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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

**TECHNICAL WORKING PARTY
FOR
FRUIT CROPS****Eighteenth Session
Kiryat Anavim, Israel, March 18 to 20, 1987**

REPORT

adopted by the Technical Working Party for Fruit CropsOpening of the Session

1. The eighteenth session of the Technical Working Party for Fruit Crops (hereinafter referred to as "the Working Party") was held at Kiryat Anavim, Israel, from March 18 to 20, 1987. The list of participants is given in Annex I to this report. Meetings of the Subgroups for Fruit Crops for Tropical and Subtropical Regions and for Temperate Regions were held at the same place on March 17, 1987.

2. Dr. M. Hoffman, Chairman of the Plant Breeders' Rights Council and Director of the Institute for Field and Garden Crops, Agricultural Research Organization, welcomed the participants to Israel. The session was opened by Mr. F. Schneider, Chairman of the Working Party, who extended a special welcome to Mr. R.R. Stapleton, United Kingdom, who was attending a meeting of the Working Party for the first time.

Adoption of the Agenda

3. The Working Party unanimously adopted the agenda of the eighteenth session as reproduced in document TWF/XVIII/1.

Adoption of the Draft Report on the Seventeenth Session

4. The Working Party unanimously adopted the draft report of the seventeenth session as reproduced in document TWF/XVII/23 Prov., after having incorporated the remarks reproduced in Circular U 1161-08.1 and in document TWF/XVIII/8.

Short Reports on New Developments in Member States in Plant Variety Protection for Fruit Species

5. The Working Party noted the reports on new developments in plant variety protection for fruit species given orally by each of the Working Party's experts. It noted, in particular, the difficulty of testing rootstock varieties and clone varieties for which the number of applications for plant breeders' rights had been increasing in France and the United Kingdom.

Important Decisions Taken During the Last Session of the Technical Committee

6. The Working Party noted the oral report by Dr. M.-H. Thiele-Wittig on the decisions taken during the last session of the Technical Committee and briefly discussed some of the items.

Standard Test Guidelines

7. The Working Party noted paragraphs 17 to 19 of document TC/XXII/7 and the revised Standard Test Guidelines reproduced in document TC/XXII/8 which had been distributed to all members of the Working Party. Some of the Working Party's experts proposed that the contents of subparagraphs 17(i) to 17(iii) of document TC/XXII/7 concerning the interpretation of a single combined Table of Characteristics for different groups of varieties should be included in the revised general introduction to the Test Guidelines. Others, however, expressed concern that the revised general introduction might be too long if all the subparagraphs were included.

Combined Over-Years-Analysis

8. The Working Party noted that the Technical Committee had agreed to introduce the combined over-years-analysis for testing grass varieties, as shown in paragraph 50 of document TC/XXII/7. The majority of the Working Party's experts were of the opinion that visual assessments were more efficient than statistical assessments for fruit crops and they saw little possibility of introducing the over-years-analysis for testing fruit varieties. However, the Working Party noted that the experts from South Africa would study applicability of the over-years-analysis to fruit crops.

Final Discussion on Draft Test Guidelines

Test Guidelines for Gooseberry

9. The Working Party noted documents TG/51/4(proj.) and TWF/XVIII/7 and agreed to send the Test Guidelines for Gooseberry to the Technical Committee for final adoption, after having incorporated the following changes in document TG/51/4(proj.):

(i) Subject of these Guidelines: These Test Guidelines should apply to all varieties of Ribes uva-crispa L. and their hybrids which are similar to Ribes uva-crispa L.

(ii) Methods and Observations:Paragraphs

- 3 the word "trees" replaced by "plants"
- 5 the word "whole" inserted before "plant"
- 11 after the paragraph, the following new paragraph inserted: "The description should be supplemented by a shadowgraph of eight typical leaves."

(iii) Grouping of Varieties: Subparagraph 2(i) should be deleted.(iv) Table of Characteristics:Characteristics

- 2 the states changed into "very sparse, sparse, medium, dense, very dense"
- 5 the example varieties "Reverta (1), Rote Triumph (3), Risulfa (5), Ingelheimer Rote (7), Lepac (9)" inserted
- 8 the asterisk deleted
- 11 an asterisk inserted
- 11, 12 the words "number of" inserted before "points"
- 17 an asterisk inserted
- 17 to 19 the word "mature" replaced by "fully developed"
- 20 the word "flower" or "flowers" deleted from each state
- 25 the states changed into "globose, ellipsoid, pyriform;" before that characteristic, the following new characteristic inserted: "Fruit: ratio length/width" with the states "small, medium, large" and the example varieties to be named by the experts from the Federal Republic of Germany
- 28 the example varieties "Hönings Früheste (3), Rote Triumph (5), Weiss Triumph (7) replaced by "Bila (3), Golden Lion (5), Hönings Früheste (7)" respectively

Test Guidelines for Guava

10. The Working Party noted documents TG/110/1(proj.), TWF/XVIII/3 and TWF/XVIII/9, and agreed to send the Test Guidelines for Guava to the Technical Committee for final adoption, after having incorporated the following changes in document TG/110/1(proj.):

(i) Subject of these Guidelines: The Latin name of Guava should be "Psidium guajava L.

(ii) Methods and Observations: Paragraph 7 should be deleted. After paragraph 8, the following new paragraph should be added: "The description should be supplemented by a shadowgraph of leaves from the middle of the mature vegetative flush and imprints of the longitudinal median section of fruits."

(iii) Grouping of Varieties: Subparagraphs 2(vi) and 2(vii) should be deleted.

(iv) Table of Characteristics:

Characteristics

- | | |
|----|--|
| 2 | the example varieties "Oakford, Puerto Rico (1), Pink Indian (3)" inserted |
| 3 | the example varieties "Oakford, Puerto Rico (1), Pink Indian (9)" inserted |
| 4 | the example varieties "WK 11-26 (3), Pink Indian (7)" inserted |
| 5 | the example varieties "Beaumont (3), Puerto Rico (5)" inserted |
| 7 | amended to read "Fully developed leaf: length of blade" and the example varieties "Puerto Rico (3), DA6, Dert (7)" inserted |
| 8 | amended to read "Fully developed leaf: width of blade" and the example varieties "Buys (3), Dert (7)" inserted |
| 9 | amended to read "Fully developed leaf: ratio length/width of blade" and the example varieties "Curflau (3), Buys (7)" inserted |
| 10 | the example varieties "Buys, Welken (6)" inserted |
| 11 | the example variety "Oakford I (7)" inserted |
| 12 | the example varieties "Beaumont (1), Oakford I (9)" inserted |
| 13 | the example varieties "Curflau (1), Welken (9)" inserted |
| 14 | the example variety "Welken (3)" inserted |
| 15 | the example varieties "Beaumont, Puerto Rico (1)" inserted |
| 16 | the example varieties "Puerto Rico (2), Oakford I (3)" inserted |
| 17 | the example variety "Puerto Rico (3)" transferred to state 1 and the example variety "Pink Indian" inserted in state 3 |
| 18 | the example varieties "DA6 (3), Oakford I (7)" inserted |
| 19 | the example varieties "WK11-26 (3), Welken (7)" inserted |
| 22 | the example varieties "Buys (3), Oakford II (5)" inserted |
| 23 | the state "acute" deleted and the example variety "Pink Indian (3)" inserted |

- 24 the example varieties "Pink Indian, Puerto Rico (2), Dert (5)"
inserted
- 27 deleted
- 34 amended to read: "Fruit: shape at stalk end"
- 42 amended to read: "Fruit: diameter of calyx cavity in relation to
that of fruit"
- 48 the indication of explanation (+) deleted
- 55 deleted.

The following example varieties in the Table of Characteristics should be checked by the experts from South Africa: "Seedless, Lucknow 45, Malherbe, Fan Retief, Harijha, Safeda, Habshi, Blich, Allahabad Safeda, Indonesian Seedless, Pink Acid, Madeira, Hong Kong Pink, Patillo."

(v) Explanations on the Table of Characteristics:

Ad 34, 35 The lower half of each drawing should be erased.

Ad 48 & 49 These drawings should refer only to characteristic 49.

(vi) Technical Questionnaire: Subparagraphs 5.6 and 5.7 should be deleted.

Test Guidelines for Macadamia

11. The Working Party noted documents TG/111/1(proj.), TWF/XVIII/8 and TWF/XVIII/10. It noted the example varieties proposed by the experts from South Africa and Australia, which are listed in their respective columns in Annex II to this report. It would try to compare the varieties in the different columns to see whether they represent the same state of expression. The final Test Guidelines document would, however, comprise only the example varieties indicated by the experts from South Africa. The Working Party agreed to send the Test Guidelines for Macadamia to the Technical Committee for final adoption, after having incorporated the following changes in document TG/111/1(proj.):

(i) Subject of these Guidelines: The spelling of "Betcbe" should be corrected: The abbreviation of the author's name of M. tetraphylla should be "L.A.S. Johnson."

(ii) Conduct of Tests: Each test should include "6 trees" instead of "6 plants."

(iii) Table of Characteristics:

Characteristics

3, 4, 5, 12, 13, 16 an asterisk inserted

19 amended to read: "Seed: length" with the states "short, medium, long;" after this characteristic, the following new characteristic added: "Seed: width" with the states "narrow, medium, broad"

- 20 the words "globular, elliptic" replaced by "globose, ellipsoid" respectively
- 24 after this characteristic, the following three new characteristics added: "Seed: micropyle" with the states "closed, open;" "Seed: suture from micropyle to hilum" with the states "inconspicuous, conspicuous;" "Seed: thickness of seed coat (shell)" with the state "thin, medium, thick"
- 25 the words "at 1.5% moisture content" inserted after "kernel"
- (iv) Explanations on the Table of Characteristics: On the drawing for characteristics 16 to 18, the positions of micropyle and hilum should be indicated.
- (v) Literature: The page numbers of the second literature should read "pp. 5-15" instead of "pp. 5-12."

Test Guidelines for Mango

12. The discussion was based on documents TG/112/1(proj.), TWF/XVIII/8 and TWF/XVIII/9, as well as on the revised working paper which had been prepared by the experts from South Africa and distributed during the session. The Working Party agreed to send the Test Guidelines for Mango to the Technical Committee for final adoption, after having made the following changes in document TG/112/1(proj.):

- (i) Methods and Observations: At the end of paragraph 8, the following sentence should be added: "All fruits for observation should be harvested from the periphery of the tree and ripened at room temperature without any artificial ripening agents." At the end of this chapter, the following new paragraph should be added: "The description should be supplemented by shadowgraphs of leaves from the middle of the mature vegetative flush and imprints of the longitudinal sections in two directions of fruit."
- (ii) Table of Characteristics:

Characteristics

- 12 the example varieties "Van Dyke (1), Hood (3)" inserted
- 14 the example varieties "Hood (1), Florigon (9)" inserted
- 15 the example varieties "Hood (1), Zill (2)" inserted
- 16 the example varieties "Carrie (1), Hood (2)" inserted
- 17 the example variety "Irwin (1)" replaced by "Hood" and the example varieties "Fascell, Haden (9)" inserted
- 19 deleted
- 20 the states changed into "smooth (Sabre)" and "raised between secondary veins (Carrie)"
- 22 deleted

- 23 the word "predominant" inserted before "relief" and the example variety "Early Gold (2)" inserted
- 24 states 1 and 9 deleted and the example varieties "Tommy Atkins (3), Florigon (7)" inserted
- 25 the state "attenuate" with the example variety "Florigon" inserted before state 1; the example variety "Hood" inserted for state 2; state 3 deleted and the new drawing inserted in Chapter VIII
- 45 the example varieties "Adams (3), Irwin (5)" inserted
- 46 the example varieties "Adams (3), Irwin, Zill (5), Keitt, Nimrod (7), Extrema (9)" inserted
- 47 the example varieties "Sensation (5), Carrie, Gouveia (7)" inserted
- 48 the example varieties "Fascell, Zill" replaced by "Gouveia"
- 49 amended to read: "Mature fruit: color of skin" with the states "only green (Carrie), green and purple (Sensation, Zill), green and red (Fascell), green and orange (Gouveia), green and pink (Kensington)"
- 50 deleted
- 51 the word "over" replaced by "non-green," and the example varieties "Zill (3), Irwin (5)" inserted
- 52 deleted
- 53 the words "absent, present" replaced by "inconspicuous (1), conspicuous (2)" respectively and the example varieties "Early Gold (1), Sensation (2)" inserted
- 54 the example varieties "Carrie, Fascell (3), Sabre (5), Hood, Sensation (7)" inserted
- 55 the example varieties "Sandersha (3), Sheil (5), Ruby (7)" inserted; after this characteristic, the following new characteristic added: "Mature fruit: size of lenticels" with the states "small (Sandersha, Sensation), medium, large (Haden, Sheil)"
- 56 the words "flat, protruding" replaced by "smooth, rough" respectively, and the example varieties "Hood, Peach, Zill (1), Kensington (2)" inserted
- 57 deleted
- 58 divided into the following four characteristics reading: "Mature fruit: stalk cavity" with the states "absent (Adams, Ruby), present (Nimrod);" "Mature fruit: depth of stalk cavity" with the states "shallow (Florigon, Haden, Irwin), medium, deep (Nimrod);" "Mature fruit: neck" with the states "absent (Fascell, Zill), present (Ruby);" "Mature fruit: prominence of neck" with the states "weak (Peach, Sandersha), medium, strong (Ruby);" the drawings for Chapter VIII added to the second and the fourth characteristics

- 62 divided into the following two characteristics: "Mature fruit: length of groove in left shoulder" with the states "short (Fascell, Sheil), medium (Kensington), long;" "Mature fruit: depth of groove in left shoulder" with the states "shallow (Fascell), medium (Sheil), deep"
- 63, 64 deleted
- 65 the words "fleshy protuberance (5)" replaced by "lumpiness;" the example variety "Sensation" replaced by "Peach;" and the example varieties "Fascell, Zill (9)" inserted
- 66 to 72 deleted
- 73 the words "proximal of stylar scar" inserted after "sinus" and the example varieties "Hood, Kent (1), Gouveia (9)" inserted
- 74 amended to read: "Mature fruit: prominence of sinus proximal of stylar scar" with the states "weak (Florigon, Peach), medium (Kensington), strong (Anderson, Sabre)" added
- 75 amended to read: "Mature fruit: bulge proximal of stylar scar" with the states "absent (Adams, Anderson), present (Sheil)" and the drawing added
- 76 the asterisk deleted and amended to read: "Mature fruit: prominence of bulge proximal of stylar scar" with the states "weak (Fascell), medium, strong (Nimrod, Sheil)"
- 77 the asterisk deleted and amended to read: "Mature fruit: shape at stylar scar" with the states "depressed (Sheil), flattened (Kent), pointed (Sandersha, Van Dyke), ridged (Zill)"
- 78, 79 deleted
- 80 the example variety "Sabre" replaced by "Sensation" and the example varieties "Adams (5), Tommy Atkins (7)" inserted
- 81 deleted
- 82 the states changed into "green to yellow (Early Gold), reddish (Hood)"
- 83 amended to read: "Ripe fruit: predominant color of skin" with the states "green (Long Green), yellow green (Carrie, Sandersha), green and yellow (Early Gold), yellow, yellow and orange (Peach), orange, yellow and red (Adams, Ruby, Sensation), orange and red, red (Van Dyke), orange and purple (Tommy Atkins), red and purple, purple;" after this characteristic, the following new characteristic added: "Ripe fruit: brilliance of skin color" with the states "absent (Gouveia, Hood, Sheil), present (Adams, Ruby)"
- 84, 85, 86 deleted
- 87, 88 the word "over" replaced by "skin"
- 89 the example varieties "Adams, Carrie, Florigon (3), Peach, Sabre, Sheil (5), Haden (7)" inserted

- 90 the example variety "Fascell (7)" inserted
- 92 the example varieties "Carrie, Sheil (3), Haden, Zill (5), Sensation, Tommy Atkins (7)" inserted
- 93 the example varieties "Tommy Atkins (5), Carrie (7)" inserted
- 94 the example varieties "Adams, Fascell (3), Tommy Atkins (5), Sheil (7)" inserted
- 95 amended to read: "Ripe fruit: amount of fibrous fibre in flesh attached to stone;" after this characteristic, the following new characteristic added: "Ripe fruit: amount of fleshy fibre beneath the skin" with the states "low (Kent), medium, high (Sheil, Tommy Atkins)"
- 96 the example varieties "Sensation (1), Sandersha (9)" inserted
- 97, 98 deleted
- 99 the word "beak" replaced by "point at stylar area"
- 101 the example varieties "Peach, Ruby (1), Tommy Atkins, Zill (9)" inserted
- 102 the example variety "Tommy Atkins" deleted and the example variety "Anderson (5)" inserted
- 103 the example variety "Fascell (3)" inserted
- 104 the example variety "Sensation" to be checked by the experts from South Africa
- 105 the example variety "Irwin (9)" inserted
- 106 amended to read: "Seed: length in relation to length of stone" with the states "short (Tommy Atkins), medium, long (Sensation)"
- 108 deleted

(iii) Explanations on the Table of Characteristics:

- Ad 6 + 20 the drawings reversed
- Ad 45 to 81 the words "peduncle, pedical, beak" replaced by "branch of infructescence, fruit stalk, stylar scar" respectively
- Ad 48 the drawing for Note 5 amended
- Ad 73 the positions of stylar scar and of sinus indicated

(iv) Literature: the name of the author of the third literature amended to read "Gangolly" and the additional literature provided by the experts from South Africa inserted

(v) Technical Questionnaire: subparagraphs 5.1, 5.2, 5.7, 5.9, 5.10 deleted

List of Reference Books and Documents

13. The Working Party noted that, at its last session, the Technical Committee had adopted the list of reference books and documents reproduced in document TC/XXII/4 and had agreed to publish the list as part of UPOV's Collection of Important Documents.

Revision of the UPOV Model for a Report on Technical Examination

14. The Working Party noted that the Technical Committee, at its last session, had adopted the revised UPOV model for a report on technical examination reproduced in Annex IV to document TC/XXII/7. All members of the Working Party were requested to use the revised model immediately for both national and international purposes.

Discussions on Working Papers on Test GuidelinesTest Guidelines for Banana

15. The Working Party noted documents TWF/XVIII/2 and TWF/XVIII/2 Rev. and made the following changes in document TWF/XVIII/2 Rev.:

- (i) Cover page: The French common name should be "Bananier."
- (ii) Subject of these Guidelines: The words "genome" and "... ploids" should be replaced by "varieties" and "... ploid varieties" respectively.
- (iii) Methods and Observations:

Paragraphs

- 2 the number of plant parts to be observed should be 10
- 4 amended to read: "The length of pseudostem should be measured from the ground level to the crook of the peduncle at the beginning of flowering"
- 5 amended to read: "The circumference of the pseudostem should be measured at the height of 30 cm from ground level at the beginning of flowering"
- 6 deleted
- 7 the words "flower emergence" replaced by "flowering"
- 8 the word "(finger)" deleted
- 10 the word "female" replaced by "well-developed"
- 15, 16 deleted.

(iv) Grouping of Varieties: It was agreed that the varieties should be divided firstly into the main groups of Musa acuminata triploids. The experts from South Africa were requested to rewrite paragraph 2 in the way used for draft Test Guidelines for Macadamia. Paragraph 3 should read: "For the further grouping, it is recommended that the competent authorities use the length of pseudostem (characteristic 1)."

(v) Table of Characteristics:

Characteristics

- 1 amended to read: "Pseudostem: length" with the states "very short, short, medium, long, very long"
- 2 the words "at 30 cm from base (at flower emergence)" deleted
- 5 the word "flower" replaced by "bract"
- 8 the word "bud" replaced by "portion"
- 15 deleted
- 17 the words "of fruit (finger)" deleted
- 18, 19, 20 the content in brackets deleted
- 26 amended to read: "Mature fruit: thickness of skin" with the states "thin, medium, thick"
- 28 to 32 the word "leaf" replaced by "leaf blade" and transferred between characteristics 2 and 3
- 32 the word "ventral" replaced by "lower."

(vi) Literature: The following literature was added: E. de Langhe, 1969: "Bananas, Outlines of perennial crop breeding in the tropics," Miscellaneous papers 4, pp. 53-78, Landbouwhogeschool, Wageningen, NL

(vii) Technical Questionnaire: Paragraph 1 should include the main groups of Musa acuminata triploids.

16. The Working Party agreed to rediscuss the Working Paper on Test Guidelines for Banana at its next session. The experts from South Africa were asked to send the information still lacking to the Office of the Union. Furthermore, the experts from Israel and South Africa would examine the possibility of including the additional characteristics mentioned on page 10 of document TWF/XVIII/2.

Test Guidelines for Blackberry

17. The Working Party noted documents TWF/XVII/5, TWF/XVIII/4 and TG/73/3 and agreed to send the draft Test Guidelines for Blackberry to the professional organizations, after having made the following changes in document TWF/XVII/5:

(i) Subject of these Guidelines: These Guidelines should apply to all varieties of Rubus procerus, R. laciniatus and R. allegheniensis and their

hybrids as far as they are morphologically similar to those species. However the experts from the United Kingdom would check the whole sentence in the chapter.

(ii) Material Required: The recommended quantity of plant material should be "6 one-year-old plants."

(iii) Conduct of Tests: The number of plants to be included in each test should be 4.

(iv) Methods and Observations: In paragraph 3, the word "trees" should be replaced by "plants."

(v) Grouping of Varieties: Characteristics 1, 9 and 23 should be used for grouping varieties.

(vi) Table of Characteristics:

Characteristics

- | | |
|----------|--|
| 1 | the states "erect to semi-erect (4), semi-erect to rambling (6, Tayberry)" added |
| 5 | after this characteristic, characteristic 6 from document TG/73/3 should be re-inserted and the example varieties checked by the expert from the Federal Republic of Germany |
| 8 | amended to read: "Dormant cane: shape in cross section" with the states "rounded (3, Sunberry), rounded to angular (4), angular (5, Wilson's Early), angular to grooved (6), grooved (7, Mammoth)" |
| 13a, 13b | inserted before characteristic 13 |
| 13a | the example varieties "Philadelphia (1), Black Satin (3), Bedford Giant (5), Tayberry (7)" inserted |
| 13b | the example varieties "Philadelphia (3), Ashton Cross (5), Thornless Evergreen (7)" inserted |
| 14 | the example variety "Philadelphia" inserted |
| 17b, 17c | deleted |
| 18 | the word "shoot" replaced by "lateral" |
| 20 | the states "globose (Himalaya), broad ovoid (Wilson's Early), ellipsoid (Taylor's Prolific), narrow ovoid (Tayberry)" inserted; after this characteristic, the following new characteristic added: "Fruit: ratio length/width" with the states "small (Himalaya), medium (Taylor's Prolific), large (Tayberry)." |
| 21 | the states "reddish (3, Loganberry), black (4, Black Satin)" inserted |

(vii) Literature: The expert from the Federal Republic of Germany would provide some literature useful for testing blackberry varieties.

- (viii) Technical Questionnaire: Subparagraph 5.4 should be deleted.

Test Guidelines for Chestnut

18. The Working Party noted documents TWF/XVII/17 and TWF/XVIII/12 and agreed to make the following changes in document TWF/XVII/17:

(i) Subject of these Guidelines: These Guidelines apply to all varieties of Castanea sativa Mill. and of its hybrids.

(ii) Material Required: The recommended quantity of plant material should be "6 plants either grafted (one year after grafting; please indicate rootstock) or on their own roots (2 years old)."

(iii) Conduct of Tests: As a minimum, each test should include a total of 4 trees.

(iv) Methods and Observations: At the end of this Chapter, the following additional paragraph should be inserted: "The description should be supplemented by shadowgraphs of leaves."

(v) Grouping of Varieties: Subparagraphs 1(ii) and 1(iii) should be deleted. Subparagraph 1(iv) should be amended to read: "Interspecific hybrids between Castanea sativa and any other species." The expert from France was asked to provide the characteristics to be included in paragraph 3.

(vi) Table of Characteristics:

Characteristics

- | | |
|------------|--|
| 1 | deleted |
| 2 | amended to read: "Tree: diameter of trunk (1 m high, starting after first growing season)" |
| 5 | the word "surface" replaced by "ribbing" and the states changed into "very weak, weak, medium, strong, very strong" |
| 12, 18 | the states changed into "basal third, median third, upper third" |
| 14, 17, 19 | deleted |
| 15 | the words "of male flowers" deleted |
| 21 | to be checked by the expert from France |
| 23 to 33 | the word "mature" replaced by "fully developed" |
| 24 | amended to read: "Fully developed leaf: cross section" and the states to be examined by the expert from France |
| 27 | the word "upright" replaced by "erect" |
| 28 | amended to read: "Fully developed leaf: green color of upper side" with the states "light (3), medium (5), dark (7)" |

- 29 the word "nacre" replaced by "pearl"
- 31 the states changed into "wedge-shaped (1), wedge-shaped to rounded (2), rounded (3), rounded to cordate (4), cordate (5)"
- 32 amended to read: "Fully developed leaf: persistence of dead leaves on tree in vegetative pause" with the states "absent, present" and transferred after characteristic 36
- 33 the states changed into "mucronate, serrate"
- 34 amended to read: "Fully developed leaf: symmetry of petiole" with the states "asymmetric, symmetric"
- 35 amended to read: "Fully developed leaf: adult color of petiole"
- 36 amended to read: "Fully developed leaf: hairiness of petiole"
- 37 amended to read: "Fully developed leaf: ratio length of blade/length of petiole"
- 39 the contents in brackets deleted
- 40 amended to read: "Polyembryonic varieties only: Fruit: degree of separation"
- 41, 53, 54 the word "tan" replaced by "seed coat"
- 42 the states changed into "ovoid, globose, broad ovoid, transverse broad ellipsoid, transverse ellipsoid"
- 43 the word "ribs" replaced by "ribbing"
- 44 the word "visible" deleted
- 45, 48 deleted
- 47 the explanation to be provided by the expert from France to be added
- 49 to be checked again by the expert from France
- 50 amended to read: "Fruit: glossiness (at time of opening of shell)"
- 53, 54 the word "Tan" replaced by "Seed coat"
- 56 amended to read: "Monoembryonic varieties only: Kernel: inner cavity"

(vi) Explanations on the Table of Characteristics: The drawings for characteristic 23 should be deleted.

(vii) Literature: The expert from France was asked to provide the literature useful for testing chestnut varieties.

(viii) Technical Questionnaire: Under paragraph 1, the applicant would be asked whether the variety belonged to Castanea sativa Mill. or was a hybrid with other species. The expert from France was asked to check the characteristics to be included under paragraph 5.

19. The Working Party decided to rediscuss Test Guidelines for Chestnut at its next session. The expert from France was also asked to provide the optimal stages for observation to be included in the Table of Characteristics and to check the example varieties. The example varieties should be chosen from the varieties belonging to Castanea sativa. Characteristics in which no difference among the Castania sativa varieties could be observed should be deleted from the Table of Characteristics.

Test Guidelines for Prunus Rootstocks

20. The Working Party noted documents TWF/XVII/22, TWF/XVIII/5 and TWF/XVIII/12. However, lack of time did not allow the Working Party to discuss Test Guidelines for Prunus Rootstocks.

Test Guidelines for Jostaberry

21. The discussions were based on document TWF/XVIII/6. The Working Party agreed to make the following changes in that document:

(i) Subject of these Guidelines: The expert from the Federal Republic of Germany was asked to check the Latin name of Jostaberry.

(ii) Material Required: The recommended quantity of plant material should be "4 plants with at least three well-developed shoots."

(iii) Grouping of Varieties: Subparagraphs (i), (ii), (iii) and (v) of paragraph 2 should be deleted.

(iv) Table of Characteristics:

Characteristics

- 2 amended to read: "Plant: ratio height/width" with the states "small, medium, large"
- 3 the words "small, large" replaced by "few, many" respectively
- 6 the word "green" inserted before "color" and the same word in the states of expressions deleted
- 7 the states "absent or very weak, very strong" inserted
- 8 the word "predominant" inserted before "number" and the following states of expressions to be checked by the expert from the Federal Republic of Germany: "two to three (1), three to four (2), four to five (3), more than five (4)"
- 9 the states changed into "transverse broad ellipsoid (1), globose (2), broad ellipsoid (3)"

14 deleted

(v) Technical Questionnaire: Subparagraphs 5.1 and 5.3 should be deleted.

Test Guidelines for Walnut

22. The Working Party noted documents TWF/XVII/12 and TWF/XVIII/11 and agreed to make the following changes in document TWF/XVII/12:

(i) Subject of these Guidelines: These Guidelines apply to all varieties of Juglans regia L.

(ii) Conduct of Tests: As a minimum, each test should include a total of 4 trees.

(iii) Methods and Observations: In paragraph 5, the word "plant" should be replaced by "tree."

(iv) Grouping of Varieties: In paragraph 2, reference should be made to characteristics 4, 9 and 14 for grouping varieties.

(v) Table of Characteristics:

Characteristics

- | | |
|-------------------|---|
| 1 | amended to read: "Tree: diameter of trunk (1 m high, starting after first growing season)" |
| 3 | the words "weak, strong" replaced by "sparse, dense" respectively |
| 4 | amended to read: "Tree: predominant locations of fruit bud" with the states "at tip of one-year-old shoot, all along one-year-old shoot, on spurs" |
| 5 | the words "Branch of one year" replaced by "one-year-old shoot" |
| 6 | amended to read: "Leaf: shape of lateral leaflet" with the states "narrow elliptic, elliptic, broad elliptic" |
| 8 to 11, 13 to 17 | transferred to the end of the Table of Characteristics |
| 12 | amended to read: "Flower: number of male catkins" with the states "few, medium, many" |
| 13 | amended to read: "Plant: time of male flowering compared to female flowering" with the states "before, simultaneous, after" |
| 14 | an asterisk inserted |
| 15 | amended to read: "Husk: persistence on tree after nut fall" with the states "non persistent, partially persistent, persistent" |
| 16, 17 | the word "susceptibility" replaced by "resistance" and the states changed into "absent or very weak, weak, medium, strong, very strong" |
| 19 | amended to read: "Fruit: shape in longitudinal section" with the states "cordate, circular, triangular, broad ovate, ovate, broad oblong, oblong, broad elliptic, elliptic" |
| 20 | amended to read: "Fruit: shape in longitudinal section perpendicular to suture" with the same states as for characteristic 19 |

- 21 amended to read: "Fruit: width of rondure" with the states "very low (Sorrente), low (Corne, Gustine, Payne), medium (Chico, Grandjean), high, very high (Meylannaise)
- 22 the words "basis in lateral view" replaced by "base perpendicular to suture" and the fourth state changed into "emarginate"
- 23 the words "in lateral view, shouldered, recurrent" replaced by "perpendicular to suture, troncate, emergent" respectively
- 24 amended to read: "Fruit: prominence of point of pistil"
- 25 amended to read: "Fruit: position of pad on suture" with the states "upper half, upper 2/3, whole length"
- 26 amended to read: "Fruit: prominence of pad on suture" with the states "weak, medium, strong"
- 27 the words "of shell in lateral view" deleted
- 28 the notes changed into "1, 2, 3, 4"
- 29 the word "anfractuosity" replaced by "groove"
- 31 amended to read: "Fruit: adherence of two halves of shell"
- 32 the states changed into "thin, medium, thick"
- 33 amended to read: "Fruit: ease of cracking"
- 34 amended to read: "Seed: color" with the states "cream, light brown, dark brown;" after this characteristic, the following new characteristic added: "Seed: distribution of color" with the states "even, streaky, patchy"
- 35 to 37 the word "Kernel" replaced by "Seed"
- 37 transferred before characteristic 34

23. The Working Party agreed to rediscuss Test Guidelines for Walnut at its next session. The expert from France was asked to check the example varieties --a maximum number of three for each state--and to examine the Technical Questionnaire.

Color Pictures as a Supplement of Variety Descriptions

24. During discussions on Test Guidelines, some experts in the Working Party suggested that variety descriptions, especially color description, should be facilitated by using color pictures, as was the case for the description of shapes in some cases presently supplemented by shadowgraphs. The Working Party noted the technical difficulty of including color pictures as a part of variety description, however, it agreed to ask the Technical Committee to discuss it at its next session.

Status of Test Guidelines

25. The Working Party agreed that the draft Test Guidelines for Gooseberry, for Guava, for Macadamia and for Mango should be sent to the Editorial Committee and the Technical Committee for final adoption.

26. The Working Party agreed that the draft Test Guidelines for Blackberry should be sent to the professional organizations for comments as soon as outstanding questions had been settled. It also agreed that the draft Test Guidelines should be sent to the additional professional organizations whose addresses would be sent to the Office of the Union by the expert from the United Kingdom.

27. The Working Party agreed that the working papers on Test Guidelines for Banana, for Chestnut, for Prunus Rootstocks, for Jostaberry and for Walnut should be rediscussed at its next session.

Future Program, Date and Place of Next Sessions

28. At the invitation of the expert from the Federal Republic of Germany, the Working Party agreed to hold its nineteenth session at Hanover, Federal Republic of Germany, from June 29 to July 1, 1988. On June 28, 1988, some subgroups would meet to discuss working papers on test guidelines. The sessions would close at 1.00 p.m. on July 1, 1988. During the session, the Working Party planned to discuss the following items:

(i) short reports on new developments in member States in plant variety protection for fruit species;

(ii) important decisions taken during the last sessions of the Working Party and the Technical Committee;

(iii) final discussion on draft Test Guidelines for:

Blackberry (TG/73/4(proj.) and comments from the professional organizations);

(iv) list of reference books and documents (TC/XXIII/..., paragraph ..);

(v) additional matters resulting from the twenty-third session of the Technical Committee;

(vi) discussions on working papers on Test Guidelines for:

- Banana (ZA and IL to prepare new proposals)
- Chestnut (FR to prepare new proposals)
- Prunus Rootstocks (TWF/XVII/22, TWF/XVIII/5, TWF/XVIII/12)
- Jostaberry (TWF/XVIII/6 + DE to provide additional information)
- Walnut (FR to prepare new proposals)
- Citrus (revision) (TG/83/3 + ZA to prepare a working paper)
- Black Currant (revision) (TG/40/3 + DE to prepare a working paper)
- Red and White Currant (revision) (TG/52/2 + DE to prepare a working paper)

Visits

29. On March 19, the Working Party visited the Experimental Station of Jordan Valley at Gil Gal (chrysanthemum trial) and the Local Research Centre at Tiberias (banana trial). During the morning of March 20, the Working Party visited the Agricultural Research Organization, Volcani Centre, where Prof. Dr. Spiegel-Roy gave a short lecture on "Fruit Crop Breeding in Israel."

Chairmanship

30. The Working Party unanimously agreed to recommend to the Technical Committee that it recommend to the Council that Mr. B. Bar-Tel, Israel, be elected Chairman of the Working Party for a term of three years.

Retirement

31. Mr. F. Schneider (Chairman of the Working Party, Netherlands) announced that he would retire during the year and thanked the members of the Working Party for their active contribution.

32. This report, in the absence of any suggestions for modifications, is considered as adopted, in accordance with Rule 37(5) of the Rules of Procedure of the Council.

[Annex I follows]

ANNEX I

LIST OF PARTICIPANTS IN THE EIGHTEENTH SESSION
OF THE TECHNICAL WORKING PARTY FOR FRUIT CROPS
KIRYAT ANAVIM, ISRAEL, MARCH 18 TO 20, 1987I. MEMBER STATESFRANCE

Mr. R. SAUNIER, Station d'arboriculture fruitière, INRA, Centre de recherche agronomique de Bordeaux, Domaine de la Grande Ferrade, 33140 Pont de la Maye (tel. 56 77 30 81)

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- Mr. J.U. RIETMANN, Agricultural Counsellor, South African Embassy, 59, Quai d'Orsay, 75007 Paris, France (tel. 01-45 55 92 37)

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- Mr. I. BENITEZ-SIDON, Instituto Nacional de Semillas y Plantas de Vivero, Registro de Variedades, José Abascal 56, 28003 Madrid (tel. 0034 1 441 8199)

SWITZERLAND

- Mr. P. RUSTERHOLZ, Prüfungsstellenleiter, Eidg. Forschungsanstalt für Obst-, Wein- und Gartenbau, 8820 Wädenswil (tel. 01 7801333)

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- Mr. R.R. STAPLETON, National Fruit Trials, Brogdale Experimental Horticulture Station, Faversham, Kent, ME13 8XU (tel. (0795) 535462)

II. OFFICER

- Mr. F. SCHNEIDER, Chairman

III. OFFICE OF UPOV

- Dr. M.-H. THIELE-WITTIG, Senior Counsellor, 34, chemin des Colombettes, 1211 Geneva 20, Switzerland (tel. (022) 99 91 52)
- Mr. M. TABATA, Associate Officer, 34, chemin des Colombettes, 1211 Geneva 20, Switzerland (tel. (022) 99 92 97)

[Annex II follows]

EXAMPLE VARIETIES FOR MACADAMIA
PROPOSED BY THE EXPERTS FROM SOUTH AFRICA AND AUSTRALIA

Characteristics	states	Example Varieties proposed by the experts from South Africa	Example Varieties proposed by the experts from Australia	Note
1. Tree: shape	erect	Kau	Keaau	1
	spreading	Keakea, Nelmak 2	Ikaika	2
2. Branch: predominant number of leaves per whorl on mature tree	three	Kau, Keaau, Keauhou, Nelmak 1		1
	four	Elimbah		2
3. Young leaf: color	green	Ikaika, Keakea, Keaau, Keauhou		1
	yellow green	Nelmak 2		2
	bronze	Elimbah		3
	reddish	Beaumont, Nelmak 1		4
	purple			5
4. Fully developed leaf: length	short	Greber, Keakea		3
	medium			5
	long	Elimbah, Nelmak 2		7
5. Fully developed leaf: length/width ratio	low	Teddington		3
	medium			5
	high	Elimbah		7
6. Fully developed leaf: conspicuousness of secondary veins	weak	Greber, Ikaika, Keakea		3
	medium			5
	strong	Elimbah		7
7. Fully developed leaf: spine-tipped serrations on margin	absent	Greber, Rickard		1
	present	Beaumont, Elimbah, Nelmak 2		9
8. Fully developed leaf: number of spine-tipped serrations on margin	few	Kau	Hinde	3
	medium	Ikaika, Teddington		5
	many	Elimbah, Nelmak 2		7

Characteristics	states	Example Varieties proposed by the experts from South Africa	Example Varieties proposed by the experts from Australia	Note
9. Fully developed leaf: undulation of margin	weak	Nelmak 2	Hinde	3
	medium	Keakea	Keahou	5
	strong	Keaau, Keahou, Rickard	Own Choice	7
10. Fully developed leaf: tip	acute	Elimbah, Nelmak 2		1
	rounded	Keakea, Teddington	Hinde	2
11. Fully developed leaf: petiole	absent or very short	Elimbah		1
	short			3
	medium			5
	long	Keaau, Teddington		7
	very long			9
12. Inflorescence: length	short	Kau		3
	medium	Beaumont, Greber		5
	long	Elimbah	Beaumont	7
13. Flower: size	small	Kau		3
	medium		Keauhou	5
	large	Nelmak 1	Beaumont	7
14. Flower: color	creamy white	Greber, Kau, Teddington		1
	pink	Beaumont, Nelmak 1		2
15. Infructescence: thickness of main axis	thin			3
	medium			5
	thick			7
16. Fruit: neck	absent	Elimbah, Nelmak 2		1
	present	Keakea, Keaau		9
17. Fruit: apical point	small	Nelmak 2, Teddington		3
	medium			5
	large	Beaumont, Keaau		7

Characteristics	states	Example Varieties proposed by the experts from South Africa	Example Varieties proposed by the experts from Australia	Note
18. Fruit: thickness of pericarp	thin		Keaau	3
	medium		Keauhou	5
	thick		Hinde	7
19. Seed: size	small		Keaau	3
	medium			5
	large		Ikaika	7
20. Seed: shape	oblate	Nelmak 2		1
	globular	Kau, Keaau, Teddington		2
	spindle-shaped	Cate		3
	elliptic	Nelmak 1		4
21. Seed: brown color	pale		Own Choice	3
	medium			5
	dark		Takea	7
22. Seed: surface	smooth	Kau, Keaau, Teddington		1
	rough	Beaumont, Cate, Elimbah		2
23. Seed: pale specks on surface	absent	Cate	Own Choice	1
	present	Elimbah		9
24. Seed: conspicuousness of pale specks on surface	inconspicuous	Teddington	Takea	1
	conspicuous	Elimbah	Own Choice	2
25. Seed: size of kernel	small		Keaau	3
	medium		Keauhou	5
	large		Hutty Glen	7
26. Seed: color of kernel	white		Makai	1
	cream		Takea	2
27. Seed: discoloration of distal half of kernel	absent		Makai	1
	present		Mauka	9

[End of Annex II and of document.]