E

TWF/43/38
ORIGINAL: English
DATE: August 3, 2012

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

TECHNICAL WORKING PARTY FOR FRUIT CROPS

Forty-Third Session
Beijing, July 30 to August 3, 2012

REPORT

adopted by the
Technical Working Party for Fruits

1. The Technical Working Party for Fruit Crops (TWF) held its forty-third session in city of Beijing, China, from July 30 to August 3, 2012. The list of participants is reproduced in Annex I to this report.

2. The TWF was welcomed by Mr. Zhang Yanqiu, Director-general of Bureau of Seed Management, Ministry of Agriculture and Director-General of Office of Protection of New Varieties of Plants, Ministry of Agriculture and Mr. Huang Faqiang, Deputy Director-General of the Science and Technology Development Center, State Forestry Administration and Deputy Director-General of Office of Protection of New Varieties of Plants, State Forestry Administration. Copies of their welcome addresses are provided in Annex II to this report.

3. The session was opened by Mrs. Carensa Petzer (South Africa), Chairperson of the TWF, who welcomed the participants and thanked China for hosting the TWF session.

Adoption of the Agenda

4. The TWF adopted the agenda as reproduced in document TWF/43/1 Rev. 2

Short Reports on Developments in Plant Variety Protection

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

5. The TWF noted the information on developments in plant variety protection from members and observers provided in document TWF/43/35 Prov.. The TWF noted that reports submitted to the Office of the Union by August 10, 2012, would be included in the final version of document TWF/43/35.

(b) Reports on developments within UPOV

6. The TWF received a presentation from the Office of the Union on the latest developments within UPOV, a copy of which is provided in document TWF/43/34.

Molecular Techniques

7. The TWF noted the information provided in document TWF/43/2, and requested to have further information from TWF experts on the use of biochemical and molecular techniques in fruit crops for purposes such as variety identification, management of variety collections and other applications The expert from Israel informed the TWF that Israel had experience in the use of biochemical and molecular techniques in Pomegranate. The TWF invited the expert from France to provide more information on the study concerning Peach and molecular markers done by the Variety and seed study and control group (GEVES). The TWF invited participants to present their experience on the use of biochemical and molecular techniques in Fruit crops at the TWF session in 2013.

TGP Documents

8. The TWF considered the TGP documents below on the basis of document TWF/43/3, in conjunction with document TWF/43/33 "Comments by the Technical Working Party for Agricultural Crops, the Technical Working Party for Vegetables and the Technical Working Party on Automation and Computer Programs on TGP documents".

Revision of TGP Documents:

TGP/7: Development of Test Guidelines

(i) Summary of revisions agreed for document TGP/7

9. The TWF considered document TWF/43/11 and agreed that chapter 2.3: should read "The minimum quantity of plant material, to be supplied by the applicant should be: […]."

10. The TWF noted that the information provided by the Office of the Union concerning the quantity of plant material required would be available to TG experts on the TG Expert webpage.

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

11. The TWF considered document TWF/43/12 and received a presentation by an expert from Germany on the "Number of Plants to be examined". The TWF noted the comments on the Guidance Note to be included in TGP/7, Section 4.1.4, contained in Annex II. The TWF highlighted that the number of plants in the variety collection depended on how similar the candidate variety was to the reference varieties and whether it was clear and easy to determine distinctness.

Guidance note to be included in TGP/7, Section 4.1.4

(iii) Guidance for method of observation

12. The TWF considered document TWF/43/13.

GN 25 - Recommendations for conducting the examination

13. The TWF agreed with the proposed text for guidance on method of observation as set out in the Annex to document TWF/43/13 and proposed to modify the text of paragraph 7 to read as follows:

"(b) Number

7. If a characteristic is observed by counting (for example 'Number of lobes', observed by counting), the assessment is a measurement (M). If a characteristic is observed by estimation (for example 'Number of lobes', observed by estimation), the assessment is a visual observation (V)."

(iv) Example Varieties

14. The TWF considered documents TWF/43/14 and TWF/43/14 Add and received a presentation by an expert from France.

15. The TWF proposed that a three step approach be taken into consideration by the Leading Expert:

Step 1: to ascertain whether example varieties were necessary for a specific characteristic;

Step 2: if considered necessary, those example varieties that could be used as common or universal references should be identified;

Step 3: to establish whether a regional set of example varieties were necessary for the specific Test Guidelines.

16. The TWF proposed that consideration be given to allowing applicants to suggest their choice of example varieties in the Technical Questionnaire, to assist in the clarification of the expression of their varieties.

(v) Providing Photographs with the Technical Questionnaire

17. The TWF considered document TWF/43/15 and received a presentation by an expert from the European Union. The TWF took note of the concern expressed by the representative of European Seed Association (ESA) during the TWA with regard to the submission of photographs for vegetable species.

18. The representative of CIOPORA support the concern expressed by ESA at the TWA.

19. The TWF noted the information provided by the delegation of Japan concerning a manual developed for the East Asia Plant Variety Protection Forum, on how to take photographs for Plant Variety Protection applications and DUS testing.

20. The TWF suggested that the following sentence of the proposal for new ASW 16 in the Annex to documents TWF/43/15 should read:

"A representative color photograph (image) of the variety displaying its main distinguishing feature(s), must accompany the Technical Questionnaire. [A photograph would provide ~~be provided according to the specified requirements (see [authority reference to be added]) in an appropriate format will help the examination authority to prepare its examination of distinctness in a more efficient way~~, ~~by giving~~ a visual illustration of the candidate variety which supplements the information provided in the Technical Questionnaire. ~~The information provided by the photograph may be used in the selection of the most similar varieties of common knowledge to be grown alongside the candidate variety in the trial, as well as to group the variety optimally within the DUS trial~~.]"

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

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

21. The TWF considered document TWF/46/16 and noted the modifications made in the "New Section 2 - Data to be recorded" and agreed that the document should be submitted to the TC for approval at its next session.

TGP/8 PART II: DUS TRIAL DESIGN AND DATA ANALYSIS
New Section – Minimizing the Variation due to Different Observers

22. The TWF considered document TWF/43/24.

TGP/8 PART II: DUS TRIAL DESIGN AND DATA ANALYSIS
New Section – Reduction of the Size of Trials

23. The TWF considered document TWF/43/21.

TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION
Section 3 - The Combined-Over-Years Criteria for Distinctness (COYD)

24. The TWF considered document TWF/43/23.

TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION
Section 3, Subsection 3.6 - Adapting COYD to Special Circumstances

25. The TWF considered document TWF/43/20.

TGP/8: PART II: TECHNIQUES USED IN DUS EXAMINATION
Section 4 - 2X1% Method - Minimum Number of Degrees of Freedom for the 2x1% Method

26. The TWF considered document TWF/43/22.

TGP/8: PART II: TECHNIQUES USED IN DUS EXAMINATION
New Section 10 - Minimum number of Comparable Varieties for the Relative Variance Method

27. The TWF considered document TWF/43/26.

TGP/8: PART II: TECHNIQUES USED IN DUS EXAMINATION
New Section 10 - Examining DUS in Bulk Samples

28. The TWF considered document TWF/43/28. The TWF agreed that as long as practical examples could not be provided, no specific guidance for the assessment of uniformity was necessary.

TGP/8: PART II: TECHNIQUES USED IN DUS EXAMINATION
New Section: Methods for Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions

29. The TWF considered documents TWF/43/30 and TWF/43/30 Add. and received a presentation made by the Office containing a summary of different approaches for transforming means into notes for variety descriptions.

30. The TWF expressed concern that a specific country may have difficulty in describing the full range of states of expression of a characteristic because some varieties might not be available. A universal set of example varieties, the use of historical data and experience of the experts could be a way to address this issue.

31. The TWF recommended that consideration be given to the construction of a meaningful range of expression in the case of a limited range of available varieties.

TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION
Section - Guidance of data analysis for blind randomized trials

32. The TWF considered document TWF/43/17.

33. The TWF requested experts to provide more examples of the use of data analysis for blind randomized trials, which would be considered in the development of guidance.

34. The TWF agreed that the guidance should provide more precise explanation concerning cases in which this method is appropriate and how the use of this technique would assist in DUS examination.

TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION
New Section - Guidance for Development of Variety Description

35. The TWF considered document TWF/43/18 and noted that the last sentence of paragraph 8.1 should be redrafted:

> “[If for a given reason the result from one trial is preferred, also for other characteristics the results from that trial should be considered a ‘leading]”

36. The TWF agreed that the guidance should be further developed taking into account the comments provided by other TWPs.

TGP/8: PART II: TECHNIQUES USED IN DUS EXAMINATION
New section: Statistical Methods for Visually Observed Characteristics

37. The TWF noted the document TWF/43/29.

TGP/14: Glossary of Terms Used in UPOV Documents

(i) Revisions of existing Sections of document TGP/14: Section 2: Botanical Terms, Subsection 2: Shapes and Structures

38. The TWF considered document TWF/43/27.

39. With regard to Section 2: paragraph 2.8 perspective from which to observe plant shapes, the TWF agreed with the text in Annex I and proposed to add examples and explanations in TGP/14. Experts from Mexico and New Zealand would provide information.

40. With regard to Section 2: Definition for Botanical Terms, the TWF proposed to read “Pedúnculo” in the Spanish translation for “Peduncle”. “Peciolulo” in the Spanish translation and “Blattfiederstiel” in the German translation for “Petiolule”.

41. The TWF requested clarification on the term “single flowers”.

42. With regard to revision of “components of shape: states of expression for ratios”, the TWF:

- appreciated that their earlier proposal to have all states from “compressed to elongated” had been agreed upon by other TWPs;
- requested that the changes proposed be consistently updated throughout document TGP/14;
- proposed that the ratio diameter/height be changed to ratio length/width to be consistent throughout document TGP/14.

43. With regard to Section 2: paragraph 1.3, the TWF requested further elaboration on the definition for “base”, providing an example, indicating the precise orientation of base.

44. The TWF noted the guidance on use of composite characteristics for determining distinctness and uniformity contained in the Annex V to document TWF/43/27.

(ii) New Section for Color Characteristics

45. The TWF considered document TWF/43/25.

46. With regard to paragraph 2.1, the TWF agreed that the example for “intensity of color” in the table should be reviewed and reference to “orange” be deleted.

intensity	light yellow, medium yellow, dark yellow, ~~light orange, medium orange~~

Variety denominations

47. The TWF noted the developments reported in document TWF/43/4.

Webcasting of UPOV Sessions

48. The TWF considered document TWF/43/19, but highlighted the limitations of electronic communication tools with large audiences when active contributions are necessary.

Uniformity assessment

(a) Method for calculation of COYU

49. The TWF noted the information provided in document TWF/43/10.

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

50. The TWF considered document TWF/43/9 Rev.

51. The TWF noted the different approaches and the similarity between the approaches used by different UPOV members. It agreed to propose that the Technical Working Party on Automation and Computer Programs (TWC) be invited to advise whether to use individual or combined results.

52. The TWF requested that the expert from New Zealand would provide a presentation on the testing of uniformity of apple varieties arising from mutations, at the TWF meeting in 2013.

53. The TWF agreed that the definition of growing cycles should be more precise and that, in the future, a detailed description of the way that the examination was to be conducted should be included under "Matters for future consideration".

Experience with new Types and Species

54. The TWF noted information from the representative from CIOPORA about new interspecific hybrids of cherry *x* plum, and pear (crosses between European and Asian types).

55. The TWF was informed by the expert from Israel about a new species being tested named *Argania spinosa (*L.) Skeels. The expert from Israel agreed to make a presentation about that species at the TWF session in 2013.

Proposals for new Test Guidelines to be drafted for the next TWF session

Avocado rootstocks (Mexico)
Walnut (China)

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

*Papaya *(Carica papaya L.) (Revision)*

56. The subgroup discussed documents TG/264/2(proj.4 and TWF/43/37, presented Mr. Alejandro Barrientos-Priego (MX) and agreed the following:

Chars.1,2,4.7.8.9.11,16,20,21,22,23.24,27,28,31,32,34,36,38,39,40,41,43,44,46	to review example varieties according proposal in document TWF/43/37
Char.9	to read: "very elongated" (1), "moderately elongated" (2), "slightly elongated" (3)
Char.14(TWF/43/7) should be as Char.13 Petiole: length	to add example variety BT-K for state 3 (as proposed in document TWF/43/37)

Chars.17,18, 19	The Leading Expert proposed to "delete" the characteristics: 17. Proportion of male plants 18. Proportion of hermaphrodite plants 19. Proportion of female plants The TWF received the confirmation from the subgroup for Papaya that the proportion of female and hermaphrodite plants is highly influenced by environmental conditions, mainly depending on availability of water and temperature. Therefore stability cannot be ensured for those characteristics, and they are not suitable for DUS examination. Since there are enough characteristics to ensure discrimination of varieties, the TWF agreed to delete those characteristics.
Char.39	to read: , “stellate type 1”(3) instead of ”star-shaped”, “stellate type 2”(4) instead of ”stellate”
Char.48	to delete example variety BT-3 for state 3
8.1(b)	to read “…or single flower has appeared.”
8.1(d)	to be deleted
8.1(f)	to read: “ Ripe fruit: …”
Ad.7,8,10	to move the indication on the drawing
Ad.17,18,19	to be deleted
Ad. 22	to read: “This characteristic only applies to hermaphrodite or female varieties. Observations on flower length should be made during the first flower opening, at the start of anther dehiscence in hermaphrodite varieties, and in the case of female varieties at midday’
Ad. 23	to read: “This characteristic applies to all types of plants, regardless of the sex. Observations on flower color should be made during the first flower opening.”
Ad.34	to move illustration to Ad.32

*Pineapple *(Ananas comosus L.Merr.)*

57. The subgroup discussed documents TG/PINEAP(proj.10) and TWF 43/32, presented Mr. Richard Brand (FR) and agreed the following:

5.3	*to read:* The following have been agreed as useful grouping characteristics: *(a) Plant: growth habit (characteristic 1)* *(b) Leaf: anthocyanin coloration (characteristic 6)* *(c) Leaf: raised margin (characteristic 8)* *(d) Leaf: spines (characteristic 9)* *(e) Fruit: shape (characteristic 31)* *(f) Fruit: predominant color (characteristic 34)* *(g) Fruit: color of flesh (characteristic 39)*
6.5	to add reference to growth stages to be transferred from 8.1 to 8.3 and modified as below: - 1-T: At fully vegetative growth stage, before flower emergence - 2-A: Anthesis stage - 3-I: Immature fruit stage, before physiologically ripe - 4-M: Maturity stage, when physiologically ripe
Char.8	to read “Leaf: piping” instead of ”Leaf: raised margin”
Char.14	to be indicated as “3-I” (d) instead of ”2-A” (c)
Char.37	to read ” Fruit: fruitlet apex “ with the states: sunken (1), flat (2), prominent (3) ; to add appropriate photos for Ad.37
8.1 (a)	to read: (a) (Characteristics 1 to 13) Floral emergence is obtained from provoked artificially floral induction. Floral induction should be invoked artificially about 36 to 54 weeks after planting depending on location and varieties.
8.2	last synonym for example variety “Red Spanish” to be checked
Ad.8	“Piping” as named by Collins and Kerns (1946). The meaning is that the lower epidermis is folded over the leaf edge and extended over the upper surface, to produce a narrow silvery stripe”

Ad.11	to have illustration (option 1 - see Annex to document TG/PINEAP(proj.10))
Ad.14	to read: Floral bracts are borne on the fruit at the base of each fruitflet.
Ad.31	to read: Fruit: shape
Ad.43	to read: “To be assessed with penetrometer (after removal of the skin and eyes).”
Ad.47	to read: "Acidity is considered as free acids content and determined by titration” The TWF supported maintaining Char. 47.
Ad.48	to read: Sweetness is considered as total soluble solids content and determined with a refractometer
9.	to read: ”Journal of Heredity” in the second position and the added position CNPMF (CUNHA, G. A. P. da; CABRAL, J. R. S; SOUZA, L. F. da S. (Organizadores). O abacaxizeiro – cultivo, agroindústria e economia. Brasília: Embrapa Comunicação para Transferência de Tecnologia, 1999. P. 17-51 to be checked

Discussion on Draft Test Guidelines

Acca sellowiana *(Berg) Burret*

58. The subgroup discussed document TG/ACCA(proj.1), presented by Mr. Barnaby (New Zealand), and agreed the following:

Common names	to be checked
2.3	to read 5 trees
3.4.1	to read 5 plants
4.1.4	to read 5 plants, to delete “disregarding any off-type plants”
4.2.2	to read 5 plants
4.3.2	to delete “seeds or“
Char. 1	to add “Alcantara” as example variety for state (4)
Char. 3	to have 3 states
Chars. 3, 4	to delete state 1 and 9
Char. 5	to delete state 1
Char. 6	to be checked
Char. 7	to consider deleting
Char. 9	to check states (4) and (5)
Char.12	to delete
Char.13	to be indicated as PQ
Char.14	to delete (*) and to check
Char.15	to verify place of (+) to have states: whitish (1); light green (2); medium green (3); greyish (4) and to be checked in relation to the proposed new characteristic for glaucosity
New Char. before Char. 16	to read: “Petiole: length” with states: short (1), medium (2), long (3)
Chars. 16 to 18	to review flower Chars.
Char. 19	to delete states (1) and (9)
Char. 20	to consider having states: short (5), medium (7); long (9) and to provide example varieties for state (7)
Char. 21	to provide example variety for state 7

Char. 23	to be indicated as PQ and to provide example varieties
Chars. 25, 26	to delete (*)
Char. 27	to provide photo for elliptic (1)
Char. 29	to be checked
Char. 31	to add (+)
Chars. 33 to 36	to be checked
Char.37	to add (+) and to check method of observation
Char. 38	to be checked
Ad. 8.1	to check (c) and (d)
Ad. 19	to read: “Fruit weight is determined by a sample size of 25 harvested fruits, 5 each from five trees, at harvest time.”
Ad. 27	to provide photo for elliptic (1)
Ad. 32	to reverse photo for state (2)
Ad. 36	to improve illustration
9.	to check literature

Apple rootstocks *(Malus Mill.) (Revision)*

59. The subgroup discussed document TG/163/4(proj.2), presented by Mr. Hennie Venter (South Africa) by WebEx®, and agreed the following:

2.2	to delete “of 5”
2.4	to read “5 one-year-old rooted trees and/or”
4.1.4	to read: “…the number of parts to be taken from each of the plants should be 2.”
5.3	to read: Plant: vigor (1) Plant: habit (4) Young leaf: anthocyanin coloration (19) Leaf blade: attitude in relation to shoots (21) Leaf blade: incisions of margin (27)
Char. 2	to reduce to 5 states: (1) to (5)
Char. 3	to reduce to 5 states: (1) to (5)
Char. 4	to delete state (5)
Char. 5	to have states (1), (2), (3)
Char. 7	state (1) to read: “absent or weak”
Char. 8	to reduce to 3 states: (1), (2) (3) to delete example variety “MM 106” for state (3) and move it to state 2
Char. 9	to reduce to 3 states: (1), (2), (3)
Char. 10	to reduce to 5 states (1) to (5)
Char. 11	to reduce to 3 states (1), (2), (3)
Char. 12	to delete word “predominant” from title
Char. 13	to reduce to 3 states (1), (2), (3)
Char. 15	to add note (a) and to provide example variety for (3)
Char. 16	to reduce to 3 states (1), (2), (3)

Char. 18	to read: “Plant: spines” and state (1) to read: “absent or few” and to move to after Char. 4 and to add note (b)
Char. 19	to consider wording of title: “Young leaf: [degree, amount, intensity of] anthocyanin coloration”
Char. 20	to consider indicating as QL and reducing to 2 states : reddish brown (1) and purple (9) – experts to check
Char. 21	to add (*) and to reduce to 3 states (1), (2), (3)
Char. 24	to reverse order: “very slightly elongated” to “very strongly elongated”
Char. 25	to add (+)
Chars. 29, 31, 32,	to add (*)
Char. 30	to reduce to 3 states (1), (2), (3)
Char.34	to read: “Leaf: length of petiole to length of blade” and to have states: short (1), medium (3), long (5)
Char. 35	to reduce to 3 states (1), (2), (3) and to add note (d)
Char. 36	to add (d) and to consider reducing to 3 states
Char. 37	to delete “predominant” and state (2) to read “whitish yellow” and to add example varieties for state (1) and (2)
Char. 39	to reduce to 4 states: (1), (2), (3), (4)
Char. 42	to read “Fruit: ratio length/width”
Char. 43	to read “Fruit: shape”
Char. 46	to have example variety “B9” for state (1)
Char. 48	to add (+)
Char. 52	to move before Char. 37
Char. 53	to be indicated as VG/MG and to provide example varieties
Char. 54	to check with JP expert whether to delete
Ad.. 17	to read: “All observations on trees should be made on the upper third of the lateral shoots. The color observed should be of the underlying skin underneath the pubescence.”
TQ 5.1	to add Char. 3 “Plant: number of shoots”
TQ 6.	to provide an example

Cocos nucifera *L.*

60. The subgroup discussed document TG/COCOS(proj.1), presented by Mrs. Machado (Brazil), and agreed the following:

1	to read: These Test Guidelines apply to all varieties of Cocos nucifera L. including giants type, dwarf type and hybrid giants x dwarf, controlled pollination
2.3	to read: 20 fruits only
All TG	to change tree by palm through all document
3.4.1	to read Each test should be designed to result in a total of at least 12 palms
4.2.1.1	to be deleted
4.2.1.2	to read: For the assessment of uniformity of controlled pollinated varieties, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 12 plants, 1 off-type is allowed.
5.3	to be reviewed

Table of Chars.	to add or check example varieties to check whether sufficient number of (*) characteristics
Char. 1	to read: Young plant: color of shoot
Char. 2	to read: Young plant: number of leaves
Char. 3	to add (+) in the table of characteristics
Char. 4	to read: Leaves attitude of lower leaves, to be indicated as PQ, to read states Upwards (1), Outwards (2), Downwards (3), to adjust illustration accordingly
Char.5	to read: Stem: bole
Char. 6	to read: Stem: diameter of the bole, to add (+), to have states 1,3,5
Chars. 7, 8	to be indicated as VG/MS
Chars.9, 10	to be deleted
Char. 12, 13	to provide photos
Char.14	to be indicated as PQ
Chars. 17, 18	to add (+): halfway of the rachis
Char. 19	to read: Leafleaflet intensity of green color, to be indicated as VG, to read light (1), medium (2), dark (3)
Char.20	to be indicated as QN and MG, to add (+) , to read: Time of appearance of first inflorescence
Char. 24	to read note (3) for state “few”
Chars. 25, 27, 29	to be deleted
Char. 28	to add illustration and explanation
Chars. 29, 30	to be deleted
Char. 31	to read: Bunch: number of fruits
Char. 32	to review explanation
Char.33	to be indicated as MS, (d) to be replaced by (e)
Chars.34, 35, 36	to be deleted
Char.37	to read: Fruit: shape, to Review state of expression according TGP 14, to put illustration in form of a grid, (d) to be replaced by (e)
Char. 38	to be deleted
Char. 39	to read: Fruit: ratio weight husk/weight nut, to be indicated as QN, to read low(1), to have states 1,3,5, (d) to be replaced by (e)
Char. 40	to be deleted
Char. 41	to read: Fruit: color, to be indicated as PQ, (d) to be replaced by (e)
Char. 42	to be deleted
Char. 43	to review illustration and tu put in a form of a grid, states according to TGP 14, to read elliptic (1), ovoid (2), circular (3), oblate (4), (d) to be replaced by (e)
Char. 44	to read: Nut: weight, to read low(1), medium (2), high (3), (d) to be replaced by (e)
Chars. 45,46	to be deleted
Char. 47	to read: Shell: thickness, (d) to be replaced by (e)
Char.48	to read Meat : weight, (d) to be replaced by (e)
Char.49	(d) to be replaced by (e)
New after Char. 49	to read: Consistency of meat, to be indicated as QL with state solid (1), lose (2), to add photo

Chars. 50, 51,52	to be deleted
8.1	to be reviewed, with (a), (b), (c), (d) and (e)
Ad. 1	to read: Young plant: color of shoot : should be observed as soon as shoot emergence
Ad. 4, Ad. 6	to be adjusted
Ad. 7, 8	to read: to be measured at 11 leaf scars.
Ad. 15	to delete: Measure from the base of the petiole to the tip and to read: measure excluding the petiole, to review the illustration
Ad. 29	to add : measured by caliper
Ad. 43	to review accordingly
TQ. 6	to read Example instead of GHN

*Fortunella *Swingle*

61. The subgroup discussed document TG/FORTU(proj.2), presented by Mr. Yamaguchi (Japan), and agreed the following:

3.3	The last sentence ”Trees should only be pruned in the year of planting to ensure good branch formation” to be moved move to Add .3
4.1.4	to delete “disregarding any off-type plants”
Table of Chars.	to check and add example varieties to check (*)
Char.1	to be deleted
Char.2	to be indicated as QN, explanation to be reviewed
Char.3	to add (+) and explanation
Char.4	to add example variety for state 7
Char. 10	to be deleted
Char. 13	to be indicated as QN; to read right angled for state 2
Char. 17	to be indicated as VG
Char.21	to read “circular” for state 2
Char. 22	to be indicated as QN; to read medium orange for state 2
Chars. 27, 29, 30, 31	to add (+) and provide explanation how to observe as for Char. 27 to be provided
Char. 28	to check whether all varieties are self-incompatible; to read none or very few (1), medium (2), many (3)
Char. 29	to reverse example varieties and to read: Nagami for state 1 and Meiwa for state 2
Char. 30, 31	to be indicated as MG

* Indicates possible final draft Test Guidelines

8.1	(a) to be deleted (c) to be (b) to read One-year-old shoot: All observations on the one-year-old shoot should be made on well developed shoots (excluding water shoots) at the equatorial part of outer side of the plant." (f) to be (e) to read "Fruit: All observations on the fruit should be made on the first fruit, which has reached maturity and is ready for consumption"
Ad.1	to be deleted
Ad.2	photos to be replaced by drawing
Ad.13	to read right angled for state (2); to improve photo for state (3)
Ad. 16	to move arrow
Ad. 21	to improve explanation- to review the grid
Ad. 24	to read : "The sweetness is considered as the total soluble solids content, and is determined with refractometer."
Ad.25	to read: "The acidity is considered as free acids content, and is determined by titration."
Ad. 26	to read "The sweetness is considered as the total soluble solids content of juice from peeled skin at the middle part of fruit determined by refractometer."
Ad. 29	to read: "seed embryony should be determined by observation of embryony after removing seed coat"
Ad. 30	to read: "the beginning of flowering is considered as the time when 10% of the flowers are fully open"
Ad. 31	to read: "the beginning of fruit ripening is considered as the time when 10% of the fruits are ready for consumption."

*Litchi *Sonn*

62. The subgroup discussed document TG/LITCHI(proj.2), presented by Ms. Lu Xin (China), and agreed the following:

Cover page	UPOV code: to read LITCH_CHI
Char. 1	to be indicated as PQ and to have notes: 1, 2, 3
Chars. 4, 6, 19, 30	to be indicated as VG/MS
Char. 9	to have states: yellow green (1); green (2); reddish green (3); brown (4) and to provide example varieties for state (3)
Char. 10	to read: "Leaf: predominant arrangement of leaves" and to be indicated as QN with the states: "opposite (1); both opposite and alternate (2); alternate (3) and to replace example variety in state (3)
Char. 13	to revise order of states to read : lanceolate, elliptic, oblong, ovate, obovate and reorder example varieties and states accordingly
Char. 17	to add (+)
Char. 18	to add (+) and to have states : broad (7) and very broad (9)
Char. 19	to be indicated as VG/MS and to revise states: strongly elongated (1), moderately elongated (3), weakly elongated (5) and to consider the order of states
Char. 20	to read: "strongly asymmetric" for state (3)
Char. 21	to clarify/ According to TGP 14/ p. 33/35 and to indicate with circle where to be observed in the illustration
Char. 22	to move Char. 22 before Char. 21 and to read: "Leaflet: tip" and to check consistency of order of states with other guideline and state (2) to read "acute" and state (3) "acuminate"
Chars. 23 to 27	to delete word "blade" from Char. title

Char. 23	state (3) to read: “strongly asymmetric”
Char. 27	to add (+) and provide explanation “Contrast of color to be observed…”
Char. 30	to have states: strongly elongated (1), moderately elongated (3), weakly elongated (5) and to consider the order of states
Char. 32	to read: “Inflorescence: density of flowers”
Char. 36	to review states and order (see TGP 14) and to revise order to: elliptic, circular, ovate, cordate
Char. 37	to read: “symmetrically depressed” for state (3) and “asymmetrically depressed” for state (4)
Char. 38	to revise illustration by using illustration from state (3) and to indicate where to be observed using lines/arrows
Char. 39	to read: “Fruit: conspicuousness of suture” and to provide explanation on color and depth
New Char. after Char. 40	to consider new Char. combining 41 and 43 to be indicated as QN and to read: “Fruit: appearance of skin protuberances” with states: smooth or slightly raised” [Ad. 41, picture 1]; moderately raised [Ad. 41, picture 2]; strongly raised [Ad. 41, picture 3] and to move boxes on illustration to side and remove arrows with close up photos and to add explanation “to observe at the equatorial zone” and to provide example varieties
Char. 41	if new Char. above NOT created, to read: “Fruit: appearance of skin segments” and to check whether to replace state: “flattened” with “dome-shaped”
Char. 45	to replace example variety for state (3)
Char. 46	to provide explanation: “Seed should be assessed at time of harvest maturity.”
Chars.47	to provide illustration in the form of a grid
Char 48	to read: “Fruit: color of seed” and to add notes (1), (2), (3) and state (2) to read: “medium brown”
Char. 50	to be indicated as VG/MG and to read: “Fruit: sweetness of flesh” and to update explanation about how to assess and to have notes 1, 3, 5
New Char. before Char. 51	to be indicated as VG/MG and to read: “Fruit: acidity of flesh” with states : low (1) ; medium (3) ; high (5) and to provide example varieties and to add (+) with explanation about how to assess
Char. 51	to have states: low (1); medium (2); high (3)
Char. 52	to check if suitable characteristic and, if yes, to reword Char. and revise explanation and delete (*)
Char.53	to delete (d) and revise explanation to read: “The beginning of flowering is considered as when 10% of the inflorescences have started to flower.”
Char. 54	to be indicated as MG
8.1 (c)	to change “leaflet blade” and “leaflet” to “leaf”
Ad. 11	to replace “Petiole leaflet” with “Petiolule” and to replace “Petiole of Leaf” with “Petiole”
Ads. 16, 17, 18	title to read: “Ad.16. Leaflet: length of petiolule”; Ad. 17. Leaflet blade: length”, Ad. 18. Leaflet blade: width”
Ad. 36	to check for consistency with grid in other TGs (see TGP/14)
Ad. 38	to indicate where to be observed in illustration
Ad. 50	explanation to read: “The sweetness should be determined by using a refractometer.”
Ad. 51	to replace “Weak” with “Low” and “Strong” with “High”
Ad. 53	explanation to read: “The beginning of flowering is considered as when 10% of the inflorescences have started to flower.”
TQ 5	to update accordingly
TQ 6	to delete “e.g.”

Mandarins *(partial revision)*

63. The TWF noted document TWF/43/36 and received a presentation from Mr. Jean Maison (European Union), the coordinator of the subgroup. The experts from Spain and Morocco reported on their progress to date. The TWF noted that results obtained from the ring tests made on the basis of the agreed methodology would be presented at the TWF in 2013.

64. The TWF noted that the decision concerning whether to continue the ring tests for a second year would be made once the results of the tests for the first year had been obtained.

65. The TWF expressed its appreciation of the work done by Mr. Jean Maison (European Union), as coordinator of the subgroup.

66. A copy of the presentations is provided as document TWF/43/36 Add.

Peach *(partial revision)*

67. The TWF discussed documents TG/53/7 and TWF/43/31, presented by Mr. Brand (France), and agreed the following:

Cover page	Spanish common name to read: “Duraznero”
Chapter 1 “Subject of these Test Guidelines”	To check standard wording from TGP/7
Chapter 2.3	to accept proposed new wording provisionally, subject to clarification on whether this reduction is statistically acceptable from statistical experts. The TWF noted that the reduction to “3 grafted trees” was supported by CIOPORA.
Chapter 3.4.1	to accept proposed new wording subject to clarification as in Chapter 2.3 above
Chapter 3.5	to accept proposed new wording subject to clarification as in Chapter 2.3 above
Chaper 4.2.2	to accept proposed new wording subject to clarification as in Chapter 2.3 above
Chapter 5.3	to accept proposed new wording
Chapter 7	to revise as indicated below (with missing example varieties added)

Char. 1	state 1	to add “Bonfire, Pix Zee, Zaino”
Char. 3	state 3	to delete “O’Henry” and to add ”Mercil”
Char. 5	state 1	to add “Bonfire, Pix Zee, Zaino”
Char. 7	state 1	to add “De flor doble Blanca, Biancopendulo”
Char. 21	state 7	to delete “Dixinel”, to add “Dixired”
Char. 24	state 4	to delete “Flor de Guiad”
Char. 25	state 3	to delete “Merrill Fransiscan”, to add “Merrill Franciscan”
Chars. 34, 35	state 9	to delete “Jersey Land”, to add “Jerseyland”
Char. 36	state 2	to delete “Brittaney Lane”, to add “Brittney Lane”
	state 3	to delete “Precoccissima Moretini”, to add “Precocissima Morettini”
Char. 37	state 5	to add “Early Hale, Amsden, Tay Flower”
Char. 40	state 2	to delete “Rubberima”, to add “Ruberrina”
Char. 41	state 1	to add “Ghiaccio 1, Zholty”
Char. 43	state 1	to delete “Flavorcrest”, to add “Zaitabo”
	state 2	to delete “Merill Sundance”, to add “Merrill Sundance”
Char. 45		to add example varieties
Char. 47	state 3	to delete “Royal gem”, to add “Royal Gem”
	state 7	to correct” Erlyvee”

Char. 50	state 1	to replace existing example varieties with “Springtime, Morettini 1, Amsden”
	state 3	to replace existing example varieties with “Fairhaven”
	state 5	to replace existing example varieties with “Flavorcrest, Retop”
	state 7	to replace existing example varieties with “Honey Blaze, Zaitabo”
	state 9	to replace existing example varieties with “Babygold 6, Big top””
Char. 51	state 6	to delete “Merill Franciscan”, to add “Merrill Franciscan”
Char. 52	state 1	to add “Springfire”
Char. 53	state 1	to add “Springfire”
Char. 54	state 1	to add “Springfire”
new Char. 52a	state 1	to add “Daisy, Dolore, Monco”
	state 2	to add “Starlite, Merrill Fransiscan Desert Gold, Zairegem””
	state 3	to add “Monalu, Monof, Sanguine Chanas, Sanguine Vineuse”
new Char. 53a	state 1	to add “Robin”
	state 2	to add “Dolores, Monco, Suncrest”
	state 3	to add “Monof, Zairegem”
new Char. 54a	state 1	to add “Andross, Ghiaccio 1”
	state 2	to add “Ryan Sun”
	state 3	to add “Summer Lady, Zaipeo”
Char. 56	state 1	to delete “Merryl Gemfree”, to add “Merrill Gemfree”
Char. 57	state 1	to delete “Ambre, Kevine, Nacre, Opale, Zaiboni”, to add “ Monna, Zaibomi, Zaidaso”
	state 2	to delete “Felicia, Monprime”, to add “Zaifave, Zaitabo”
	state 3	to delete “O’Henry, Ryan Sun, Zaitabo”, to add “Mercil, Monprime, Ryans Sun”
	state 4	to delete “Hermione, Primerose”, to add “ Kraprim, Zailice”

Char. 3	to have states: “fastigiate (1); upright (2); upright to spreading (3); spreading (4); drooping (5) in new proposed wording and update Ad. 3 accordingly
Char. 7	to accept proposed new wording
Char. 9	to keep current wording
Char. 15	to accept proposed new wording: state (2) to read: “same level”
Char. 24	*To delete example variety in state (3) and* Spanish state (2) to read: “poco aserrado” and state (3) “muy aserrado”
Char. 28	to add (+) and provide explanation “To be observed during the period of new leaf growth.”
Char. 35	to accept proposed new wording
Char. 52	to accept proposed new wording and to indicate as QL
Char. 53	to accept proposed new wording
Char. 54	to accept proposed new wording
Char. 55	to keep current wording and state (2) to read: “medium”
Ad. 55	explanation to read: “The flesh fiber is evaluated by tasting” and to delete illustration
Char. 58	to accept proposed new wording: “size in relation to fruit”
Char. 63	to delete
Char. 66	to accept proposed new wording: spelling “Foliar”
Char. 68	to accept proposed new wording and check wording of states (see cauliflower TG) and to correct example variety as “Western Red”
Ad. 68	to accept proposed new additional state (1) “ultra late” with example varieties: “Calante, Jesca”
Ad. 8	to revise previous explanation to read: “The density of flower bud is determined by counting the flower buds along the length of the current years’ shoots.” and to keep illustration as it is.
New Ad. 28	to read: “To be observed during the period of new leaf growth.”

Chapter 10	to accept proposition with the deletion of “Ovary: pubescence (characteristic 18) from Chapter 5
Ad. 50	to read: “To be observed just before maturity.”

Pecan nut

68. The subgroup discussed document TG/PECAN(proj.8), presented by Mr. Barrientos-Priego (Mexico), and agreed the following:

UPOV and common names	to check French “Pacanier“ spelling
5.3	to add Chars. 3, 11 and 24
Chars. 1, 3, 11, 14, 19, 23, 26, 30, 33,	to add (*)
Char. 2	to consider adding explanation on dormant period
Chars. 6, 7, 8, 15, 20, 21, 22, 27	to indicate as VG/MS (for all phenological Chars.)
Char. 7	to check method of observation
Char. 8	to check scale (to be either 1 to 9) and to adjust the states accordingly
Char. 10	to check whether to reduce to three states
Char. 11	to add (*) and indicate as QL
Char. 14	to add (+) and provide illustration
Char. 15	to indicate as VG/MS
Char. 17	to read state 2: “medium” and to provide example varieties
Char. 19	to change “Shuck” to “Husk” (to change throughout Table of Contents)
Char. 28	to indicate as PQ and to read: “Nut: intensity of brown color” with states: light(1), medium(2), dark(3) and to check if other colors possible (grey, reddish brown) and to update accordingly
Char. 30	to consider reducing to 3 or 5 states
Char. 32	to read: “Kernel: adherence to shell”
Char. 33	to improve explanation on time of measuring (reference to time of consumption)
Char. 34	to read “Kernel: Intensity of brown color” with states: light(1), medium(2), dark(3)
Char. 37	to improve explanation on method of observation
Char. 38	to be indicated as MG and to provide explanation
Char. 39	to delete
Char. 40	to check whether to indicate VG/MG in all phenological Chars. and to provide example varieties
Char. 41	to indicate as VG
Ad. 2	to add “.” at end of sentence
Ad. 27	to indicate with a circle area of observation of tip
Ad. 37	to replace “in late autumn and early winter.” with “after the vegetation period.”
8.3	to check whether reference in INTA- EEA DELTA DEL PARANÁ should be: “to check if this referente: Madero E., Frusso E., 2002: Desarrollo del Cultivo de la Nuez Pecan en la Argentina, Estación Experimental Agropecuaria INTA Delta del Paraná (INTA), Buenos Aires, AR, pp.32”
TQ5	to add Chars. 3, 1, 24

TQ6	to delete “e.g.” and read: “Kernel: intensity of brown color” and remove “brown”

*Pomegranate *(Punica granatum L).*

69. The subgroup discussed document TG/PGRAN(proj.3), presented by Mr. Soler Fayos on behalf of Mr. Chome (Spain), and agreed the following:

Cover page	to German “Granatbaum” with “Granatapfel”
4.1.4	to delete “,disregarding any off type plants.”
5.3	to read (a): “Corolla: color (characteristic 18)”
Char. 1	to add (*) and example varieties: “Wonderful” (2); “Mollar de Elche” (7)
Char. 2	to update Illustration to have states 1, 3, 5
Char. 4	to be indicated as QN and to read: “One-year-old shoot: anthocyanin coloration on sunny side” with states: absent or very weak (1); weak (2); medium (3); strong (4) and to provide example varieties
Char. 5	to delete (+) and delete explanation and state (1) to read: “absent or very few”
Char. 6	to delete (b)
Char. 9	to revise states using “elongated” with notes 1, 2, 3, 4
Char. 10	to be indicated as QN and state (3) to read “right angled”
Table of Chars.	to remove space before “:” throughout ToC
Char.16	to add (+) and provide illustration and to have states: “very elongated (3); moderately elongated (5); slightly elongated (7)”
Char. 17	to check literature for existing varieities and revise colors and states accordingly if necessary
Char. 18	to check literature for existing varieities and revise colors and states accordingly if necessary
Char. 21	to read: “Petal: surface” with states: “even or slightly wrinkled (1); moderately wrinkled (3); strongly wrinkled (5)” with example varieties “Mollar de Elche, Bahgwa” (3); “Malisi, Rosh Hapered” (5), respectively
Char. 22	to add (+) and provide explanation and to remove “predominantly” from states 1, 2 and 3 and to be indicated as QN and to delete “(b)”
Char. 25	to add (+) and provide illustration and to have states: “slightly elongated (3); moderately elongated (5); strongly elongated (7)”
Char. 30	to add (+) and provide explanation on where to measure
Char. 31	to review explanation and indicate stage of measurement
Char. 40	to be indicated as VG/MG and to provide example varieties and explanation to read: “The beginning of flowering is considered as the time when25% of the flowers are fully open.”
Char. 41	to be indicated as VG/MG and explanation to read: “The time of maturity is considered as the time when more than 75% of the fruits are fully colored.”
Char. 42	to delete
8.1	to read for (a): All observations on the plant should be made in the dormant season, when there are no leaves on the tree. to read for (b): Observations on the one-year old shoot should be made in the dormant season, unless otherwise indicated. to read for (e): All observations on the fruit should be made on 10 fruits randomly selected from a 20 fruit sample, at full maturity for consumption.
Ad. 2	to read upright (1), spreading (3), weeping (5)
Ad. 5	to be deleted

Ad. 14	to delete photo and to combine illustration for Ad. 14 with Ad. 15 with indication for length and width
Ad. 15	to read: Calyx width should be observed approximately in the middle of calyx length.
Ad. 17	to read: The color of the calyx should be observed when the sepals are closed.
Ad. 18	to read: The color of the corolla should be observed when the flower is fully open.
Ad. 19	to read: Length of petal must be observed from the base to the top of the petal, to improve illustration
Ad. 20	illustration to be deleted and combine with the Ad. 19 illustration, indicating Petal: length and width
Ads. 23, 24, 27	to be combined in one single illustration, to read: Fruit: length, width, length of crown
Ad. 28	to read: The over color of the fruit is different the ground color. The ground color is always yellow or yellow cream.
Ad. 31	to read: The sweetness is considered as the total soluble solids contents, and is determined with refractometer. The measured unit is the degree Brix (º Brix). One degree Brix corresponds to 1 gram of sucrose in 100 grams of solution
Ad. 32	to read: The acidity is considered as free acids content, and is determined by titration of a juice sample.
Ad. 33	Juiciness is considered as the percentage of Juice of total fruit weight.
Ads. 34, 35	to be combined in one illustration, to read: Aril: length and width
Ad. 36	to read: The main color is the color with the largest surface area
Ads. 37, 38	to be combined in one illustration, to read: Seed: length and width
Ad. 39	to read: Hardness of tegmen is assessed by chewing the arils. Soft means easy to chew. Hard means difficult to chew.
Ad. 40	to read: The beginning of flowering is considered as the time when25% of the flowers are fully open.
Ad. 41	to read: The time of maturity is considered as the time when more than 75% of the fruits are fully colored.
TQ5	to be adjusted accordingly to the change made in the Table of characteristics
TQ6	to read: Example, fruit over color, orange, orange red

Vanilla *Mill*

70. The subgroup discussed document TG/VANIL(proj.2), presented by Mr. Barrientos-Priego (Mexico), and agreed the following:

UPOV and common names	UPOV Code to read VANIL_PLA Common names German: to read: “Vanille-Pflanze”
1	to read: These Test Guidelines apply to all varieties of *Vanilla planifolia* Jacks. and interspecific hybrids, especially *Vanilla* x *tahitensis* (=*Vanilla planifolia* x *Vanilla* odorata) and *Vanilla planifolia* x *Vanilla* x *tahitensis*, *Vanilla planifolia* x *Vanilla pompon*, *Vanilla planifolia* x *Vanilla* phaeanta
Table of Chars.	to add example varieties
New Char after 1	Stem variegation: to be checked for example varieties
Char. 2	to read: shape in cross section, to read round to angular for state 2, to add (+)
Char. 3,4	to be indicated as VG/MS

Char. 6	to add example variety for state 9
Char. 7	to read “conspicuousness” and to be indicated as QN and to read: slightly for state 2
Char. 9	to be indicated as VG/MS, to add (*)
Char. 10	to add (+)
Char. 11	to delete Acamaya as example variety from state 3
Char.12	to add (*)
Char.13	to read “length”
Char. 15	to add (+), wording to be checked and orders to be reversed starting with compressed
Char. 17	to read “Leaf blade: thickness” and to add (*)
Char. 18	to add (+) and to check whether to combine with Char. 17
Char. 20	to be indicated as VG/MG
Char. 21	to read “rostellum” with state 2: “As broad as stigma” and to add (+)
Char. 22	to check the color of tepals
New Char. after 22	to read: “Flower: color of label” with states: white, green, yellow, orange purple and to be checked for example varieties
Char. 23	to read “labellum”and to add example varieties and to add (*)
New Char. after 25	to read: “Flower: width of petal” with states: narrow (3), medium (5), broad (7)
Char. 26	to change the order starting with yellow (1), greenish yellow (2), medium green (3), dark green (4) and to change example varieties accordingly
Char. 27	to add (+)
New Char. after 27	to read: “Fruit: section shape” with states: circular, elliptic, ovate, trullate, triangular and to provide photos
Char. 29	to be indicated as QN
Char. 30	to have states: moderately visible (2), and clearly visible (3)
8.1	to read : (a) Stem and leaf: All observations on stem and fully developed leaves should be made, when the first fruit is fully developed. The observations on stem should be taken at mid-length of the stem. (b) Inflorescence and flower: All Observations should be made on fully expanded inflorescence. (c) Fruit: All Observations should be made on fruit at physiological maturity.
9.	to read Lubinsky for all
Ad. 8	to provide better photos
TQ	to change the questionnaire accordingly, to remove “e.g.” from 6.

Prunus *rootstocks (Revision)*

71. The subgroup discussed document TG/187/2(proj.1), presented by Mr. Schulte (Germany), and agreed the following:

Cover page	to add French common names: French: “Porte-greffe de Prunus”; German: “Prunus-Unterlagen”; Spanish: “Portainjertos de Prunus”
1.	to delete “These Test Guidelines apply to all varieties of”

2.2	to read: “The material is to be supplied in the form of plants on their own roots, the method of propagation of which is to be specified.”
2.3	to read: (b) “40 one-year-old seedlings or 40 two-year-old seedlings for seed propagated varieties, and/or” (c) “sufficient seeds ready for germinating into 40 seedlings.”
4.1.2	to check standard wording
4.1.4	to delete in first sentence “, disregarding any off-type plants” . Note: If decision is made to keep reference to seed prop. var. to check suitable number of plants in standard wording “to add: …should be made on 10 plants … parts to be taken should be 2.”
Section 4.2	to renumber Note: If decision is made to keep reference to seed prop. var. to add. standard wording for “relative homogeneity” (see TGP/7)
Table of Chars.	- to replace ex. var. F 12/1 (C) by MF 12/1 (C) throughout and to check the correct writing of example varieties (e.g. “Weito 6”) throughout - to indicate use of each of ref. var. for cherry, plum, peach etc. and to add new ex. var. for those species not mentioned in the particular chars./states. in the following indicated as (C) for the use as rootstock for cherry varieties, (PL) for plum var., (PE) for peach and nectarine var., and (A) for apricot var. - to request from experts to receive example varieties for Almond
Chars 5,6,13,14,19	to move information in brackets to explanation
Char. 1	to reduce to 5 states and to have example varieties: Edabriz (C), Ferlenain (PL), Pumiselekt (A, PE) for state (3); Brokforest (C), GM 61/1 (C) Rubira (PE), Ute (PL), GF 305 (PE) for state (5); Alkavo (C), MF 12/1 (C), Hamyra (PL) for state (7)
Char. 2	to add (*) and to read: “Plant: habit” and to add state (2) “upright to spreading” and state (4) “spreading to drooping” and to have example varieties: Colt (C), Prudom (PL) for state (1); Gisela 5 (C) for state (3) and *Prunus besseyi (PL) for state (5)*
Char. 3	to reduce to 5 states and to have example varieties: MF 12/1 (C), Ferciana (PL) for state (1); Pixy (PL) for state (3); Gisela 5 (C), Myruni (PL) for state (7), and Hamyra (PL) for state (9)
Char. 4	to reduce to 5 states and have example varieties: Edabriz (C), Gisela 5 (C) , Hamyra (PL) for state (1); Colt (C), Pixy (PL) , GF 655-2 (PL) for state (3) and Brooks-60 (C), MF 12/1 (C) for state (5)
Char. 5	to have example varieties: SL 64 (C), Prudom (PL) and Pumiselekt (A, PE) for state (1); Colt (C) , VVA 1 (PL) for state (3); MF 12/1 (C) for state (5)
Char. 6	to have example varieties: Pixy (PL) , Pumiselekt (A, PE) for state (1) and SL 64 (C) , Ute (PL) and VVA 1 (PL) for state (9)
Char. 7	to reduce to 3 states and to have example varieties: Colt (C), Fereley (PL) for state (1); Gisela 4 (C), Pixy (PL) for state (2); SL 64 (C) , Ute (PL) for state (3)
Char. 8	to add (+) and explain “To be observed at sunny side.” and to have example varieties: MF 12/1 (C) for state (1); Pixy (PL) for state (2); Ferciana (PL) for state (3), Hamya (PL) for state (4); Ferciana (PL) for state (5)
Char. 9	to reduce to 3 states and to have example varieties: Hamyra (PL) for state (1); Gisela 5 (C) for state (2); MF 12/1 (C) for state (3)
Char. 10	to have example varieties: SL 64 (C) , Hamyra (PL) for state (1); MF 12/1 (C) for state (3); Piku 1 (C) for state (5)
Char. 11	to have example varieties: Hamyra (PL), Pixy (PL) for state (1); Gisela 5 (C) for state (2); MF 12/1 (C), Pumiselekt (A, PE) for state (3)
Char. 12	to reduce to 3 states and to have example varieties: Hamyra (PL) for state (2); MF 12/1 (C) state (2)
Char. 13	to read: “One-year-old shoot: feathering” and to indicate as (d) and to have example varieties: Felinem (?), Mayor (?), Hamyra (PL) and Pumiselekt (A, PE) for state (1); Adafuel (?), Ute (PL) for state (3); GF 655 (PL) for state (5); and to request experts to check what purpose the example variety with (?) is used for

Char. 14	to delete “intensity of” from title and to indicate as new (c), state 1 to read “absent or weak” and to have example varieties: Edabriz (C), Fereley (PL), for state (1); MF 12/1 (C), Hamyra (PL), GF 655 (PL) for state (3) and Colt (C), Ute (PL) for state (5)
Char. 15	to have example varieties: Myrobalan B (PL) for state (1); Edabriz (C), Weito [T?]6 (C, PL) for staete (3); Piku 1 (C) for state (5); MF 12/1 (C) for state (7); GF 677 (PL) for state (9)
Char. 16	to have example varieties: GF 677 (PL) for state (1); Myrobalan B (PL) for state (3); Fereley (PL) , Weito [T?] 6 (C, PL) for state (5); Brooks-60 (C), MF 12/1 (C) for state (7); Colt (C) for state (9)
Char. 17	to have example varieties: GM 61/1 (C) , Prudom (PL), GF 8-1 (PL) for state (1); Gisela 5 (C) for state (3); MF 12/1 (C), Pixy (PL) for state (5); Piku 3 (C), Pumiselekt (A, PE) for state (7); GF 677 (PL) for state (9)
Char. 18	state (2) to read: “medium elliptic” and to insert new state (4): narrow ovate with example variety “Greenpac” and state (5) to read: “broad ovate” and to have example varieties: GF 677 (PL) , Pumiselekt (A, PE) for state (1); Colt (C), Fereley (PL), Pixy (PL) for state (2); Adara (C), SL 64 (C) , Prudom (PL) and Hamyra (PL) for state (3); Edabriz (C), Gisela 5 (C) for state (4)
Char. 19	to read: “Leaf blade: angle at apex” and to reduce scale to 3 states and have example varieties: GF 677 (PL), Pixy (PL) , Pumiselekt (A, PE) for state (1); Edabriz (C) for state (2); Colt (C), Fereley (PL) for state (3)
Char. 20	to have example varieties: Fereley (PL) for state (1); GM 61/1 (C) for state (3); Colt (C), Ferlenain (PL) for state (5)
Char. 21	to have example varieties: Colt (C) , Hamyra (PL) and Pumiselekt (A, PE) for state (1); MF 12/1 (C), Ferlenain (PL) for state (2); SL 64 (C) , GF 655 (PL) for state (3)
Char. 22	to have example varieties: Gisela 5 (C), Pixy (PL) , Hamyra (PL) and Pumiselekt (A, PE) for state (1); Colt (C) for state (2); Citation (PL) for state (3); Rubira (PE) for state (4)
Char. 23	state 1 to read “absent or weak” with to have notes 1, 2, 3 and to have example varieties: Hamyra (PL) , Weito [T?] 6 (C, PL) for state (1); Fereley (PL), Gisela 5 (C) for state (2); Colt (C), Ute (PL) for state (3)
Char. 24	state 1 to read “absent or weak” with to have notes 1, 2, 3 and to have example varieties: Hamyra (PL) for state (1); Pixy (PL) for state (2); Weito [T?]6 (C, PL) for state (3)
Char. 25	to check the use of (A, C, PE or PL) for the example variety “Adesoto” and to consider deleting “only” in states and to have example varieties: Pixy (PL) for state (1); Adesoto (?), GF 1869 (PL) for state (2); Gisela 5 (C), Wangenheim (PL), VVA 1 (PL) and Hamyra (PL) for state (3)
Char. 26	to have example varieties: Edabriz (C) , Pumiselekt (A, PE) for state (1); Piku 3 (C) for state (3); Colt (C) for state (5)
Char. 27	to provide new example variety for state (5) and change notes to 3, 5, 7 and to check the example varieties accordingly
Char. 28	to delete
Char. 29	to reduce to 3 notes 1, 2, 3 with states: absent or very weak (1); sparse (2); dense (3) and to have example varieties: Colt (C), Hamyra (PL), Pumiselekt (A, PE) for state (1); Weito [T?]6 (C, PL), Ute (PL) for state (3)
Char. 30	to reduce to 3 states and to have example varieties: MF 12/1 (C) , GF 8-1 (PL) for state (1); Gisela 5 (C) , Prudom (PL) for state (2); Myrobalan B (PL) for state (3)
Char. 31	to read: ‘Leaf blade in relation to petiole length” and to reduce to 5 states with states: short (1); medium (3); long (5) and to have example varieties: Piku 1 (C) , Hamyra (PL), Pumiselekt (A, PE) for state (1); Colt (C) for state (3); Fereley (PL), GF 677 (PL) , Weito [T?] 6 (C, PL) for state (5)
Char. 32	to delete

Char. 33	to read: “Leaf: length of stipule” with new state (1) “absent or very short” and to have example varieties: Weito [T?]6 (C, PL) for state (1); Gisela 5 (C), Pixy (PL) for state (3); MF 12/1 (C) for state (5)
Char. 34	to check whether QL and to have example varieties: Ferlenain (PL), Hamyra (PL) for state (1); GF 677 (PL), Pixy (PL), St. Julien A (PL) , Weito [T?] 6 (C, PL) for state (9)
Char 35	to be indicated as QN and to have example varieties: Weiroot 158 (C) , Hamyra (PL) for state (1); Gisela 5 (C), Pixy (PL) for state (2); Weito [T?]6 (C, PL) for state (3)
Char. 36	to have example varieties: Gisela 5 (C) for state (1); Colt (C) , GF 655 (PL), and Prudom (PL) for state (2); MF 12/1 (C) for state (3)
Char. 37	to have example varieties: Pixy (PL) for state (1); Weito [T?]6 (C, PL) for state (2); Weiroot 158 (C) , GF 8-1 (PL) for state (3); Colt (C) for state (4)
Char. 38	state (1) to read: “circular” and to have example varieties: Gisela 5 (C) , Prudom (PL) and GF 655 (PL) for state (1); Colt (C) , Pumiselekt (A, PE) for state (2)
Char. 39	to have example varieties: Brokforest (C) for state (1) and Colt (C) , Hamyra (PL) and Pumiselekt (A, PE) for state (9) and to check whether other example varieties for state (1) are absent in other regions
Add. 18	to be provided in the form of a grid
Explanations on the Example Varieties	to delete all synonyms from table ® and expert to check and experts to provide information on use of varieties and to include here all of the example varieties which have been added to the ToC, together with all information on species concerned and their use

Information and databases (continued)

(a) UPOV information databases

72. The TWF noted the information provided in document TWF/43/5.

73. The expert from Australia informed the TWF that the UPOV-ROM does not work in a Microsoft® Windows 7.

74. The expert from Australia enquired as to whether the information concerning the date of commercialization could be sent in advance of the two-monthly update.

75. With regard to Annex V “UPOV codes to be checked by authorities”, the experts of the TWF were invited to provide comments to the Office of the Union by August 31, 2012.

76. The expert from the European Union requested clarification on 2.2.6 concerning amendments to the Principal Botanical Name used in the UPOV Codes and requested clarification by providing more than one genus example for Binomial names.

> “2.2.6 In the case of UPOV codes for hybrid genera and species, the UPOV code will not distinguish between two hybrids produced using the same parents. A UPOV code is created for the first hybrid notified to UPOV in accordance with the procedure set out in paragraphs 2.2.3 to 2.2.5. However, if a subsequent request is received for a hybrid involving the same genera/species in a different combination, the Principal Botanical Name will be amended to indicate that the UPOV code covers all combinations involving the same genera/species.

(b) Variety description databases

77. The TWF noted the information contained in documents TWF/43/6 and TWF/43/6 Add.

78. The TWF requested the Office of the Union to check whether any data that was used in a previous similar study for apple could be made available.

(c) Exchangeable software

79. The TWF noted the information provided in document TWF/43/7..

(d) Electronic application systems

80. The TWF noted the information provided in document TWF/43/8 and received a presentation on the development of a Web based TG template from the expert from Australia.

Recommendations on draft Test Guidelines

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

81. The TWF agreed that the following draft Test Guidelines should be sent to the TC for adoption at its forty-ninth session, to be held in Geneva in March 2013, on the basis of the following documents and the comments in this report:

Subject	Basic Document (2012)
Fortunella Swingle	TG/FORTU(proj.2)
Papaya (Carica papaya L.)	TG/264/2(proj.4)
Pineapple (*Ananas comosus* L.Merr.)	TG/PINEAP(proj.10)
Pomegranate (*Punica granatum* L).	TG/PGRAN(proj.3)

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

82. The TWF agreed to discuss the following draft Test Guidelines at its forty-fourth session:

Species
Avocado rootstock (Persea Mill.)
Acca (Acca sellowiana (Berg) Burret)
*Apple rootstocks (Malus Mill.) (Revision)
Coconut (Cocos nucifera L.)
Mandarins (Citrus L. - Group 1) (Partial revision)
*Peach (Prunus persica (L.) Batsch) (Partial revision)
*Pecan nut (Carya illinoinensis (Wangenh.) K. Koch)
*Litchi (Litchi chinensis Sonn.)
Walnut (Juglans regia L.) (revision)
Vanilla (Vanilla planifolia Jacks)
*Prunus rootstocks (Prunus L.) (Revision)

* indicates possible final draft Test Guidelines.

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

Guidance for drafters of Test Guidelines

84. The TWF considered document TWF/43/34.

85. The TWF noted the revision of the “Practical Guidance for Drafters (Leading Experts) of UPOV Test Guidelines”, Section “Test Guidelines for Discussion at the Technical Working Party” presented on the basis

of document TC/48/3, as available on the TG Drafters webpage (see document TC/48/3). The revision concerned the information that “a clean” version of the draft should be provided: the draft should not contain any comments within the document. If necessary, any comments should be included in an annex or in a separate document”.

86. The expert from the European Union questioned the length of time between the adoption of the Test Guidelines by the Technical Committee and the posting of the adopted Test Guidelines on the UPOV website.

87. The Office of the Union informed the TWF that the Technical Working Parties, at their sessions, would be informed of which Test Guidelines had been adopted, but were not posted on the website due to missing information.

88. The expert from Israel proposed that acknowledgement be given to the drafters and indicated on the Test Guidelines.

Date and Place of the Next Session

89. At the invitation of New Zealand, the TWF agreed to hold its forty-fourth session in Napier, New Zealand, from April 29 to May 3, with the preparatory workshop on April 28, 2013.

Future Program

90. 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
5. TGP documents
6. Variety denominations
7. Information and databases
   (a) UPOV information databases
   (b) Variety description databases
   (c) Exchangeable software
   (d) Electronic application systems
8. Uniformity assessment
9. Matters to be resolved concerning Test Guidelines adopted by the Technical Committee (if appropriate)
10. Discussion on draft Test Guidelines (Subgroups)
11. Recommendations on draft Test Guidelines
12. Guidance for drafters of Test Guidelines
13. Experience with new Types and species
14. Date and place of the next session
15. Future program
16. Report on the session (if time permits)
17. Closing of the session

Matters for future consideration

91. The TWF agreed that information should be provided on the term “growing cycles”. This should be in the form of a General Note (GN) or Additional Standard Wording (ASW). The TWF considered that the wording below is contradicting and clarification on the exact meaning should be sought.

> Paragraph 3.1: “The minimum duration of test should normally be two independent growing cyles.”;
> Paragraph 4.1.2: “The differences observed between varieties may be so clear that more than one growing cycle is not necessary.”

92. The TWF requested further information on how the method of vegetative propagation (e.g. *in vitro*, hardwood or softwood cuttings) and the origin of the propagating material, taken from within the plant, might affect future plant development and characteristic expression and how this should be provided for in Test Guidelines.

93. The TWF agreed that the European Union would prepare a document for discussion at the TWF session in 2013.

Visit

94. On the afternoon of August 1, 2012, the TWF visited the facilities of the Institute of Forestry and Pomology, Beijing Academy of Agriculture and Forestry Sciences, Beijing, where they were received by Dr. Yuzhu Wang, the Director of the Institution.

Printing of report

95. At the proposal of the Chairperson, the TWF agreed that, in an effort to reduce the carbon footprint of the TWF meeting, Annexes I, II and III of the report would no longer be distributed during the session. Those annexes would be made available on the TWF webpage together with the adopted report.

96. *The TWF adopted the report at the end of its 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.), Examiner, National Plant Variety Protection Office (SNPC), Ministry of Agriculture, Livestock and Food Supply, Esplanada dos Ministerios, Bloco D, Anexo A, sala 252, 70043-900 Brasilia , D.F.
(tel.: +55 61 3218 2549 fax: +55 61 3224 2842 e-mail: vera.machado@agricultura.gov.br)

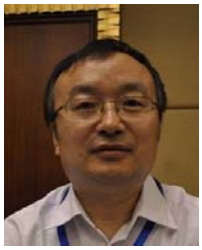
CHINA

ZHANG Yanqiu (Mr.), Director General, Bureau of Seed Management, Ministry of Agriculture, No. 11 Nongzhanguannanli, Chaoyang District, 100125 Beijing
(tel.:+86 10 5919 1609 fax: +86 10 5919 1609)

LIU Ping, Deputy Director-General, Development Center of Science and Technology, Ministry of Agriculture, Room 623, Nongfeng Building NO.96, Dong San Huan Nan Lu, Chaoyang District, 100122 Beijing
(tel.:+86 10 5919 9363 fax: +86 10 59199374 e-mail: liuping@agri.gov.cn)

HUANG Faqiang, Deputy Director-General, Office of Protection of New Varieties of Plants State Forestry Administration,P.R.C, 18 Hepingli East Street, 100714 Beijing
(tel.: +86 10-8423 8703 fax:+86 10-84238703/13701240158)

LÜ Bo, Director, Division of Variety Management, Bureau of Seed Management, Ministry of Agriculture, No. 11 Nongzhanguannanli, Chaoyang District, 100125 Beijing
(tel.:+86 10 5919 3150 fax: +86 10 59193142 e-mail: lvbo@agri.gov.cn)



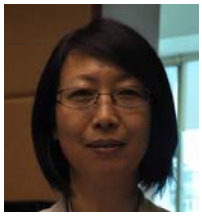
ZHANG Xinming, Director, DUS Testing Division, Development Center for Science and Technology, Ministry of Agriculture, Room 709, Nongfeng Building NO.96, Dong San Huan Nan Lu, Chaoyang District, 100122 Beijing
(tel.:+86 10 5919 9395 fax: +86 10 5919 9393)

ZHOU Jianren, Director ,Office of Protection of New Varieties of Plants State Forestry Administration, P.R.C, 18 Hepingli East Street, Beijing 100714
(tel.: +86 10-8423 9106 fax.+86 10-8423 8885/18601139661 e-mail:webmaster@cnpvp.net)

RAO Zhihong, Deputy Director, Division for Plant Varieties Protection, Development Center for Science and Technology, Ministry of Agriculture, Room 713 Nongfeng Building NO.96, Dong San Huan Nan Lu, Chaoyang District, 100122 Beijing
(tel.:+86 10 5919 9397 fax: +86 10 59199396)

MA Mei (Ms.), Director Office of Protection of New Varieties of Plants State Forestry Administration, P.R.C, 18 Hepingli East Street Beijing 100714
(tel.: +86 10-8423 9106 fax: +86 10-84238885)

WANG Qi, Director ,Office of Protection of New Varieties of Plants State Forestry Administration,P.R.C, 18 Hepingli East Street Beijing 100714
(tel.: +86 10-84239104 fax:+ 86 10-84238883/13601166026)



DU Yuanyuan (Ms), DUS Examiner, DUS Testing Division, Development Center for Science and Technology, Ministry of Agriculture, Room 707, Nongfeng Building NO.96, Dong San Huan Nan Lu, Chaoyang District, Beijing 100122
(tel.:+86 10 5919 9394 fax: +86 10 59199393)

LU Xin (Ms.), DUS Examiner, DUS Testing Division, Development Center for Science and Technology, Ministry of Agriculture, Room 707, Nongfeng Building No. 96, Dong San Huan Nan Lu, Chaoyang District, Beijing 100122
(tel.: +86 10 5919 9394 fax: +86 10 5919 9393 e-mail: luxin@agri.gov.cn)

JIANG Quan, Breeder, Institute of Forestry and Pomology, Beijing Academy of Agriculture and Forestry Sciences,
(tel.: +86 13701331760, e-mail: Quanj@vip.sina.com）

YANG Xuhong (Ms),Examiner, Division for Plant Varieties Protection, Development Center for Science and Technology, Ministry of Agriculture, Room 713 Nongfeng Building NO.96, Dong San Huan Nan Lu, Chaoyang District, 100122 Beijing
(tel.:+86 10 5919 9398 fax: +86 10 59199396
e-mail: yangyang@agri.gov.cn)

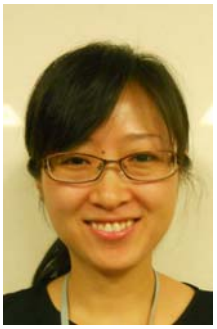
CHEN Houbin, Researcher, College of Horticulture, South China Agricultural University, Wu Shan Street, Tianhe District, Guangzhou 510642, Guangdong Province
（ tel.:+86 13380055696 e-mail: hbchen@scau.edu.cn）

ZHANG Zhisheng, Professor, College of Agriculture, South China Agricultural University
(tel.:+86 13711026839 e-mail: zszhang@scau.edu.cn）

SHA Guangli, Professor of Qingdao Agricultural Academy, Ph.D.；Chair of Apple Rootstock Breeding & Resources Program；Director of Qingdao Apple Experiment Station, China Agriculture Research System（CARS） Address: 168 Wan nian quan lu, Li cang qu, Postcode 266100, Qingdao
(tel. 86-532-87891009 86-15966885645 E-mail: shaguangli@gmail.com)

ZHENG Yongqi, Researcher, Professor, Research Institute of Forestry, Chinese Academy of Forestry, No.1 Dongxiaofu, Haidian district, Beijing
(tel.: +86 10-62888565 fax: +86 10-62888565 e-mail: zhengyq@caf.ac.cn)

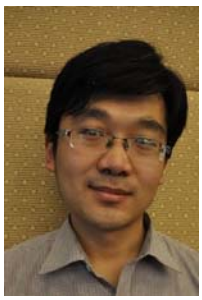
ZHANG Chuanhong (Ms.), Assiociate Researcher, Professor, Research Institute of Forestry,Chinese Academy of Forestry, No.1 Dongxiaofu,Haidian district,Beijing
(tel.: +86 10-62889645 fax: +86 1062872015 e-mail: zhangchenator@163.com)



Xuedan YU, Research Institute of Forestry, Chinese Academy of Forestry, Dongxiaofu 1, Xinagshan Road, Haidian District, Beijing 100091
(tel.: 86 10 6288 9645 fax: 86 10 628 720 15 e-mail: yxd--003@163.com)

YUE Xianghua, Engineer, Anhui Taiping Experimental Station for INBAR, Taiping Lake Scenic Area Huangshan Dist Anhui Province
(tel.:+86 0559-8519193/13965514096 fax: +86 0559-8519119 e-mail: yuexianghua@icbr.ac.cn)

YU Fangyuan, Professor, Southern Laboratory of Molecular Identify of New varieties of piants,State Forestry Administration
(tel.: + 86 139 5177 1982 fax: +86 025-85427402 e-mail: fyyu@njfu.edu.cn)



MA Qingguo, Assistant Research Professor, Research Institute of Forestry,Chinese Academy of Forestry, No.1 Dongxiaofu, Haidian district, Beijing
(tel.: +86 10-62889624/13810670704 fax: +86 10-62872015 e-mail: mqgme@163.com)

KONG Qingyun, Research management officer, Experimental Center of Forestry in North China, CAF,No.1 of ShuiZha West Road, Mentougou, District,Beijing
(tel.: +86 10-69826131-608/13401013685 fax: +86 10-69842397
e-mail:kqybjfu@126.com)

SUN Qiang, Director, Shanghai Forestry Station, No. 7, 1053Hutai Rd,200072 Shanghai
(tel.:+86 021-57639232/13764707528 fax:+86 021-57639232
e-mail:sundaysq@126.com)

YAO Hongjun (Ms), Engineer, Shanghai Forestry Station, No. 7, 1053Hutai Rd, 200072 Shanghai
(tel.:+86 13601901416 fax: +86 21-57639232 e-mail: yaohongjun75@163.com)

LU Lihua, Director of Department, Experimental Center of Tropical Forestry, Chinese Academy of Forestry, Pingxiang, Guangxi
(tel:+86 0771-8585019/13517512761 fax:+86 0771-8526320
e-mail:kjc8526136@163.com)

ZHONG Wenbin, Assistant Director, Experimental Center for Subtropical Forestry, Chinese Academy of Forestry, No460,QianShan Road(West), Fenyi County, JiangXi Province
(tel.:+86 13879050753 fax: + 86 0790-5895689 e-mail:Zwb7234@163.com)

SUN Shu (Ms.), Deputy Director, Office of Protection of New Varieties of Plants State Forestry Administration P.R.C ,Hepingli East Street Beijing 100714
(tel.:+86 10-84239106 fax:+86 10-84238885/13651028380
e-mail:sunshu9106@qq.com)

EUROPEAN UNION

Jean MAISON, Deputy Head, Technical Unit, Community Plant Variety Office (CPVO), 3, boulevard Marechal Foch,
F-49101 ANGERS Cedex 02, France
(tel.: +33 2 4125 6435 fax: +33 2 4125 6410 e-mail: maison@cpvo.europa.eu)

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

FRANCE

Richard BRAND, DUS, Unité de Cavaillon, Groupe d'étude et de contrôle des variétés et des semences (GEVES), B.P. 21101, F-84301 Cavaillon Cedex
(tel.: +33 4 9078 6676 fax: +33 4 9078 0161 e-mail: richard.brand@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)

ISRAEL

Ben-Zion ZAIDMAN, DUS Examiner, Plant Breeders' Rights Unit, Agricultural Complex Rishon-Lezion, Ministry of Agriculture and Rural Development, P.O. Box 30, 50250 Bet-Dagen
(tel.: +972 3 9485833 fax: +972 3 9485839 e-mail: benzionz@moag.gov.il)

JAPAN

Katsumi YAMAGUCHI (Mr.), Chief Examiner, PVP Office, New Busines and Intellectual Property Division, Ministry of Agriculture, Forestry and Fisheries, 1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8950
(tel.: +81 3 6738 6470 fax: +81 3 3502 6572 e-mail: katsumi_yamaguchi@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 59 59 52 15 00 EXT. 5079 fax: +52 595 9521642 e-mail: abarrien@gmail.com)

MOROCCO

Hamid BENYAHIA, Coordinator of UR Improvement and Conservation of Phytogenetic Resources, Kénitra Regional Centre for Agronomic Research, Route Sidi Yahya du Gharb, Km 9, BP 257 Kénitra
(tel.: +212 660 157216 fax: +212 660 156327 e-mail: hamidbenyahia2002@yahoo.fr)

Ibtihaj BELMEHDI (Mrs.), Senior Expert in charge of the Control and Certification of Citrus, Division of Seed and Plant Control, National Office for Sanitary Security of Food Productions, Avenue Hadj Ahmed Cherkaoui, Agdal, Rabat
(tel.: +212 537 771085 fax: +212 5 37778852 e-mail: ibtibelmehdi@hotmail.com)

Abdelhak RIZQI, Les Domaines Agricoles - Business Unit Agrumes, KM 5 Rte D'Azemmour, BP 15634, 21000 Casablanca, Email:
(tel.: +212 661 17 68 43 fax: +212 522 91 97 47 e-mail: arizqi@domaines.co.ma)

NEW ZEALAND

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

REPUBLIC OF KOREA

CHUNG EunSun (Ms.), Senior Researcher, Examiner, Plant Variety Protection Division, Korea Seed and Variety Service (KSVS),
184 Anyang-ro, Manan-gu, Angyang-si, Gyeonggi-do 430-016
(tel.: +82 31 467 0110 fax: +82 31 467 0116 e-mail: eschung@seed.go.kr)

KWON Oh Woung, Senior Researcher Examiner, Research Scientist, Korea Forest Seed and Variety Center, 670-4 Suhoeri, Suanbo, Chungju, Chungbuk
(tel.: +82 43 850 3324 fax: +82 43 850 3055 e-mail: owkwon@forest.go.kr)

Sung-ryul RYU, Research Scientist, Korea Forest Seed and Variety Center, 670-4 Suhoeri, Suanbo, Chungju, Chungbuk
(tel.: +82 43 850 3326 fax: +82 43 850 3055 e-mail: ryul25@forest.go.kr)

Sang-Don YUN, Agricultural Researcher, Plant Variety Protection Division, Korea Seed and Variety Service (KSVS), 39Taejana, Suwon, Gyeonggi 443-400
(tel.: +82 31 8008 0214 fax: +82 31 203 7431 e-mail: yunsd@korea.kr)

ROMANIA

Marcel BUCIU, Expert, State Institute for Variety Testing and Registration (ISTIS), Bd. Marasti nr. 61, sector 1, P.O. Box 32-35, 011464 Bucarest
(tel.: +40 21 3184380 fax: +40 21 3184408 e-mail: marcel_buciu@istis.ro)

SOUTH AFRICA

Carensa PETZER (Mrs.), Plant Variety Examiner, Forestry and Fisheries 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)

SPAIN

Guillermo SOLER FAYOS, Examiner, Unidad de Examen Técnico de Identificación Varietal (UETIV), Instituto Valenciano de Investigaciones Agrarias (IVIA), Ctra. Moncada-Náquera Km. 4,5, E-46113 Moncada, Valencia
(tel.: +34 96 342 40 00 ext. 439227 fax: +34 96 342 4001 e-mail: soler_gui@gva.es)

VIET NAM

Thai Ha NGUYEN, DUS Tester, Tuliem Station, Plant Variety Protection Office (PVPO), Department of Crop production (DCP), Ministry of Rural Development (MARD), Me Tgri Tri, Tu Liem, Hanoi
(e-mail: thaiha_dm@yahoo.com)

II. OBSERVERS

INDONESIA

SOBIR, Director, Center for Tropical Horticulture Studies, Bogor Agricultural University, Jl. Pajaran Bogor, 16144 Indonesia
(tel.: +62 251 832 6881
fax: +62 251 8326881 e-mail: sobir@ipb.ac.id)

MALAYSIA

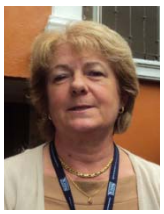
Azizi HASHIM, Assistant Director, Plant Variety Protection Registration Office, Crop Quality Control Division, Department of Agriculture, Level 7, Lot 4G2, Wisma Tani, no. 30, Persiaran perdana, Precint 4, 62624 Putrajaya
(tel : +603-8870 3571 fax: +603-8888 7639 e-mail: azizi@doa.gov.my)

THAILAND

Pan PANKHAO, Agricultural Scientist, Plant Variety Protection Group, Plant Variety Protection Division, Ministry of Agriculture and Cooperatives
(tel.: +66 2561 4665 fax: +66 2561 4665 e-mail: ppk1969@hotmail.com)

III. ORGANIZATIONS

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



Dominique THÉVENON (Mrs), Board Member, Treasurer - CIOPORA, AIGN®, International Community of
Breeders of Asexually Reproduced Ornamental and Fruit Plants (CIOPORA), 8, avenue Charles de Gaulle, 84420 Piolenc
(tel.: +33 4 90347149 mobile: +33 678930413 e-mail: t.dominique4@orange.fr)

IV. OFFICER

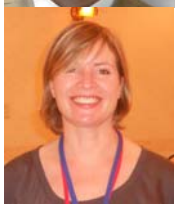
CHAIRPERSON

Carensa PETZER (Mrs.), Chairperson

V. OFFICE OF UPOV

Julia BORYS, Senior Technical Counsellor, 34, chemin des Colombettes, 1211 Geneva 20, Switzerland
(tel. +41-22-338 7441, fax +41-22-733 03 36 e-mail: julia.borys@upov.int)

Ben RIVOIRE, Consultant, International Union for the Protection of New Varieties of Plants (UPOV), Chemin des Colombettes 34, 1211 Genève 20, Suisse
(tel.: +41 22 338 8426 fax: +41 22 733 0336 e-mail: ben.rivoire@upov.int)



Caroline ROVERE (Mrs.), Administrative Assistant, International Union for the Protection of New Varieties of Plants (UPOV), 34, chemin des Colombettes, 1211 Geneva , Switzerland
(tel.: +41 22 338 9233 fax: +41 22 733 0336 e-mail: caroline.rovere@upov.int)

VI. ELECTRONIC CONFERENCE PARTICIPANTS

SOUTH AFRICA

Thursday, August 2, 2012 – Presentation of Apple Rockstock Test Guideline

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

[Annex II follows]

Speech of Mr. ZHANG Yanqiu,
Director-general of Bureau of Seed Management, Ministry of Agriculture，
Director-general of Office of Protection of New Varieties of Plants, Ministry of Agriculture

Distinguished Ms. Julia Borys, Ladies and gentlemen,
Good morning everyone.

Today we are very pleased to witness the opening of the forty-third Session of the UPOV-Technical Working Party for Fruit Crops in Beijing. Here, On behalf of the Ministry of Agriculture as well as on my own behalf, I wish to extend a sincere welcome to UPOV officials and participants from all countries, and also express a warm congratulation on the opening of the meeting.

On April 23.1999, China became a party of “the International Convention for the Protection of New Varieties of Plants”, and put into effect “the Regulations of the People’s Republic of China on the Protection of New Varieties of Plants”. Over the past 13 years, China has developed PVP system from scratch and made significant progress. We are pleased to note that in China, the Protection of New Varieties of Plants has an explosive development and show a gratifying situation. All those developments have been encouraging and showing the commitment of the government and people to respecting and protecting intellectual property rights. Practice has proved that, the system of the PVP in china has significant effect and huge potential on promoting the plant breeding and seed industry development.

In order to implement “the Regulations of PVP”, the Ministry of Agriculture has organized and developed a series of rules and provisions under the Regulations, including “Implementing Rules for the Regulations on the Protection of New Varieties of Plants (Agriculture Part)”, “Review Provisions on the New Plant Variety Review Committee of the Ministry of Agriculture ”,“Provisions on Handling Tort Cases concerning New Agricultural Plant Varieties ”,“Naming Rules on Agricultural Plant Varieties ”and so forth. The legal system for the PVP has been basically established, which make our work marched into the legalization track.

The Ministry of Agriculture has set up the PVP Office and the New Plant Variety Review Committee; established one DUS Testing Headquarter and 14 DUS Testing sub-stations in the 10 national A-class agriculture planting areas, as well as the Center for the Preservation of Breeding Materials of New Varieties of Agricultural Plants. Chinese government has issued and implemented 8 lists of protected new varieties of agricultural plants which cover 80 genus and species.

As a UPOV member, China participated in series of UPOV meetings and international activities actively. The Ministry of Agriculture of China successfully hosted thirty fifth UPOV TWA meeting and forty-third TWV meeting. And as leading experts, had undertaken and finished UPOV Testing Guidelines for Tea Plant and Foxtail Millet, UPOV TG for Litchi is being developed.

The Ministry of Agriculture also carried out extensive exchanges and cooperation with the Netherlands, the United States of America, Germany, Japan, the Republic of Korea, Australia and other countries. Added up to more than 60 people have been sent to abroad for international training. By means of,

training, investigation and hosting international workshop and so on, we learn from and draw upon the experience and achievements concerning PVP from other country. Especially based on UPOV general principle for DUS and practical experience of member State, we organized DUS testing experts and relevant researcher to prepare National Guidelines for 183 genus and species, which laid the technical foundation for expansion of protection list and DUS testing .

Along with the genus and species for PVP released gradually in China, the number of applications and authorizations in Ministry of Agriculture increases year by year. By end of June 2012, the number of applications has reached 9,586, of which 3,865 have been granted. Among them, there are 570 applications from abroad, of which 89 have been granted; there are 278 applications for fruit crops up to now, of which 66 have been granted.

In 2011, the Ministry of Agriculture has accepted 1,255 applications for New Plant Varieties rights. The yearly total number of applications of China ranked third place in UPOV member States. When talking about the great achievements that China has made in PVP, we should never forget the support of UPOV and its members. Let me take this opportunity**,** on behalf of the Ministry of Agriculture**,** to express our sincere appreciation to UPOV and experts from all over world, for their understanding of and support for our PVP cause.

Now, China is enacting and implementing the national intellectual property strategy, including the new plants varieties protection, and actively participating all kinds of activities under the frame of other international convention on intellectual property which we have joined, we abide by the relevant international treaties strictly, carry out obligations conscientiously, and that has been widely praised by the international community. The Chinese government will strengthen the cooperation with UPOV and its member States, persistently improve the capability of innovation, utilization, protection and management of intellectual property rights, and jointly push forward the development of the Plants Varieties Protection.

Finally, I wish the meeting complete successful, wish you all have nice stay in Beijing.

Thank you!

Opening address at the 43rd Session of TWF of UPOV

By

Huang Faqiang

Deputy Director General, Science and Technology Development Center, SFA

Ladies and Gentlemen :

Good morning !

Today，the 43rd session of the Technical Working Party for Fruit Crops of the UPOV is opened, on behalf of the Science and Technology Development Center of the State Forestry Administration, I would like to express our warmest congratulations to the convening of this session.

On Oct. 1, 1997, China started to implement the “Regulations for the Protection of New Varieties of Plants of the People's Republic of China”. On April 23, 1999, China became a member of the UPOV. According to the “Regulations”, the Ministry of Agriculture and the State Forestry Administration are jointly responsible for the acceptance and examination of the applications for plant variety rights with different coverage of plants, and grant the plant variety rights to applications that meet the requirements by the Regulations. The State Forestry Administration is responsible for the acceptance, examination and granting of plant variety rights for forest trees, bamboos, woody vines, woody ornamental plants (including woody flower plants), fruit trees (nuts trees) , woody plants for production of oils, beverages, flavoring materials, and medicinal materials.

The State Forestry Administration pays great attention to the protection of new plant varieties. As early as in 1997, the SFA set up a leading group for the protection of new plant varieties and established the PVP Office. In 2002, a committee for re-examination was set up. Since China’s accession to the UPOV, we have taken effective measures to enhance the awareness of IPR protection in forestry sector, and the number of granted plant variety rights has sharply increased, significant progress has been achieved in PVP in the following aspects:

Firstly, a system of agents, a network of testing centers and stations, and an information system for PVP have been established. These 3 major systems have ensured the smooth implementation of the PVP system in forestry sector. By the end of 2011, more than 350 persons were trained for PVP agent services, 21 agents were established, and 1 testing center, 5 testing sub centers, 2 Molecular labs, 5 testing stations have been established; A portal website for the protection of new plant varieties has been developed and in operation; and a Gazette of protection of new plant varieties in forestry sector has been published timely and in regular basis. The PVP system in forestry sector was further improved.

Secondly, the awareness on PVP of the whole society has been increased through continual efforts in knowledge and information dissemination. For example, through dissemination of knowledge of the PVP across the country, the awareness of protection of plant variety rights of administrative officers, researchers and educational personnel has been enhanced. By holding discussions and workshops with seed and seedling enterprises and flower industries, their awareness on PVP was continually enhanced. In collaboration with the National IP Week, activities were conducted for wide dissemination of PVP in forestry sector and the public

awareness was further increased. Meanwhile, nation-wide cracking-down of infringements of plant variety rights was carried out, effectively protecting the legal rights of breeders.

Thirdly, we have strictly implemented the UPOV Convention and carried out active international cooperation. We have hosted various international meetings on PVP, and participated in the annual UPOV meetings and also involved in the studies of UPOV working groups.

At present, we are undertaking the development of UPOV Test Guidelines for the new varieties of the genus *Camellia,* species *Paeonia suffruticosa* and genus *Syringa*. We are willing to develop more UPOV TGs in the future. Up to the end of 2011, the State Forestry Administration had accepted 862 applications in total for plant variety rights from domestic and foreign applicants, and 331 of the applications were granted with plant variety rights.

This meeting provides an excellent opportunity for technical exchange. Many Chinese participants are from forestry sector. Through the technical exchanges, the meeting will further promote the improvement of DUS tests in China.

I wish the meeting a great success!

Thank you.

[Annex III follows]

Plant Variety Protection in China

LÜ BO
Director
Division of Variety Administration
Bureau of Seed Management
Ministry of Agriculture

Chair of CAJ

TWF 43rd Session
Beijing, China
Jul. 30-Aug. 3, 2012

www. cnpvp. cn

Legislation background

- **1985:** "Patent Law of the People's Republic of China"
- **1997:** " Regulation of the People's Republic of China on the Protection of New Varieties of Plants" conforms to the 1978 Act of the UPOV convention in principal
- **1999:** China became UPOV 39th member state

Authorities for Examining and Approving Rights

- Ministry of Agriculture (MOA)
- State Forestry Administration (SFA)

Ministry of Agriculture (MOA)

Responsible for:

- grains, cotton, oil seeds, hemp,
- sugar crops, vegetables (including water melon and mask melon), tobacco, mulberries,
- tea shrubs, fruit trees (except dry fruit), ornamental plants (except woody plants), grass,
- green manure, herbaceous medicinal materials edible fungi, algae and rubber.

The State Forestry Administration

Responsible for:

- forest trees
- Bamboo
- xyloid vine
- ornamental woody plants (including woody flowers), fruit trees (dry fruit trees only)
- woody oil-bearing
- beverage and condiment plants
- woody medicinal materials.

158 Genera or Species Eligible for Plant Breed's Rights

MoA : 80 genera or species

SFA : 78 genera or species

www. cnpvp. cn

Terms for Protection

- *20* years for vines, forest trees, fruit trees and woody ornamental plants
- *15* years for other plants

www. cnpvp. cn

Fees for PVP

- Application fee: RMB 1,000 (about Euro $100)
- Examination fee: RMB 2,500 (about Euro $250)
- Annual fees:

RMB 1,000 (about Euro $100) per year from the first year to the sixth year.

Then, RMB1,500 (about Euro $150) per year during the rest of the protection period.

No fee for DUS test

www. cnpvp. cn

Law enforcement

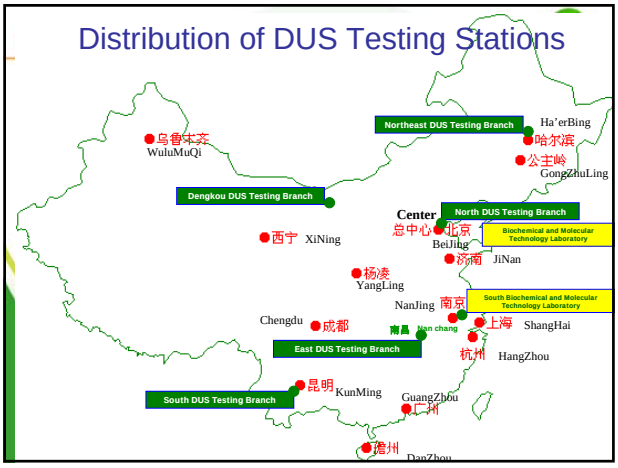
Two Channels:

- Court
- Administrative departments of agriculture or forestry

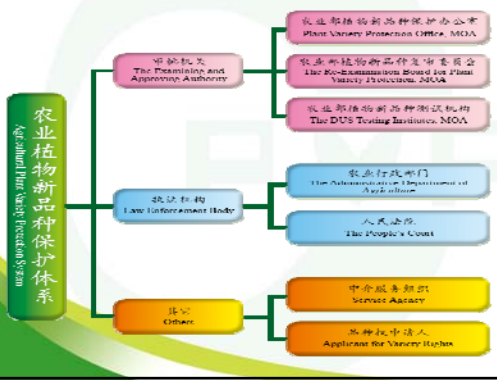
www. cnpvp. cn

DUS Test Center in MOA

Distribution of DUS Testing Stations



www. cnpvp. cn



www. cnpvp. cn

- International and Region cooperative Activities


INTERNATIONAL SEMINAR ON PLANT VARIETY PROTE
植物品种保护国际研讨会
22, 2009
International Seminar on PVP


植物新品种保护培训班
International Training Course on New Plant Variety Protection in China
International Training
Course on PVP in China
20


www. cnpvp. cn
Dutch Project: “DUS testing in china”
中荷植物新品种权及品种注册研讨会


Deutsch-Chine
Seminars zum Schutz der neuen Pflanzensorten


www. cnpvp. cn
种业发展（中美）学术研讨会
Seminar on the Development of Seed Industry (China)

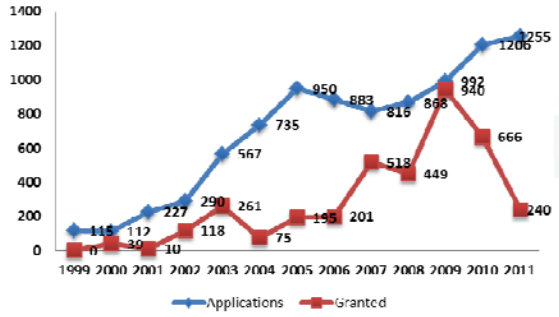

www. cnpvp. cn
植物新品种保护与农民权益国际研讨会
INTERNATIONAL SEMINAR ON PLANT VARIETY PROTECTION AND FARMERS' RIGHTS AND INTERESTS
2010.4.20-22

www. cnpvp. cn

Statistics

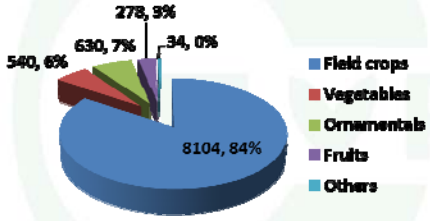
www. cnpvp. cn

PVP Statistics from MOA



www. cnpvp. cn

Applications by Crops(MoA)



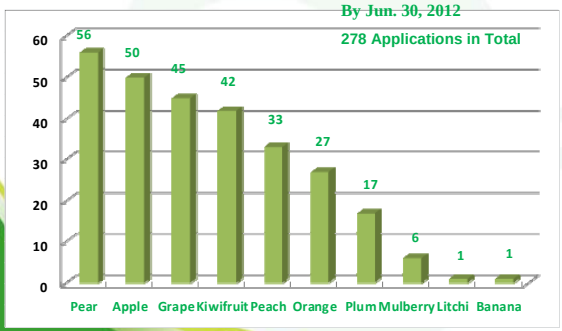
As of Jun.30,2012, the Total Number of Applications from MOA is 9586.

www. cnpvp. cn

Applications by Fruit Crops

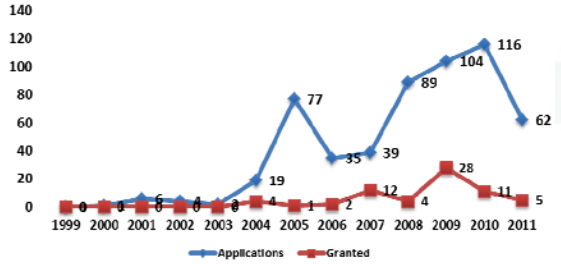
By Jun. 30, 2012

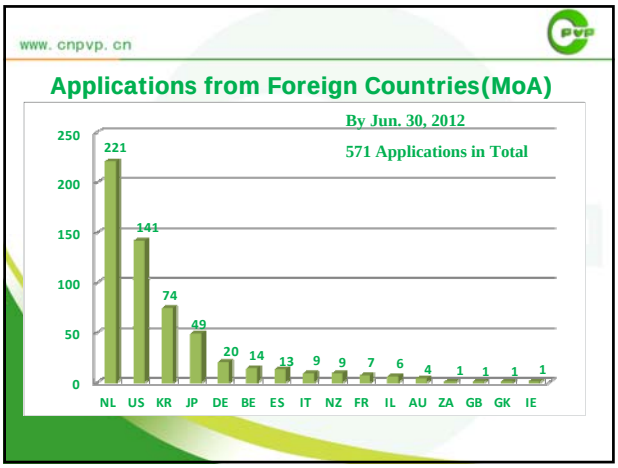
278 Applications in Total

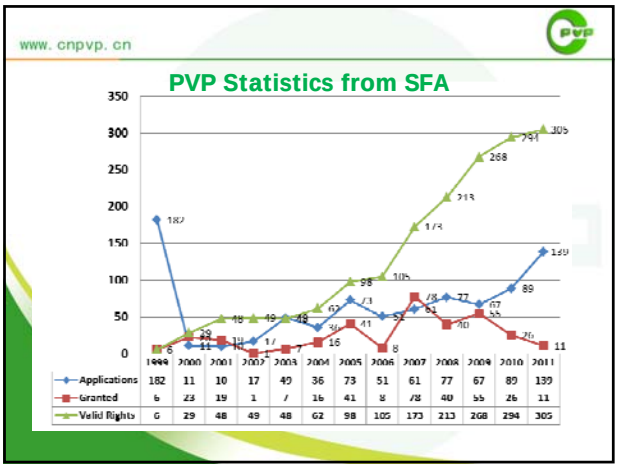


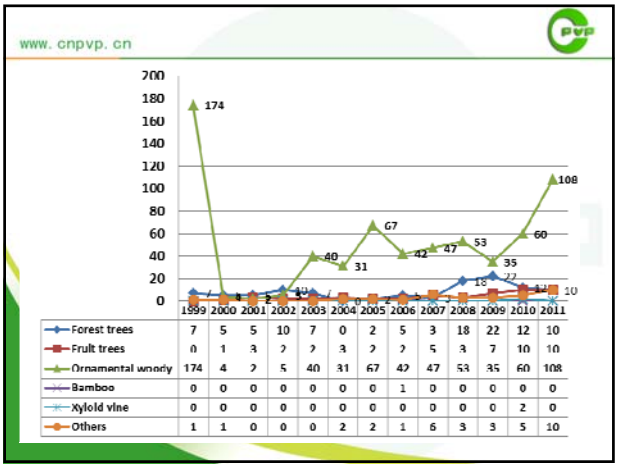
www. cnpvp. cn

Applications from Foreign Countries(MoA)




www. cnpvp. cn
Applications from Foreign Countries(MoA)
By Jun. 30, 2012
571 Applications in Total
250
200
150
100
50
0
221
141
74
49
20
14
13
9
9
7
6
4
1
1
1
1
NL US KR JP DE BE ES IT NZ FR IL AU ZA GB GK IE


www. cnpvp. cn
PVP Statistics from SFA
350
300
250
200
150
100
50
0
Applications 182 11 10 17 49 36 73 51 61 77 67 89 139
Granted 6 23 19 1 7 16 41 8 78 40 55 26 11
Valid Rights 6 29 48 49 48 62 98 105 173 213 268 294 305


www. cnpvp. cn
200
180
160
140
120
100
80
60
40
20
0
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
Forest trees 7 5 5 10 7 0 2 5 3 18 22 12 10
Fruit trees 0 1 3 2 2 3 2 2 5 3 7 10 10
Ornamental woody 174 4 2 5 40 31 67 42 47 53 35 60 108
Bamboo 0 0 0 0 0 0 0 1 0 0 0 0 0
Xylold vine 0 0 0 0 0 0 0 0 0 0 0 2 0
Others 1 1 0 0 0 2 2 1 6 3 3 5 10


Thank you for your attention!

ANNEX IV

LIST OF LEADING EXPERTS

DRAFT TEST GUIDELINES TO BE SUBMITTED TO THE TECHNICAL COMMITTEE IN 2013

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

before September 14, 2012

Species	Basic Document(s)	Leading expert(s)	Interested experts (States/Organizations)[1]
Kumquat (*Fortunella* Swingle)	TG/FORTU(proj.2)	Mr. Yamaguchi (JP)	AR, ES, IL, KR, RU, QZ, Office
Papaya (*Carica papaya* L.) (Revision)	TG/264/2(proj.4), TWF/43/37	Mr. Barrientos-Priego (MX)	BR, IL, JP, ZA, CIOPORA, Office
Pineapple (*Ananas comosus* (L.) Merr.)	TG/PINEAP(proj.10)	Mr. Brand (FR)	AU, BR, ES, JP, KE, MX, PT, QZ, ZA, CIOPORA, Bioversity, Office
Pomegranate (*Punica granatum* L.)	TG/PGRAN(proj.3)	Mr. Chomé Fuster (ES)	IL, KR, MX, QZ, ZA, Office

[1] for name of experts, see List of Participants

DRAFT TEST GUIDELINES TO BE DISCUSSED AT TWF/43
(* indicates possible final draft Test Guidelines)

New draft to be submitted to the Office of the Union
before March 15, 2013

(Guideline date for Subgroup draft to be circulated by Leading Expert: January 18, 2013
Guideline date for comments to Leading Expert by Subgroup: February 15, 2013)

Species	Basic Document(s)	Leading expert(s)	Interested experts (States/Organizations) [2]
Avocado rootstock (*Persea* Mill.)	TG/PERSEA(new)	Mr. Barrientos-Priego (MX)	AU, BR, IL, NZ, ZA, QZ, Office,
Acca (*Acca sellowiana* (Berg) Burret)	TG/ACCA(proj.1)	Mr. Barnaby (NZ)	BR, ZA, CIOPORA, Office
*Apple rootstocks (*Malus* Mill.) (Revision)	TG/163/4(proj.2)	Mr. Venter (ZA)	AU, CN, DE, FR, QZ, BR, JP, KR, NZ, RO, CIOPORA,Office
Coconut (*Cocos nucifera* L.)	TG/COCOS(proj.1)	Mrs. Machado (BR)	CN, ID, MX, TH, VN, Office
Mandarins (Citrus L. - Group 1) (Partial revision)	TG/201/1	Mr. Chomé Fuster (ES)	AU, CN, CO, IL, JP, KR, MA, MX, NZ, QZ, ZA, CIOPORA, Office
*Peach (*Prunus persica* (L.) Batsch) (Partial revision)	TG/53/7, TWF/43/31	Mr. Brand (FR)	AU, BR, CA, CN, ES, IL, JP, KR, MX, NZ, SK, RO, QZ, ZA, CIOPORA, Office
*Pecan nut (*Carya illinoinensis* (Wangenh.) K. Koch)	TG/PECAN(proj.8)	Mr. Barrientos-Priego (MX)	BR, IL, KR, ZA, Bioversity, Office
*Litchi (*Litchi chinensis* Sonn.)	TG/LITCHI(proj.2)	Mrs. Lu Xin (CN)	IL, JP, KR, ZA, Office
Walnut (*Juglans regia* L.) (revision)	TG/125/6	Ms. Dong Pei (CN)	JP, KR, QZ, ZA, Office
Vanilla (*Vanilla planifolia* Jacks)	TG/VANIL(proj.2)	Mr. Barrientos-Priego (MX)	CN, FR, QZ, Office
*Prunus rootstocks (*Prunus* L.) (Revision)	TG/187/2(proj.1)	Mr. Schulte (DE)	AU, BR, CN, ES, FR, KR, NZ, RO, QZ, ZA, CIOPORA, Office

[End of Annex IV and of document]

[2] for name of experts, see List of Participants