatively propagated varieties. It was recalled that an expert from the United Kingdom had previously offered to provide examples.

TGP/14: "Glossary of [Technical, Botanical and Statistical] Terms Used in UPOV Documents"

28. The TWF considered documents TWF/40/3, TWF/40/3 Add.Rev., TWF/40/3 Add.2, TGP/14/1 Draft 9, TGP/14/1 Draft 9 Supp. and TWF/40/11.

29. The TWF made the following comments on document TGP/14/1 Draft 9:

	Table of Contents
	page numbering to be corrected
	Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE
1.3	the TWF expressed its reluctance to introduce the possibility to provide a different definition for the terms "base" and "apex" in Test Guidelines
2.4.2	the TWF agreed with the TWO proposal to add a line indicating the start of the tip in each illustration
	Section 2: Botanical Terms: Subsection 2: Shapes and Structures: III. DEFINITIONS FOR SHAPE AND STRUCTURE TERMS

	the TWF agreed with the TWO proposal to delete definition of terms "Tree", "Shrub" and "Vine", to avoid confusion concerning the meaning of those terms in the UPOV Convention.
Decurrent	to read "Running downwards"
Hirsute	comments to be deleted
Oblique	to delete first definition
Oblong	to delete second definition
Pyramidal	explanation to be provided by Germany
Rough	to delete second definition
Sagittate	to delete first definition
Semi shrub	to be deleted
Sinuate	comments to be deleted
Spine	comments to be deleted
Thorn	comments to be deleted
Trapezoidal	explanation to be provided by Germany
Trichome	comments to be deleted

30. The TWF made the following comments on document TWF/40/11:

New item	(TGP/14 - Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE) the TWF agreed with the TWO proposal that a section on guidance for characteristics for outline shape in plane view should be developed for inclusion in a future revision of document TGP/14
New item	(TGP/14/1 Draft 9: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: II. STRUCTURE: 3.4) the TWF agreed with the TWO proposal to add a term to cover spike / branch in, for example, Vriesea (see document TG/VRIES(proj.3))

31. The TWF noted the conclusions of the TWO on the "Exercise on Color", as set out in document TWF/40/3 Add.2 and noted that those conclusions would be incorporated in a new document that would be drafted in the form of a section to be introduced in document TGP/14 and would be presented to all Technical Working Parties in 2010.

(b) Revision of TGP Documents

TGP/0 "List of TGP Documents and Latest Issue Dates"

32. The TWF noted that the TC agreed to propose that document TGP/0 be revised (to become document TGP/0/2) in conjunction with the scheduled adoption of documents TGP/12 and TGP/13 by the Council at its forty-third ordinary session, to be held in Geneva on October 22, 2009.

TGP/7 "Development of Test Guidelines"

33. The TWF considered documents TGP/7/2 Draft 3 and TWF/40/14, and the report on developments in the TC, CAJ and TWPs concerning document TGP/7/2 Draft 3 in document TWF/40/3.

34. The TWF considered document TGP/7/2 Draft 3 and made the following comments:

	Section 1: Introduction
1.2.1.9	the TWF supported the proposal by the TWA that the final sentence should read "In the interim, members of the Union may indicate in DUS reports that the characteristic in the individual authorities' test guidelines has some differences to the characteristic in the Test Guidelines, pending consideration of a revision of the Test Guidelines by the Technical Committee.". The TWF further agreed with the TWO proposal that new characteristics and new states of expression notified by means of document TGP/5, Section 10 "Notification of Additional Characteristics", should be presented for consideration at the session of the relevant Technical Working Party (ies). It emphasized that partial revisions should be possible where appropriate.
1.2.1.11	the TWF agreed that the wording proposed by the TWA should be amended to read "according to the individual authority's requirements, the authority's technical questionnaire may request additional information to that requested in the Technical Questionnaire of the UPOV Test Guidelines"
	Annex 3: Guidance Notes (GN) for the TG Template
GN 4.4	Test Guidelines references to be updated
GN 7	the TWF clarified that "in the case of plants" (second paragraph) the number of plants specified in Chapter 4.1.4 might be less that the number of plants in Chapter 3.4. Furthermore, it was also agreed that the number of plants in Chapter 4.1.4 should at least allow for the possibility of off-type plants within the tolerated number to be excluded from observations and that guidance should be provided to disregard off-type plants from observations for distinctness.
GN 11.1	The TWF agreed with the proposal of the TWO (i) that option (b) to be deleted and option (a) to be included in TG Template, i.e. MG/MS/VG/VS to be presented for all characteristics in the Test Guidelines; and (ii) to add an explanation that, for example, VG/MG indicated that visual observation or measurement would be appropriate according to the particular circumstances, including the number of varieties included in the growing trial (see document TGP/9/1, Section 4.2). The TWF also agreed that only the types of observations included in the Test Guidelines concerned (e.g. VG, MG) should be presented in Chapter 4.1.5
GN 18.3	the TWF agreed with the TWO proposal to choose a more typical qualitative characteristic example than number of colors
GN 20, 3.2.1	the TWF agreed with the TWO proposal to clarify that the "two Note" difference rule only applies in the case of comparison by Notes

GN 28	the TWF agreed that experts with suggestions concerning the document to be developed on example varieties could send those to Mr. Joël Guiard (France), or to the Office of the Union, which would forward the suggestions to Mr. Guiard. The expert from New Zealand explained that he would raise the matter of example varieties that were a matter of common knowledge, but did not have a name.

35. The TWF considered document TWF/40/14 and agreed with the conclusions of the TWO, as reported by the Technical Director, that "the document provided a good basis to develop Additional Standard Wording (ASW) for inclusion in a future revision of document TGP/7, but agreed that the text was too prescriptive and would need to be edited to be more suitable for applicants completing the Technical Questionnaire. In addition, it was agreed that it would be useful to explain that the photograph(s), if provided in an appropriate format, 'may help the examination authority to conduct its examination of distinctness in a more efficient way'". The TWF also agreed that the text should be of a suitable length for applicants, although it should be explained that it would be possible for authorities to make the full explanation available by means of a link, rather than including all the text in the Technical Questionnaire.

36. The TWF considered document TWF/40/11 and agreed to consider including an indication of grouping characteristics in the Table of Chars., whilst avoiding any confusion with the use of the letter "G" as used in document TGP/5: Section 6 "UPOV Report on Technical Examination and UPOV Variety Description", Annex, Item 14.

Discussion on Draft Test Guidelines

Almond (revision)

37. The subgroup discussed document TG/56/4(proj.1), as presented by Mrs. Carensa Petzer (South Africa), and agreed the following:

Cover page	to check author' s name: *Prunus dulcis* (Mill.) D. A. Webb
2.3	information on the requirements for material (e.g. sufficient buds etc.) to be moved to chapter 2; last line to read: "- 5 one-year-old trees grafted on a rootstock selected by the testing authority."
3.3.1	second sentence to be moved to 3.1
4.3.2	to delete "seed or"
5.3	to be decided on
6.5	to decide whether to include MG, MS, VG, VS (will depend on discussion on TGP/7)
Table of Chars.	to check whether to add more (*) characteristics; check order of characteristics
Char. 1	to add (+) with explanation of vigor
Char. 2	to have states "upright (1)"; "semi-upright (2)"; "spreading (3)"; "drooping (4)"

Char. 3	to read " Plant: texture of bark"; to be indicated as QL; to check whether to have the states: smooth (1); moderately cracked (2); strongly cracked (3)
Char. 5	to be deleted
Char. 6	to add state "absent or very weak (1)" and check example variety
Char. 7	to add (+) with explanation of feathering; to have states "absent or very weak (1)"; "weak (3)"; "medium (5)"; "strong (7)"; "very strong (9)"
Char. 8	move back (chronological order); state 2 to read "same"
Char. 9	to read "Tree: density of foliage"; state 3 to read "sparse"
Char. 11	to read "Leaf blade: width"
Char. 12	to read "Leaf: ratio length/width"; to add (+) with an illustration and an explanation; to have states "small (3)"; "medium (5)"; "large (7)"
Char. 13	to read "Leaf blade: intensity of green color"; to be indicated as QN; to have states "light (3)"; "medium (5)"; "dark (7)"
Char. 15	to be indicated as QL
Char. 16	move at the beginning of table of characteristics with tree characteristics; to read "Tree: distribution of flower buds" with states "predominantly on spurs (1)"; "equally on spurs and on one-year-old shoots (2)"; "predominantly on one-year-old shoots (3)"; to be indicated as QN
Char. 17	to add (+) and provide illustration; to have states "triangular (1)"; "ovoid (2)"; "circular (3)"
Char. 18	to have states "white (1)" with example variety "Ardechoise"; "pink (2)" with example varieties "Barte, Marcona"; "red (3)" with example varieties "Ai, Trell"
Char. 19	to have states "green (1)"; "brown (2)"; "red (3)"
Char. 20	to read "Flower bud: pubescence of sepals" with the following states: "absent or very weak (1)"; "weak (3)"; "medium (5)"; "strong (7)"
Char. 21	to add (+) with explanation of time of beginning of flowering; to have states "very early (1)"; "early (3); "medium (5)"; "late (7)"; "very late (9)"
Char. 22	keep as it is and check the example varieties
Char. 23	to read "Petal: shape" with the following states: "narrow elliptic (1)"; "medium elliptic (2)"; "circular (3)"; "rhombic (4)" with example variety "Volcani 59/4"
Char. 24	to read "Petal: color of inner side" with the following states: "white (1)"; "light pink (2)"; "medium pink (3)"; "dark pink (4)"
new Char. 25	to read "Petal: undulation of margin" with the following states: "absent or weak (1)"; "medium (2)"; "strong (3)"; add example varieties
Char. 26 (old 25)	keep current wording of characteristic
Char. 27 (old 26)	to be deleted
Char. 28 (old 27)	to read "Stigma: position in relation to anthers"; to be indicated as QN
Char. 29 (old 28)	QL – to check whether 3 states needed (QN): absent or weak (1); moderate (2); strong (3)

Char. 30 (old 29)	to have states 1, 2, 3
Chars. 31, 32, 34 (old 30, 31, 32)	"Green fruit" to become "Fruit"
Char. 32 (old 31)	to read "Fruit: shape (in lateral view)" with the following states: "ovate (1)"; "elliptic (2)"; "circular (3)"; "obovate (4)"
new Char. 33	to read "Fruit: shape of apex" with the following states: "acute (1)"; "obtuse (2)"; "rounded (3)"
Char. 34 (old 32)	to have states "weak (3)"; "medium (5)"; "strong (7)"
Char. 35. (old 33)	to read "Time of harvest"; to add (+) with explanation
Chars. 36 to 43	"Dry fruit" to become "Stone"
Char. 38	check to use same states as leaf ratio and add (+) with an explanation
Char. 39 (old 34)	to read "Stone: shape (in lateral view)" with the following states: "ovate (1)"; "elliptic (2)"; "circular (3)"; "obovate (4)"
Char. 40 (old 35.)	to have states "acute (1)"; "obtuse (2)"; "rounded (3)"; example varieties to be deleted
Char. 41 (old 36)	change notes to 1, 2, 3
Char. 42 (old 37)	to read "Stone: cracking" with the states "absent or very weak (1)" to "very strong (9)"; add (+) with an explanation of what is cracking
Char. 43 (old 38)	to add (+) and provide illustration (use drawing of European Plum)
Char. 44, 45 (old 39, 40)	to be deleted
Char. 47 (old 42)	to be deleted
Char. 48 (old 43)	to have states "yellow (1)"; "brown (2)"; "red (3)"
8.1 (b)	to read "Unless otherwise stated, all observations…"
new Ad. 21	to read "All observations on the flower should be made on fully opened flowers. The time of beginning of flowering is reached when 10% of the flowers on the tree are fully opened."
new Ad. 35	to read "When 50% of the fruits on the tree split."

Acerola

38. The subgroup discussed document TG/ACERO(proj.1), as presented by Mr. Kiyofumi Nakamura (Japan), and agreed the following:

Cover page	add following alternative names: English: "West Indian-cherry"; French: "Cerise de Cayenne, Cerisier de Barbade, Cerisier des Antilles"; German: "Barbadoskirsche, Westindische Kirsche"; Spanish: "Semeruco, Grosella"
3.3.2	remove highlight
3.5	add third sentence: "In particular, in the case of fruit and stone characteristics, observations should be made on 15 fruits, three taken from each of five trees."
Table of Chars.	delete all references to "G"; to check "MS" and to add asterisk depending as necessary
Char. 1	add example varieties "Rubra" for state 2, "Cabocla, Sertaneja" for state 3
Char. 2	add (+) with explanation (Ad. 2: "The vigor of the plant should be considered as the overall abundance of vegetative growth.")
Char. 3	add example varieties "Cabocla" and "Rubra" for state 5
Char. 6	delete "density of"; rename state 3 to "sparse"
new Char.	after Char. 6, add new characteristic "Young shoot: color" with states "grayish (1)", "light brown (2)", "medium brown (3)"; to be indicated as PQ; add "VG" and "(a)" in second column; check example varieties
Char. 8	rename states as follows: "moderately compressed (3)", "medium (5)", "moderately elongated (7)"
Char. 9	to read "Leaf blade: position of broadest part"; to be indicated as QN
Char. 10	BR to replace photograph and example variety
new Char.	after Char. 10, add new characteristic "Leaf blade: angle of apex" with states "small (3)", "medium (5)", "large (7)"; to be indicated as QN; add "VG" and "(b)" in second column; BR to provide better photographs
Char. 11	to read "Leaf blade: intensity of green color on upper side"; to add following example varieties: "Flor Branca" for state 3; "Cabocla" for state 5; "Rubra" for state 7
Char. 12	to read "Inflorescence: number of flowers"
Char. 13	to be deleted
Char. 14, 15	move "Petal" characteristics after "Flower" characteristics
Char. 14	to read "Petal: undulation of margin"
Char. 15	to read "Petal: color" with states "white (1)", "light pink (2)", "medium pink (3)"; to be indicated as PQ
Char. 16	add example varieties "Cabocla, Rubra" for state 2
Char. 18	to rename states as follows: "moderately elongated (1)", "medium (2)", "moderately compressed (3)"; BR to provide better photographs
Char. 19	to be deleted

Char. 20	to read “Fruit: weight” with states “low (3)”, “medium (5)”, “high (7)”; to add following example varieties: “Sertaneja” for state 3; “Rubra” for state 5; “Cabocla” for state 7
Char./Ad. 21	add example varieties “Rubra” for state 1 and “Cabocla” for state 3; correct legend of illustration for state 1 in Ad. 21 to read “ shallow”
Char. 22	check whether Char. 21 and Char. 22 are related
Char. 23	check whether to delete
Char. 25	changes notes to 3, 5, 7 and have states “narrow (3)”, “medium (5)”, “broad (7)”; add an asterisk
Char. 26	to read “Fruit: main color of skin”; delete state 1 “white” and renumber states; add example varieties “Cabocla, Rubra” for state “medium red”
new Char.	after Char. 27, add new characteristic “Fruit: thickness of skin” with states “thin (3)”, “medium (5)”, “thick (7)”; add (+) and BR to provide explanation or photograph; to be indicated as QN; add “MS” and “(d)” in second column; add example varieties “Sertaneja” for state 3, “Rubra” for state 5, “Cabocla” for state 7
Char. 29	to add state “orange” with note 4 (or 2?) and BR to provide example variety
Char. 30	to read “Fruit: acidity”; to add following example varieties: “Rubra” for state 3, “Cabocla” for state 5, “Sertaneja” for state 7; to check Ad. 30
Char. 31	to have the states “low (3)”, “medium (5)”, “high (7)”; add example varieties “Florida Sweet” for state 3, “Cabocla” for state 7
Char. 32, 33	to be deleted
new Char.	after Char. 31, add new characteristic “Seed: size” with states “small (3)”, “medium (5)”, “large (7)”; to be indicated as QN; add “MS” and “(d)” in second column; add example varieties “Sertaneja” for state 3, “Cabocla, Okinawa, Rubra” for state 7
Char. 34	rename state “brown” to “medium brown”
Char. 35, 36	to be deleted
Char. 37	JP to check whether to delete; if needed, change notes to 1, 2, 3 and add (+) with explanation

Actinidia (revision)

39. The subgroup discussed document TG/98/7(proj.1), as presented by Mr. Chris Barnaby (New Zealand), and agreed the following:

2.3	to read: “The minimum quantity of plant material, to be supplied by the applicant, should be: 5 plants on their own roots, or 5 plants on a clonal rootstock.”
3.4.1	to read: “Each test should be designed to result in a total of at least 5 plants.”

3.5	first sentence to read: "Unless otherwise indicated, all observations should be made on 5 plants or parts taken from each of 5 plants."
4.2.2	last sentence to read: "In the case of a sample size of 5 plants, no off type is allowed."
6.4	to read: "Where appropriate, example varieties are provided to clarify the states of expression of each characteristic. "Example varieties are separated into two groups: "A Female, hermaphrodite and male varieties belonging to *A. deliciosa, A. chinensis, A. kolomikta*, *A. eriantha*, *A. rufa* "B Female, hermaphrodite and male varieties belonging to A. arguta, A. polygama, A. melanandra, A. macrosperma"
6.5, Table of Chars.	check how to present (1) and (2) in the Table of Characteristics
Char. 1	add (+) with explanation of states 3 and 4, at least
Char. 3	to have notes 2, 4, 5, 6, 8
Char. 4	add an asterisk; add (+) with explanation
Char. 5	to be deleted
Char. 6	to add note 1 "very sparse"
Char. 7	to be deleted
Char. 9	to be deleted
Char. 11	to read: "Stem: texture of bark" with states "smooth (1)"; "moderately rough (2)"; "strongly rough (3)"
Char. 12	to be deleted
Char. 13	to add note 1 "absent or very sparse" with example variety "Hortgem Tahi (B)"
Char. 14	to be deleted
Char. 17	to be deleted
Char. 18	to be deleted
Char. 19	to check whether to have notes 1-5; to have states "very small (1)", "small (2)", "medium (3)", "large (4)", "very large (5)"; improve Ad. 19
Char. 20	to be deleted
Char. 23	to check whether to have the states: flat (1); moderately depressed (2); strongly depressed (3)
Char. 24	to read "Stem: pith" with states "absent (1)", "solid (2)", "lammelate (3)" and to be indicated as PQ
Char. 25	to be deleted
Char. 26	to consider JP proposal to split into shape and length/width ratio; to add (+) and provide illustration in form of grid if JP proposal accepted
Char. 27	to check whether to reorganize the states based on JP proposal in Ad. 27
Char. 31	to be deleted
Char. 32	to read: "Leaf blade: intensity of green color of upper side"
Char. 35	to check new states "white only (1)"; "yellow only (2)"; "yellow and white (3)"
Char. 36	to be deleted

Char. 37	retain states; add (+) and provide an explanation to make the states clear; delete MG
Char. 38	to be deleted
Char. 39	spelling of coloration**n**
Char. 40	to be deleted
Char. 41	delete predominant, add VG
Char. 43	to be deleted
Char. 44	to be deleted
Char. 46	provide explanation for main color
Char. 48	to be deleted
Char. 51	to be checked and ZA to provide diagrams
Char. 52	to be checked in relation to the new Char. 51, possible overlap or duplication
Char. 53	to be deleted
Char. 54	add (+) and provide an explanation for main color; to delete “or only”
Char. 55	to be deleted
Char. 56	to change to “Petal: shading of main color”
Char. 57	to delete underlined words, to read “Petal: secondary color”; add new state 1 “none” and renumber 2-6 existing states; to provide new explanation
Char. 58	to delete underlined words, change to “secondary color”; to provide new explanation
Char. 59	to be deleted
Char. 61	change to “Style: number”. Check example variety ‘Hort16A’ for state 5
Char. 62	to be deleted
Char. 63	change to “Style: attitude”, replace state 4 with “irregular”; check example variety ‘Hort16A’ for state 2
Char. 64	add MG, add (+) and provide an explanation regarding size range for group 1 and 2, add group A example variety for state 3
Char. 65	to have new states “ovate (1)”, “oblong (2)”, “elliptic (3)”, “circular (4)”, “oblate (5)”, “obovate (6)”; add (+) and provide new diagram order, add TPG/14 grid
Char. 66	add (+) with an explanation for states and draft new states; consider adding new characteristics “Fruit: length” and “Fruit: width”
Char. 67	change states to “narrow oblate (2)”, “medium oblate (3)” and amend diagram; add MG
Char. 68	delete “shape of” and delete states 7 and 8
Char. 69	to be checked whether this new characteristic covers all protrusion possibility and the meaning of protrusion is clear. Only for group 2
Char. 71	change state 1 “squared” to “truncate”, delete “shape of”, consider renaming states 2 and 3. Amend Ad. 71
Char. 72	check whether any correlation or overlap with Char. 42
Char. 73	add VG; add (+) and provide explanation for states to be renamed
Char. 74	to be deleted
Char. 75	add (+) and provide an explanation; change state 1 to “weak” and state 3 to “strong”
Char. 76	to be deleted
Char. 77	delete example variety for state 1
Char. 80	change to QL, rename state 2 “towards stylar end”
Char. 82	change state 1 to “weak” and state 3 to “strong”

Char. 83	add (+) and provide explanation of maturity; add "Hortgem Rua" as example variety for state 1; reword 8.1 (h) to include all fruit characteristics observed when ripe; delete "at eating maturity"
Char. 84	delete "at eating maturity"; add new (h)
Char. 85	delete "main"
Char. 86	Change to "Fruit: colour of locules"; provide improved diagram and explanation to clearly identify the locules
Char. 87	add (+) and provide explanation. Change to "Only varieties with reddish color in locules: Fruit: amount of red coloration in locules". Change state 1 to "weak" and state 3 to "strong"
Char. 89	to check states; add (+) and provide an explanation
Char. 90	to be deleted
Chars. 92 and 93	add VG/MG
Char. 95	add (+) and provide an explanation of when to observe for time of flowering
Char. 96	add (+) and provide an explanation of "maturity for harvest"; state Brix level for harvest maturity
Chapter 8	explanations to be amended according to table of characteristics comments

*Banana (*Musa *L.) (revision)*

40. The subgroup discussed document TG/123/4(proj.7), as presented by Mrs. Vera Lúcia dos Santos Machado and Mrs. Janay Almeida dos Santos Serejo (Brazil) and Mr. Richard Brand (France), and agreed the following:

3.3.2	to be moved to Chapter 3.1
5.3	subgroups to be deleted and to add the following characteristics: (a) Pseudostem: length (characteristic 3) (b) Bunch: length (characteristic 26) (c) Bunch: diameter (characteristic 27) (d) Fruit: longitudinal ridges (characteristic 38) (e) Fruit length (characteristic 39) (f) Fruit: shape of apex (characteristic 42) (g) Fruit thickness of skin (characteristic 43) (h) Fruit: color of skin (characteristic 45) (i) Fruit: color of flesh (characteristic 48) (j) Fruit: firmess of flesh (characteristic 49)
Table of Chars.	to check the spelling of all example varieties
Char. 1	to add (*)
Char. 5	illustration to be provided by France and to add example varieties Gros Michel (1); William (2); Petite Naine (3)
Char. 8	to be deleted
Char. 9	to have the states: absent or very weak (Bluggoe, Figo, Figue Pomme Nain) (1); weak (Figue Pomme) (3); medium (Gros Michel) (5); strong (Caipira, Yangambi km 5) (7); very strong (Petite Naine) (9)
Char. 13	example varieties to be provided
Char. 14	to add (*)
Char. 15	to add (*) and example varieties to be provided for states 1 and 5

Char. 20	to have the states: weakly elongated (3); moderately elongated (5); strongly elongated (7)
Char. 21	to add (*)
Char. 24	to add (*)
Char. 29	to add (*) and to have example varieties Pacovan, Gros Michel (1); Prata anã (2); Terra, Figue Pomme,Grand Nine, Nanicão (3)
Char. 31	to add (+) and provide illustration of hands, as presented at TWF session
Char. 33	to add (+) with explanation / illustration of prominence of scars
Char. 34	to add (*), to have the states: absent or weak (1); moderate (2); strong (3) and to add (+) and provide illustration, as presented at TWF session
Char. 36	to add (*)
Char. 37	to be deleted
Char. 38	to have the states: absent or weak (1); moderate (2); strong (3)
Char. 40	to read “Fruit: width (excluding ridges)”
Char. 41	to add (+) with explanation
Char. 42	to have the states: rounded (IRFA 2003) (1); truncate (Grand nain) (2); bottle-necked (Figue Pomme, Gros Michel); pointed (Figue Rose, Prata) (4)
Char. 43	to read “Fruit: thickness of peel” and to add (*)
Char. 44	- to read “Fruit: color of peel (before maturity)” - to delete (d) - to add example variety Figue Rose (8) - to provide example variety for state 10 or to delete state - to delete state 11 - to add (+) with explanation that the characteristic is to be observed when the fruit has developed to its full size
Char. 45	to read “Fruit: color of peel” and to provide example variety for state 9 or state to be deleted
Char. 46	to read “Fruit: adherence of peel”
Char. 48	to delete “(stage 6 for ripe fruit) and to delete “ivory/” from state 2
Char. 49	to delete “(stage 6 for ripe fruit), to replace note (c) with (d) and to add (*)
Char. 50	to add (*) and to add note (d)
Char. 52	to have notes 1, 3, 5
Char. 54	to be deleted
Char. 55	to be deleted
Char. 56	to have the states: narrow acute (1); broad acute (2); right angle (3); obtuse (4); emarginate (5) and to be indicated as PQ
Char. 57	to be deleted
Ad. 4	to read “The diameter of the pseudostem should be observed at a consistent height above ground level for all varieties (e.g. 0.3 meters above ground), at the beginning of flowering.”
Ad. 11	box for state 5 to be deleted
Ad. 28	illustration for state 2 to be provided
Ad. 40	to be provided
Ad. 42	illustration for “blunt-tipped” to be moved to “truncate” and states 3 and 6 to be deleted
Ad. 43	to be provided or (+) to be deleted
Ad. 50	to be provided or (+) to be deleted
Ad. 51	to enlarge illustration for state 2
TQ 4.2	to be completed

TQ 5	to have the same characteristics as for Chapter 5.3 (see above)
TQ 6	example to be provided

Cacao

41. The subgroup discussed document TG/CACAO(proj.2), as presented by Mr. Alejandro Barrientos-Priego F. (Mexico), and agreed the following:

2.3	last two sentences to be replaced as follows: "In the case of seed, the seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority."
3.1	replace text to read: "3.1.1 The minimum duration of tests should normally be two growing cycles. "3.1.2 The growing cycle is considered to be the duration of a single growing season, beginning with vegetative growth, followed by flowering and fruit harvest."
4.3.2	to read "…seed or plant stock…"
5.3	after (d), add new "(e) Fruit: color (characteristic 23)" and renumber two other grouping characteristics as (f) and (g)
Table of Chars.	experts to provide example varieties
Char. 2	add (+) and provide illustration
Char. 3	to delete "green" from states
Char. 4	experts to supply pictures for states "apiculate" and "acute" (in Ad. 4)
Char. 5	add an asterisk
Char. 6	to be deleted
Char. 7	add an asterisk; to provide clearer photograph
Char. 8	to read "Flower: anthocyanin of pedicel" with states "absent or weak (1)"; "moderate (2)"; "strong (3)"
Char. 9	delete (+) and illustration
Char. 11	to delete "intensity of"; have states "absent or very weak (1)"; "weak (2)"; "moderate (3)"; "strong (4)"; to be indicated as QN
Char. 12	to delete "intensity of"; to delete (+); have states "absent or very weak (1)"; "weak (2)"; "moderate (3)"; "strong (4)"; to be indicated as QN
Char. 13	to delete (+); to be indicated as PQ
Char. 14	to change order of states to read: "circular (1)"; "elliptic (2)"; "oblong (3)"; "obovate (4)"
Char. 15	to be deleted
Char. 16	to delete "intensity of"; to have states "absent or very weak (1)", "weak (3)", "medium (5)", "strong (7)"; to add an asterisk

Char. 17	add an asterisk; state 1 to read "waisted"; delete state 5 "acuminate" and modify Ad. 17 to delete drawing for state 5
Char. 19	to delete "at broadest part"
Char. 20	to delete "at broadest part"; to have states "moderately elongated (3)"; "medium (5)"; "moderately compressed(7)"
Char. 21	to be indicated as QN
Char. 23	add as a grouping characteristic and in TQ
Char. 26	add (+) with explanation as follows: "Ad. 26: To be determined by refractometer."
Char. 30	change states to "moderately elongated (1)"; "medium (2)"; "moderately compressed (3)"
NEW Char.	after Char. 31, add new characteristic to read "Seed: coat thickness" with states "thin (1)", "medium (2)", "thick (3)"; to be indicated as QN; insert (c) in the second column of the Table of Characteristics
Char. 32	experts to supply a photo for state "white"
Char. 33	to read "Fruit: number of seeds"; to be moved after Char. 26
Char. 34	ISF to supply method: general description and reference
Char. 35	ISF to supply method: general description and reference
Ad. 9, 12, 13	to delete text and move drawing to Chapter 8.1 as general illustration with title "Cacao flower parts"
Ad. 27	to illustrate like Ad. 14
TQ, 4.2	to read as follows: "4.2 Method of propagating the variety 4.2.1 Seed-propagated varieties (a) Open pollination [ ] (b) Hybrid [ ] (c) Other (please provide details) [ ] 4.2.2 Vegetative propagation (a) cuttings [ ] (b) *in vitro* propagation (please specify) [ ] (c) grafting [ ] (d) other (state method) [ ]"
TQ 5	to be updated according to changes in Table of Characteristics

Dragon-fruit

42. The subgroup discussed document TG/DRAGON(proj.3), as presented by Mr. Alejandro F. Barrientos-Priego (Mexico), and agreed the following:

2.3	change number of plants from 5 to 6, with last sentence to read: "10 stem segments, each sufficient to propagate 6 plants."
3.5	change number of plants from 5 to 6 in all three sentences
4.2.2	modify last sentence to read: "In the case of a sample size of 6 plants, one off-type is allowed."
Table of Chars.	more example varieties needed
Char. 1	to delete "intensity of"
Char. 5	to read "Stem: texture of surface (excluding areole)"
Char. 7	add asterisk
Char. 8	to be deleted
Char. 13	to delete "al" at end of "elliptic"
Char. 14	check whether to add state 2 "obtuse"
Char. 17	to delete "at broadest part" and add a new explanation under Ad. 17 as follows: "To be taken at broadest part."
Char. 19	to delete "intensity of" and have the states "weak (1)"; "moderate (2)"; "strong (3)"
Char. 26	to check with experts whether truly QL
Char. 29	add (+) with an illustration; add asterisk; changes states to "moderately elongated (3)", "medium (5), "moderately compressed (7)"
Char. 30	to be deleted
Char. 31	to read "Fruit: number of bracts"
Char. 34	add (+) with following explanation as Ad. 34: "To be determined by cutting in transversal section of the fruit."
Char. 38	to be deleted
Char. 39	to delete "frequency"; add (+) with following explanation as Ad. 39: "To observe if there is presence of one or two independent flowering periods in a year."

Gooseberry (revision)

43. The subgroup discussed document TG/51/7(proj.1 Rev.), as presented by Mr. Erik Schulte (Germany), and agreed the following:

cover page	to update common names as follows: *Ribes uva-crispa* L., *Ribes uva-crispa* L. var. *reclinatum* (L.) Berl., *Ribes uva-crispa* L. var. *sativum* DC.
1.	"and of hybrids…etc." to be deleted

2.2	to read “The material is to be supplied in the form of plants on their own roots.”
2.3	to delete “(on own roots)”
3.3.2	to be moved to become 3.1.3
3.5	to read: “Unless otherwise indicated, all observations for the purpose of distinctness should be made on 3 plants or parts taken from each of 3 plants.”
5.3	to add TQ characteristics
Table of Chars.	check whether names of example varieties “Catharina” and “Catharina Oldenburg” are synonyms; “Mai Duke” to be corrected to read “May Duke”
Char. 1	to add (+) with explanation of vigor (e.g. The vigor of the plant should be considered as the overall abundance of vegetative growth.); to add following example varieties: “Korsun” for state 5, “Mucurines” for state 7, “Invicta” for state 9
Char. 2	to delete “density” and have states “very short (1)”, “short (3)”, “medium (5)”, “tall (7)”, “very tall (9)”; to add following example varieties: “Catharina Oldenburg” for state 3 (name “Catharina” to be checked); “Rokula” for state 7; “Reflamba” for state 9
Char. 3	to have the states “obovate (1)”; “circular (2)”; “oblate (3)”; to add following example varieties: “Pax” for state 1; “Invicta” for state 2; to replace the existing variety for state 3 by “Achilles” and add “Remarka”
Char. 4	to add following example varieties: “Korsun” for state 3; “Invicta” and “Mucurines” for state 7
Char. 5	add (+) and provide illustration; state 2 to read “semi-upright”; to add following example varieties: “Resistenta”, “Gelbe Triumph” and “Relina” for state 1; to replace the existing variety for state 2 by “Invicta”; add “Korsun” for state 3 and replace “Runde Gelbe” by “Rolonda”
Char. 6	to read “…: curvature”; add (+) and provide illustration; to add following example varieties: “Relina” for state 1; “Invicta” for state 3; and replace “Risulfa” by “Hankkijas Delikatess” for state 5
Char. 7	add example variety “Spinefree” for state 1
Char. 8	state 1 to read “none or very few”; to add (+) and provide illustration; to add following example varieties: “Captivator” and “Whitesmith” for state 1; “Whinham’s Industry” for state 3; “Invicta” for state 5; “Hinnonmäen Keltainen” for state 7; “Rzeszowski” for state 9
Char. 9	state 1 to read “none or very few”; to add (+) and provide illustration; to add following example varieties: “Remarka” and “Rokula” for state 1; “Riversa” for state 7
Char. 10	state 1 to read “none or very few”; to add (+) and provide illustration; to add following example varieties: “Hinnonmäen Keltainen”, “Korsun” and “Rokula” for state 1; “Riversa” for state 5; “Whitesmith” for state 7; “Starkls Mehltaufreie” for state 9
Char. 11	to be deleted
Char. 12	to add (+) and provide illustration; to add following example varieties: “Rokula” and “Captivator” for state 1; “Rolonda” for state 3; “Hinnonmäen Punainen” for state 5

Char. 13	state 1 to read “none or very few”; to consider the right term for “bristle” in accordance with TGP/14; to add following example varieties: “Whitesmith” for state 1; “Pax” for state 3; “Invicta” for state 5, “Starkls Mehltaufreie” for state 9
Char. 14	state 1 to read “adpressed or slightly held out”
Char. 16	to add (+) and provide illustration; to be indicated as PQ
Char. 17	to add following example varieties: “Hinnonmäen Keltainen” and “Rolonda” for state 1; “Invicta” for state 3; “Riversa” and “Rokula” for state 5
Char. 18	to read “Young leaf: intensity of green color”; to add following example varieties: “Hinnonmäen Keltainen” for state 1; “Whitesmith” for state 3; “Whinham’s Industry” for state 5; “Mucurines” for state 7; “Riversa” for state 9
Char. 19	to add following example varieties: “Nieslukovskij” for state 1 and “Mucurines” for state 7
Char. 20	to be indicated as VG/MG; to add following example varieties: “Korsun” for state 3 and “Invicta” for state 5
Char. 21	delete state 9; to be indicated as VG/MG; to add following example varieties: “Remarka” and “Hinnonmäen Punainen” for state 3; “Korsun” for state 5; “Whinham’s Industry” for state 7
Char. 22	to read “Leaf: ratio length/width”; to reword states as follows: “moderately compressed (3)”; “medium (5)”; “moderately elongated (7)”; add (+) with an explanation and possibly an illustration; to be indicated as VG/MG
Char. 23	to be deleted
Char. 24	to read “Leaf: …”; to add following example varieties: “Rokula” and “Riversa” for state 1; “Hinnonmäen Keltainen” and “Achilles” for state 3; “Pax” and “Retina” for state 5; “Korsun” for state 7
Char. 25	to read “Leaf: …”; to add following example varieties: “Korsun”, “Rolonda” and “Redeva” for state 3; “Hinnonmäen Punainen” for state 5; “Whitesmith” and “Whinham’s Industry” for state 7
Char. 26	delete “predominant” and check whether truly QL; to add example variety “Hinnonmäen Keltainen” for state 2
Char. 27	delete state 9; to add following example varieties: “Reliza” for state 1; “Hinnonmäen Keltainen” and “Redeva” for state 3; “Rokula” for state 5; “Invicta” for state 7
Char. 28	delete state 9; to add following example varieties: “Reliza” for state 1; “Whinham’s Industry” and “Rolonda” for state 3; “Invicta” for state 5; “Riversa” for state 7
Char. 29	delete state 9; to add following example varieties: “Remarka” for state 1, “Mucurines” and “Rexrot” for state 3; “Rafzuera” for state 5; “Invicta” and “Reflamba” for state 7; correct name of example variety for state 7 to read “Starkls Mehltaufreie”
Char. 30	to add following example varieties: “Captivator” for state 1; “Hinnonmäen Punainen” for state 3; “Reflamba” for state 7; “Hinnonmäen Keltainen” for state 9
Char. 31	to reword states as follows: “moderately compressed (3)”; “medium (5)”; “moderately elongated (7)”; to add following example varieties: “Golda” and “May Duke”for state 1; “Rolonda” and “Peggy” for state 3; “Reflamba” for state 7

Char. 32	to reword states as follows: “circular (1)”; “elliptic (2)”; “pyriform (3)”; to add following example varieties: “Rexrot” for state 1; “Achilles” for state 2; “Peggy” for state 3
Char. 33	keep wording of state 6; to add following example varieties: “Golda” and “Rixanta” for state 1; “Invicta” for state 2; “Whitesmith” for state 3; “Korsun” and “Rolonda” for state 5; “Achilles”, “Cernomore”, “Rubikon” and “Whinham’s Industry” for state 6 and correct Maiherzog to read “May Duke”
Char. 34	to add (+) with explanation of “bloom”; to add following example varieties: “Lady Delamare” for state 1; “ Pax” and “Rokula” for state 3; to replace existing example variety for state 5 by “Whinham’s Industry”; add “Robustenta” for state 7
Char. 35	to add following example varieties: “Golda”, “May Duke”, “Reflamba”, “Riversa” and “Mucurines” for state 1; to replace the existing example variety in state 3 by “Achilles” and add “ Rolonda”; to replace the existing variety in state 5 by “Pax” and “Whinham’ s Industry”
Char. 36	to add (+) with explanation / illustration of veining; to add following example varieties: “Korsun” for state 3; “Mucurines” for state 5
Char. 37	to add following example varieties: “Whinham’s Industry” for state 3; “Rokula” and “Achilles” for state 5; “Mucurines” for state 7
Char. 38	to add following example varieties: “Hinnonmäen Keltainen” for state 3; “Pax” for state 5
Char. 39	to add following example varieties: “Hinnonmäen Punainen” and “Rexrot” for state 5; “Hinnonmäen Keltainen” and “Redeva” for state 7
Char. 40	to add (+) with explanation of time of bud burst (10 % of plants…); to delete note (c); to add following example varieties: “Rokula” for state 1; “Invicta” for state 3; “Mucurines” for state 5; “Korsun” for state 7; “Hinnonmäen Keltainen” and “Reliza” for state 9; check whether name of example variety “Grüner Edelstein” for state 7 is identical to “Green Gem”
Char. 41	to add (+) with explanation of time of beginning of flowering (10% of plants…); to delete note (f); to add following example varieties: “Whitesmith” for state 3; “Invicta” for state 5; “Hinnonmäen Keltainen” for state 7
Char. 42	to add (+) with explanation of time of beginning of fruit ripening (10% of plants…); to delete note (g); to replace the existing example variety in state 3 by “May Duke”, the one in state 5 by “Whinham”s Industry” and the one in state 7 by “Achilles”; to add following example varieties: “Hinnonmäen Punainen” and “Reverta” for state 3; “Hinnonmäen Keltainen” for state 7; “Reliza” for state 9
8.1 (b)	reword (b) as follows: “All observations on the buds, prickles and bristles should be made on one-year-old shoots during the dormant season before pruning.”
8.1 (f)	to move (f) to become new Ad. 41
8.1 (g)	to move (g) to become new Ad. 42
8.3	to add new line into the table (after “Early Green Haire”) as follows:
	Hankkijas Delikatess | Hinnonmäki grün, Hinnonmäki Grön
9	to add new literature: “Hoffman, M.H.A., 2005: List of names of woody plants. Praktijkonderzoek Plant & Omgeving BV, Boskoop, NL, (871 pp.)”

TQ, 4.2	delete 4.2.2 and renumber 4.2.3
TQ, 5.	update names of example varieties according to changes in Table of Characteristics
TQ, 9.3	keep text

Japanese plum (revision)

44. The subgroup discussed document TG/84/4(proj.2), as presented by Mr. Sergio Semon (European Community), and agreed the following:

1.	to read "These Test Guidelines apply to all varieties of *Prunus salicina* Lindl.. For the examination of hybrids involving *Prunus salicina* Lindl., guidance is provided in document TGP/13 "Guidance for New Types and Species".
2.3	to move the requirements concerning the type of material to Chapter 2.2
3.3.2	to be moved to become 3.1.3
Char. 1	to add "on" to states 2 and 3
Char. 4	to be indicated as PQ and example varieties to be provided by South Africa
Char. 6	to have notes 1, 2, 3
Char. 12	to have the states: slightly elongated (Casselman) (1); moderately elongated (Pioneer) (2); very elongated (Eclipse) (3)
Char. 13	to delete state 3 and to be indicated as QN
Char. 17	to have the states: sparse (1); medium (2); dense (3)
Char. 18	example variety and illustration to be provided for state 4 or state to be deleted
Char. 20	to be deleted
Char. 23	to read "Plant: number of flowers with more than five petals" and to add (+) with explanation and example varieties (to be provided by Japan) or characteristic to be deleted
Char. 24	to read "Flower: diameter"
Char. 26	to add (+) and provide illustration in form of grid and to amend states 2 and 5 to "medium ovate" and "medium elliptic", respectively
Char. 28	to provide illustration in form of grid
Char. 32	to read "Fruit: height", with the states: short (3); medium (5); tall (7) and to add (+) with explanation to be observed as height in ventral view
Char. 33	to add (+) with explanation to observe as width in ventral view and to have the states: narrow (3); medium (5); broad (7)
Char. 34	to be deleted
Char. 35	to provide illustration in form of grid
Char. 36	to read "Fruit: symmetry" and to move "ventral view, along suture" to an explanation in Chapter 8; to be indicated as QN and to delete (*)
Char. 37	state 2 to read "truncate"
Char. 38	state 3 to read "truncate" and to add state 4 "depressed" with example variety "Tereda"
Char. 39	to be deleted
Char. 42	to have the states: absent or very shallow (Sunrise) (1); shallow (Taiyou) (2); medium (Sordum) (3); deep (Akihime) (4) and to be indicated as QN
Char. 43	to add (+) with explanation that the bloom is the waxy layer that can be removed by rubbing

Chars. 44, 45, 46, 47	to add (+) with explanation as follows: The ground color is the first color to appear chronologically during the development of the skin and upon which other colors will develop in time in the form of spots, a macule, or a color flush or blush. It is not always necessarily the largest area of the (part of the) organ concerned. The over color is a second color developing over time. It is not always necessarily the smallest area of the skin.
Char. 45	to delete hyphen in "over-color"
Char. 46	to have the states: yellow (Golden Japan) (1); orange yellow (2); medium red (Red Beauty, Taiyou) (3) dark red (4); purple (5); dark blue (Black Amber) (6); black (Angeleno) (7)
Char. 47	to have the states: flecks only (1); mottled (Omega) (2); solid flush with flecks (3); solid flush only (4) and further example varieties to be provided
Char. 48	to add example varieties: ARC PR 3 (3); Sunrise (5); Solar Eclipse (7)
Char. 49	to add example varieties Sunset (3); Extreme (5); Southern Belle (7)
Char. 50	state 6 to read "medium red" and to add example variety "Hawera" for state 7
Char. 51	to add (+) with explanation of how to observe
Char. 52	to add (+) with explanation of how to observe
Char. 55	to refer to Test Guidelines for Apricot for suitable wording
Char. 57	to add (+) and provide illustration
Char. 61	to be deleted
Char. 62	to provide illustration
Char. 63	to be deleted
Char. 65	to be deleted
8.1 (c)	to provide explanation of "maturity for consumption" using objective parameters
Ad. 2	to read " The vigor of the tree is observed as the overall abundance of vegetative growth"
Ad. 6	to be updated
Ad. 13	to replace with illustrations from Japan
Ad. 37	to be provided
Ad. 38	to be provided
Ad. 44	to add Ad. 45 and 46
Ad. 53	to be provided
Ad. 54	to be provided
Ad. 62	to be provided
Ad. 66	to be provided
Ad. 67	to provide improved explanation
TQ 4.2.2	to check whether to be deleted
TQ 9.3	to check whether to be deleted

Olive (revision)

45. The subgroup discussed the Table of Characteristics in document TG/99/4(proj.1), as presented by Mr. Hennie Venter (South Africa), and agreed the following:

General	to review all indications for type of observation, particularly for MS indications

Char. 2	state 1 to read “upright”
Chars. 4, 5, 6	to be deleted
Char. 7	to add (+) with explanation / illustration
Char. 8	to be deleted
Char. 9	to delete state 1 and 9
Char. 11	to be deleted
Char. 12	to read “Leaf blade: ratio length/width”, with the states: slightly elongated (Manzanilla de Sevilla) (1); moderately elongated (Picual) (2);very elongated (Cornezuelo de Jaen) (3)
Char. 13	to be deleted
Char. 14	to read “Leaf blade: intensity of green color of upper side”
Char. 15	to be deleted
Char. 16	to add (+) and provide illustration
Chars. 17, 18, 19	to be deleted
Char. 20	to have notes 1, 2, 3
Chars. 21, 22	to be deleted
Char. 23	to have notes 1, 2, 3, 4 and example varieties to be provided
Chars. 24, 25	to be deleted
Char. 25	to be deleted
Char. 26	to have the states: erect (1); horizontal (2); reflexed (3) and to be indicated as QN
Char. 27	to be deleted
Char. 30	to be deleted
Char. 32	to read “Immature fruit: intensity of green color” and to check the influence of the environment with regard to the reliability of the characteristic
Char. 33	to have notes 1, 2, 3
Char. 34	to have notes 1, 2, 3
Char. 35	to have the states: ovate (Gordal Sevillana) (1); narrow elliptic (Cornezuelo de Jaen) (2); medium elliptic (Lechin de Sevilla) (3); circular (Manzanilla de Sevilla) (4); obovate (Verdial de Huevar) (5) and to add (+) and provide illustration in form of grid
Char. 36	to read “Fruit: over color at full maturity” and 3 states to be provided
Char. 37	to be deleted
Char. 38	to be indicated as QN
Chars. 39, 40	to be deleted
Char. 42	to be deleted
Char. 43	to have the states: absent or weak (1); moderate (2); strong (3) and to be indicated as QN
Char. 44	to be deleted
Char. 45	to be deleted
Chars. 47, 48, 49, 50	to be deleted
Char. 51	to add (+) with explanation of bloom
Char. 52	to add (+) with explanation and to have notes 1, 2, 3, 4
Char. 53	to check whether to add state “ oblong” and to provide illustration in form of grid
Char. 54	to provide illustration in form of grid
Char. 55	to be indicated as QN
Char. 56	to keep 3 states and to be indicated as QN
Chars. 57, 58, 59, 60	to be deleted
Char. 61	to add (+) and provide illustration and to be indicated as QN
Char. 62	to add (+) and provide illustration and to be indicated as QL

Char. 64	to be deleted
Char. 67	to be deleted
Char. 68	to add (+) and provide illustration
Char. 69	to be deleted
Char. 71	to be deleted
Char. 74	to be deleted
Char. 76	to be deleted
Char. 77	explanation in Chapter 8.1 (d) to become Ad. 77
Char. 78	to be deleted
8.1 (e)	to explain that the fruit to be observed should be fully developed and before coloring

Papaya

46. The subgroup discussed document TG/PAPAYA(proj.5), as presented by Mr. Alejandro Barrientos-Priego (Mexico), and agreed the following:

2.3	to read "…6 hermaphrodite plants in the case of vegetatively propagated varieties."
3.4.1	to read "…6 hermaphrodite plants."
3.4.2	to delete "hermaphrodite"
3.5	to read "…6 hermaphrodite plants."
4.3.2	to read "…or by testing a new seed or plant stock…"
Table of Chars.	- to provide further example varieties, if available - to correct spelling of example variety "Surise" to "Sunrise"
Char. 2	to read "Plant: height of first flower" and to add (+) and provide illustration
Char. 3	to add (*)
Char. 4	to delete "maximum" and to add (+) and provide as an explanation
Char. 9	to have the states: slightly elongated (3); moderately elongated (5); very elongated (7)
Char. 10	to add (*)
Char. 11	to be deleted
Char. 14	to be deleted
Char. 15	to read "Petiole: anthocyanin coloration", with the states: absent or very weak (1) (example variety "Ishigaki Sango"); moderate (3) (example varieties "Sunrise, Tainung Nº 1"); very strong (5)
Char. 16	to add (*) and to read "Inflorescence: number of flowers"
Char. 18	to read "Inflorescence: anthocyanin coloration of axis" with the states: absent or weak (1); moderate (2); strong (3)
Char. 20	to have the states: white (1); cream (2); yellow (3); green (4); purple (5)
Char. 22	to add (*)
Char. 23	to add (*) and to read "Fruit: diameter"
Char. 24	to read "Fruit: ratio length/ diameter", with the states: to have the states: slightly elongated (3); moderately elongated (5); very elongated (7)
Char. 25	to have the states: ovate (1); elliptic (2); obovate (3); pyriform (4); oblong (5) and to present illustration in form of grid
Char. 27	to be indicated as QN
Char. 28	to add (*)

Char. 29	to be deleted
Char. 30	to read “Ripe fruit: ridges” with the states: absent or very weak (1); weak (2); moderate (3); strong (4) and to add (+) and provide illustration
Char. 31	to add (*) and to add (+) with explanation that the characteristic is observed by cutting the fruit in transversal section
Char. 32	to add (*)
Char. 35	to correct spelling of example variety “Cera”
Char. 37	to delete “maximum” and to add (+) and provide illustration and explanation
Char. 38	to delete “predominant”
Char. 39	to read “Ripe fruit: number of seeds” and add state 5 “moderate”
Char. 40	to read “Seed: color”
Char. 43	to have the states: compressed (1); circular (2); elongated (3)
Char. 44	To Read “Seed: position of broadest part”, with the states: at middle (1); slightly towards base (2); moderately towards base (3), to be indicated as QN and to add (+) and provide illustration
Char. 45	to have the states: small (1); moderate (2); large (3)
8.1 (a)	second sentence to read “Leaves should be taken from the middle third of the current season’s when the fruit has reached full size”
8.1 (d)	to add “Single flowers should be excluded from all observations”
8.1 (f)	to add “Seed characteristics should only be observed on fully developed seeds.”
8.1 (g)	to read “Ripe fruit: Observations on the ripe fruit should be made when the color change is complete”
TQ 4.2	to read: 4.2.1 Seed-propagated varieties (a) Self-pollination [ ] (b) Cross-pollination (i) population [ ] (ii) synthetic variety [ ] (c) Hybrid [ ] (d) Other [ ] (please provide details) 4.2.2 Vegetative propagation (a) cuttings [ ] (b) *in vitro* propagation [ ] (c) other (state method) [ ] 4.2.3 Other [ ] (please provide details)
TQ 6	to read “Fruit: shape / ovate / elliptic

Pecan nut

47. The subgroup discussed document TG/PECAN(proj.6), in the absence of the Leading Expert Mr. Marcelo Labarta (Argentina), and agreed the following:

Cover page	Spanish common names to read ““Nuez pecán, Nogal Pecadero”
2.2	to delete “(15 cm long and 1 1.5 cm in diameter with 3 groups of buds) to be sent at grafting time”

3.1	to read “The minimum duration of tests should normally be two independent growing cycles. In particular, it is essential that the trees produce a satisfactory crop of fruit in each of the two growing cycles.”
3.3.1	to delete second sentence
3.3.2	to be deleted
Table of Chars.	to select additional characteristics to receive (*)
Char. 5	to be deleted
Char. 6	to have notes 1, 2, 3
Char. 9	to have the states: slightly elongated (3); moderately elongated (5); very elongated (7)
Char. 11	to read “Lateral leaflet: curvature along longitudinal axis”
Char. 12	to check whether there are any varieties without petiolule (i.e. simple leaf) – if not, characteristic to be deleted
Char. 13	to check whether to read “Lateral leaflet: asymmetry at base”. with the states: absent or weak (1); moderate (2); strong (3)
Char. 14	to read “Lateral leaflet: position of broadest part”, with the states: towards apex (1); at middle (2); towards base (3) and to be indicated as QN
Char. 16	to read “Female inflorescence: number of flowers”, with the states: very few (1); few (2); medium (3); many (4); very many (5) and to be indicated as QN
Char. 17	to read “Stigma: bifurcation”, with the states: absent or weak (1); moderate (2); strong (3) and illustration to be updated
Char. 18	to read “Stigma: anthocyanin coloration, with the states: absent or weak (1); moderate (2); strong (3) and to be indicated as QN
Char. 19	to have notes 1, 2, 3
Char. 20	to add (+) and provide illustration
Char. 24	to add (+) and provide illustration in form of grid (see TGP/14/1 Draft 9: Section 2: Botanical Terms: Subsection 2: Shapes and Structures: I. SHAPE page 19, Section 2.1.3 and page 28)
Char. 25	to provide illustration in form of grid (see above)
Char. 26	to read “Nut: shape in cross section with suture at top”
Char. 28	to read “Nut: length of tip”, to have notes 1, 2, 3 and to add (+) and provide illustration
Char. 29	to read “Nut: intensity of ground color” and to add (+) with explanation
Char. 32	to have notes 1, 2, 3 and to add (+) and provide illustration
Char. 33	to have notes 1, 2, 3
Char. 34	to add (+) with explanation of how many kernels to measure
Char. 35	to be deleted
Char. 36	to have notes 1, 3, 5
Char. 37	to be deleted
Char. 38	to be deleted
Char. 39	to check whether to have the states: absent or weak (1); moderate (2); strong (3) and to be indicated as QN and to add (+) with explanation
Char. 40	to be deleted
Char. 41	to check whether to replace with a characteristic for time of flowering
Char. 42	to read “Time of opening of shuck” and to add (+) with explanation of % of plants at a particular stage for the timing of the characteristic
Char. 43	to add (+) with explanation

8.1	growth codes (V9, R6, R14) to be inserted for relevant characteristics in Table of Chars.
Ad. 7 etc	to become note in Chapter 8.1
Ad. 21, 22, 23	dimensions to be observed and orientation to be clarfiied
Ad. 26	to add suture
Ad. 27	illustration for state 3 to be improved (to be rounded)
TQ 4.2	section for method of propagating the variety to be provided
TQ 6	example to be provided

Red and White Currant (revision)

48. The subgroup discussed document TG/52/6(proj.1), as presented by Mr. Erik Schulte (Germany), and agreed the following:

Cover page	to add botanical name as follows: "(*Ribes niveum* non valid)"
1.	to delete "…and of varieties of etc.", i.e. to read: "These Test Guidelines apply to all varieties of *Ribes rubrum* L."
2.2	to read "The material is to be supplied in the form of plants on their own roots."
2.3	to delete "(on own roots)"
3.3.2	to move "3.3.2 In particular, …" to become 3.1.3
new 3.3.2	to read: "In order to enable the assessment of growth habit characteristics, the plants should be grown as bushes." (to be discussed with the Office in conjunction with TGP/7)
3.5	to read: "Unless otherwise indicated, all observations for the purpose of distinctness should be made on 3 plants…"
Table of Chars, ex. v.	check throughout the document: - whether "Earliest of Fourlands" should be "Rote Vierländer"; - whether the name of example variety "Rode Hollander" is correct; - whether the name of example variety "Rote Versailler" is correct; - correct spelling of example variety "Devínska Veľkoplodná"; - correct spelling of example variety "Heineman**ns** Rote Spätlese" (without apostrophy)
Char. 1	to add (+) with explanation of vigor under 8.2 (Ad.1:. "The vigor of the plant should be considered as the overall abundance of vegetative growth."); to add following example varieties: "Pink Dutch" for state 3; "Rovada" and "Mulka" for state 5; "Jonkheer van Tets" for state 7
Char. 2	to add following example varieties: "Losan" and "Krenever" for state 3; "Rovada" and "Rondom" for state 5; "Rode Hollander", "Rote Versailles" and "Tatran" for state 7
Char. 3	to read "Plant: habit"; to add following example varieties: "Bar le Duc" for state 1; "Frauendorfi", "Jonkheer van Tets" and "Losan" for state 3
Char. 4	to add following example varieties: "Krenever" and "Rolan" for state 3; "Earliest of Fourlands" (see comment above) for state 5; "Detvan" for state 7

Chars. 5, 6, 7, 8, 9	to read "Bud: …"
Char. 5	to add following example varieties: "Jonkheer van Tets", "Natalia" and "Witan" for state 1; "Heinemanns Rote Spätlese" for state 2; "Traubenwunder" and "Tydeman's Seedling" for state 3
Char. 6	to add following example varieties: "London Market", "Rovada" and "Kimere" for state 3; "Augustus" for state 7
Char. 7	to add following example varieties: "Rode Hollander", "Viking" and "Rosetta" for state 1
Char. 8	to look for suitable example varieties
Char. 9	to add (+) with explanation of bloom under 8.2 (Ad. 9: "Bloom is the waxy layer on the scales that can be removed by rubbing."); to add following example varieties: "Frauendorfi" for state 3, "Rode Hollander" and "Jonkheer van Tets" for state 5, "Augustus", "Detvan" and "Rovada" for state 7
Char. 10	to read "Young shoot: intensity of anthocyanin coloration (leaf and stem)"; to add example varieties "Augustus" and "Roodneus" for state 3
Char. 11	to be deleted
Char. 12	to read "Young leaf: intensity of green color"; add example variety "Roodneus" for state 3
Char. 13	to add following example varieties: "Red Lake" for state 3, "Rosetta" and "Traubenwunder" for state 7
Char. 14	to add following example varieties: "Rosetta" for state 3, "Frauendorfi" for state 7
Char. 15	to read "Leaf: ratio length/width"; add an asterisk; to have states "moderately compressed (3)", "medium (5)", "moderately elongated (7)"
Char. 16	to be deleted
Char. 17	to read "Leaf: intensity of green color of upper side"; add example varieties "Jonkheer van Tets" for state 5 and "Augustus" for state 7
Char. 18	to read "Leaf: …"; to add (+) with illustration of thickness; to delete existing example varieties and replace with: "Hosszufurtu" and "Kordes Rotes Wunder" for state 3; "Witte Hollander" for state 5; "Detvan" and "Imperial Blanche" for state 7
Char. 19	to add following example varieties: "Primus" and "Traubenwunder" for state 3; "Jonkheer van Tets" for state 5; "Detvan" and "Rovada" for state 7
Char. 20	to add following example varieties: "Devínska Veľkoplodná" for state 1, "Frauendorfer" for state 3, "Argos Piros" for state 7
Char. 21	to add following example varieties: "Rotet" and "Rovada" for state 5, "Loppersummer" for state 7
Char. 22	to read "Flower: curvature of calyx" with the states "very weak (1)", "weak (3)", "moderate (5)", "strong (7)", "very strong (9)"; to be indicated as QN; to add following example varieties: "Devínska Veľkoplodná" for state 1; "Jonkheer van Tets" for state 3; "Frauendorfi" and "Earliest of Fourlands" for state 5

Char. 23	to add following example varieties: “Chenonceau”, “Devínska Veľkoplodná” for state 1; “Earliest of Fourlands” and “Jonkheer van Tets” for state 3; “Detvan” and “Roodneus” for state 5; “Rode Hollander” for state 7
Char. 24	to add (+) and provide illustration (see illustration in TGs for Blackcurrant); to add following example varieties: “Heinemanns Rote Spätlese” for state 3; “Blanka”, “Frauendorfi” and “Jonkheer van Tets” for state 7; “Detvan” for state 9
Char. 25	add an asterisk; to add following example varieties: “Heinemanns Rote Spätlese” for state 3; “Losan” for state 5; “Argus Piros” and “Jonkheer van Tets” for state 7
new Char.	to add a new characteristic “Fruit truss: density” with following states: “sparse (3)” (example variety “Devínska Veľkoplodná”); “medium (5)” (example varieties “Rogwood” and “Traubenwunder”; “dense (7)” (example varieties “Kimere”, “Rosetta” and “Kordes Rotes Wunder”)
Char. 26	to add following example varieties: “Devínska Veľkoplodná” for state 1; “Laxton’s Perfection” for state 3; “Augustus” and “Earliest of Fourlands” for state 5; “Jonkheer van Tets” for state 7; “Tatran” and “Krenever” for state 9
Char. 27	to have the states: “oblate (1)”, “circular (2)”, “pyriform (3)”; to add (+) and provide illustration; to be indicated as PQ; to add example varieties “Zitavia” for state 1 and “Witte Hollander” for state 3
Char. 28	state 4 to read “medium red”; to be indicated as PQ; to add following example varieties: “Blanka” for state 2; “Hosszufurtu” for state 3; “Jonkheer van Tets” for state 4; “Laxton’s Perfection” for state 5
Char. 29	to be deleted
Char. 30	to add (+) with explanation of time of bud burst (Ad. 30: “The time of bud burst is when 10% of the plants show bud burst.”); to delete note (b); to add following example varieties: “Detvan” for state 3; “Laxton’s Perfection” and “Frauendorfi” for state 7
Char. 31	to add (+) with explanation of time of beginning of flowering (Ad. 31: “The Time of beginning of flowering is when 10% of the plants start flowering.”); to delete note (f); to add following example varieties: “Hosszufurti” for state 1; “Jonkheer van Tets” for state 3; “Losan” for state 5; “Rondom” and “Rode Hollander” for state 7
Char. 32	to add (+) with explanation of time of beginning of fruit ripening (Ad. 32: “The time of beginning of fruit ripening is when the fruit starts to be most easily to be removed from the plant.” [to be further elaborated]); to delete note (g); to add following example varieties: “Red Lake” for state 3; “Detvan” for state 5; “Blanka” and “Krenever” for state 7; “Tatran” for state 9
8.1	delete (c) and (d); modify (e) to read “Unless otherwise stated, all observations on the leaf should be made at the stage of fully developed leaves at fruit maturity on the upper third of typical one-year-old shoots.”
8.2	update explanations according to changes in Table of Characteristics
8.3	2nd line: check whether “Rode Hollander” exists; 3rd line: keep “Rote Vierländer” throughout the document and add “Earliest of Fourlands” in column of synonyms

9.	add: "Hoffman, M.H.A., 2005: List of names of woody plants. Praktijkonderzoek Plant & Omgeving BV, Boskoop, NL, (871 pp.)"
TQ, 1.1	add "(*Ribes niveum* non valid)"

Proposal for a Partial Revision of the Test Guidelines for Mandarin (Citrus Group 1)

49. The subgroup considered document TWF/40/15 and a presentation provided by Mr. Guillermo Soler Fayos, a copy of which is provided as document TWF/40/15 Add..

50. The subgroup agreed that, in order to provide all interested experts with additional time to check the proposed partial revision, the proposal should be circulated to the TWF for agreement by correspondence. It was agreed that the proposal should also include the explanation for the new characteristic, as it would be provided in Chapter 8. It was agreed that the circular would be issued in October 2009, with at least 4 weeks for comment. If no comments were received, it was proposed that the partial revision should be put forward for adoption by the Technical Committee in 2010.

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

51. The subgroup for Fig considered documents TWF/40/13 and TG/FIG(proj.5), as presented by Mr. Pedro Chomé Fuster and Mrs. Margarita López Corrales (Spain), and agreed the following amendments to document TG/FIG(proj.5):

Char. 14	to read "Two-year-old shoot: bud support swellings" and to delete note (a)
Char. 19	state 3 to read "broad rhombic"
Chars. 25.1, 25. 2 etc.	to provide an example variety(ies) in Chars. 25.1 and 25.2 that shows a different state of expression in Char. 25.1 compared to 25.2, and the same for Chars. 26.1, 26.2 etc.
Chars. 25.2, 26.2 etc. to 51.2	to be renumbered from Char. 52 etc.
Chars. 36.1, 36.2	to add state 1 "none"
Chars. 37.1, 37.2	to add (+) with explanation and illustration that the characteristic refers to all lenticels and not only large lenticels
8.1 illustration	to delete "meat" and "scales" and to reverse the direction of the arrows
Ad. 3	to read "The circumference of the trunk should be measured at the same height above the ground for all varieties (e.g. 20 centimeters). The vigor is observed as the growth rate of the circumference. It is necessary for comparisons that the varieties are of the same age."
Ad. 27.1, 27.2	to provide illustration for state 5 that is not asymmetric
Ad. 32.1, 32.2	to provide illustration for each state
Ad. 36.1, 36.2	to delete reference to RHS Colour Chart

Development of a set of example varieties for North East Asia for the Test Guidelines for Strawberry

52. The TWF received the final report on the possible development of a regional set of example varieties for North and East Asia for the Test Guidelines for Strawberry from Mr. Kiyofumi Nakamura (Japan). A copy of that report is presented as Annex VI to this document. Mr. Nakamura confirmed the conclusion, reported at the thirty-ninth session of the TWF, that it would not be possible to develop a regional set of example varieties for the time being.

Experiences with new types and species

53. The TWF received a presentation from Mr. Nik Hulse (Australia), a copy of which is provided as Annex VII to this report.

UPOV Information Databases

54. The TWF noted the information provided in document TWF/40/4 and agreed to provide comments on the additions and amendments to UPOV codes, presented in Annex V to that document, to the Office by October 23, 2009.

Variety Denominations

55. The TWF noted the report on developments provided in document TWF/40/5.

56. With regard to the botanical reclassification of "Tomato" in the GRIN database from "*Lycopersicon esculentum* Mill." to "*Solanum lycopersicum* var. *lycopersicum*", the TWF supported the proposal of the TWA, as reported by the Technical Director, that a separate denomination class for Tomato be created within Solanum (e.g. Class 4.3), in order to avoid difficulties for denominations for other species within Solanum. It also agreed with the proposal of the TWO that a separate denomination class might be considered for *Solanum melongena* L., in order to avoid varieties of former species of *Cyphomandra* needing different denominations to varieties of *Solanum melongena* L..

Variety description databases

57. The TWF noted the report provided in document TWF/40/6.
(continued in paragraph 61)

Combinations of Lines or Varieties

58. The TWF noted the report on discussions concerning combinations of lines or varieties, as set out in document TWF/40/7.

Exchangeable software

59. The TWF welcomed the proposal presented in documents TWF/40/8 and UPOV/INF/Software Draft 2.

Discussion on Draft Test Guidelines

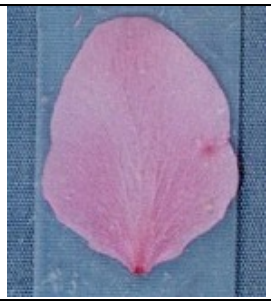
Peach (revision)

60. The subgroup discussed document TG/53/7 (proj.1), as presented by Mr. Richard Brand (France), and agreed the following:

General	the Leading Expert, Mr. Richard Brand, requested that any information sent to him for completion of the Test Guidelines be copied to his colleague, Miss Marie-Hélène Gandelin at: e mail: marie-helene.gandelin@geves.fr
Cover page	to add "Durazno" as common name in Spanish
1.	to read "These Test Guidelines apply to all varieties of peach (including nectarine) of the species *Prunus persica* (L.) Batsch.. For the examination of hybrids involving *Prunus persica* (L.) Batsch., guidance is provided in document TGP/13 "Guidance for New Types and Species".
3.3.2	to be moved to Chapter 3.1
5.3	to have the following grouping characteristics: (a) Flower: type (characteristic 8) (b) Petiole: shape of nectaries (characteristic 32) (c) Fruit: pubescence (characteristic 52) (d) Fruit: carotenoid coloration of flesh (characteristic 59) (e) Fruit: acidity (Acidity titrable) in meq 100/ml (characteristic 66) with the following groups: - low - medium - high (f) Fruit: flesh type (TQ characteristic), with the following groups: - melting - non-melting (pavies) - stony hard (g) Stone: adherence to flesh (characteristic 72) (h) Time of beginning of flowering (characteristic 80) (i) Time of maturity for consumption (characteristic 82)
Char. 3	to delete example variety "Mayred" (state 2) and example varieties for state 4 to be replaced
New (after 4)	to read "Flowering shoot: presence of anthocyanin coloration", with the states: absent (De flor doble blanca) (1); present (9)
Char. 6	to delete "absent or" from state 1, to delete (*), to replace example variety "De flor doble blanca" and to
Char. 7	to delete example varieties "Early Coronet, Merrill X" (state 3) and "Redhaven (state 7) and to correct spelling of "Momée" and "Armking"
Char. 9	to be deleted
Char. 10	RHS Colour Chart reference to be provided to Leading Expert by China and checked against color groups in TGP/14, or state to be deleted

Char. 11	to have the states: narrow ovate (1); medium ovate (2); narrow elliptic (3); medium elliptic (4); circular (5) and example varieties to be updated.
Char. 12	to delete (*) and to have notes 1 to 5
Char. 13	to have notes 1 to 5 and example variety for state 1 to be replaced
Char. 18	to be retained
Char. 23	to have the states: concave (Merrill Gemfree) (1); flat (Mayred) (2) and to be indicated as QL
Char. 24	to have the states: crenate (Crimson Glo) (1); shallow serrate (Fiesta Red) (2); deep serrate (Flor de Guaid) (3)
Char. 25	to delete “approximatively” from state 2
Char. 27	to be deleted
Char. 33	to be deleted
Char. 34	to correct example variety “Maycrest” to “Minastar” (3) and “Jade” to “Momée” (5)
Chars. 35 to 38	to be deleted
Char. 40	to be deleted
Char. 42	example varieties for states 1 and 2 to be replaced by example varieties without mucron tip
Char. 43	South Africa to provide illustrations for state 2 and “Jim Dandy” and “Brittaney Lane” to be added as example varieties for state 2. If illustrations not provided, state to be deleted and to be presented as two states (QL)
Char. 49	to read “Fruit: hue of over color of skin”
Chars. 51, 52	to add “of skin”
Char. 55	to read “<u>Only varieties with fruit pubescence: absent</u>: Fruit: conspicuousness of lenticels” and to add explanation that the conspicuousness of the lenticels is determined by the size and color contrast
Char. 58	see note for 8.1 (f)
Char. 63	to have the states: absent or weak (Redhaven) (1); moderate (2); strong (Sunhigh) (3)
Char. 64	to be deleted and included in Technical Questionnaire
Char. 70	to have the states: only pits (1); predominantly pits (2); equally pits and grooves (3); predominantly grooves (4); only grooves (5) and to use the illustrations provided by Japan
Chars. 74 to 77	to be deleted
Char. 78	to move after Char. 68
Char. 79	to read “Time of beginning of leaf bud burst” and to add (+) with explanation that the characteristic should be observed as the appearance of the first leaves on all trees
Char. 80	to add (+) with explanation that to be observed when all trees have 10% open flowers
Char. 81	to be deleted
Char. 82	- to add (+) with explanation that the time of maturity for consumption is when the overall appearance, firmness and taste indicate that the fruit is ready for consumption - to present all 9 notes as presented in the second option in the draft and to add relevant example varieties from the first option
Char. 83	to be deleted

8.1 (f)	to read “All observations on the fruit should be made on fruits mature for consumption, when the overall appearance, firmness and taste indicate that the fruit is ready for consumption.”
Ad. 2	to read “The vigor of the tree should be considered as the overall abundance of vegetative growth.”
Ad. 3	illustration to be improved for state 4
Ad. 6	to explain to be observed on shaded side of shoot
Ad. 11	to have the following illustration, presented in a grid

	
narrow ovate (1)	medium ovate (2)

		
narrow elliptic (3)	medium elliptic (4)	circular (5)

Ad, 12, 13	table of measurements to be deleted
Ad. 14	to explain that varieties with note 1 may have occasional flowers with more than 5 petals and varieties with note 2 might have occasional flowers with 5 petals
Ad. 28	to be deleted and (+) to be deleted from Char. 28
Ad. 47	to add explanation that: The ground color is the first color to appear chronologically during the development of the skin and upon which the over color will develop in time. It is not always necessarily the largest area of the skin.
Ad. 49	to swap illustrations for states 6 and 7
Ad. 55	to correct heading according to the Table of Chars.
Ad. 65, 66	to explain the equipment presented in the illustrations
Ad. 68	to use Japan illustration, except for state 2, which should be replaced by the original photograph for state 2
TQ 5	to use the same characteristics and groups as for Chapter 5.3 (grouping characteristics)
TQ 6	example to be provided
TQ 7.3.2	to be deleted
TQ 7.3.4	to be moved to TQ 9

Variety description databases *(continued)*

61. The TWF received a presentation on the CPVO project on the "Management of peach tree reference collections" from Mr. Sergio Semon (European Community) and Mr. Thierry Pascal (France). Copies of their presentations are provided as Annex VIII to this report. It was explained that the project would run for 3 years from 2008 to10 and was a collaborative R&D project co-financed by CPVO, together with its examination offices for peach, which were in France, Spain, Italy and Hungary. The aim of project was " to create and manage a peach tree database via the establishment of an European Union *Prunus persica* tree collection structures in varietal groups, by using a common database containing phenotypic, visual and molecular descriptions."

Electronic application systems

62. The TWF noted the developments reported in document TWF/40/9, concerning proposals under consideration in the context of electronic application systems.

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

63. The TWF considered document TWF/40/12 and agreed that TWF experts should be invited to supply information on apple by means of the questionnaire.

Method of calculation of COYU

64. The TWF noted the report provided in document TWF/40/16.

Guidance for drafters of Test Guidelines

65. The TWF received a presentation of the latest version of the "Practical guide for drafters (Leading Experts) of UPOV Test Guidelines", a copy of which is provided as Annex IX to this report. The TWF noted that the guide would be attached to the e-mail reminder sent to Leading Experts. The TWF agreed that a similar presentation should be made at each session, if time allowed.

Recommendations on draft Test Guidelines

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

66. The TWF agreed that the following draft Test Guidelines should be sent to the TC for adoption at its forty-sixth session, to be held in Geneva in March 2010, on the basis of the following documents and the comments in this report:

Banana (*Musa* spp) (Revision)	TG/123/4 (proj.7)
Fig (*Ficus carica)*	TG/FIG(proj.5)
Papaya (*Carica papaya* L.)	TG/PAPAYA (proj.5)
Peach (Revision)	TG/53/7 (proj.1)
Mandarins (Citrus; Grp 1) (Partial Revision)	TG/201/1

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

67. The TWF agreed to re-discuss the following draft Test Guidelines at its forty-first session (* indicates possible "final" draft Test Guidelines):

*Almond (*Prunus amygdalus* Batsch) (Revision)
*Acerola (*Malpighia emarginata* DC)
Actinidia Lindl. (Kiwifruit) (Revision)
Cacao (*Theobroma cacao* L.*)*
*Dragon-fruit (*Hylocereus undatus* (Haw.) Britton et Rose)
*Gooseberry (*Ribes uva-crispa* L.) (Revision)
*Japanese plum (Revision)
*Olive (*Olea europaea* L.) (Revision)
*Pecan nut
*Pineapple *(Ananas comosus*)
Pomegranate (*Punica granatum* L.)
*Red and White Currant (*Ribes sylvestre* (Lam.) Mert. & W.O.J. Koch) (Revision)

68. The TWF agreed that it should start to establish Test Guidelines for the following at its forty-first session:

Lonicera caerulea L. var. *kamtschatica* Sevast (Blue Honeyberry)

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

Pistachio (*Pistacia vera* L.)

70. The leading experts, interested experts and timetables for the development of the Test Guidelines, are summarized in Annex X.

Future Program, Date and Place of the Next Session

71. At the invitation of an expert from Mexico, the TWF agreed to hold its forty-first session in Cuernavaca, Morelos State, Mexico, from September 27 to October 1, 2010.

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

1. Opening of the session
2. Adoption of the agenda
3. Short reports on developments in plant variety protection
   (a) Reports from members and observers
   (b) Reports on developments within UPOV
4. Molecular techniques:
   (a) Developments in UPOV concerning the use of molecular techniques (document to be prepared by the Office of the Union)
   (b) Ad hoc Crop Subgroups (oral reports)
5. TGP documents

   (a) New TGP documents

   TGP/11: Examining Stability (document to be prepared by the European Community)

   (b) Revision of TGP documents

   TGP/7 "Development of Test Guidelines" (documents to be prepared by France (example varieties) and the European Community (photographs))

   TGP/8: "Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability" (document to be prepared by the Office of the Union)

   TGP/14: "Glossary of [Technical, Botanical and Statistical] Terms Used in UPOV Documents" (document to be prepared by the European Community)
6. Variety denominations
7. Information and databases
   (a) UPOV information databases (document to be prepared by the Office of the Union)
   (b) Variety description databases (document to be prepared by the Office of the Union and documents invited)
   (c) Exchangeable software (documents to be prepared by the Office of the Union)
   (d) Electronic application systems (document to be prepared by the Office of the Union)

8. Uniformity assessment

   (a) Method for calculation of COYU (document to be prepared by the Office of the Union)

   (b) Assessing uniformity by off-types on the basis of more than one sample or sub-samples (document to be prepared by the Office of the Union)

9. Experiences with new types and species (oral reports by participants)

10. Proposals for Partial Revisions / Corrections of Test Guidelines

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

12. Discussion on draft Test Guidelines

13. Recommendations on draft Test Guidelines

14. Guidance for drafters of Test Guidelines

15. Date and place of the next session

16. Future program

17. Report of the session (if time permits)

18. Closing of the session.

Technical Visit

73. On the morning of Wednesday, September 23, 2009, the TWF received presentations on "Fruit breeding research" by the following researchers of the *Unité mixte de recherche Génétique et Horticulture* (UMR-GenHort) of the INRA, Agrocampus Ouest, University of Angers: Mrs. Elisabeth Chevreau, Director; Ms. Pauline Lasserre, *ingénieur d'études*; Mr. François Laurens, *ingénieur de recherche*; and Ms. Marie-Hélène Simard, *ingénieur de recherché*. A presentation on "Color Apple mutant" was also given by Mrs. Laurence Feugey, DUS Examiner. Copies of those presentations are provided on the TWF/40 website. On the afternoon of Thursday, September 24, 2009, the TWF visited INRA UMR-GenHort, hosted by Mrs. Chevreau and her research team, followed by a visit to Davodeau-Ligonnière and International Fruit Obtentions (IFO).

74. The TWF adopted this report at the close of the session.

[Annexes follow]

ANNEX I

LIST OF PARTICIPANTS

I. MEMBERS

AUSTRALIA

Nik HULSE, Senior Examiner, Plant Breeder's Rights Office, IP Australia, 47 Bowes Street, Phillip ACT 2606
(tel.: +61 2 6283 7982 fax: +61 2 6283 7999 e-mail: nik.hulse@ipaustralia.gov.au)

BRAZIL

Vera Lúcia DOS SANTOS MACHADO (Mrs.), Senior Officer, National Plant Variety Protection Office (SNPC), Ministry of Agriculture, Livestock and Food Supply, Esplanada dos Ministerios, Bloco D, Anexo A, sala 249, 70043-900 Brasilia, D.F.
(tel.: +55 61 3218 2549 fax: +55 61 3224 2842 e-mail: vera.machado@agricultura.gov.br)

Janay ALMEIDA DOS SANTOS SEREJO (Sra.), Embrapa Cassava and Tropical Fruits, Rua Embrapa, s/nº, CEP 44380-000 Cruz das Almas, BA
(tel.: +55 75 3312 8048 fax: +55 75 3312 8097 e-mail: janay@cnpmf.embrapa.br)

CANADA

Elizabeth PRENTICE-HUDSON (Mrs.), Examiner, Plant Production Division, Plant Breeders' Rights Office, Canadian Food Inspection Agency (CFIA), 59 Camelot Drive, Ottawa Ontario K1A 0Y9
(tel.: +1 613 221 7529 fax: +1 613 228 4552 e-mail: elizabeth.prentice-hudson@inspection.gc.ca)

EUROPEAN COMMUNITY

Urszula BRAUN-MLODECKA (Mrs.), Technical Expert for Ornamental Plants, Community Plant Variety Office (CPVO), 3, boulevard Marechal Foch, 49101 Angers Cedex 02, France
(tel.: +33 2 4125 6449 fax: +33 2 4125 6410 e-mail: braun@cpvo.europa.eu)

Jean MAISON, Deputy Head, Technical Unit, Community Plant Variety Office (CPVO), B.P. 10121, 49101 Angers Cedex 02, France
(tel.: +33 2 4125 6435 fax: +33 2 4125 6410 e-mail: maison@cpvo.europa.eu)

Sergio SEMON, Community Plant Variety Office (CPVO), 3, boulevard Maréchal Foch, B.P. 10121, 49101 Angers Cedex 02, France
(tel.: 33 241 256 434 fax: 33 241 256 410 e-mail: semon@cpvo.europa.eu)

FRANCE

Nathalie AUGÉ, Communication Service, Groupe d'étude et de contrôle des variétés et des semences (GEVES), Rue Georges Morel, BP 90024, 49071 Beaucouzé Cedex
(tel.: +33 2 41 22 86 37 fax: +33 2 41 22 86 01 e-mail: nathalie.augé@geves.fr)

François BOULINEAU, DUS Coordinator, Groupe d'étude et de contrôle des variétés et des semences (GEVES), F-49250 Brion
(tel.: +33 2 41 57 23 22 fax: +33 2 41 57 46 19 e-mail: francois.boulineau@geves.fr)

Richard BRAND, DUS, Unité de Cavaillon, Groupe d'étude et et de contrôle des variétés et des semences (GEVES), B.P. 21101, 84301 Cavaillon Cedex
(tel.: +33 4 90 78 66 63 fax: +33 4 90 78 01 61 e-mail: richard.brand@geves.fr)

Elisabeth CHEVREAU (Mme), Institut National de la Recherche Agronomique (INRA), Directrice, UMR GenHort, B.P. 60057, F-49071 Beaucouzé Cedex
(tel.: +33 2 41 22 57 50 fax: +33 2 41 22 57 55 e-mail: chevreau@angers.inra.fr)

Sylvie DUTARTRE, Directrice, Groupe d'étude et de contrôle des variétés et des semences (GEVES), Rue Georges Morel, BP 90024, 49071 Beaucouzé Cedex
(tel.: +33 2 41 22 86 37 fax: +33 2 41 22 86 01 e-mail: sylvie.dutartre@geves.fr)

Laurence FEUGEY (Mme), Institut National de la Recherche Agronomique (INRA), DUS Examiner, UMR GenHort, B.P. 60057, F-49071 Beaucouzé Cedex
(tel.: +33 2 41 22 57 50 fax: +33 2 41 22 57 55 e-mail: Laurence.Feugey@angers.inra.fr)

Marie-Hélène GANDELIN (Mademoiselle), Horticulture DUS, Groupe d'étude et et de contrôle des variétés et des semences (GEVES), BP 21101, 84301 Cavaillon Cedex
(tel.: +33 4 90 78 66 77 fax: +33 4 90 78 01 61 e-mail: marie-helene.gandelin@geves.fr)

Joël GUIARD, Directeur adjoint, Groupe d'étude et de contrôle des variétés et des semences (GEVES), Rue Georges Morel, BP 90024, 49071 Beaucouzé Cedex
(tel.: +33 2 41 22 86 37 fax: +33 2 41 22 86 01 e-mail: joel.guiard@geves.fr)

Yves LESPINASSE, Fruit research coordinator, Institut National de la Recherche Agronomique (INRA), UMR Genhort, B.P. 60057, F-49071 Beaucouzé Cedex
(tel.: +33 2 41 22 57 50 fax: + 33 2 41 22 57 55 e-mail: yves.lespinasse@angers.inra.fr

Muriel LIGHTBOURNE (Mme), Responsable juridique, Groupe d'étude et de contrôle des variétés et des semences (GEVES), rue Georges Morel, F-49071 Beaucouze Cedex
(tel.: +33 2 41 22 85 96 fax: +33 2 41 22 86 01 e-mail: muriel.lightbourne@geves.fr)

Thierry PASCAL, Institut National de la Recherche Agronomique (INRA), GAFL, B.P. 94, F-84143 Montfavet Cedex
(tel.: +33 4 32 72 26 79 fax: +33 4 32 72 27 02 e-mail: tpascal@avignon.inra.fr)

Laurent PERON, Administrateur, VEGEPOLYS, Pôle de compétitivité, 3 rue Alexandre Fleming, 49066 Angers Cedex 01
(tel.: +33 2 41 72 17 37 fax: +33 2 41 72 25 67 e-mail: contact@vegepolys.eu)

Rachel TESSIER (Mme), Assistante SEV, Groupe d'étude et de contrôle des variétés et des semences (GEVES), Rue Georges Morel, BP 90024, 49071 Beaucouzé Cedex
(tel.: +33 2 41 22 85 93 fax: +33 2 41 22 86 01 e-mail: rachel.tessier@geves.fr)

GERMANY

Erik SCHULTE, Referatsleiter Obst und Stauden, Prüfstelle Wurzen, Bundessortenamt, Torgauer Str. 100, 04808 Wurzen
(tel.: +49 3425 90 40 24 fax: +49 3425 90 40 20 e-mail: erik.schulte@bundessortenamt.de)

JAPAN

Kiyofumi NAKAMURA, Examiner, Agricultural Production Bureau, Ministry of Agriculture, Forestry and Fisheries (MAFF), 1-2-1 Kasumigaseki, Chiyodaku, Tokyo 100-8950
(tel.: +81 3 6744 2123 fax: +81 3 3502 6572 e-mail: kiyofumi_nakamura@nm.maff.go.jp)

MEXICO

Alejandro F. BARRIENTOS-PRIEGO, Professor-Investigator, Departamento de Fitotecnia, Universidad Autónoma Chapingo (UACh), Km. 38.5 Carretera México-Texcoco, CP 56230, Chapingo, Estado de México
(tel.: +52 595 9521500 ext. 6260/6212/5079 fax: +52 595 9521642 e-mail: abarrien@gmail.com)

Sweetia Paulina RAMIREZ RAMIREZ (Srta.), Professor-Investigator, Departamento de Fitotecnia, Universidad Autónoma Chapingo (UACh), Km. 38.5 Carretera México-Texcoco, CP 56230, Chapingo, Estado de México
(tel.: +52 595 952 1500 ext. 6160 fax: +52 595 9521642 e-mail: sweetia.ramirez@gmail.com)

NETHERLANDS

Gerard, J.J. BOLSCHER, Varieties & Trials, Naktuinbouw, Binnenhaven 1, 6709 PD Wageningen
(tel.: +31 317 46 54 48 fax: +31 317 41 17 21 e-mail: g.bolscher@naktuinbouw.nl)

NEW ZEALAND

Christopher J. BARNABY, Assistant Commissioner of Plant Variety Rights / Examiner, Plant Variety Rights Office (PVRO), Private Bag 4714, Christchurch 8140
(tel.: +64 3 9626206 fax: +64 3 9626202 e-mail: Chris.Barnaby@pvr.govt.nz)

POLAND

Piotr LASKOWSKI, DUS Examiner, Experimental Station for Cultivar Testing (SDOO), Zybiszòw, PL-55-080 Katy Wroclawskie
(tel.: +48 71 33 42 013 fax: +48 71 33 42 017 e-mail: plaskowski@poczta.onet.pl)

Jozef PERCZAK, Research Centre for Cultivar Testing (COBORU), PL-63-022 Slupia Wielka
(tel.: +48 61 28 52 341 fax: +48 61 28 53 558 e-mail: j.perczak@coboru.pl)

REPUBLIC OF KOREA

JANG Jun-Yon, Agricultural Researcher, Korea Seed and Variety Service (KSVS), 233-1, Mangpo, Yeongtong, Suwon, Gyeonggi-do 443-400
(tel.: +82 31 2734145 fax: +82 31 2037431 e-mail: jangjy@seed.go.kr)

KIM Young, Agricultural Researcher, Korea Seed and Variety Service (KSVS), 1095-47 Seokcheon Nangsan Iksan Jeonbuk, Jeonbuk 570-892
(tel.: 82 63 861 2595 fax: 82 63 862 0069 e-mail: youngk@seed.go.kr)

KWON Ohwoung, Examiner, Korea Forest Seed and Variety Center (KFSV), Korea Forest Service, 670-4 Suhoe-ri, Suanbo-myeon, Chungju-Si, Chungcheongbuk-Do 380-941
(tel.: +82 43 850 3324 fax: +82 43 848 3055 e-mail: owkwon@forest.go.kr)

LEE Jeong-Ho, Researcher, Korea Forest Seed and Variety Center (KFSV), Korea Forest Service, 670-4 Suhoe-ri, Suanbo-myeon, Chungju-Si, Chungcheongbuk-Do 380-941
(tel.: 82 43 850 3325 fax: 82 43 850 3390 e-mail: mtmac@forest.go.kr)

SLOVAKIA

Bronislava BÁTOROVÁ (Mrs.), National Coordinator, Senior Officer, Department of Variety Testing, Central Controlling and Testing Institute in Agriculture (ÚKSÚP), Akademická 4, 949 01 Nitra
(tel.: +421 37 655 1080 fax: +421 37 652 3086 e-mail: bronislava.batorova@uksup.sk)

SOUTH AFRICA

Carensa PETZER (Mrs.), DUS Examiner, Directorate Genetic Resources, National Department of Agriculture, Private Bag X 5044, Stellenbosch 7599
(tel.: +27 21 809 1653 fax: +27 21 887 2264 e-mail: carensap@nda.agric.za)

Hendrik VENTER, DUS Examiner, Directorate: Genetic Resources, National Department of Agriculture, Private Bag X 5044, Stellenbosch 7599
(tel.: +27 21 80 91 650 fax: +27 21 88 72 264 e-mail: henniev@nda.agric.za)

SPAIN

Vicent CEBOLLA ROSELL, Coordinator, Unidad de Examen Técnico de Identificación Varietal, Instituto Valenciano de Investigaciones Agrarias (IVIA), Ctra. Moncada-Náquera Km. 4,5, E-46113 Moncada, Valencia
(tel.: +34 96 342 4000 fax: +34 96 342 4001 e-mail: cebolla_vicros@gva.es)

Pedro Miguel CHOMÉ FUSTER, Jefe de Área de Recursos Fitogenéticos, Oficina Española de Variedades Vegetales (OEVV), Ministerio de Medio Ambiente y Medio Rural y Marino (MARM), Calle Alfonso XII, No. 62, 28014 Madrid
(tel.: +34 91 3476913 fax: +34 91 3476703 e-mail: pchomefu@marm.es)

Margarita LÓPEZ CORRALES (Sra.), Expert for Ficus carica, Centro de Investigación, Finca La Orden, Valdesequera, Nacional V Km. 372, 06187 Guadajira (Badajoz)
(tel.: +34-924 014 065 fax: +34-924 014 001 e-mail: margarita.lopez@juntaextremadura.net)

Luis RALLO, Professor of Pomology, Departamento de Agronomía, Universidad de Córdoba, Campus de Rabanales, Ctra. de Madrid Km. 396, 14071 Córdoba
(tel.: +34 957 21 21 98 fax: +34 957 21 85 69 e-mail: lrallo@uco.es)

Guillermo SOLER FAYOS, Unidad de Examen Técnico de Identificación Varietal, Instituto Valenciano de Investigaciones Agrarias (IVIA), Ctra. Moncada-Náquera Km. 4,5, E-46113 Moncada, Valencia
(tel.: +34 96 342 40 00 ext. 70127 fax: +34 96 342 4001 e-mail: soler_gui@gva.es)

II. OBSERVERS

Emmanuel DE LAPPARENT, Director, International Fruit Obtentions (IFO) International, 4 Olive Grove, Havelock North, New Zealand
(tel.: +64 21 020 65 123 e-mail: emmanuel.delapparent@ifo-fruit.com)

Guy LIGONNIÈRE, Président, Davodeau-Ligonnière (DL-SNC ELARIS), 75, avenue Joxé, 40100 Angers, France
(tel.: +33 2 41 43 77 77 e-mail: dl.guy.ligonniere@dalicom.com)

III. ORGANIZATIONS

INTERNATIONAL COMMUNITY OF BREEDERS OF ASEXUALLY REPRODUCED ORNAMENTAL AND FRUIT PLANTS (CIOPORA)

Dominique THÉVENON (Madame), Board Member - CIOPORA, AIGN®, 8 avenue Charles de Gaulle, 84420 Piolenc
(tel.: +33 4 90 29 65 44 fax: +33 4 90 29 65 44 e-mail: t.dominique4@aliceadsl.fr)

INTERNATIONAL SEED FEDERATION (ISF)

Vincent PÉTIARD, Nature Source Genetics (NSG), 33 Thornwood Dr, Ithaca, NY 14850, United States of America
(tel.: +33 6 12 12 52 44 / +1 607 257 00 99 e-mail: vpetiard@naturesourcegenetics.com)

IV. OFFICER

Bronislava BÁTOROVÁ (Mrs.), Chairperson

V. OFFICE OF UPOV

Peter BUTTON, Technical Director, International Union for the Protection of New Varieties of Plants (UPOV), 34, chemin des Colombettes, 1211 Geneva 20
(tel.: +41 22 338 8672 fax: +41-22733 0336 e-mail: peter.button@upov.int)

Rosa SANCHEZ-VIZCAINO (Ms.), Administrative Assistant, International Union for the Protection of New Varieties of Plants (UPOV), 34, chemin des Colombettes, 1211 Geneva 20
tel.: +41 22 338 9153 fax: +41-22733 0336 e-mail: rosa.sanchezvizcaino@upov.int)

[Annex II follows]

ANNEX II

Welcome speech delivered by Mrs. Sylvie Dutartre, Directrice,
Groupe d'Étude et de contrôle des Variétés et des Semences (GEVES)

Ladies and gentlemen, dear colleagues,

It's a great honor and pleasure for me to welcome you, on behalf of the French Ministry of Food, Agriculture and fisheries, to this 40th session of UPOV TWF, organized here in Angers, on invitation of GEVES.

I hope that each of you had a good trip to reach Angers. I know that some of you were already present last week for the TWO, organized by CPOV

I am sure that all of you will take the opportunity to visit Angers and discover some of the jewels of Anjou.

It was time for GEVES to organize this event, because the last time GEVES hosted a UPOV technical party was in 1998 with the TWA. It was in Angers too, in the National Seed Testing Station.

During this meeting we'll use INRA facilities, because, as you could see this morning in front of INRA car park, GEVES is implementing its new headquarters on the construction site located nearby the SNES.

For such a helpful cooperation, I deeply want to thank Mr. Jean François THIBAULT, he's the chairman of the regional Research Center of INRA.

As Director of GEVES my duty wouldn't be achieved without giving or reminding you some elements about GEVES:

- GEVES is a public entity mandated by the Ministry of Agriculture to realize analysis and studies on seeds and varieties, for national listing, seed certification and plant breeders' rights.

- GEVES is an office of Public Interest with more than 250 employees and a budget of about 19 million €.

- About 2/3 of the employees are civil servants, the others are paid by our own budget.

- Our financial resources are based on fees paid by breeders doing applications and on an amount paid by Seed Certification Service (called SOC) for Analyses on seeds.

- GEVES has an administrative council including the 3 founders : INRA, Ministry of Agriculture and GNIS, the inter professional organization on seeds and varieties, under the official control of the Ministry of Research.

- All in all, GEVES studies about 2,000 new varieties and realizes about 2,000 seed analyses.

- In addition, GEVES develops research programs to improve methods and techniques used to test seeds and varieties.

As second part of my brief speech I want to tell you some news about GEVES:

- GEVES has now a large contribution in DUS activities on behalf of CPVO, our neighbor, located in the center of Angers.

- GEVES has developed new technologies and methods for varieties and seeds, based on wide partnerships and a new organization of our biochemical and bimolecular lab (called BIOGEVES), which becomes a platform with a set of modern equipments, at the disposal of each of the 2 sectors of GEVES: varieties and seeds.

- But the last significant evolution is the headquarters and technical unit move from La Minière (near Versailles), to Beaucouzé (headquarters) and to l'Anjouère, 20 km North-West of Angers. L'Anjouère is a farm of 200 ha, with new buildings and facilities and even an old castle to renew. So La Minière is closed.

- Headquarters will be inhibited in a few months and l'Anjouère 6 months later.

- Meanwhile, DUS and VCU trials done in La Minière will be completely transferred to l'Anjouère.

- With the new facilities added to the other main units in Magneraud, Cavaillon and Montpellier, GEVES will have a modern and efficient tool:

    - Firstly to improve its activities in relation with national testing, seed quality control and plant breeders rights

    - And secondly to propose new methods and new techniques or skills in the scope of seeds and varieties, to meet the society's requirements

At last, if you need more information, or want to cooperate with GEVES, please don't hesitate to ask.

I finally hope your meeting will be fruitful, I know that your schedule is heavy, but also that you'll have time enough to visit and to appreciate the life in the city of Angers.

[Annex III follows]

Presentation by Mr. Jean-François Thibault,
President of the *Institut National de la Recherche Agronomique* (INRA)

INRA
(Institut National de la Recherche Agronomique)

Public mission-oriented research

DIET
AGRICULTURE
ENVIRONMENT

The National Institute for Agronomic Research

- Set up in 1946,
- A public, scientific and technological establishment
- Under the joint authority of the Ministries of Agriculture and Research
- Second largest French public research organisation with a staff of nearly 9000 persons and a budget of 745 millions euros
- Largest European organisation for agricultural research

DIET
AGRICULTURE
ENVIRONMENT

The National Institute for Agronomic Research

- INRA is strengthening its resources in three major fields :
  1. The development of sustainable agriculture
  2. Nutrition and its effects on human health
  3. The environment and regional development
- integrating them in the construction of the European Research Area
- responding to new demands from society (food safety and quality, ethics, science-society debate, etc.)

DIET
AGRICULTURE
ENVIRONMENT

Partnership

A strengthened partnership policy:

> Scientific collaborations in France with:
- *research organisations*
- *higher education (universities, high schools,…)*

> Socio-economic partnership

> Local activities with public-sector regional agencies

> European and international scientific cooperations

> Science-society relationships

DIET
AGRICULTURE
ENVIRONMENT

Resources and organisation

- A President and board of Directors
- 20 regional research centres
- 14 scientific research departments
- 468 units
  - > 257 research units (140 associated with other organisations)
  - > 80 experimental units
  - > 131 support units

DIET
AGRICULTURE
ENVIRONMENT

INRA

Centre of Angers-Nantes

DIET
AGRICULTURE
ENVIRONMENT

20 Centres

Centre of Angers - Nantes

DIET
AGRICULTURE
ENVIRONMENT

Centre of Angers – Nantes

DIET
AGRICULTURE
ENVIRONMENT

Centre of Angers – Nantes

✓The 1st january 2008, Angers and Nantes centres merged :

25 units

480 scientists and technicians

140 professors, associated professors and technicians from the universities of Nantes and Angers, and high schools associated to INRA

✓ The research areas are :

plant science (horticulture and seeds) mainly at Angers

food science and nutrition mainly at Nantes

DIET
AGRICULTURE
ENVIRONMENT

Centre of Angers – Nantes

25 units:

✓ 2 INRA units

✓ 9 joint research units with high schools (Agrocampus Ouest, ENITIAA, and ENVN) and Universities (Angers and Nantes)

✓ 3 contract-based research units

✓ 3 experimental units (experimental field plots, …)

✓ 3 GEVES units

✓ 5 service and administrative units

DIET
AGRICULTURE
ENVIRONMENT

Centre of Angers – Nantes

Research topics

DIET
AGRICULTURE
ENVIRONMENT

Centre of Angers – Nantes

Research topics in food science and nutrition:

Characterization of biopolymers
Economy of the sector
Human nutrition
Animal health / Public health
Mainly Nantes

DIET
AGRICULTURE
ENVIRONMENT

Centre of Angers – Nantes

A focus on the research carried out at Angers

DIET
AGRICULTURE
ENVIRONMENT

The INRA units at Angers

4 joint research units with Agrocampus Ouest and the University of Angers :

GenHort (Genetics and Horticulture), PaVé (Plant Pathology), PMS (Molecular Seed Physiology), Sagah (Agrononomy Applied to Horticulture)

2 experimental units :

UE VV (Grapevine and wine), UE Horticulture

1 contract-based unit with the University of Angers :

RCIM (Membrane Receptors and Ion Channels)

2 units of GEVES :

SNES (National Seed Testing Station), SEV (Variety Study Service)

a total of 230 INRA people (scientists and technicians)

DIET
AGRICULTURE
ENVIRONMENT

Centre of Angers – Nantes
INRA at Angers
Research topics in plant science:

Plant – pathogen interactions
Genetic resources
Seeds: biology and quality
Quality of ornemental plants
Quality and typicity of products (fruits and wine)

DIET
AGRICULTURE
ENVIRONMENT

INRA at Angers
A wide partnership

- Higher education (University of Angers, Agrocampus Ouest, ESA - Angers)
- GEVES
- Regional Council, Europe (e.g. Isafruit project in the VI PCRDT)
- Federative Research Institute QUASAV (Quality and Plant health)
- Private companies and the competitiveness cluster Végépolys

DIET
AGRICULTURE
ENVIRONMENT

Quasav

Federative Research Institute
« QUALITY AND PLANT HEALTH »

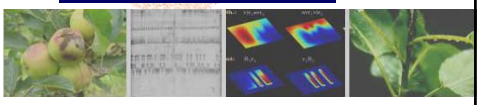
A « FRI » is a partnership between research laboratories :
- belonging to different institutions,
- localized on the same site,
- sharing a common scientific project,
- sharing expertise and facilities.

FRI - QUASAV :
- created in January 2008,
- eight research partners,
- research component of Végépolys.

DIET
AGRICULTURE
ENVIRONMENT

DIET
AGRICULTURE
ENVIRONMENT

Four scientific themes



1. Resistance to bioagressors and durable management of plant health: from gene to ecosystem

GenHort, PaVé, UE Horti, UEVV, RCIM, SONAS

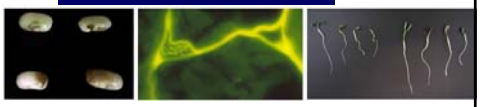
collaboration between PaVé and GenHort on apple (scab, fire blight)

New collaborative project on carrot (*alternaria*)

New expertises: insect neurotoxicology, biological activity of natural substances…

DIET
AGRICULTURE
ENVIRONMENT

Four scientific themes



2. Biology, quality and health of seeds : from seed mother plant to seedilngs

PMS, PaVé

Strong national visibility of Angers in this field of research

Priority : development of synergy between expertises (physiology, ecophysiology, pathology) on common research questions

DIET
AGRICULTURE
ENVIRONMENT

Four scientific themes

3. Development, architecture, control of the shape of ornamental woody plants

GenHort, Sagah

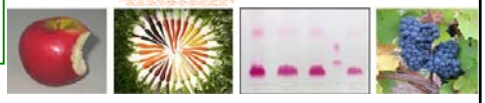
Recent research activity

Strong collaboration between teams in genetics and ecophysiology

Activity focussed on an unique model plant : the rose

DIET
AGRICULTURE
ENVIRONMENT

Four scientific themes



4. Quality, characterization and valorization of products from plants

GenHort, UEVV, SONAS, RCIM, PaVé, UE Horti

Very important research activity in relationship to Végépolys.

Strong collaboration with researchers of INRA Nantes and ESA-Angers

DIET
AGRICULTURE
ENVIRONMENT

Common facilities of FRI QUASAV

One experimental unit :

UE Horti : 100 ha of fruits and ornamentals experimental plots

Three platforms:

Cellular imaging : histology, cytology, confocal microscopy, image analysis

Phytochemistry analysis: extraction, chromatography, NMR spectroscopy

Microorganisms collection : French National Collection of Phytopathogenic Bacteria

DIET
AGRICULTURE
ENVIRONMENT

INRA

Centre of Angers-Nantes

DIET
AGRICULTURE
ENVIRONMENT

[Annex IV follows]

Presentation by Mr. Laurent Peron, *Administrateur* of VEGEPOLYS

VEGEPOLYS
PÔLE DE COMPÉTITIVITÉ

International competitiveness cluster dedicated to specialised plants

A CLUSTER

Networking to enhance competitiveness of the territory through innovation

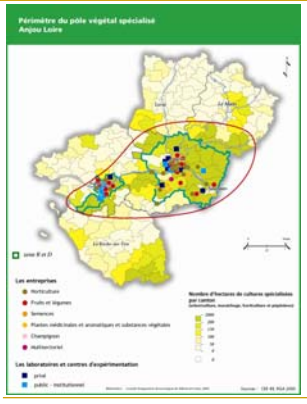
COMPANIES ↔ RESEARCH

EDUCATION

IN THE HEART OF WESTERN FRANCE

A CONCENTRATION UNIQUE IN EUROPE :

- 8 sectors:
  - ornamental horticulture,
  - seeds,
  - fruit and vegetables,
  - wine-growing,
  - medicinal plants,
  - mushrooms,
  - cider making,
  - tobacco
- 50,000 hectares of specialist plants
- 25,000 people employed
- 4,000 companies



LEADING POSITIONS

- **Ornamental horticulture** : country leader for pot plants, nursery plants, bulbs
- **Seeds** : country leader in vegetable and flower seeds, 25 % of national seed production
- **Fruit** : country leader for apple
- **Wine-growing** : third French vineyard
- **Vegetables** : country leader in lambs' lettuce, cucumber, new season's leeks, Galia melons
- **Medicinal plant** : country leader
- **Mushroom** : worldwide leader

Professional sector : 4000 companies and sector bodies

Education : 2500 students

Schools gathered within the same dynamics :

Research : 300 researchers, technicians and teachers

HOW DOES VEGEPOLYS WORK?

- An association of 200 members with a board
- A dedicated team for coordination
- The partner structures for support and development
  - Angers Science Park (Angers Technopole): bringing enterprises closer to the world of research and education
  - Public and private industry and sector organisations
  - Close partnership with the local government authorities

OUR GOAL

To reinforce our position and to become a European and internationally recognized cluster of talent, knowledge and resources, with the ability and experience to carry out research programs at a national & international level in all areas of specialized plants.

TO ACHIEVE THESE OBJECTIVES

- Networking - Training - Workshops
- Anticipate : Centre of Business Intelligence (Watch…)
- Facilitate innovation :
  - Support common projects around **4 technological key themes**:
    - Plant Breeding and Innovation
    - Sanitary Quality of Seeds and Plants
    - Plants benefits for Health and Well-being
    - Landscape and Urban Horticulture
  - Access to research : **2 innovation centres** : Valinov, Plante & Cité
- Promote : Communication toolkit, events…

VEGEPOLYS
PÔLE DE COMPÉTITIVITÉ

www.vegepolys.eu

contact@vegepolys.eu

[Annex V follows]

RECENT DEVELOPMENTS IN UPOV

OVERVIEW

- UPOV Membership
- Council
- Consultative Committee
- CAJ (information materials)
- Symposium on Contracts
- Second World Seed Conference
- Bioversity (GIGA project)
- TC / Test Guidelines

MEMBERSHIP OF UPOV

67 Members
(66 States and the European Community)

New Members:

Georgia	November 29, 2008
Costa Rica	January 12, 2009

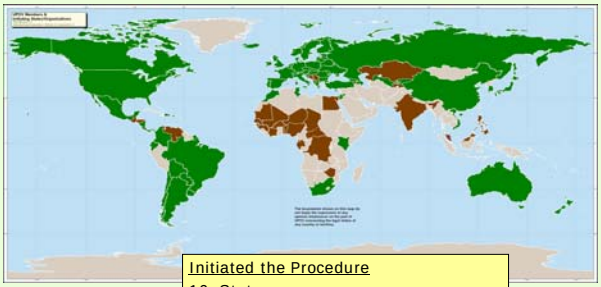
Draft Laws examined	Council Session	Advice
FYR Macedonia	October 30, 2008	positive
Bosnia and Herzegovina	October 30, 2008	amendments of draft law required - to be resubmitted to Council
Peru	April 3, 2009	positive

India, Zimbabwe

Opinion on whether India and Zimbabwe have acted expeditiously to complete their legislation and any UPOV formalities and to effect the deposit, to be the responsibility of the Consultative Committee

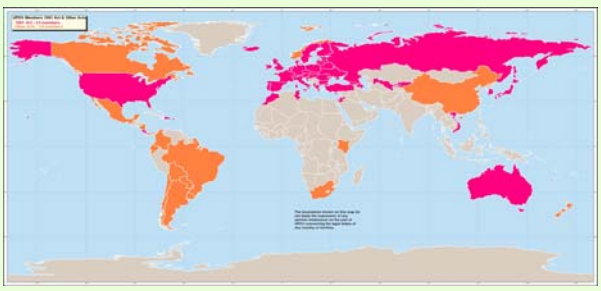
UPOV Membership / Territories covered
67 members

Members of UPOV (green) and initiating States and organizations (brown)



Initiated the Procedure
16 States
1 intergovernmental organization

UPOV Membership / Territories covered
1991 Act: 43 members – Other Acts: 24 members



COUNCIL

COUNCIL

Mr. Francis Gurry appointed as the new **Secretary-General of UPOV** for the period from October 30, 2008 to September 30, 2014.

Appointment of **Vice Secretary-General**, **Mr. Rolf Jördens** extended until November 30, 2010.

NEW SECRETARY-GENERAL OF UPOV

Mr. Francis Gurry (Australia)

COUNCIL

The Council elected:

- **Mr. Jöel Guiard** (France), **Vice-Chairman** of the **Technical Committee (2008-2010)**.

and

- **Mr. Dirk Theobald** (European Community), Chairman, **TWA**;
- **Mr. Gerie van der Heijden** (Netherlands), Chairman, **TWC**;
- **Mrs. Bronislava Bátorová** (Slovakia), Chairperson, **TWF**;
- **Ms. Andrea Menne** (Germany), Chairperson, **TWO**;
- **Mrs. Radmila Safarikova** (Czech Republic), Chairperson, **TWV**;
- **Mr. Andy Mitchell** (United Kingdom), Chairman, **BMT**

for the period October 2008- October 2011

COUNCIL

Statistics

In 2007, the total annual **number of titles issued by UPOV members** exceeded **10,000** for the first time.

COUNCIL

Convention on Biological Diversity (CBD)

Peer review of the draft "Study on the relationship between the ABS International Regimen and other international instruments which govern the use of genetic resources: The WTO; WIPO; and UPOV".

see http://www.upov.int/en/about/key_issues.htm

CONSULTATIVE COMMITTEE

Consultative Committee

Assistance webpage

- to provide **information on relevant forms of assistance** in the development of plant variety protection according to the UPOV Convention and an approach to seek **to enhance extra-budgetary sources of funding** for assistance
- **Mr. Minwook Kim**, Deputy Director, Foodgrain Policy Division, Ministry for Food, Agriculture and Fisheries, Republic of Korea
  (internship: November 3, 2008 to November 2, 2010)
  to investigate extra-budgetary resources and to assist in the development of proposals to access such funding.

Consultative Committee

- Financial Regulations and Rules of UPOV and
- External audit committee and internal audit provisions

  ⇒ *ad hoc* working group established

- Endorsed preparation of the draft program and budget of the Union for the 2010-2011 biennium
- Endorsed medium-term work program of the Office of the Union for the period 2012-2015
- Approved procedure for the appointment of a new Vice Secretary-General

ADMINISTRATIVE AND LEGAL COMMITTEE (CAJ)

CAJ

INFORMATION MATERIALS

⇒ ***Guidance for the preparation of laws based on the 1991 Act of the UPOV Convention (document UPOV/INF/6/1 Draft 2)***

PART I: *EXAMPLE TEXT FOR ARTICLES*
PART II: *NOTES BASED ON INFORMATION MATERIALS*

proposed for adoption by the Council in October 2009

(will be available in English, French, German, Spanish, Arabic, Chinese and Russian)

CAJ

INFORMATION MATERIALS (CAJ/59/3: Annex)

Latest reference	Explanatory Notes on	Status
UPOV/EXN/NOV	Novelty under the UPOV Convention	Approved by CAJ
Draft addition	Article 6(2) of the 1991 Act "Varieties of recent creation": example provision	CAJ by correspondence (May 2009)
UPOV/EXN/PRI	Right of Priority under the UPOV Convention	Approved by CAJ
UPOV/EXN/PRP	Provisional Protection under the UPOV Convention	Approved by CAJ
Draft addition	Article 13 of the 1991 Act "Provisional Protection": example provision(s)	CAJ by correspondence (May 2009)
UPOV/EXN/EDV	Essentially Derived Varieties under the UPOV Convention	Approved by CAJ CAJ-AG (October 2009) to consider a possible revision
UPOV/EXN/EXC	Exceptions to the Breeder's Right under the UPOV Convention	Approved by CAJ
UPOV/EXN/NUL	Nullity of the Breeder's Right under the UPOV Convention	Approved by CAJ
UPOV/EXN/CAN	Cancellation of the Breeder's Right under the UPOV Convention	Approved by CAJ
UPOV/EXN/ENF Draft 2	Enforcement of Breeders' Rights under the UPOV Convention	To be considered by CAJ/59 (April 2009)
UPOV/EXN/GEN Draft 1	Genera and Species to be Protected under the 1991 Act of the UPOV Convention	CAJ by correspondence (May 2009)
UPOV/EXN/NAT Draft1	National Treatment under the 1991 Act of the UPOV Convention	CAJ by correspondence (May 2009)
UPOV/EXN/HRV Draft 2	Acts in Respect of Harvested Material under the UPOV Convention	Draft 1 CAJ correspondence (May 2009)and Draft 4 to be considered by CAJ-AG (October 2009)
UPOV/EXN/RES Draft1	Restrictions on the Exercise of the Breeder's Right under the UPOV Convention	CAJ by correspondence (May 2009)
UPOV/EXN/BRD Draft 1	Definition of Breeder under the 1991 Act of the UPOV Convention	Draft 2 to be considered by CAJ-AG (October 2009)
UPOV/EXN/VAR Draft 1	Definition of Variety under the 1991 Act of the UPOV Convention	Draft 2 to be considered by CAJ-AG (October 2009)
UPOV/EXN/... Draft 1	Conditions and Limitations Concerning the Breeder's Authorization	To be considered by CAJ-AG (October 2009)
UPOV/EXN/COND Draft 1	Conditions of Protection under the UPOV Convention	CAJ-AG (October 2007) agreed not to pursue the development of a document
Latest reference	INF documents	Status
UPOV/INF/12/1	Explanatory Notes on Variety Denominations under the UPOV Convention	Adopted by the Council
UPOV/INF/6/1 Draft 2	Guidance for the preparation of laws based on the 1991 Act of the UPOV Convention	To be considered by CAJ/59 (April 2009)
UPOV/INF/... Draft 1	Guidance on how to become a member of UPOV and accede to the 1991 Act of the UPOV Convention	CAJ by correspondence (May 2009)
UPOV/INF/... Draft 1	Guidance on how to ratify, or accede to, the 1991 Act of the UPOV Convention (for members of UPOV only)	CAJ by correspondence (May 2009)

UPOV

GENERAL

UPOV

Symposium on Contracts in relation to Plant Breeders' Rights

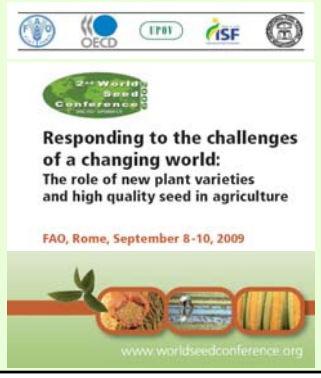
- Purpose: provide information to authorities and breeders on practices and experiences under different jurisdictions

(October 31, 2008, UPOV headquarters, Geneva)

http://www.upov.int/en/news/2008/upov_symposium_contracts_2008

UPOV

Second World Seed Conference



UPOV

Second World Seed Conference

UPOV

UPOV

Second World Seed Conference

Urgent government measures and increased public and private investment in the seed sector are required for the long term if agriculture is to meet the challenge of food security in the context of population growth and climate change. [...]

In particular, FAO member countries are urged to participate in the internationally harmonized systems of the OECD, UPOV, ITPGRFA and ISTA.

Participation in those systems will facilitate the availability of germplasm, new plant varieties and high quality seed for the benefit of their farmers, without which their ability to respond to the challenges ahead will be substantially impaired.

The Conference highlighted the critical role of new plant varieties and high quality seed in providing a dynamic and sustainable agriculture that can meet those challenges. It concluded that governments need to develop and maintain an enabling environment to encourage plant breeding and the production and distribution of high quality seed.

• *Intellectual property protection is crucial for a sustainable contribution of plant breeding and seed supply. An effective system of plant variety protection is a key enabler for investment in breeding and the development of new varieties of plants. A country's membership of UPOV is an important global signal for breeders to have the confidence to introduce their new varieties in that country.*

BIOVERSITY

GIGA (Germplasm Information on Germplasm Accessions) project to define a **minimum set of characterization and evaluation standards** for 22 crops of major economic importance

Crop specific experts invited from UPOV

- Bean
- Faba bean
- Cultivated potato
- Yam
- Rice
- Cowpea
- Chickpea
- Maize
- Pearl millet
- Pigeon pea
- Sorghum
- Sweet potato
- Finger millet
- Lentil

BIOVERSITY

Crop (Bioversity list)	Relevant UPOV Test Guidelines	TWP	Leading Expert
Bean (?)	Phaseolus coccineus L. (Runner bean) (TG/9/5) / Phaseolus vulgaris L. (French bean) (TG/12/9)	TWV/ TWA	Kees van Ettekoven (NL) / Francois Boulineau (FR)
Faba bean (Vicia faba L.)	Vicia faba L. var. major Harz (Broad bean) (TG/206/1) / Vicia faba L. var. minor Harz (Field bean) (TG/8/6)	TWV/ TWA	Niall Green (GB) / Beate Rucker (DE)
Cultivated potato (Solanum tuberosum L.)	Solanum tuberosum L. (TG/23/6)	TWA	Beate Rücker (DE)
Yam (Dioscorea spp.)	Dioscorea alata L.; Dioscorea polystachya Turcz.; Dioscorea japonica Thunb. (TG/YAM (adopted 2009))	TWV	Mitsuo Yuasa (JP)

BIOVERSITY

Crop (Bioversity list)	Relevant UPOV Test Guidelines	TWP	Leading Expert
Rice (Oryza sativa L.)	Oryza sativa L. (TG/16/8)	TWA	Luis Salaices (Spain)
Cowpea (Vigna unguiculata L.)	Vigna unguiculata (L.) Walp. subsp. sesquipedalis (L.) Verdc.) (TG/COWPEA (adopted 2009))	TWV	Mitsuo Yuasa (JP)
Chickpea (Cicer arietinum L.)	Cicer arietinum L. (TG/143/4)	TWV	Francois Boulineau (FR)
Maize (Zea mays L.)	Zea mays L. (TG/2/7)	TWA (/TWV)	Joël Guiard (FR)
Pearl millet (Pennisetum glaucum L.)	Pennisetum glaucum (L.) R. Br. (TG/PRL_MIL(proj.5))	TWA	Mr. Luís Gustavo Asp Pacheco (BR)
Pigeon pea (Cajanus cajan (L.) Millsp.)	-		

BIOVERSITY

Crop (Bioversity list)	Relevant UPOV Test Guidelines	TWP	Leading Expert
Sorghum (Sorghum bicolor (L.) Moench)	Sorghum bicolor L. (TG/122/3)	TWA	Joël Guiard (FR)
Sweet potato (Ipomoea batatas)	Ipomoea batatas (L.) Lam. (TG/SWEETPOT(proj.3))	TWA/ TWV	Keun-Jin Choi (KR)
Finger millet (Eleusine coracana (L.) Gaertn)	-		
Lentil (Lens culinaris Medik)	Lens culinaris Medik. (TG/210/1)	TWV	Francois Boulineau (FR)

Developments at the 45th session (March 2009)

of the

TECHNICAL COMMITTEE

(not on the TWP agenda)

Test Guidelines adopted by Technical Committee in 2009

New Test Guidelines:

Status	Document No.	English	Drafter	TWP
Posted	TG/COWPEA(proj.4)	Asparagus-bean	JP/NL	TWV
Posted	TG/HEVEA(proj.6)	Rubber	BR	TWO
Posted	TG/NERIUM(proj.5)	Oleander	FR	TWO
Posted	TG/PASSI(proj.6)	Passion Fruit	ZA	TWF
Asterisked chars. to be agreed by TWO	TG/PHLOX(proj.3)	Phlox	NL	TWO
Posted	TG/PRUNU_PAD(proj.4)	Bird cherry	HU	TWO/ TWF
Posted	TG/TARO(proj.4)	Taro	JP	TWV
Posted	TG/YAM(proj.4)	Yam	JP	TWV

Test Guidelines adopted by Technical Committee in 2009

Status	Document No.	English	Drafter	TWP
Revisions:				
Being checked	TG/2/7	Maize	FR/HU	TWA/ TWV
UA comments to be resolved	TG/7/10	Pea	GB	TWV/ TWA
Posted	TG/28/9	Zonal Pelargonium	DE	TWO
Being checked	TG/45/7	Cauliflower	FR	TWV
Partial revisions				
Posted	TG/89/6 Rev.	Swede		TWV
Posted	TG/155/4 Rev.	Pumpkin		TWV
Posted	TG/209/1 Rev.	Dendrobium		TWO
Posted	TG/220/1 Rev.	Verbena, Vervain		TWO

Other Test Guidelines considered by Technical Committee in 2009

Status	Document No.	English	Drafter	TWP
Referred back to TWO	TG/ANUBI(proj.5)	Anubias	SG	TWO
Referred back to TWF	TG/FIG(proj.4)	Fig	ES	TWF
Referred back to TWO	TG/MOKARA(proj.5)	Mokara	SG	TWO

Test Guidelines corrections notified to Technical Committee in 2009

Status	Document No.	English	TWP
Published	TG/26/5 Corr.	Chrysanthemum	TWO
Published	TG/86/5 Corr.	Anthurium	TWO
Published	TG/94/6 Corr.	Ling, Scots Heather	TWO
Published	TG/176/4 Corr.	Osteospermum	TWO
Published	TG/225/1 Corr.	Waxflower	TWO
Published	TG/238/1 Corr.	Tea	TWA
Published	TG/241/1 Corr.	Nemesia	TWO

Test Guidelines

- **257 Test Guidelines** adopted
- Further **64 to be discussed** in 2009
  - 39 new Test Guidelines
  - 22 Revisions
  - 3 Partial revisions

  (31 “final” draft stage)

THANK YOU

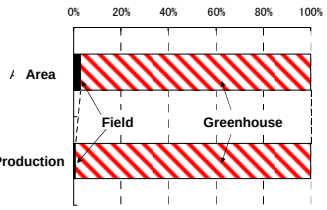
Presentation by Mr. Kiyofumi Nakamura, Examiner
Agriculture Production Bureau, Ministry of Agriculture, Forestry and Fisheries of Japan

Final report of the test for North and East Asian example varieties for ***New*** Strawberry TG

September 2009 by Japan

Background

Production of Strawberry in Japan

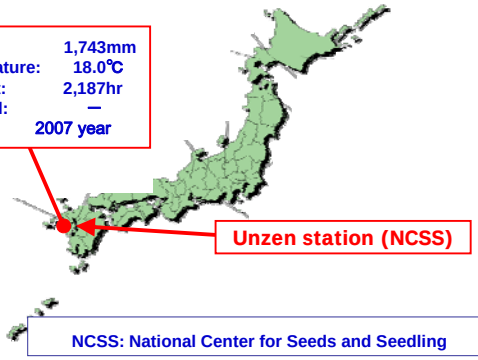


Area : 4,720 ha
Production: 163,000 ton

Statistics of MAFF, 2000

Testing condition 1
Location of testing station

Rainfall: 1,743mm
Temperature: 18.0℃
Sunlight: 2,187hr
Snowfall: —
2007 year



NCSS: National Center for Seeds and Seedling

Testing condition 2
Design for Testing

① **Two Conditions** 1. Field 2. In Greenhouse

② **Tested Varieties** ( ):Number of Plants

● Example varieties from UPOV TG: 10 varieties
Cambridge favourite (8) Elista (4) Elsanta (8) Garigaette (6)
Gorella (8) Marmion (8) Marie France (6) Regina (8)
Senga gigana (2) Talisman (8)

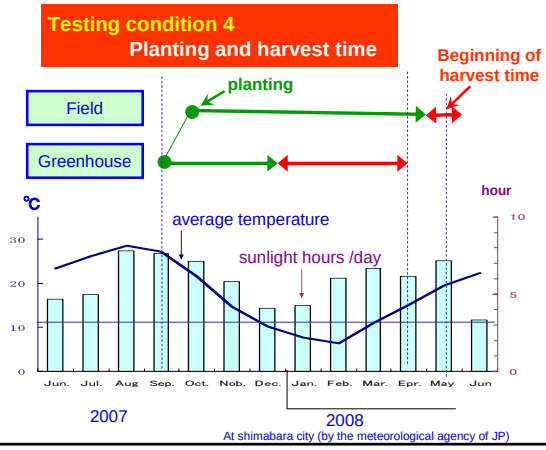
● Japanese varieties: 8 varieties
Akihime(6) Danner (8) Ever berry (4) Harunoka (40)
Houkouwase (40) Nyohou (40) Tochiotome (40) Toyonoka (40)

Note: Testing result of this report should be regarded only a one of case study because the number plants is very few

Testing condition 3
Detail conditions

	Field	Greenhouse
Fertilizer (total kg/a)	N:1.5, P:1.5, K:1.5 Manure:30t/ha etc	N: 1.7, P: 1.4, K:1.8 Manure: 30t/ha etc.
Distance	30cm (plants) × 30cm (line)	25cm (plants) × 30cm (line)
Temperature	18.0 ℃ mean in 2007 year highest day: 35.5 ℃ lowest day: -1.4 ℃	To keep min. 8 ℃ by the time of flowering To keep min 5℃ after the time of flowering

Testing condition 4
Planting and harvest time



At shimabara city (by the meteorological agency of JP)

Testing condition 5
As for demanding low temperature

- Varieties which size of plant was very small in greenhouse were often found in European varieties. It might be considered that demand for low temperature in European varieties may be totally stronger than Japanese varieties.
  Japanese varieties were bred in not field but greenhouse. Therefore demanding low temperature of Japanese varieties may be weaker than European varieties.
- In this growing test, European varieties may not be able to have a chance for enough dormant in greenhouse condition. However this matter had not been considered in this test.

‘ Akihime ’

Obviously dormant had already finished in both conditions.

Greenhouse

Field

‘ Gorella ’

Dormant may be not yet finished in greenhouse.

Greenhouse

Field

Testing result 1

Testing results will be explained by each item

Item	Number of characteristics
1. QL characteristics	2
2. PQ characteristics	8
3. QN ① Group 1 (Stable)	15
② Group 2 (Unstable)	11
③ Group 3 (Unstable 2*)	6
Not assessed	6
total	48

*Unstable 2: Characteristics to be provided two kinds of notes table (for field and for greenhouse. Ex. size of leaf etc.)

1 QL 12. Leaf: variegation

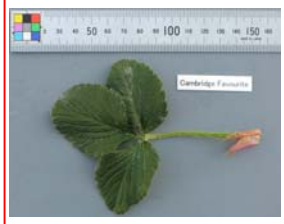
1 absent	1 absent
	
Greenhouse	Field

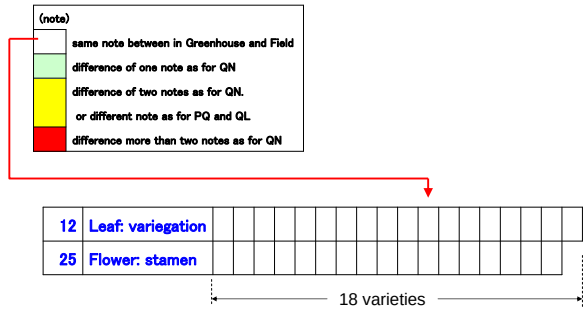
Photo: ‘Cambridge Favourite’

1 QL 25. Flower: stamen

9 present	9 present
	
Greenhouse	Field

Photo: ‘Cambridge Favourite’’

Result
QL characteristics : Just same note between in Greenhouse and Field



2 PQ 32. Fruit: color 1/2

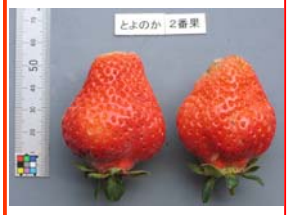
Greenhouse	Field
5 medium red	5 medium red
	

Photo: 'Toyonoka'

2 PQ 32. Fruit: color 2/2

Greenhouse	Field
5 medium red	7 blackish red
	

Photo: 'Danner'

2 PQ 43. Fruit: color of flesh (excluding core) 1/2

Greenhouse	Field
3 orange red	3 orange red
	

Photo: 'Marie France'

2 PQ 43. Fruit: color of flesh (excluding core) 2/2

Greenhouse	Field
1 whitish	3 orange red
	

Photo: 'Regina'

2 PQ 30. Fruit: shape 1/2

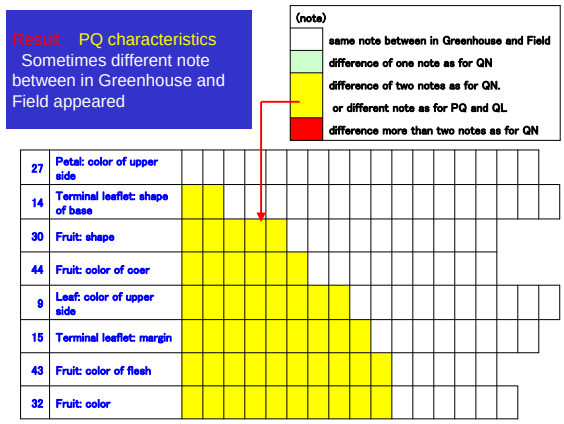
Greenhouse	Field
2 conical	2 conical
	

Photo: 'Danner'

2 PQ 30. Fruit: shape 2/2

2 conical	4 ovoid
	
Greenhouse	Field

Photo: ‘Harunoka’



3① QN 13. Terminal leaflet: length in relation of to width

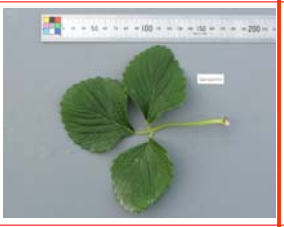
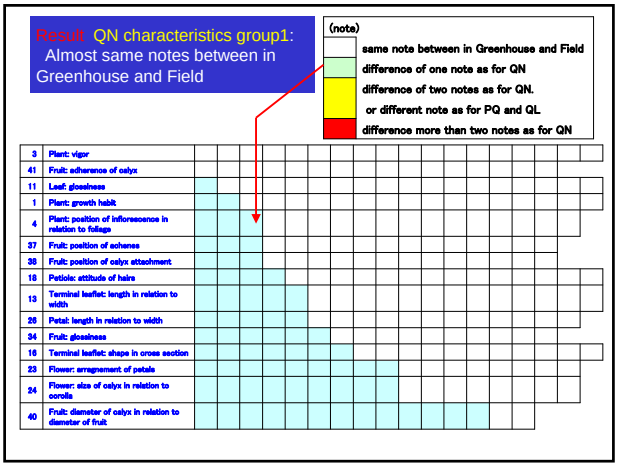
5 medium	5 medium
	
Greenhouse	Field

Photo: ‘Gariguette’

3① QN 40. Diameter of calyx in relation to diameter of fruit

3 same size	3 same size
	
Greenhouse	Field

Photo: ‘Elista’



3② QN 35. Fruit: evenness of surface

3 strongly uneven	1 even or very slightly uneven
	
Greenhouse	Field

Photo: ‘Nyohou’

3② QN 45. Fruit: cavity

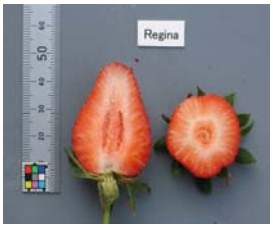
2 medium	3 large
	
Greenhouse	Field

Photo: 'Regina'

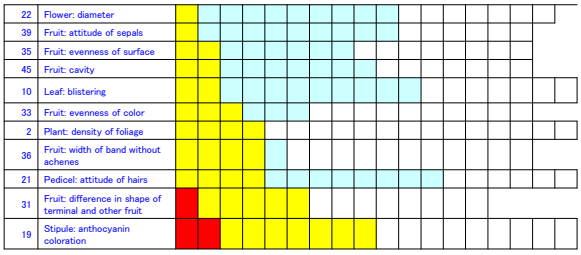
3② QN 39. Fruit: attitude of sepals

1 upward	2 outward
	
Greenhouse	Field

Photo: 'Harunoka'

Result QN characteristics group2:
Sometimes large difference between in Greenhouse and Field appeared

(note)
- same note between in Greenhouse and Field
- difference of one note as for QN
- difference of two notes as for QN.
- or different note as for PQ and QL
- difference more than two notes as for QN



QN Group 3

Characteristics	G. H.	Field
8. Leaf: size	100	227
17. Petiole: length	100	233
20. Inflorescence: number of flowers	100	60
28. Fruit: ratio in relation to width	100	87
29. Fruit: size	100	109

47. Time of beginning of fruit ripening
G. H.: From December to April
Field: May

3③ QN 17. Petiole: length

3 short	3 short
	
Greenhouse	Field

Photo: 'Cambridge favourite'

3③ QL 8. Leaf: size

4 small to medium	5 medium
	
Greenhouse	Field

Photo: 'Tochiotome'

Date: may 21 2008

8. Leaf: Size (QN)

	small	medium	large
Green house	1 Gorella, Senga Gigana, Ever berry, 2 Regina, Elista, 3 Talisman, Danor, Marie France, Elsanta, Cambridge Favourite,	4 Houkouwase, Tochiotome, Marmion, 6 Akihime, Nyohou,	7 Toyonoka, Harunoka, 8 Garigaette,
Field	1 Senga Gigana, Elsanta, Ever berry 2 Regina, Elista, 3 Marie France, Gorella, Cambridge Favourite,	4 Marmion, Talisman, Garigaette 5 Akihime, Danor, Tochiotome, Houkouwase,	8 Toyonoka, Harunoka, Nyohou,

Note 1: 1～9 are notes (status) of characteristics
Note 2: characteristics are assessed, depending on note table for greenhouse in the case of greenhouse and depending on note table for greenhouse in the case of field.

3③ QN 29. Fruit: size

8 large to very large	7 large
	
Greenhouse	Field

Photo: 'Garigaette'

29. Fruit: Size

	small	medium	large
Green house	1 Cambridge Favourite, 2 Regina, Marie France, 3 Elsanta, Elista,	4 Houkouwase, Gorella, 5 Ever berry, Nyohou, Tochiotome, 6 Marmion, Danor, Harunoka,	7 Akihime, 8 Garigaette, Toyonoka,
Field	1 Cambridge Favourite, 2 Marie France, 3 Elsanta, Elista, Nyohou,	4 Regina, Gorella, 5 Marmion, Danor, Ever berry,	7 Garigaette, Akihime, Harunoka 8 Tochiotome, Houkouwase, 9 Toyonoka,

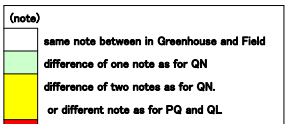
Note 1: 1～9 are note (status) of characteristics
Note 2: characteristics are assessed, depending on note table for greenhouse in the case of greenhouse and depending on note table for greenhouse in the case of field.

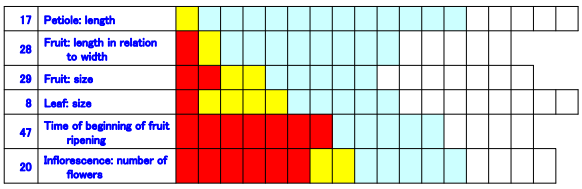
3③ QN 28. Fruit: length in relation to width

6 slightly large	5 medium
	
Greenhouse	Field

Photo: 'Akihime'

Result: QN characteristics group3:
Two kinds of note table should be provided.
Sometimes it was shown large difference between in GH and Field.





Note: characteristics are assessed, depending on note table for greenhouse in the case of greenhouse and depending on note table for greenhouse in the case of field.

Consideration

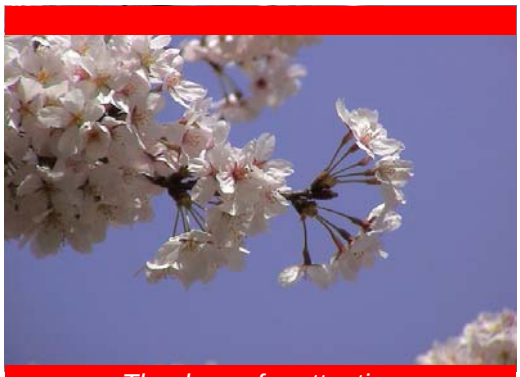
This growing test is only a case study.

Enough number of plants should be provided.
Low temperature treatment should be conducted to testing plants for greenhouse.

It was confirmed that status of some characteristics were different between in field and greenhouse.

Assessment with interim report

Categories	Example	Expectation in the interim report (2008, TWO Lisbon session)	Assessment depending on final result
QL characteristic	absent or present	Just same result will be shown in Greenhouse and Field.	○: Expectation was right.
PQ characteristic	color, shape etc.	Almost same result will be shown in Greenhouse and Field. Some characteristics may shows slightly change in different conditions, however their notes will seldom change.	○: Expectation was right. ×: not seldom but sometimes changed
QN characteristic	ratio etc. (group 1)	Almost same as the cases of PQ characteristics	△: Expectation itself was right. But PQ's was not right.
	length, width, vigor etc. (group 2,3)	Value of characteristics are often change. And in some characteristics, degree of changes may be different between varieties. Therefore, in some characteristics, notes will be change.	○: Expectation was right.



Thank you for attention
And see you again someday !

[Annex VII follows]

Presentation by Mr. Nik Hulse, Senior Examiner,
Plant Breeder' s Rights Office, IP Australia

Australian Government
IP Australia

First Varieties of a Species

Nik Hulse

Australian Government
IP Australia

Applications filed 2008/2009

- ~ 60 first applications for the species or new hybrid (35 from species indigenous to Australia*)
- ~ 22 first for the genus (8 from genera indigenous to Australia)
- three applications for new varieties of fruit species are currently under trial – *Citrus glauca*, *Morinda citrifolia*, *Garcinia humilis*

* Recent census estimates >19000 species endemic to Australia

Australian Government
IP Australia

Steps

- Check if UPOV TG already exists
- Check list of countries with practical experience
- Check GENIE for UPOV code
  - GRIN
  - APNI (for Australian species)
  - other sources
  - provide details to UPOV office

Australian Government
IP Australia

If no TG or national descriptor

- Research the genus/species to prepare a national descriptor and identify possible existing VCK's
- Australian Cultivar Registration Authority (ACRA)– for native Australian species

Australian Government
IP Australia

ACRA

- maintains a register of Australian native plants and their hybrids
- records cultivar names in accordance with ICNCP
- assesses and describes cultivars and maintain herbarium specimens, photographic collections
- publishes information on Australian plant cultivars

Australian Government
IP Australia

Example 1 - Wollemi Pine

- Discovered in 1994, thought to be extinct 90 million years ago
- Original population consists of 100 trees located in several deep ravines west of Sydney
- Successfully propagated and a company set up to market the "Dinosaur Plant"

Australian Government
IP Australia

- Company sought advice on likely eligibility for PBR protection before they lodged an application

- After investigation it was determined there was no variation in the source population and it would therefore be considered a VCK. Also the proposed variety was not distinct from the source population.

RESULT - Application not filed

IP Australia • Patents • Trade Marks • Designs • Plant Breeder's Rights

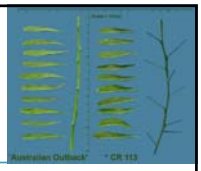
Australian Government
IP Australia

Example 2 – *Citrus glauca*

- Common name: Desert Lime
- Australian native *Citrus* species
- First application received for the species in 1996
- No TG or national descriptor
- No VCK identified
- Limited literature

IP Australia • Patents • Trade Marks • Designs • Plant Breeder's Rights

Australian Government
IP Australia



Citrus glauca

- A government research arboretum had a number of clones available

- a second accession of *Citrus glauca* was propagated to the same rootstock

- DUS trials were completed and application granted in 2004

- Growing trials now being established for an application for a second variety of the species received in 2009.

IP Australia • Patents • Trade Marks • Designs • Plant Breeder's Rights

Australian Government
IP Australia

Example 3 – *Garcinia humilis*

- Application received for a selection from a popular fruit in Bolivia. Related to the Mangosteen (*Garcinia mangostana*)

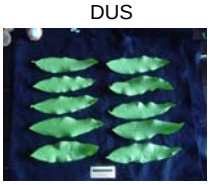
- The variety is registered in Bolivia

- Description of variety obtained from Bolivia and used as basis for national descriptor in Australia

IP Australia • Patents • Trade Marks • Designs • Plant Breeder's Rights

Australian Government
IP Australia

- A trial was established near Palm Creek far north Queensland to confirm characteristics and DUS



The trial was examined in early 2009 which enabled a draft descriptor to be tested. Further examination is proposed next season

IP Australia • Patents • Trade Marks • Designs • Plant Breeder's Rights

[Annex VIII follows]

CPVO
Community Plant Variety Office

Introduction and update on the ongoing R&D project "Management of peach tree reference collections

1

Management of peach tree reference collections

- 3-year long (2008-10) collaborative R&D project co-financed by CPVO together with its examination offices for peach:
  - France
  - Spain
  - Italy
  - Hungary
- ***Aim*** of project is to create and manage a peach tree database via the establishment of an EU *Prunus persica* tree collection structures in varietal groups, by using a common database containing phenotypic, visual and molecular descriptions.

2

Management of peach tree reference collections

- First year finalised positively, with certain responsibilities shared out amongst the project partners.
- Second year (ongoing) evolution of first year. Encouraging signs for the future.
- If succesful, project will stimulate the complete renewal of peach reference collection in each examination office.
  → Questions already being asked on how database could be maintained by project partners into the future once R&D project finalised.....

3

CPVO R&D project – CPV. 8648
Management of peach tree reference collections

UPOV Technical Working Party for Fruit Crops
(Peach) 24-25 September 2009
Angers (France)

Management of peach tree reference collections
Partners from Hungary, Italy, Spain and France

regrouping:

- peach experts
- molecular biologists
- database experts

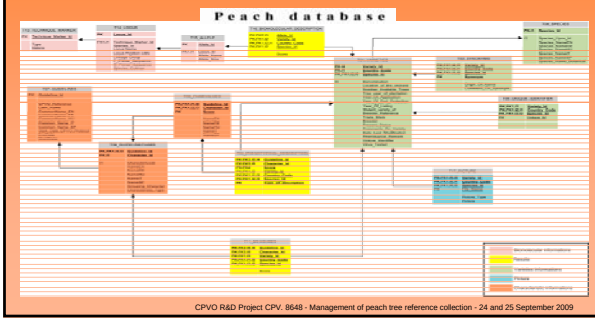
Management of peach tree reference collections
Partners from Hungary, Italy, Spain and France

CPVO R&D Project CPV. 8648 :

- kick off meeting hold in Paris on April 10, 2008
- including 506 varieties:
- 12 common to partners,
- 247 in France,
- 54 in Hungary,
- 97 in Italy
- 96 in Spain

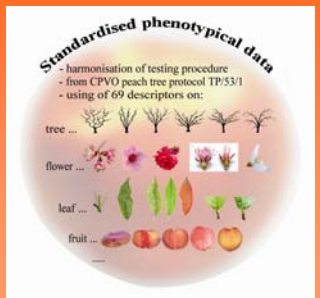
Management of peach tree reference collections
Database from a previous project on Maize …

… adaptated for Peach by GEVES Le Magneraud



Management of peach tree reference collections
Phenotypical data …

- harmonisation of testing procedure
- on the basis of TP/53/1
- using 69 descriptors
- applicant phenotypical description

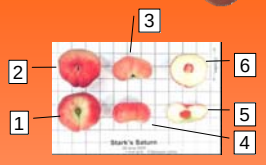


2008 process	Complete phenotypical description (TP/53/1)		
Country	Work to do	Work Partially done	Work done
Italy	0,91	99,09	0,00
Hungary	0,00	100,00	0,00
Spain	26,45	71,07	0,83
France	7,31	32,69	60,00

Management of peach tree reference collections
Production of standardized digital data … on the fruit

… pomological view

1 top view
2 bottom view
3 ventral view
4 lateral view
5 longitudinal cross section
6 transversal cross section



… mass view in harvest

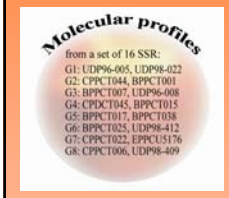
2008 process	Picture: pomologicl wiew		Picture: mass effect	
Country	Work to do	Work done	Work to do	Work done
Italy	-	-	-	-
Hungary	100,00	0,00	100,00	0,00
Spain	33,88	64,46	37,19	61,16
France	57,31	42,69	86,92	13,08

Management of peach tree reference collections
Generation of moleculat data … SSR

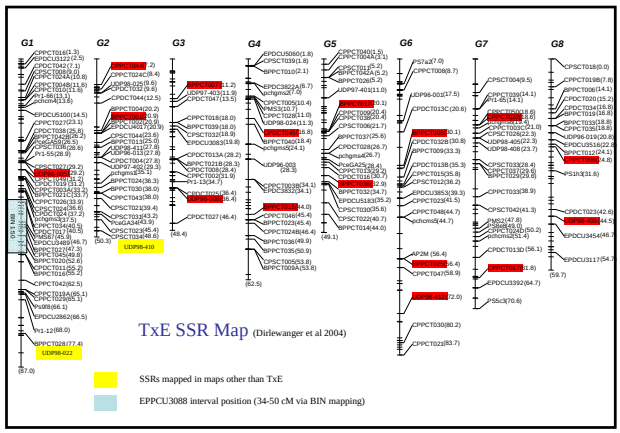
Selective criteria

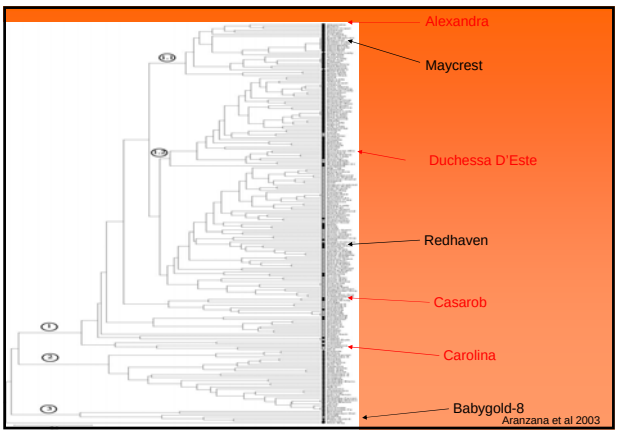
- high level heterozygosis: high number of alleles detected
- polymorph
- lisible
- cultivars genetically distant: alleles of different size detected

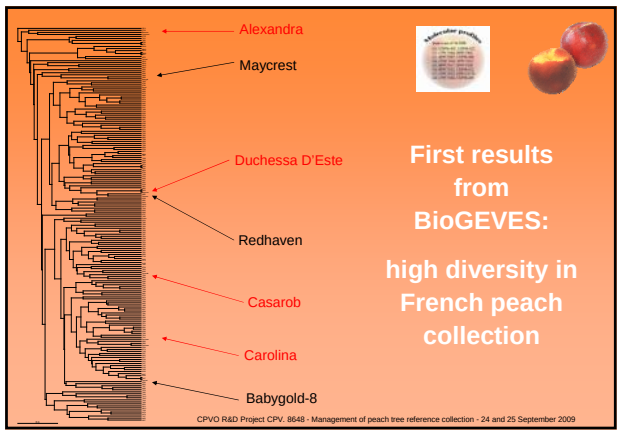
Ring test with DNA samples from a single source (Italy), a set of 12 cultivars (BioGEVES, CRA-FRU and IVIA)



CPVO R&D Project CPV. 8648 - Management of peach tree reference collection - 24 and 25 September 2009







CPVO R&D project – CPV. 8648
Management of peach tree reference collections

UPOV Technical Working Party for Fruit Crops
(Peach) 24-25 September 2009
Angers (France)

[Annex IX follows]

ANNEX IX

PRACTICAL GUIDE FOR DRAFTERS (LEADING EXPERTS) OF UPOV TEST GUIDELINES

TEST GUIDELINES FOR DISCUSSION AT THE TECHNICAL WORKING PARTY

(a) Test Guidelines to be re-discussed by the TWP

- Please use the Word version of the draft Test Guidelines prepared by the Office for the TWP session as the starting point for the subsequent year's draft (it will be correctly formatted) and incorporate all agreed changes as recorded in the TWP report; then repeat the process in (b) and (c) below
- The necessary information is provide in the UPOV website at http://www.upov.int/restricted_temporary/tg/index.html

Unless otherwise agreed at the TWP session, or thereafter by the TWP Chairperson, the timetable for the consideration of draft Test Guidelines by the Technical Working Parties is as follows:

(b) Draft for circulation to the subgroup of interested experts

Timing:	The deadline for circulation by the Leading Expert to the Interested Experts (Subgroup) is provided in an **Annex to the TWP report**	
Circulation of Subgroup draft by Leading Expert		14 weeks before TWP session
Format:	Draft Test Guidelines should be prepared using the **Electronic TG Template** (http://www.upov.int/restrict/en/tg-rom_word/index.html)	
Sources of information:	**Drafter's webpage** (http://www.upov.int/restricted_temporary/tg/index.html): – adopted TGs in Word format & Word versions of TWP drafts – TGP/7 Annex 4 "Collection of Approved Characteristics" – Subgroup of Interested Experts	
Circulation and comments:	The Leading Expert (not the Office) circulates the draft to the Interested Experts. The list of Interested Experts is provided in an **Annex to the TWP report and on the Drafter's webpage**. A deadline for comments to be made by the subgroup of Interested Experts is provided in the same **Annex to the TWP report**.	
Comments to be received from Subgroup:		10 weeks before TWP session

(c) Draft for the TWP session

Timing:	The deadline for the draft to be submitted to the Office of the Union (Office) is provided in the **Annex to the TWP report**	
Sending of draft to the Office by the Leading Expert		6 weeks
Format:	Draft Test Guidelines should be prepared with the **Electronic TG Template** (http://www.upov.int/restrict/en/tg-rom_word/index.html) All characteristics in the Table of Characteristics should be numbered in sequence without letters (i.e. 1, 2, 3, not 1, 2, 2(a), 3) (previous numbering can be shown in brackets, e.g. "5. (old 4.)" **Revisions (track change)** mode should **not** be used: Additions can be indicated (manually) by highlighting & underlining ~~Deletions~~ can be indicated (manually) by highlighting & strikethrough Different colored text should **not** be used to indicate comments / changes Illustrations should be inserted as shown on the following page	
Posting of draft on the website by the Office		4 weeks
"Final" drafts:	Drafts at the "final" stage should have no missing information from any chapter of the Test Guidelines and should include, for example, explanations of characteristics contained in the Table of Characteristics and an appropriate set of example varieties.	

In cases where *either* of the deadlines for circulation of the Subgroup draft or for the sending of the draft to the Office by the Leading Expert is not met, the Test Guidelines would be withdrawn from the TWP agenda and the Office would inform the TWP accordingly at the earliest opportunity (i.e. not later than 4 weeks before the TWP session). In those cases where draft Test Guidelines are withdrawn from the TWP agenda because of failure by the Leading Expert to meet the relevant dates, it would be possible for specific matters concerning those Test Guidelines to be discussed at the TWP session. However, to consider specific matters it would be necessary for a document to be provided to the Office at least 6 weeks before the TWP session.

TEST GUIDELINES TO BE SUBMITTED TO THE TECHNICAL COMMITTEE (TC)

- The **Office will prepare the draft** Test Guidelines for the TC.
- Please provide all missing information requested in the TWP report by the date specified in the **Annex to the TWP report**, but please **do not** provide that information in the form of revised Test Guidelines containing that information.

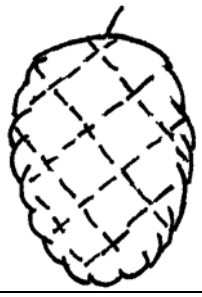
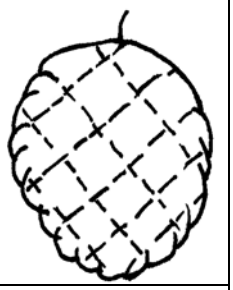
INSERTING IMAGES INTO THE TEST GUIDELINES

In order to avoid distortions of the illustrations and to minimize the size of the files, please:

(a) – **Use**: JPG, JPEG or PNG format to reduce the size of the images.
Please do not use: TIF, TIFF, BMP, TGA, PCX or JP2.

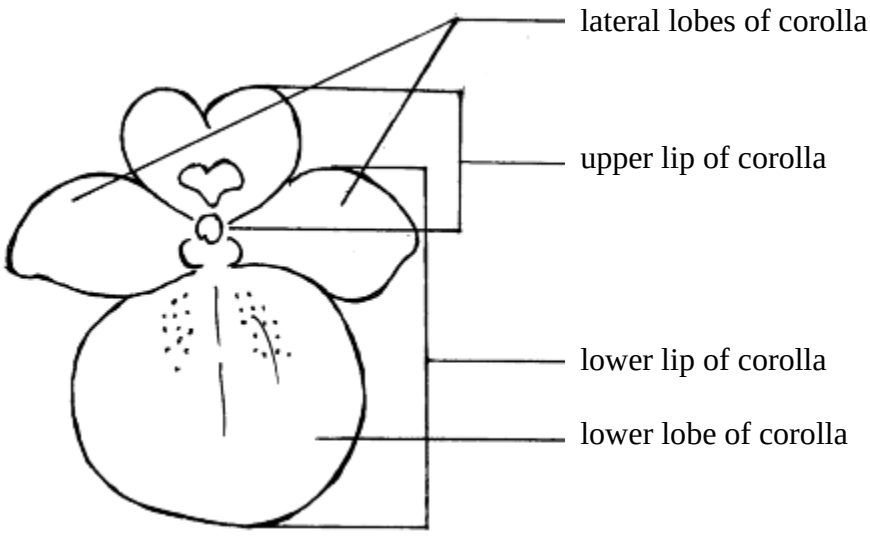
(b) – Insert the illustration for each individual state into an individual cell of a table (e.g. by using the command edit; copy and then "paste" or "paste special"). Please see Annex for further guidance.

Example

				
1	2	3	4	5
cylindrical	narrow ovate	medium ovate	broad ovate	globose

(c) – When an illustration contains several elements (e.g. drawings, arrows, figures, text, etc.) please, fix them in place, by "grouping" or by incorporating them into an image (e.g. by using the command edit; copy and inserting it using "paste special" and PNG format).

Ad. 21: Corolla: reflexing of lateral lobes
Ad. 22: Corolla: length in relation to width



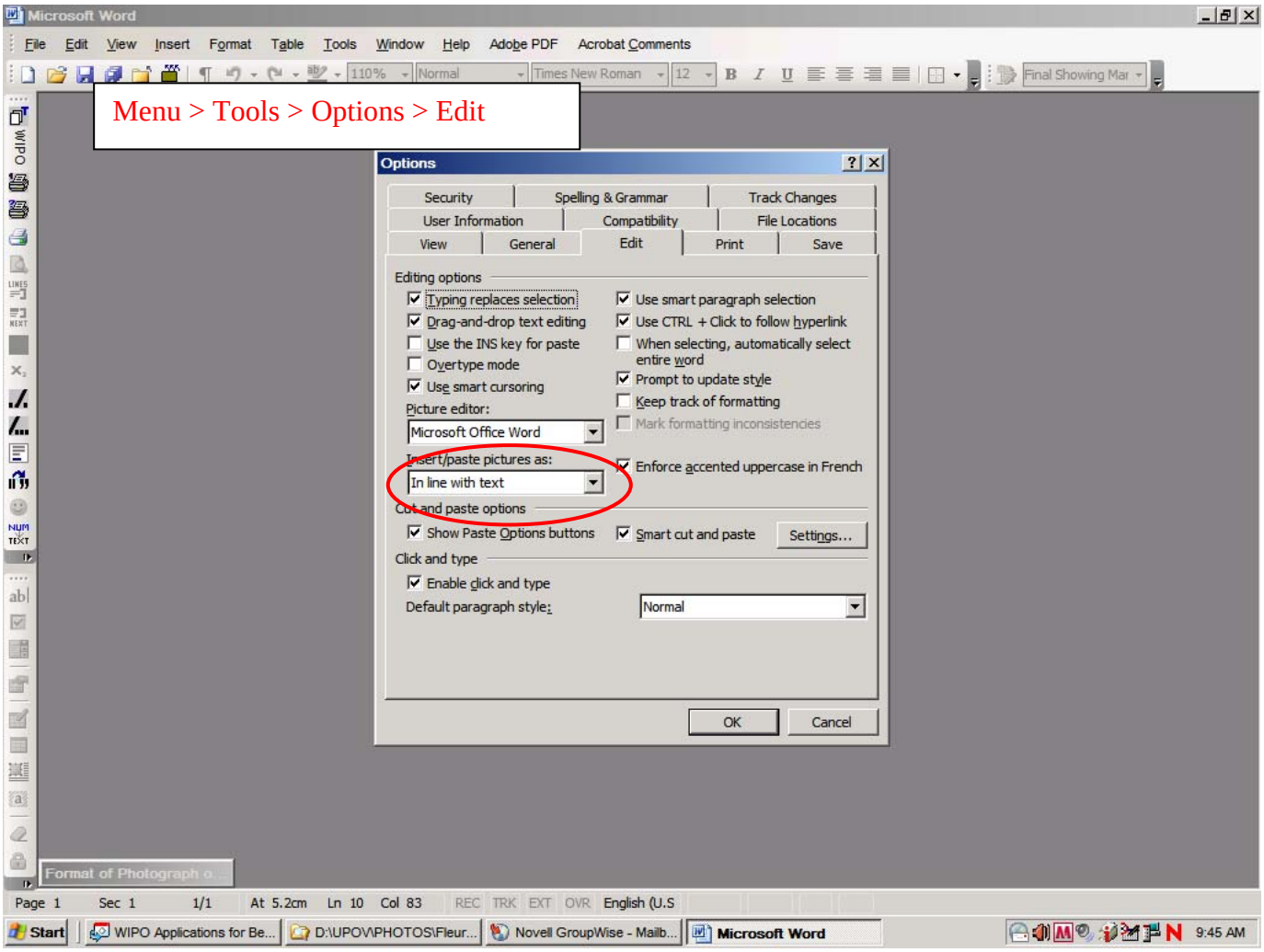
[Appendix follows]

Practical Guide for Drafters (Leading Experts) of UPOV Test Guidelines

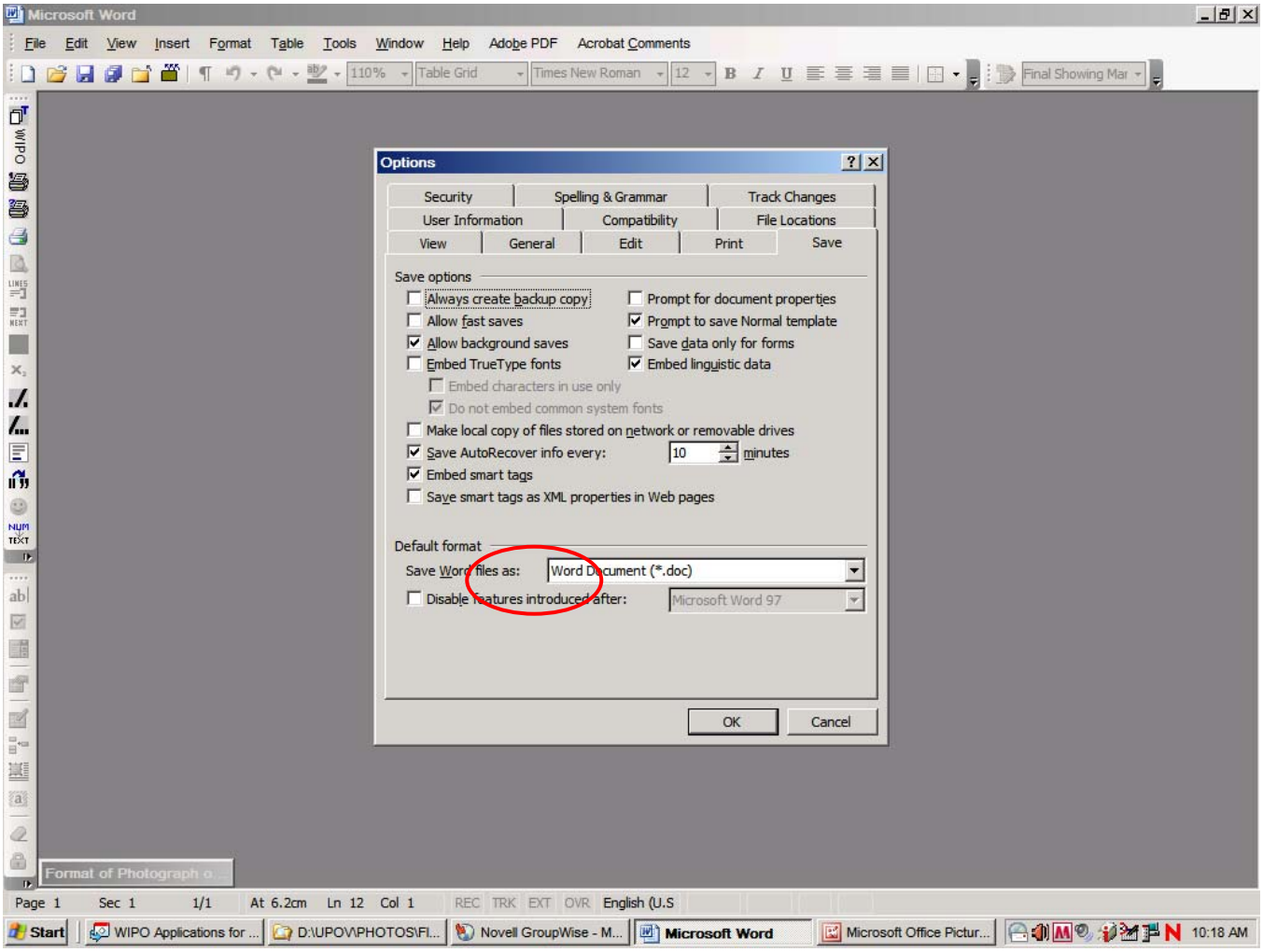
APPENDIX

page 1

IN WORD 2003 (AND ALIKE), CHECK THAT THE FOLLOWING SETTINGS ARE ACTIVATED:



and



Once the cursor is inside the table, insert the picture (Menu > insert > picture > from file >…).

If the picture is already in a Word document, cut and paste it in the table.

In previous versions of Word (Word 6.0 1995, or Word 97), use “Paste special” and uncheck the option “floating over text” on the right hand in order to paste the picture inside the table.

[Annex X follows]

ANNEX X

LIST OF LEADING EXPERTS

DRAFT TEST GUIDELINES TO BE SUBMITTED TO THE TECHNICAL COMMITTEE IN 2010

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

before November 6, 2009

Species	Basic Document	Leading expert(s)	Interested experts (States/Organizations)[1]
Banana (*Musa* spp) (Revision)	TG/123/4 (proj.7)	Mrs. dos Santos Machado (BR)	CN, ES, FR, IL, KE, QZ, ZA, IPGRI, CIOPORA, Office
Fig (*Ficus carica)*	TG/FIG(proj.5)	Mr. Chomé Fuster (ES)	AR, DE, ES, FR, IL, JP, PT, ZA, IPGRI
Papaya (*Carica papaya* L.)	TG/PAPAYA (proj.5)	Mr. Barrientos-Priego (MX)	BR, IL, JP, ZA, CIOPORA, Office
Peach (Revision)	TG/53/7 (proj.1)	Mr. Brand (FR)	AU, BG, BR, CA, CL, CN, DE, ES, HU, IT, JP, KR, MX, NZ, PL, QZ, RO, SK, ZA, CIOPORA, Office
Mandarin (Citrus; Grp 1) (Partial Revision)	TG/201/1	Mr. Chomé Fuster (ES)	AU, BR, CN, JP, KR, MX, NZ, QZ, ZA, CIOPORA, Office

[1] For name of experts, see list of participants (Annex I).

DRAFT TEST GUIDELINES TO BE DISCUSSED AT TWF/41
(* indicates possible final draft Test Guidelines)

New draft to be submitted to the Office of the Union
before August 13, 2010

(Guideline date for Subgroup draft to be circulated by Leading Expert: June 18, 2010
Guideline date for comments to Leading Expert by Subgroup: July 16, 2010)

Species	Basic Document(s)	Leading expert(s)	Interested experts (States/Organizations)[1]
*Almond (*Prunus amygdalus* Batsch) (Revision)	TG/56/4 (proj.1)	Mrs. Petzer (ZA)	CN, ES, FR, HU, QZ, RO, CIOPORA, Office
*Acerola (*Malpighia emarginata* DC)	TG/ACERO (proj.1)	Mr. Nakamura (JP) to advise Leading Expert	BR, MX, CIOPORA, Office
Actinidia Lindl. (Kiwifruit) (Revision)	TG/98/7 (proj.1)	Mr. Barnaby (NZ)	AU, BR, CN, IT, JP, KR, QZ, ZA, CIOPORA, Office
Cacao (*Theobroma cacao* L.*)*	TG/CACAO (proj.2)	Mr. Barrientos-Priego (MX)	BR, FR, CIOPORA, ISF, Office
*Dragon-fruit (*Hylocereus undatus* (Haw.) Britton et Rose)	TG/DRAGON (proj.3)	Mr. Barrientos-Priego (MX)	IL, JP, KR, CIOPORA, Office
*Gooseberry (*Ribes uva-crispa* L.) (Revision)	TG/51/7 (proj.1)Rev.	Mr. Schulte (DE)	HU, JP, NL, PL, PT, QZ, RO, SK, CIOPORA, Office
*Japanese plum (Revision)	TG/84/4 (proj.2)	Mr. Semon (QZ)	AU, BR, CA, CN, ES, FR, IT, JP, KR, NZ, PL, ZA, CIOPORA, Office
Lonicera caerulea L. var. *kamtschatica* Sevast (Blue Honeyberry)	New	Mr. Erik Schulte (DE)	CA, PL, QZ, SK, CIOPORA, Office
*Olive (*Olea europaea* L.) (Revision)	TG/99/4 (proj.1)	Mr. Venter (ZA)	AU, BR, ES, FR, PT, QZ, CIOPORA, Office
*Pecan nut	TG/PECAN (proj.6)	Mr. Labarta (AR)	BR, IL, KR, MX, ZA, Bioversity, CIOPORA, Office
*Pineapple *(Ananas comosus*)	TG/PINEAP (proj.5)	Mr. Brand (FR) and Mr. Salaices (ES)	AU, BR, JP, KE, MX, PT, QZ, ZA, CIOPORA, Bioversity, Office

Species	Basic Document(s)	Leading expert(s)	Interested experts (States/Organizations)[1]
Pomegranate (*Punica granatum* L.)	New	Mr. Chomé Fuster (ES)	MX, QZ, ZA, CIOPORA, Office
*Red and White Currant (*Ribes sylvestre* (Lam.) Mert. & W.O.J. Koch) (Revision)	TG/52/6 (proj.1)	Mr. Schulte (DE)	HU, NL, PL, PT, QZ, RO, SK, ZA, CIOPORA, Office

DRAFT TEST GUIDELINES TO POSSIBLY BE DISCUSSED IN 2011

Species	Basic Document(s)	Leading expert(s)	Interested experts (States/Organizations)[1]
Pistachio (*Pistacia vera* L.)	New	Mr. Bar-Tel (IL)	ES, ZA, CIOPORA, Office

[End of Annex X and of document]