



TWF/37/15

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**INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS**  
GENEVA

**TECHNICAL WORKING PARTY FOR FRUIT CROPS**

**Thirty-Seventh Session**

**Salvador, Bahia State, Brazil, August 21 to 25, 2006**

REPORT

*adopted by the Technical Working Party for Fruit Crops*

Opening of the Session

- 1.\* The Technical Working Party for Fruit Crops (TWF) held its thirty-seventh session in Salvador, Bahia State, Brazil, from August 21 to 25, 2006. The list of participants is reproduced in Annex I to this report.
- 2.\* The TWF was welcomed by Mrs. Maria Delia Gómez, Representative of the Ministry of Agriculture, Livestock and Food Supply.
- 3.\* The session was opened by Mr. Alejandro F. Barrientos-Priego (Mexico), Chairman of the TWF, who welcomed the participants, and in particular new participants to the TWF.
- 4.\* The TWF received a presentation on DUS Testing in Brazil from Mrs. Vera Lucia Santos do Machado, Head, *División de Normalización y Registro, Servicio Nacional de Protección de Cultivares* (SNPC), a copy of which is reproduced in Annex II to this report.

Adoption of the Agenda

- 5.\* The TWF adopted the revised agenda as reproduced in document TWF/37/1 Rev.

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\* Asterisked paragraphs are from document TWF/37/14, Report on the Conclusions, adopted by the Technical Working Party for Fruit Crops (TWF).

Short Reports on Developments in Plant Variety Protection in Fruit Crops*(a) Reports from members and observers (oral reports by the participants)*

6. The expert from Chile reported that at June 30, 2006, there were 450 protected varieties in his country, of which 248 were varieties of fruit species, 91 ornamental plants and 111 agricultural crops. Within the fruit species, 43 were varieties of nectarine, 32 peach, 29 apple, 22 cherry and 21 plum. He added that 60% of the protected fruit varieties were from the United States of America, 8.5% from New Zealand and 4.5% were domestically-bred varieties. He also reported that Chile was bound by the 1978 Act of the UPOV Convention but was working to modify its plant breeders' rights law according to the provisions of the 1991 Act.

7. Experts from Australia reported that the Australian plant breeders' rights office had been moved to IP Australia, which was responsible for all matters related to intellectual property in Australia.

8. The expert from Canada reported that most of the protected fruit varieties were domestically-bred varieties from the Canadian Agricultural Research Station, with the most important fruit species in terms of number of protected varieties being apple, strawberry and cherry. It was reported that the Canadian PBR Journal was available on-line on Internet only.

9. Experts from China reported that, in their country, two governmental agencies were responsible for granting plant breeders' rights: the Ministry of Agriculture and the State Forestry Administration. The State Forestry Administration was responsible for applications for fruit varieties. They reported that at July 31, 2007, 3,427 applications for plant breeders' rights had been filed, and 810 plant breeders' rights had been granted. In respect of fruit varieties, they reported that 80 applications had been filed and 19 plant breeders' rights had been granted.

10. Experts from the European Union reported that the Community Plant Variety Office (CPVO) had received a total of 2,733 Community plant variety rights applications in 2005 (a 5% increase from the previous year), of which 198 were for fruit varieties. Overall, it had received over 25,000 applications in all crop sectors since commencing operations in 1995. The fruit sector had received 84 applications in the first half of 2006, which represented a 14% increase compared to the same period in 2005.

11. The expert from France reported that the French legislation on plant breeders' rights was being modified according to the 1991 Act of the UPOV Convention. He reported that, during 2005, 54 applications had been filed for fruit crops for the national list and 26 for plant breeders' rights and that 268 DUS field trial examinations had been carried out in France. He added that the most important fruit crops in respect of the number of applications examined in France were apple, apricot, cherry and peach. He added that *the Groupe d'étude et de contrôle des variétés et des semences* (GEVES) and the *Institut national de la recherche agronomique* (INRA) were conducting a project on variety identification using DNA for fruit species. Peach and cherry varieties were identified using DNA profiles on a routine basis and that would be expanded to apricot and possibly to plum and walnut varieties in the near future. He explained that the aim of the project was to elaborate a reference collection for fruit species containing plant material, complete morphological descriptions, including photographs, and DNA profiles.

12. The expert from Germany reported that 160 applications for fruit varieties had been processed in 2005, 25% of which concerned national applications and 75% of which were on

behalf of the CPVO. She added that the most important fruit crops were apple, raspberry and strawberry.

13. The expert from Hungary reported that, in 2005, 30 applications had been filed, one of which was for a fruit variety.

14. The expert from Italy reported that, in 2005, there was an increase in the number of applications for plant breeders' rights for fruit varieties; however most of the applications were for agricultural and vegetable crops.

15. The expert from Japan reported that an agreement for cooperation in DUS examination between the Seeds and Seedlings Division (SSD) of the Ministry of Agriculture, Forestry and Fisheries (MAFF) and the CPVO was under preparation. He reported that, in 2005, 1,385 applications had been filed with the SSD. The National Center for Seeds and Seedlings (NCSS) had conducted DUS examinations for 613 applications. He added that, during 2006, the staff of the NCSS would be increased and that Japan would host a workshop on the enforcement of plant breeders' rights in November 2006.

16. The expert from Mexico reported that, during 2005, 663 applications for plant breeders' rights had been filed, 42% for agricultural crops, 28% for ornamental crops, 22% for fruit crops, 7% for vegetables and 1% for others. He reported that the most important species were maize, with 21% of the total number of applications, rose with 18% and strawberry with 11%. The main origin for varieties was the United States of America, with 37% of the total number of applications, Mexico with 35%, Netherlands with 11% and France with 10%.

17. The expert from Netherlands informed the TWF about the creation of a national germplasm collection for fruit varieties. He reported on the relocation of DUS testing to Naktuinbouw which, from January 1, 2006, had been made responsible for DUS examination for plant breeders' rights and national listings.

18. The expert from Poland reported that the new seed law had entered into force on July 2, 2006, and that the plant breeder's rights law was being amended, in particular with respect to the "farm-saved seed" provisions. She reported that since Poland had entered into the European Union, the number of applications had dropped: by mid 2006 the number of varieties were 1,619, of which 109 were fruit varieties, 647 agricultural varieties, 283 vegetable varieties, 579 ornamental varieties and other crops 1 variety. She added that there were 56 applications for fruit varieties under examination, 46 of which were for domestically-bred varieties.

19. The expert from South Africa reported that, during 2005, 20 plant breeders' rights had been granted to fruit varieties, making a total of 264 protected fruit varieties in the country, of which 170 were domestically-bred varieties and 94 were foreign varieties. The total number of plant breeders' rights granted by the end of 2005 was 1,884 and the number of plant genera and species listed for protection by June 2006 was almost 300. She added that the current trend in the country was to protect fruit rootstock, which provided disease resistance.

20. The expert from Spain informed the TWF that there were ten testing centres in Spain. In 2005, 15 applications had been filed for plant breeders' rights for fruit varieties; mainly citrus, olive and peach varieties.

21. The expert from the Republic of Korea reported that there were 155 plant genera or species covered by the plant breeders' right system in his country, 6 of which were fruit species.

She added that, since the beginning of the system, in December 1997, until July 2006, 2,695 applications had been filed and 1,642 plant breeders' rights had been granted, of which 134 applications were for fruit varieties with 84 plant breeders' rights having been granted for fruit varieties. The most important fruit species were apple, Chinese lemon, peach, pear, grapevine and kiwi fruit. She explained that, of the total number of applications filed up to December 2005, 64.6% were domestically-bred varieties and 34.5% were foreign-bred varieties. For fruit varieties, the main origin of foreign-bred varieties was Italy and New Zealand.

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

22.\* The TWF received an oral report from the Office of the Union on the latest developments within UPOV.

### Molecular techniques

(a) *Developments in UPOV concerning the use of molecular techniques*

23.\* The TWF considered document TWF/37/2.

(b) *Ad hoc Crop Subgroups*

24. The TWF received an oral report on developments concerning the *Ad hoc* crop subgroups on molecular techniques. It noted the extension of the Crop Subgroup for Wheat to cover both wheat and barley and the establishment of a crop subgroup for vegetatively propagated crops which, in conjunction with all interested parties and breeders in particular, could formulate proposals for consideration by the TC and the BMT Review Group. The expert from Spain wondered about the usefulness of having a vegetatively propagated subgroup covering different species; however, other experts considered that it was a very practical approach and that good progress could be made in that group.

### TGP Documents

(a) *TGP documents to which the Technical Committee has given highest priority:*

*TGP/4 Constitution and Management of Variety Collections*

25.\* The TWF discussed document TGP/4/1 Draft 7 and agreed to propose the following:

2.1.1.2	With respect to the comments made by the TWA to clarify that variety collections include candidate varieties, the TWF considered that before taking decisions on including candidate varieties in a reference collection it was necessary to complete the examination of them to obtain the necessary background information to use the candidate variety as a comparator.
Title Section 3	The TWF considered that the term "Management" is more appropriate for the title of Section 3 because it reflects more accurately the content of the section, giving the idea that the variety collection evolves in time.

*TGP/9 Examining Distinctness*

26.\* The TWF discussed document TGP/9/1 Draft 7 and agreed to propose the following:

2.3 Title	The TWF proposed to reword the title as follows: “2.3 Grouping of varieties on the basis of grouping characteristics”. The TWF noted that there may be different criteria for the grouping of varieties (e.g. by breeder, year of breeding, etc.); therefore the TWF considered it important to clarify that, for the DUS examination, the grouping characteristics should be the basis for grouping.
2.3.3.2	In respect to the proposal for a revised text of this paragraph, the TWF agreed to maintain the text in conformity with the General Introduction, i.e. “as a general rule, qualitative characteristics are not influenced by the environment”. The TWF agreed with the comment made by the TWA.
2.3.4 Title	The expression “combining grouping characteristics” to be changed to make clear that it refers to the use of more than one grouping characteristic and not to the creation of a combined characteristic. To check throughout the document for the use of the terms “combining characteristics” or “combination of characteristics” and to reword them where necessary.
2.4.2	Section 2 deals with the selection of varieties for the growing trial and the last two sentences of paragraph 2.4.2 (i.e. the highlighted text) deal with the rejection of the application. The highlighted text should be deleted or reworded to put it in the context of Section 2.
3.2	To explain that, in perennial plants, the possibility of grouping is limited once the collection has been established.
5.2.1.1 (b)	The highlighted text could be interpreted in different ways, e.g. the value of the difference between several characteristics in a characteristic-by-characteristic approach; the use of combined characteristics like length/width ratio, or the use of multivariate analysis. The TWF agreed with the reworded text proposed by the TWA (i.e. “Assessment by Notes / single variety records (“Notes”): the assessment of distinctness is based on the recorded state of expression of the characteristics of the variety”)
5.2.3.14	The TWF agreed with the rewording of the text proposed by the TWA (i.e. “However, in general, varieties with the same Note in the UPOV Test Guidelines would not normally be considered to be clearly distinguishable.”).
6.5 Title	To delete “panel of” because, in some cases, it was one expert who provided advice and not a panel of experts.

*TGP/10 Examining Uniformity*

27.\* The TWF discussed document TGP/10/1 Draft 4 and agreed to propose the following:

2.3.1 (a)	To add apricot and avocado as examples of vegetatively propagated species.
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4.2.3 and 4.2.4 and 4.2.5	The section should be restructured into only two sections, on the basis of plants which should not be considered off-types (section 4.2.3) and plants which should be considered as off-types (sections 4.2.4 and 4.2.5). Furthermore, the TWF considered that it is not possible to clearly separate between whole plant off-types (section 4.2.4) and plant-part off-types (section 4.2.5); off-types are considered on a characteristic-by-characteristic basis, in the same way as distinctness is assessed, as presented in section 4.2.2. The TWF considered that paragraph 4.2.4.2 should be deleted and that paragraph 4.2.4.3 should be moved to the section which should not be considered off-types (the present section 4.2.3). With respect to the two versions presented in paragraph 4.2.5.1, the TWF did not agree with version 1.
4.2.6.3	To be divided into two paragraphs, one dealing with growing of a further generation and another with the examination of new plant material.
4.3	There is no need to develop this section.
Adoption of TGP/10	The TWF considered that TGP/10 should be discussed by the Technical Working Parties again in 2007.

(b) *Other TGP documents:**TGP/8 Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability*

28.\* The TWF discussed document TGP/8/1 Draft 4 and requested that the drafters of TGP/8 take into account the comments the TWF had made at its thirty-sixth session, in particular with respect to PART II, Section 1: Methods for assessing uniformity on the basis of off-types.

*TGP/12 Special Characteristics: Section 1: Development of Characteristics based on a Response to an External Factor*

29.\* The TWF discussed document TGP/12 Section 1 Draft 3. In reply to the request of the expert from Israel to develop a section on chemical compounds and other special characteristics, the TWF recalled that this was the subject of Section 2 of TGP/12, which was under development by experts of the TWA.

*TGP/13 Guidance for New Types and Species*

30.\* The TWF discussed document TGP/13/1 Draft 6 and agreed to propose the following:

2.7	Even in the case of descriptions of a candidate variety of a new species, it was necessary to follow the UPOV format (i.e. a tabulated list of characteristics) as far as possible.
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*TGP/14 Section 2: Glossary of Technical, Botanical and Statistical Terms Used in UPOV Documents: Botanical Terms:*

*- Plant shapes (including hair types)*

31.\* The TWF discussed document TGP/14.2.1(&2) Draft 5 and agreed to propose the following:

	SECTION II: SHAPES
General	To have the illustrations made in black color instead of green.
	The TWF considered the approach to shapes presented in the document to be useful, in particular for harmonization purposes. Furthermore, it did not consider it necessary to run a test in the TWF as the one agreed by the TWV.
1	To harmonize the use of the terms “widest point” and “broadest part” throughout the document.
1.2 (a)	The TWF was more in favor of the use of “ratio length/width” as it was the normal practice. However, that should not be a fixed rule, to allow the use of ratio width/length in the particular situations where it was necessary. Furthermore, the TWF noted that the change in the ratio should not imply a change in the order of the illustrations of the table on page 7; the order of the values of the scale at the top of the table should be changed instead.
1.3	Page 9, “Chart for Other Plane Shapes”: “oblique” is not a shape and should be moved to Section 3.3. “Clavate” is a three-dimensional shape (see Section 3.4).
2.3	To include in the table of page 18 the illustration of shape of the base; calcarate (4) from the draft Test Guidelines for Fig (TG/FIG(proj.1)) as another example of strongly reflexed angle of base. To have “weakly reflexed” and “strongly reflexed” instead of “weakly reflex” and “strongly reflex”.
2.5	To clarify that the section deals with the shapes explained in the previous sections, i.e. full plane (Section 2.2); base shapes (Section 2.3) and apex shapes (Section 2.4).
	To clarify that the chart presented on page 22 is for illustration purposes and is not intended to show the way characteristics would be presented in a Test Guidelines document.
2.6	“In profile” is one option of many other options to observe a shape in a two-dimensional way (e.g. from the top; from the base, etc.). It should be replaced by “in cross section”, which is more general.
	The illustration of the example for “strongly assymmetric” to be improved.
3.4	To improve the illustration of “ <u>cylindrical</u> ” which is confusing with tubular and to improve the illustration of “capitate”.
	The term “spheric” to be replaced by “globose”.
	To consider the possibility to add illustrations of other angular shapes, e.g. pyramidal (Germany will provide).

	SECTION IV: DEFINITIONS
	Where more than one term exists for the same shape, to include all terms and to provide the definition in the one considered the most widely used. The definition of the alternative terms to make a cross-reference to the definition of most widely used (e.g. deltoid is broad conical, globose is spheric).

- *Color characteristics*

32.\* The TWF did not have time to discuss document TGP/14.2.3.1 Draft 2 and TGP/14.2.3.2 Draft 4.

UPOV Information Databases

33.\* The TWF noted the information provided in document TWF/37/4.

Variety Denominations

34.\* The TWF noted the information provided in document TWF/37/5.

Project to Consider the Publication of Variety Descriptions

35.\* The TWF noted the information provided in document TWF/37/6.

Criteria for Determining Off-type Plants

36.\* The TWF considered document TWF/37/9 in conjunction with the discussion of document TGP/10/1 Draft 4.

Drafters' Kit for Test Guidelines

37. The TWF considered document TWF/37/7.

38. The expert from Israel explained that, in the past, he had been in favour of having a template for the preparation of UPOV Test Guidelines, but he considered that the generalization had gone too far and might restrict the possibilities of the drafting expert. The expert from Mexico noted that, whilst it may take a little time to become familiar with the use of the TG Template, there were great advantages in using it. An expert from South Africa considered that, at the beginning, it took some time to get used to the TG Template and that some simplification might be considered. The expert from Australia recalled that the aim was to gain efficiency in drafting Test Guidelines and noted that if too much standardization was achieved, future species may not be well covered within the TG Template.

39.\* The TWF agreed on the usefulness of the TG template and of TGP/7; however it also considered that its structure may be regarded as rather complicated, in particular for those experts using it for the first time. The TWF expressed some concern about developing



electronic templates for variety types, in particular if it would reduce the flexibility that exists at the moment for the development of Test Guidelines. The TWF was in favor of considering the improvement of the TG template to provide a more user-friendly document.

Information on Probability Levels used in COY and Population Standards used in the Assessment of Uniformity by Off-types

40.\* The TWF noted the information provided in document TWF/37/10.

Additional Characteristics

41.\* The TWF noted the information provided in document TWF/37/8.

Discussion on draft Test Guidelines

*Apricot (Partial Revision)*

42.\* The subgroup discussed document TWF/37/12, as presented by Mr. Sergio Semon (European Community) and Mr. Richard Brand (France), and agreed the following changes:

- Char. 9 To check the state of expression of example variety “Veecot” (inserted in two states).
- Char. 44 To have the state “not visible” (1) added, with an example variety to be provided by France.
- Char. 45 To have the state “very large” (9) added, with an example variety to be provided by France.
- Char. 57 State “medium” (5) to have the example varieties “Bergeron, Harlayne, Pisana, Polonais”, state 7 to have the example varieties “Borsi rozsa, Larqueen, Tardif de Bordaneil type 2, Revlar”, and state “very late” (9) to have the example varieties “Boutard, Lartago”.

43.\* The subgroup agreed to submit the changes for adoption to the Technical Committee at its forty-third session in 2007.

*Banana (Musa L.) (Revision)*

44.\* The subgroup discussed document TG/123/4(proj.4), as presented by Mrs. Vera dos Santos Machado (Brazil), and agreed the following changes:

- General All the example varieties will be rechecked
- General A table of synonyms of example varieties will be provided after 8.2
- General Variety denominations will be proposed to replace cultivated groups, e.g. “Smooth Cayenne”, which is a group, will be replaced by “Champaka”

General	To reorder all the characteristics according to the UPOV order
General	To review all indications of types of expression (PQ, QL and QN)
Char. 1	(*) to be added; Brazil to provide an explanation of the method to count chromosomes and France of the method of cytometry.
Char. 2	To read: "Rhizome: number of suckers above ground". To insert in Chapter 8: to be observed at harvest.
Char. 4a New	To read: "Pseudostem: imbrications in leaf sheaths." States to read: weak (3), medium (5), strong (7). To add a (+) and an explanation.
Char. 5	To read: "Pseudostem: shape". States to read: narrow conical (1), medium conical (2), broad conical (7). To add a (+).
Char. 6	To read: "Pseudostem: color". To delete states: yellow (1) and blue (9). To replace "purple/violet" with "purple". To reorder the notes.
Char. 7	(*) to be added and a (+) with an explanation.
Char. 8	To delete the state pink purple and to check other states.
Char. 8a New	Pseudostem: size of spots. States to read: small (1), medium (2), large (3).
Char. 9	To read: "Pseudostem: density of spots", with the example varieties: "Figue Pomme, Thap Mao" (3), "Grande Naime" (5), "Preciosa" (7).
Char. 10	To read: "Pseudostem: color of the inner side on sheath base". State 4 to read "purple".
Char. 11	To read: "Plant: compactness of crown". States to read: loose (3), medium (5), compact (7).
Char. 12	To read: "Plant: growth habit".
Char. 13	States to read: curved outwards (1), straight (2), curved inwards (3).
Char. 13a New	To read: "Petiole: overlapping of wings at base", with the states: absent (1) and present (9).
Char. 13b New	To read: "Petiole: width in cross section", with the states: medium (3), medium (5) and broad (7). To add a (+) with an illustration. To be checked with France.
Char. 15	To read: "Leaf blade: color of midrib on lower side".
Char. 16	States to read: rounded (1), one rounded and one acute (2), acute (3).
Char. 17	To read: "Leaf blade: waxiness of lower side".
Char. 22	States to read: absent (1), present (9).
Char. 23	To be deleted.
Char. 26	To read: "Peduncle: pubescence" and to add a (+).
Char. 27	To read: "Peduncle: curvature", with the states: weak (3), medium (5), strong (7). To add an explanation with an illustration. To check the example varieties.
Char. 28a New	To read: "Bunch: diameter", with the states: narrow (3), medium (5), broad (7).
Char. 29	To delete the state "intermediate".
Char. 29a New	To read: "Bunch: symmetry", with the states: symmetric (1), asymmetric (2).

- Char. 30 To read: “Bunch: attitude of hands”. State 3 to read: turned up and horizontal.
- Char. 31 To read: “Bunch: compactness”.
- Char. 34 To read: “Rachis: attitude of male part”, with the states: curved with vertical end (3), with inclined end (4).
- Char. 35 To read: “Rachis prominence of scars”.
- Char. 36 States to read: absent or very weak (1) (with the same example varieties), moderately persistent (2) (example variety “Prata”), strongly persistent (3) (with the same example varieties).
- Char. 37 To read: “Persistence of rachis hermaphrodite flowers” States to read: absent (1), present (2), with the same example varieties.
- Char. 38a New To read: “Fruit: position of the fruit compared to the rachis”. Explanation to be provided by France.
- Char. 39 To read: “Fruit: longitudinal ridges”. To rename the states in the illustration. To add a (+) and the explanation: “to be observed on the medium third of the fruit”.
- Char. 41 To read: “Fruit: width (excluding sharp edges)”, with the states: narrow (3), medium (5), broad (7).
- Char. 43 To add the state “truncate” (4) with example variety “Grande Naine”; with an illustration to be provided by France for this state. To reorder states.
- Char. 45 To have the states: light green (1), medium green (2), dark green (3), pink (4), red (5), purple (6), brown (7) (state “brown” to be checked by Brazil).
- Char. 46 To have the states: light yellow (1), yellow (2), dark yellow (3), green yellow (4), orange (5), red orange (6), reddish (7), brown (8), black (9). States to be checked by France and Brazil.
- Char. 47a New To read: “Fruit: persistence of floral organs”. To have the states: absent (1) (example variety “Figue rose”), present (9) (example varieties “IDN 110, Grande Naine, Yangambi km 5”).
- Char. 48 To read: “Fruit: color of flesh (stage 6 for ripe fruit)”. To replace states “dull white” with “off white” and “pink” with “pinkish cream”.
- Char. 49 To read: “Fruit: firmness of flesh (stage 6)” and to replace the state “moderately soft” with “medium” (3).
- Char. 49a New To read: “Male inflorescence: presence”, with the states: absent (1), present (9).
- Char. 50 To read: “Male inflorescence: shape”. To have the states: lanceolate (1), ovate (2) (with the example varieties “Yangambi km 5, Pacovan”), triangular (3), rounded (4).
- Char. 52 To read: “Bract: color of inner side”. To have the states: whitish (1), pink (2), yellow (3), green (4), orange red (5), red (6), purple (7).
- Char. 53 To read: “Male inflorescence: yellow hue of the apex of the bract on outer side”. To check if it concerns the outer or the inner side.
- Char. 54 To read: “Male inflorescence: separation of the bract from the male inflorescence”.

- Char. 55 To read: “Male inflorescence: shape of apex of bract”. To have the states: acute (1) (example variety “Gros Michel”), intermediate (2), obtuse (3) (example varieties “Yangambi Km 5, Figue Pomme”).
- Char. 55a New To read: “Male inflorescence: incision of apex of bract”. To have the states: absent (1), present (9) (example variety “Figue Pomme”).

*Black Currant (Revision)*

45.\* The subgroup discussed document TG/40/7(proj.2), as presented by Mr. Erik Schulte (Germany), and agreed the following changes:

1. To check the family and to refer to the Test Guidelines for Jostaberry (TG/138) for hybrids
- 3.4.1 To read: “Each test should be designed to result in a total of at least 5 plants”.
- 5.3 To have the following grouping characteristics:
  - (a) One-year-old shoot: color (characteristic 4)
  - (b) Young shoot: anthocyanin coloration (characteristic 10)
  - (c) Fruit: size (characteristic 22)
  - (d) Fruit: color (characteristic 24)
  - (e) Time of beginning of fruit harvest (characteristic 28)
- Char. 2 State “spreading (3)”; to have example variety “Wellington XXX” instead of “Wellington” throughout the document.
- Char. 3 To check whether example variety “Baldwin Hilltop” is the same as “Hilltop” and to indicate the correct denomination throughout the table.
- Char. 6 Example varieties for state “short”“(1) to read “Ben Alder”
- Char. 7 Example varieties for state “rounded” (3) to read “Goliath”
- Char. 8 To read: “Vegetative bud...”
- Char. 10 To delete state “very strong” (9)
- New After Char. 12 To read: “Leaf blade: ratio length/width”, with the states: small (3), medium (5), large (7). To be indicated as QN.
- Char. 13 Example varieties for state “straight” (3) to read “French”; for state “strongly open” to read “Tor Cross” and for state “moderately open” to have example variety “Baldwin”.
- Char.14 Example varieties for state “light” (3) to read “Malvern Cross”; and for state “dark” (7) to have the following example varieties “Ben Alder” and “Magnus”.
- Char. 15 To have the following states of expression: “absent or weakly expressed” (1), with example variety “Blacksmith”; state “moderately expressed” (2), with example variety “Titania” and state “strongly expressed” (3), with example variety “Jet”.
- Char. 16 To read: “Petiole: intensity of anthocyanin coloration on upper side” and to amend the spelling of example variety to “Brødtorp”

New. Char. 22 (b) To read: “Infructescence: type” with states of expression “Type 1 (1)” to “type 6 (6)”, with the following illustrations:



type 1 (raceme)



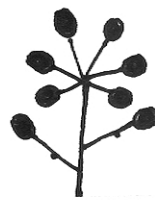
type 2 (raceme)



type 3 (panicle)



type 4 (panicle)



type 5



type 6

Char. 22 To add asterisk. In state “small” (3), to delete example variety “Ben Nevis” and in state “very large” (9) to delete example variety “Ben Lomond”.

Char. 24 To add asterisk.

Char. 27 To delete note (d) and to add state “very early” (1) with “Brødtorp” as example variety; to add to the existing example varieties “Malvern Cross” for state 3, “Goliath” for state 5, and “Black Reward” for state 7. To delete “Ben Sarek” as example variety for state 9.

Char. 28 To delete note (d) and to add to the existing example varieties, “Boskoop Giant” for state 1, “Tor Cross” for state 3, “Baldwin Hilltop” for state 5, and “Ben Alder” for state 7.

Ad. 7 To improve the illustration for state “obtuse” (2).

Ad. 27 To assess the beginning of flowering at 10 % of flowers fully open, instead of at 20 %.

Add 22. To read:  
“Ad. 22: Fruit: size

“Fruit size is determined by the weight of a minimum of 50 berries. Sufficient berries should be harvested from the 5 plants and combined in a single container. The 50 berry sample is then randomly taken from the combined sample”.

TQ 5 To amend the list of characteristics to reflect the changes in the grouping characteristics (i.e. only grouping characteristics to be included in Section 5 of the TQ).

*Blueberry (Revision)*

46.\* The subgroup discussed document TG/137/4(proj.2), as presented Mrs. Maria Zaleska (Poland), and agreed the following changes:

- Cover page To add the botanical name “*Vaccinium simulatum* Small”, common name in English “Upland Highbush Blueberry” and the following names in English:  
*Vaccinium formosum* Andrews, *Vaccinium australe* Small to add the English common name “Swamp or Southern Highbush”, for *Vaccinium corymbosum* to add “Swamp or Southern Highbush” and “Northern Highbush.”
- 3.5 The last sentence to read: “In the case of parts of plants, the number to be taken from each of the plants should be 2.”
- 5.3 To have the following grouping characteristics:
- (a) Plant: habit (characteristic 2)
  - (b) Plant: fruiting type (characteristic 15)
  - (c) Fruit: color of skin (after removal of bloom) (characteristic 22a)
  - (d) Fruit: intensity of blue color of skin (after removal of bloom) (characteristic 23)
  - (e) Time of beginning of flowering on one-year-old shoot (characteristic 27)
  - (f) Varieties which fruit on one-year-old shoots and current season’s shoots: Time of beginning of flowering on current season’s shoot (characteristic 27a)
  - (g) Time of beginning of fruit ripening on one-year-old shoot (characteristic 28)
- Varieties which fruit on one-year-old shoots and current season’s shoots: Time of beginning of fruit ripening on current season’s shoot (characteristic 28a)
- Char. 2 To read: “Plant: growth habit”.
- Char. 3 To have the following states of expression: greenish (1), greenish red (2), greyish red (3), reddish yellow (4), reddish brown (5), and dark red (6).
- Char. 4 To delete MG. To be indicated as QN.
- Char. 5 To add the example varieties: “Bluecrop” and “Patriot” for state 5; “Toro” for state 7.
- Char. 6 To delete example variety “Bluecrop” from state 3 and to move it to state 5; to add example varieties “Emil” and “Putte” for state 3, and to add example variety “Ama” for state 5.
- Char. 7 To add example varieties “Gretha” for state 3, “Patriot” for state 5 and “Heerma” for state 7.
- Char. 8 To insert a state: “ovate” (2), with example variety “Puru”.

- New Char. 8a To read: “Leaf: color of upper side” with states of expression “yellow” (1), with example variety “Geerdens” and “green” (2). To be indicated as QL/VG.
- Char. 9 To read: “Varieties with green color only: Leaf: intensity of green color on upper side”; and to add example varieties: “Berkeley” and “Toro” for state 5.
- Char. 10 To add example variety “Brigitta” for state 2.
- Char. 11 To be indicated as MG/VG.
- New Char. 11a To read: “Flower bud: anthocyanin coloration” with states of expression “weak” (3), with example variety “Hele”; “medium” (5), with example variety “Patriot” and “strong” (7), with example variety “Bluecorp”. To be indicated as QN and have note (a).
- New Char. To read: “Flower: shape of corolla” with states of expression “urceolate” (1), with example variety “Maru”; campanulate” (2) and “cylindrical” (3), with example variety “Reka”. To be indicated as PQ and have note (c).
- Char. 12a To be deleted.
- Char. 13 To add state “absent or very weak” (1) with example variety “Maru”.
- Char. 14 No explanation necessary.
- New Char. 14a To read: “Fruit: density of cluster” with the states of expression: “sparse” (3) with example variety “Rahi”; “medium” (5) with example variety “Toro”) and “dense” (7) with example variety “Tifblue”). To be indicated as VG and have note (d).
- Char. 15 To read: “Plant: fruiting type” and to be moved after Char. 14.
- Char. 19 To be deleted.
- Char. 19a and 19b New Zealand to provide example varieties.
- Char. 21 To delete example variety “Top Hat”.
- Char.22 To add the following example varieties: “Gretha” for state 3, “Ama”, for state 5, “Gila” for state 7.
- New Char. 22a To read: “Fruit: color of skin” with the states of expression “blue-red” (1) with example variety “Delite” and “blue” (2) with example variety “Bluetta”. To be indicated as QL and have note(d).
- New Char. 23a To read: “Fruit: firmness” with the states of expression “soft” (1); “medium” (3), with example variety “O’Neil”; “firm” (7), with example variety “Duke” and “very firm”(9), with example variety “Rahi”. To be indicated as QN.
- Char. 24 and 25 To be indicated as QN.
- New Char. 27a To delete states (1) and (9) and NZ to provide example varieties for the rest.
- Char. 28 To read: “Time of beginning of fruit ripening on one-year-old shoot”.

Char. 28a To read: “Varieties which fruit on one-year-old shoots and current season’s shoots (see char. 15): Time of beginning of fruit ripening on current year’s shoot”; with states of expression: early (3), medium (5), late (7). To have notes (\*) (+) and to be indicated as MG and QN.

Section  
8.2

Ad. 11a To be deleted.  
and Ad.14

Ad. 27 To include Ad. 27a in the same explanation.

Ad. 28 To include 28a in the same explanation.

9 Poland to provide a complete list of names of authors and to avoid the use of italic font.

TQ.5 To include the grouping characteristics.

TQ.7 To finish the sentence with a full stop.

*Coffee*

47.\* The subgroup discussed documents TG/COFFEE(proj.4 Rev.) and TWF/37/11, as presented by Mrs. Vera Machado (Brazil), and agreed the following changes:

General To recheck all example varieties.

Alternative Names To delete the names “Arabica type coffee”, “Robusta type coffee” and “*C. arabica* x *C. canephora*” from the table of Alternative Names.

2.3 To read as follows (additions are underlined, deletions are strikethrough):

“i) Vegetatively propagated varieties: 8 one-year-old plants,

ii) Seed-propagated varieties: ~~20 one-year-old plants~~ 50 seeds.”

3.5 To read: “~~Varieties resulting from crossing:~~—unless otherwise indicated, all observations should be made on 5 plants or parts taken from each of 5 plants for vegetatively propagated varieties and 20 plants for seed-propagated varieties”.

4.2.4 To check if this information is needed.

Char. 1 To replace all the states of expression by cylindrical (1), conical (2), oblong (3).

Char. 4 To add a (+) and the explanation: “to be observed on one axil from 3 to 6 from the top of the tree”.

Char. 5 To read: “Plagiotropic primary branch: length of internode.”

Char. 5a New To read: “Plagiotropic primary branch: diameter”. States: small (3), medium (5), large (7). Brazil to provide an explanation.



- Char. 9 To provide photographs of leaf shapes and to check states of expression.
- Char. 9a New To read: “Leaf: shape of apex”. States: apiculate (1), acuminate (2), caudate (3).
- Char. 10 To delete (+) and the state “green and bronze” and to replace “bronze” with “dark brown”.
- Char. 11 To read: “Leaf: undulation of margin and to replace “slight” by “weak”.
- Char. 12 To provide an explanation or example varieties.
- Char. 13 To delete the state “partially developed” and to replace “fully developed” with “present”.
- Char. 14 To be deleted.
- Char. 15 To add a (+) and the explanation: “to be observed on one axil from 3 to 6 from the top of the tree”.
- Char. 16 To be deleted.
- Char. 17 To add example varieties of *C. canephora* and to modify the example scale accordingly.
- Char. 18 To replace “round” by “circular” and to replace the illustrations with those to be provided by Mexico.
- Char. 20 To be deleted.
- Char. 21 To read: “Fruit: adherence to the branch”. States: very weak (1), weak (3), medium (5), strong (7), very strong (9) and to describe the method of assessment.
- Char. 21a New To read: “Fruit: fresh weight of 100 ripe fruits”. States: low (3), medium (5), high (7).
- Char. 21b New To read: “Fruit: proportion of single-seed fruits”. States: low (3), medium (5), high (7). To check the wording.
- Char. 22 and 23 To add illustrations to be provided by Mexico.
- Char. 23a New To read: “Seed: length/width ratio”. States: small (3), medium (5), large (7).
- Char. 25 To be deleted.
- Char. 26 To read: “Seed: adherence of silver skin” and to check to which structure (seed or fruit) it is related botanically. To describe the method and time of assessment.
- Char. 27 To read: “Period between flowering and harvesting” and to check existing UPOV Test Guidelines for appropriate states of expression.

- Char. 28 To read: “Maturity synchronization”. States: low (3), medium (5), high (7) and to place before characteristic 27.
- Char. 29 To delete (+) and “Only varieties of *Coffea canephora* L.”. To redefine states as dry (1), medium (2), juicy (3).
- Char. 30a New To read: “Seed: Sucrose content”. States: low (3), medium (5), high (7). France to provide method of assessment.
- Char. 30b New To read: “Seed: total chlorogenic acid content”. States: low (3), medium (5), high (7). France to provide method of assessment.
- Char. 30c New To read: “Seed: Diterpene content”. States: low (3), medium (5), high (7). France to provide method of assessment.
- Char. 31a New To read: “Resistance to rust”. States: susceptible (3), intermediate (5), resistant (7). Brazil to provide protocol and strains.
- Char. 31b New To read: “Resistance to leaf miner”. States: susceptible (3), intermediate (5), resistant (7). Brazil to provide protocol and species.
- Char. 31c New To read: “Resistance to nematodes”. States: susceptible (3), partially resistant (5), resistant (7). Brazil to provide protocol and species.

*Fig (Ficus carica L.)*

48.\* The subgroup discussed document TG/FIG(proj.1), as presented by Mr. Pedro Chomé Fuster (Spain), and agreed the following changes:

- 3.1 To finish the paragraph with a full stop.
- 3.4.1 To read: “5 plants” instead of “3 plants” and to make the corresponding changes throughout the document.
- 3.5 To read: “Unless otherwise indicated, all observations should be made on 5 plants or parts taken from each of 5 plants. In the case of parts of plants, the number to be taken from each of the plants should be 2.”
- 4.2.2 To refer to 5 plants instead of 3 plants.
- Table of Chars. To replace “Tree” by “Plant” throughout the Table of Characteristics.
- Char. 1 To read: “Plant: growth habit” to delete the state of expression “open” (5) and to have states of expression: upright (1), semi-upright (2), spreading (3).
- Char. 3 “Plant: number of basal suckers” with the states: few (3), medium (5) and many (7)
- Char. 4 State 5 to read: “medium”
- Char. 5 To read “One-year-shoot: color”, with the states: orange (1), brown (2), grey-brown (3), grey (4).
- Char. 6 To read: “One-year-old shoot: length of internode” with states: short (3), medium (5), long (7).

Char. 7	To have “few” and “many” instead of “low” and “high”
Char. 10	To be indicated as PQ.
Char. 11	To read: “Shoot: bud support”; with the states: absent or very small (1), small (3), medium (5), large (7).
Char. 12	To read: “Plant: number o bark tubers”; with the states: absent or very few, few (3), medium (5), many (7) and to add (*).
Char. 13	To read: “Two-year old shoot: type of growth”. To be indicated as QN.
Char. 14	To read: “Plant: weeping of secondary shots”; to be moved after Char. 1.
Char. 15	To read: “Leaf: type” with states: entire (1), tri-lobbed (2), five-lobed (3)
Char. 16 and 17	To be deleted.
Char. 18	To read: “ <u>Varieties with lobed leaves only</u> : Leaf: shape of terminal lob”.
Char. 19	To read: “ <u>Varieties with lobed leaves only</u> : ratio length of terminal lobe/length of blade”, with the states: small (3), medium (5), large (7).

49.\* The subgroup agreed that comments for characteristic 20 to the end of the Test Guidelines should be sent to the leading expert for the preparation of the following draft.

#### *Grapevine (Vitis L.)*

50.\* The subgroup discussed document TWF/37/13, as presented by Mr. Pedro Chomé Fuster (Spain). The TWF noted that there was a new revised draft ready to be circulated among the leading experts, and agreed the following:

- To have the following interested experts: AR, AU, BR, CZ, FR, HU, IL, KR, NZ, JP, MX, PL, QZ, SK, ZA.
- The leading experts will circulate the new revised draft to the interested experts before August 28.
- The interested experts will send comments by September 15.
- The leading experts will prepare a new draft of the Test Guidelines for Grapevine for discussion with the OIV incorporating the comments from the interested experts.
- A meeting for the harmonization of UPOV and the OIV documents will be agreed for the end of October or beginning of November. Once agreed, the venue for the meeting will be notified to all the interested experts. Experts from the European Community, France, Hungary, Germany and Spain expressed their interest in taking part in the meeting with the experts of the OIV.
- After the meeting with OIV experts, the leading experts will prepare a new draft of the Test Guidelines for Grapevine, which will be circulated to the interested experts for comments.
- If appropriate, a second meeting with UPOV and OIV experts by February 2007 will be arranged, if possible.
- A revised draft of the Test Guidelines for Grapevine will be presented for discussion at the thirty-eighth session of the TWF.

*Hawthorn (Crataegus L.)*

51.\* The subgroup discussed the table of characteristics of document TG/HAWTH(proj.3)), as presented by Mr. Alejandro F. Barrientos-Priego (Mexico), and agreed the following changes:

- |               |  |
|---------------|--|
| 5.3           | The grouping characteristics will be updated according to the table of characteristics changes.  |
| General       | Netherlands to provide example varieties.  |
| General       | To change (a) for (b) and (b) for (a) in all characteristics.  |
| Char. 1       | To have note (b). To read: “Plant habit”. To add state “weeping” (6) with example variety “Pendula”.   |
| Char. 2       | To read: “Plant: shape of canopy”.   |
| Char. 3       | To read: “Plant: height”.  |
| Char. 4       | To read: “Plant: growth type”. State 1 to read “shrub”.  |
| Char. 5       | To read: “Plant: candelabrous branching”. States: absent (1), with example variety “Calpan Gold”, present (9), with example variety “Gaca”.                  |
| Char. 6       | To read: “Plant: density of foliage”.  |
| Char. 7       | To be deleted.   |
| Char. 13      | To be deleted.   |
| Char. 16      | To read: “Leaf blade: length/width ratio”. Example varieties: “Flexuosa, Toba, Wattiana” (3), “Carrierei, Azucena” (5), “Poblano” (7).                       |
| Char. 17      | Example variety: “Flexuosa” (1).   |
| Char. 20      | To be deleted.   |
| Char. 20b New | To read: “Leaf blade: glossiness”. States: absent or very weak (1), medium, (2), strong (3). Example varieties: “Tzapingo” (1), “Mago” (2), “Carrierei” (3). |
| Char. 21      | To read: “Leaf blade: pubescence on upper side”.   |
| Char. 24      | To be deleted.   |
| Char. 24a New | To read: “Flower: type”. States: single (1) with example varieties “Edgar, Gloria, Punicea;” double (2) with example varieties “Masekii, Paul’s Scarlet”.    |
| Char. 25      | To add an explanation according to the apple guidelines.   |
| Char. 26      | Example varieties: “Chapeada, Chela, Plena” (1), “Masekii, Toba” (2), “Rubra Plena” (3); - (4), “Paul’s Scarlet” (5).  |
| Char. 27      | Flower: color of base of anthers. To change order of states to: green (1), yellow (2), pink (3), red pink (4), purple (5), dark purple (6), brown (7).       |
| Char. 28      | To be indicated as QN.   |
| Char. 29      | To add “single varieties only”.  |

- Char. 30a To be deleted.
- Char. 30b To be deleted.
- Char. 31 To be deleted.
- Char. 32 To move “light brown” (4), “medium brown”(5) and “dark brown” (6) after” purple” (9).
- Char. 34 To read: “Flower: calyx length”.
- Char. 35 To be deleted.
- Char. 36 To read: “Flower: pedicel length”.
- Char. 37 To be deleted.
- Char. 38 To move states: “light green” (9) and “medium green” (10) before “yellow” (1). To delete “brown”(11).
- Char. 39 State 1 to read “conic”.
- Char. 43 To read: “Fruit: length/width ratio”. Example varieties: “Ela” (3), “Erick, Robelo” (5), “Alex, Natzi” (7).
- Char. 44 To be deleted.
- Char. 45 To read: “Fruit: cavity of eye basin”.
- Char. 46 To read: “Fruit: depth of eye basin”.
- Char. 47 To read: “Fruit: main color of the flesh”.
- Char. 48 To read: “Fruit: glossiness”.
- Char. 49 To have the states: very sparse (1); sparse (3); medium (5); dense (7); very dense (9).
- Char. 50 To be indicated as QN.
- Char. 51 To be indicated as QN. State 1 to read: “absent or very weak” (1).
- Char. 53 To be deleted.
- Char. 54 State 7 to read: “long” (7).
- 8.1 (a) To change to (b). To read: “Plant: All observations should be made on foliated plants in spring”.
- 8.1 (b) To change to (a). To read: “Plant, stem and branch: All observations on vegetative shoot should be made on the current season’s shoot after growth.”
- 8.1 (g) To read: “Fruit and endocarp: All observations on the fruit and endocarp should be made on 10 typical fruits taken from a minimum sample of 20 fruits, at the time of fruit ripening.”
- 8.2 To be updated according to the changes in the Table of Characteristics.
- 9 To add: “Hillier, H. G. 1992. “Hillier’s Manual of Trees & Shrubs”. 6th ed. Romsey, UK. 575 p.”
- 10 Technical Questionnaire to be updated according to changes in the Table of Characteristics.

*Papaya (Carica papaya L.)*

52.\* The subgroup discussed the table of characteristics of document TG/PAPAYA(proj.2)), as presented by Mr. Alejandro F. Barrientos-Priego (Mexico), and agreed the following changes:

- |               |   |
|---------------|---|
| 1.            | To add: “of the family <i>Caricaceae</i> ”.   |
| 5.3           | To be updated according to the changes in the Table of Characteristics.   |
| Char. 1       | To delete (a). To amend the following states: green (1); purple (4).  |
| Char. 1a New  | To read: “Tree: position of pigmentation”. States: at base (1); above base (2); at middle (3); above middle (4); along stem(s). To add a (+) and an illustration. |
| Char. 2       | To check if is appropriate to take the height to first flower or to first fruit.  |
| Char. 3       | To read: “Plant: branching”. States: absent (1); present (9). To add (+) stating: “To be observed at the beginning of flowering”.                                 |
| Char. 4       | To read: “Stem: maximum diameter”. To delete (+).   |
| Char. 5       | To be deleted.  |
| Char. 6       | To check if is appropriate to take the number of nodes to first flower or to first fruit.   |
| Char. 11      | To check if this characteristic is suitable.  |
| Char. 14      | To read: “Leaf blade: pubescence on underside”.   |
| Char. 16      | To be deleted.  |
| Char. 17a New | To read: “Petiole: intensity of anthocyanin coloration”, with the states: low (1); medium (2); high (3). To add (+).  |
| Char. 17b New | To read: “Petiole: distribution of anthocyanin coloration”. To check if it is a suitable characteristic.  |
| Char. 19      | To have the states: few (3); medium (5); many (7).  |
| Char. 21      | To check if the following states would be suitable: light purple (2); dark purple (3).  |

The discussion of the document was not finished due to a lack of time.

It was agreed that the leading expert would maintain contact with the breeders from Brazil.

*Passion Fruit (Fruit species)*

53.\* The subgroup discussed document TG/PASSI(proj.2), as presented by Mrs. Carensa Petzer (South Africa), and agreed the following changes:

- |            |  |
|------------|--|
| 5.3        | To add characteristics 6 and 16 as grouping characteristics. |
| Char. 1(a) | To be deleted.   |
| Char. 3    | To read: “Leaf blade: maximum width”.                        |

- Char. 4 To read: “Leaf blade: maximum width of terminal lobe”.
- Char. 4a To add (+) with an illustration.
- Char. 4b To add (+) and illustration to have the states of expression: shallow (3), medium (5), deep (7).
- Char. 8 to 19 To add an illustration of the flower showing the different parts and where to observe the characteristics.
- Char. 18 Israel to check and to provide example varieties; if no example varieties to delete the characteristic.
- Ad. 23 To read: “Fruit: main color of the skin” with states of expression: light yellow (1), yellow (2), yellow-orange (3), pinkish red (4), red (5), greenish purple (6), reddish purple (7), purple (8), dark purple (9).
- New Char. To read: “Fruit: presence of lenticels”; with the states of expression: absent (1), present (9).
- Char. 24 To have the states: inconspicuous (1), conspicuous (2), and to be indicated as QL.
- Char. 26 To be deleted.
- Char. 28 To be indicated as QL.
- Char. 29 To add the states: yellow-orange (4), orange (5).
- 8.1 (d) To read: “Fruit: Observations on the fruit should be made on 10 typical fruits at the time of ripeness for eating.”
- Ad. 1a Explanation to read: “ To be assessed on the upper third of the vine at full flowering”.

### *Peach*

54.\* The subgroup discussed document TG/53/6 Rev.(proj.1), as presented by Mr. Richard Brand (France), and agreed the following changes:

Cover page Spanish common names: “melocotón, duraznero, nectarina”.  
 French common names: “pêche, nectarine, pavie, brugnon”.  
 To check the English common names.  
 To check if sub species are necessary.

I to VI To check if revision is necessary for updating.

### II. Material required

1. To read:
  - “5 budsticks with sufficient buds to propagate 5 trees [...]
  - 5 dormant shoots for grafting, sufficient to propagate 5 trees [...]
  - 5 trees grafted on appropriate rootstock to be selected by the competent authorities”.

### III. Conduct of tests

1. To have the general sentence "...two independent cycles with sufficient production of fruits".

### IV. Methods and observations

2 To read: "..."...In the case of a sample size of 5 plants, the maximum number of off types allowed would be 0."

All methodologies and observations to be placed in Chapter 8.

### VII. Table of characteristics

General, to check the German translation.

- |          |   |
|----------|---|
| Char. 2  | To add a (+) with an explanation.   |
| Char. 3  | To have the states "upright to spreading" (3s) (example varieties "Fair haven, Redwing"), "spreading" (5s) (example varieties "Elegant Lady, O'Henry, Albertina"). To be observed the year before the main pruning, with an illustration as in the Test Guidelines for Apricot and the TGP/14.2.1 (& .2) Draft 5, p. 29, to be provided in Chapter 8. |
| Char. 4a | To check if characteristic "tendency to produce on brindilles" is necessary.  |
| Char. 7  | To read: "Flowering shoot: intensity of anthocyanin coloration on the sunny side".  |
| Char. 8  | To have the states: very sparse (1) (example variety "Monline"), sparse (example varieties "O'Henry, Bigtop"), medium (example varieties "Michelini, Rich Lady, Melina"), dense (7) (example varieties "Redhaven, Jade"), very dense (9) (example varieties "Armking, Harco").  |
| Char. 9  | State 1 to read "isolated".   |
| Char. 10 | To add (+) with explanation to observe "just before opening".   |
| Char. 12 | To check if the states "very light pink" and "light pink" can be combined, also for "dark pink" and "violet pink".  |
| Char. 13 | State 3 to read: "circular"; to check if "elliptic" should be changed. France will provide an illustration for checking.  |
| Char. 15 | To read: " Flower: number of petals".   |
| Char. 16 | France to check if it can be deleted.   |
| Char. 23 | To have the states: low (3), medium (5), high (7).  |
| Char. 26 | State 2 to read: "acute to obtuse"( to be checked).   |
| Char. 27 | To be deleted.  |
| Ad. 28 a | To read: "Leaf blade: red color of the main vein on the lower side", with the states: absent (1), present (9).  |



- Char. 33 To have the following example varieties: Nectarine Cerise (1), Spring time, Maycrest (3), Sunhaven, Spring lady, Jade (5), Loring, Royal Glory, BigTop (7), Comanche, Maillarbig (9).
- Char. 34 State 5 to read: “broad elliptic”; to have the following example varieties for state 1: Bailou, Plate de Chine.
- Char. 35 To have the following example varieties for state 5: Bailou, Plate de Chine.
- Char. 40 To check the states and replace “cream” by a color.
- Char. 42 To add state 7 “burgundy (to be checked in English: “rouge vineux” in French)” with the example varieties “Monec, Monid”.
- Char. 45 To replace the culti group by variety denominations.

### *Pecan nut*

55.\* The subgroup discussed document TG/PECAN(proj.4), as presented by Mr. Baruch Bar-Tel (Israel), in the absence of the leading expert, and agreed the following:

- 1 To add the name of the botanical family.
- Char. 3 State 3 to read: “horizontal”.
- Char. 5 To read: “One-year-old shoot ...”
- Char. 6 To add note (d).
- Char. 7 to 14 Ad. 7 to 14 to become note (a) in Section 8.1 and to apply to characteristics 6 to 14.
- Char. 11 To read: “Lateral leaflet: curvature of longitudinal axis”.
- Char. 12 To be indicated as QL.
- Char. 13 To add illustration.
- Char. 14 To read: “Only varieties with asymmetric lateral leaflets: Lateral ...”
- Char. 16 To be indicated as PQ.
- Char. 17 To add (+) and to provide illustration.
- Char. 18 To add (\*).
- Char. 22 To be moved after Char.23.
- Char.24 and 25 To have the following order for the states of expression: circular (1), elliptic (2), oblong (3), obovate (4), ovate (5).
- Char.30 and 31 To be indicated as QN.
- Char. 33 To be moved after characteristic 34.
- Char. 34 To have states of expression: low (3), medium (5), high (7).
- Char. 38 To be indicated as QL.
- Char. 39 To add (+) with an explanation and to read: “Time of beginning of receptivity of stigma”.

Char. 40	To be deleted.
Char. 41	To read: “Time of beginning of anther dehiscence”.
Char. 42 and 43	To be deleted.
Char. 45	To be indicated as QN.
8.1	To incorporate Ad.7-14 from Chapter 8.2 as note (a).
General	To modify wording of characteristics and states of expression as per changes in the Table of Characteristics.
8.2	To add “ <u>Ad. 1: Tree: vigor</u> The vigor of the plant should be considered as the overall abundance of vegetative growth.”
Ad 21	To become Ad. 21, 22 and 23.
Ad 24	To become Ad. 24 and 25 and to indicate the point of attachment of the fruit.
Ad 26	To have state “oblate” instead of “obovate”.
Ad 27	To check the illustrations.

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

56.\* The subgroup discussed document TG/PINEAP(proj.3), as presented by Mr. Richard Brand (France), and agreed the following changes:

Cover :	Title : Ananas comosus L. Merr.	Add: “edible varieties”
page	Alternative name:	Add: “edible varieties”
1.	To read: “These Test Guidelines apply to all edible varieties of ....”	
3.1	To delete: “... independent ...”, because the second cycle is established on the production of the same plant of the first cycle	
3.3.2	To be deleted and replaced by: “Stage of development for the assessment of each characteristic The stages of development .... by each number are described in paragraph 8.1.	
6.5	To delete: “1-T See chapter 3.3.2....to 4-M See chapter 3.3.2”.	
Chapter 7 General	All example variety group names, or culti groups, to be replaced by individual. varietal denominations by Brazil and France; to delete: “NOTE ... to ... proposal” and any reference to this in the list of characteristics.	
Char. 1	State 3: to delete “Smooth Cayenne” and replace by “Champaka, Gold”.	
Char. 3	To delete “(the longer leaf)” and insert this information in the explanation in Chapter 8.	
Char. 5	To read: “Leaf: main color of upper side”; to replace “vert foncé” by “vert pourpre”.	

- Char. 6 To read: “Varieties with only green color leaf”; to check if the scale should be 3, 5, 7 or 1, 2, 3.
- Char. 7 and 8 To be deleted because variegation of the leaf does not occur in commercial varieties.
- Char. 9 To be deleted and combined with characteristic 10, as below (see char.10).
- Char. 10 To read: “Only for non-green color leaf varieties, Leaf: intensity of anthocyanin coloration (on upper side)”, with the states: very weak, weak, medium, strong, very strong.
- Char. 12 To be deleted (CIRAD to be consulted).
- Char. 13 To keep and read: “Leaf: density of trichomes on lower side”, with the states: absent or very sparse, intermediate, dense, and the notes 3, 5, 7 or 1, 2, 3.
- Char. 13a To insert a new characteristic: “Leaf: spines”, with the states absent (1),  
New Char. present (9), with the example variety “Queen” for state 1.  
To insert a new characteristic: “Leaf: conspicuousness of spines”, with the state: inconspicuous (1), with the example variety “Samba”, and conspicuous (2), with the example variety “Queen”.
- Char. 14 To read: “Leaf: silvering color on the margins”. To add an explanation in Chapter 8: “silvering color: known as piping in the pineapple breeding and industrial areas”.
- Char. 15 To be deleted and replaced by: “Leaf: distribution of spines at margin” (ex. Br 9), with the states: at base only (1), at apex only (2), at base and apex (3), along all margins (4); “sand paper” and “smooth” states to be considered with CIRAD with an explanation.
- Char. 15 a To insert a new characteristic (ex Br 9): “Leaf: distribution of spines”, with the states regular (1), irregular (2).
- Char. 16 To be deleted (not useful for commercial varieties).
- Char. 17 To read: “Leaf: color of the spine in relation to leaf blade” with the example varieties: Ananas bouteille (1), Queen (2).
- Char. 18 To read: “Leaf: size of spines”.
- Char. 19 To read: “Peduncle: color of the upper side of the bracts”, with an illustration in the explanation in Chapter 8. To be placed just before the fruit characteristics. To be checked if the organ is a peduncle.
- Char. 21 State 1 to read “from bottom to top”.
- Char. 22 To be deleted.
- Br 10 To be deleted.
- Char. 23 To read: “Petal: color of apex” with the states: whitish (1) (with an example variety to be provided, if not to be deleted), blue purple (2), red purple (3).
- Char. 24 To be deleted.
- Char. 25 To be kept and to read: “Petal: length”.
- Br 12 and To be deleted.  
Br 13
- Char. 26 To be deleted..  
Br 11 To be deleted.

- Char. 27 “Flower: style type” to be kept, “Perolera” to be indicated as example variety for state 2.
- Br 16 To be deleted.
- Char. 28 To be deleted (more adapted to genetic resources and breeding material identification)
- Chars. 29 and 30 To be deleted (as characteristic 27 is sufficient)
- Char. 31 To read: “Fruit: color (fully grown immature fruit)”, with the states: grey (1) (example variety RHS 157C), medium green (2), dark green (3), red (4), brownish purple (5), purple (6) (with example variety “Roxo de Tefe” to be added), dark brown (7). To be studied if “dark red” and “brown purple” states are needed.
- Char. 32 To read: “Fruit: density of trichomes (on fully grown immature fruit)” with the states: sparse (3), medium (5), dense (7).
- Char. 33 To be deleted.
- Char. 34 To be deleted.
- Char. 35 To read: “Plant: height to top of foliage”, with a (+) and an illustration.
- Char. 36 To read: “Plant: height to fruit base”, with a (+) and an illustration.
- Char. 38 To keep “Peduncle: diameter” (ex Br 21).
- Char. 38 a Br 23 to be kept: “Peduncle: number of bracts”, with the states: few (3), medium (5), many (7).
- Br 24 To be deleted.
- Char. 38 b Br 25 to be kept (Brazil to provide example varieties).
- Char. 39 To read: “Plant: presence of underground suckers” with the states: absent (1), present (9); characteristic and example varieties to be checked by France and Brazil, methodology to be provided (how to count them without destroying the DUS trial ?)
- Char. 40 To read: “Plant: number of aerial suckers on stem”, with state 1 to read: absent or very few.
- Char. 41 To read: “Plant: size of aerial suckers on stem at fruit harvest”.
- Char. 42 To read: “Plant: slips”, to be placed before characteristic 43.
- Br 35 To be deleted.
- Add Br 36 To read: “Fruit: relief of fruitlet”, with the states: flat (1), prominent (3), very prominent (5); to be placed with fruit characteristics.
- Char. 43 To read: “Plant: number of slips”.
- Char. 44 To be deleted.
- Char. 45 To read: “Crown: attitude”, with the states: upright (1), semi upright (2), spreading (3). State “drooping” to be deleted
- Char. 46 To read: “Crown: anthocyanin coloration”, CIRAD to check if useful: if not, to be deleted.
- Char. 47 To be deleted.

- Char. 48 To be deleted.
- Char. 49 To be deleted.
- Char. 50 To be deleted with the agreement of CIRAD to recover.
- Char. 51 To read: "Crown: size".
- Char. 52 To be deleted.
- Char. 53 To have the states: ovate (1), oblong (2), elliptic (3), circular (4).  
To check if this presentation fits with the shape of Singapore canning variety.
- Char. 59 To be placed after characteristic 53, with the characteristic 60 "width of fruit".
- Char. 60 To read: "Fruit: diameter at broadest part", with the states: small (3), medium (5), large (7).
- Add 60a To read: "Fruit: Position of broadest part", with the states: towards the base (1), in middle (2), towards apex (3).
- Char. 61 To be deleted.
- Char. 62 To be deleted.
- Char. 64 To be deleted.
- Char. 65 To be deleted.
- Char. 66 To read: "Fruit: number of eyes", with the states: few (3), medium (5), many (7).
- Char. 67 To read: "Fruit: size of eyes".
- Char. 68 State 1 to read: depressed; to be checked by France to which it corresponds (which organ of the eye is depressed?).
- Char. 69 State 1 to read: even (1), state 2 to read: uneven (2).
- Char. 70 To have the states: much smaller (1), smaller (3), slightly smaller (5), equal (7), larger (9).
- Char. 71 To read: "Flesh: color", with the states: whitish cream (1), light yellow (2), medium yellow (3), yellowish orange (4), orange (5) (with example variety "Manzana"). Golden color type has been named: yellowish orange.
- Char. 72 To read: "Flesh: evenness of the color", with the states: even (1), uneven (2)
- Char. 73 To read: "Fruit: width of central axis", with the states: narrow (3), medium (5), large (7).
- Char. 74 To read: "Fruit: thickness of eye layer", with the states: thin (3), medium (5), thick (7).
- Char. 75 To read: "Flesh: compactness" with the states: loose or soft (3), medium (5), compact or dense (7).
- Char. 76 To read: "Flesh: firmness", with the states: soft (3), medium (5), firm (7).
- Char. 77 To be deleted.
- Char. 78 To read: "Flesh: presence of fibers", with the states: weak (3), medium (5), strong (7).
- Char. 79 To read: "Flesh: aroma", with the states: weak (3), medium (5), strong (7).

- Char. 80 To read: “Flesh: sugar content”, with the states: low (3), medium (5), strong (7), with an explanation to be provided by France.
- Char. 81 To read: “Flesh: acidity”, with the states: low (3), medium (5) (example variety “Queen”), strong (7) (example variety “Champaka””, with an explanation to be provided by France.
- Char. 82 To read: “Flesh: juiciness” with the states: dry (3), medium (5) (example varieties “Champaka, Mac Gregor”), juicy (7).
- Char. 83, Char. 84 and Char. 85, Br 42: To be deleted.
- Char. Br 49 To have the states: susceptible (1), intermediate (3), resistant (5), with a methodology to be provided by Brazil. In Brazil, only one strain exists and the resistance is quantitative.

*Sea Buckthorn (Hippophae L.)*

57.\* The subgroup discussed document TG/HIPPH(proj.2), as presented by Mr. Erik Schulte (Germany) in the absence of Mrs. Bronislava Bátorová (Slovakia), and agreed the following changes:

- 1 To read: “These Test Guidelines apply to all vegetatively propagated varieties of *Hippophae rhamnoides* L.”
- 3.5 To verify whether 3 parts of plants are necessary, or if 2 parts are sufficient”
- 5.3 To have the following grouping characteristics:
- (a) Plant: growth type (characteristic 1);
  - (b) Plant: attitude of branches (characteristic 2);
  - (c) Plant: sex (characteristic 4);
  - (d) Shoot: number of thorns (characteristic 7);
- Char. 1 To have states of expression: tree-type (1), bush-type (2), with the existing example varieties.
- Char. 2 To have the following states of expression: erect (1), semi-erect (2), horizontal (3), arching (4).
- Char. 8 To delete the characteristic.
- Char. 9 To check possible example varieties provided by Hungary for state 1: “Obil’naya, Yantarnaya”.
- Char. 10 To be indicated as VG instead of VS.
- Char. 12 To read: “Leaf blade: size”, with states of expression: small (3), medium(5), large (7); to be indicated as MG instead of MS and to check the example varieties.
- New Char. “Leaf blade: undulation of margin”; with states of expression: absent (1), present (9). To check possible example varieties and to be indicated as QL.
- Char. 13 To read: “Leaf blade: color of upper side” and to add example variety “Sprite” for state 2.

- Char. 14 To read: “Leaf blade: intensity of green color of upper side”.
- Char. 15 To read: “Leaf blade: pubescence of lower side”.
- Char. 17 States (5) and (6) to read: pear-shape (5), broad ovate (6), and to modify the illustrations accordingly.
- Char. 20 To check whether the characteristic should refer to “peduncle” or to “pedicel”, to delete MS and to have notes 1, 2, 3.
- Char. 21 To delete VG.  
and 22
- 8.1 To read as follows:
- “(a) Plant: Observations should be made during winter dormancy.
  - “(b) Shoot: Observations should be made during active growth.
  - “(c) Leaf blade: Observations should be made on mature leaves taken from the middle third of the current season’s shoot in the middle part of plant.
  - “(d) Pubescence: Observations should be made using a magnifying glass.
  - “(e) Fruit: Observations should be made at the time of fruit maturity.”
- 8.2 To be updated according to the changes to the Table of Characteristics.
- Ad. 11 To improve the illustration for state 3.
- Ad. 17 To turn the illustrations upside down.
- Ad. 21 To refer to 10% instead of 20%.
- 9 To delete the last three references and to check for more literature to be included.
- TQ 5. To incorporate the grouping characteristics.
- TQ 6. To have the example: Leaf: color of upper side / green / silverish

### *Strawberry (Revision)*

58.\* The subgroup discussed document TG/22/10(proj.1), as presented by Mr. Kiyofumi Nakamura (Japan), and agreed the following changes:

- Cover page Alternative names: *Spanish*: To add: “Frutilla”
1. To add “of the family *Rosaceae*”.
- 3.4.1 To replace “in a total of at least 20 plants” by “in a total of at least 20 plants (vegetatively propagated varieties) or at least 40 plants (seed-propagated varieties)”.
- 3.5 To replace “should be made on 20 plants” with “should be made on 40 plants”.
- 4.2.2 To add “In the case of a sample size of 40 plants, 2 off-types are allowed.”
- 6.4 To replace all “ ” with ‘ ’.

6.5 To add “MG, VG: – see Chapter 3.3.2”

Table of Chars. Example varieties to be checked by interested experts. NL will provide a set.

Char. 1 To replace “Plant: habit” with “Plant: shape in profile”, “globose” with “circular”, “flat globose” with “oblate”, and “flat” with “transverse elliptic”.

Char. 2 To replace “open” with “sparse”.

Char. 4 To correct position of lines for example varieties. To delete “Akihime” and “Macherauchs Fruehernte”. All experts to consider which example varieties should be removed from state 4.

Char. 6 To replace “Leaf” with “terminal leaflet”, and to move after characteristic 11. Experts to check example variety names.

Char. 7 To replace “PQ” with “QN”.

Char. 8 To replace states “3, 5, 7” with “1, 2, 3”; “weak” (state 1) to be changed to “absent or weak”.

Char. 9 To delete “(only for ornamental varieties)”.

Char. 10 To replace “ratio of length/width” with “length in relation to width”.

Char. 12 To replace “shape of incisions of margin” with “incisions”, and “PQ” with “QL”.

Char. 13 To replace “strong” with “strongly”.

Char. 14 To add state 7, “long” (7) (example varieties: Akihime, Tochiotome).

Char. 15 To replace “QL” with “QN”.

Char. 16 To replace “Stolons: number” with “Plant: number of stolons”, “MG” with “VG”. To be moved after characteristic 3.

Char. 18 To replace “pubescence” with “pubescence”, and to change notes from “3, 5, 7” to “1, 2, 3”.

Char. 19 To replace “Inflorescence: position relative to foliage” with “Plant: position of inflorescence in relation to foliage”, “PQ” with “QN”. To be moved after characteristic 3.

Char. 20 To replace “size (diameter)” with “diameter”.

Char. 21 To move after characteristic 25. To replace “Flower: color on the upper side of petal” with “Petal: color of upper side”, and to move after characteristic 19.

Char. 22 To replace “... size of calyx relative to corolla” with “... size of calyx in relation to size of corolla”.

Char. 23 To move after characteristic 19. To replace “Flower: flower number/flower cluster” with “Inflorescence: number of flowers”.

Char. 24 To delete “(observe only on flower with 5 or 6 petals)”.

Char. 25 To replace “ratio of length/width” with “length in relation to width” and “PQ” with “QN”.

Char. 27 To replace “bi-conical” with “rhombic”, and “almost cylindrical” with “cylindrical”.

Char. 28 To replace “ratio of length/width” with “length in relation to width”.



- Char. 31 To replace “absent or weak” with “even”, “medium” with “slightly uneven” and “strong” with “strongly uneven”.
- Char. 32 To check “red black”. Experts to check whether “red black” or “black red”.
- Char. 33 To replace “evenness” with “unevenness”, “uneven” with “even” and “even” with “strongly uneven”.
- Char. 34 To replace “3, 5, 7” with “1, 2, 3”.
- Char. 35 To replace “insertion of achenes” with “position of achenes”.
- Char. 36 To replace “insertion of calyx” with “relative position of calyx”, “in a basin” with “inserted”, “level” with “level with fruit” and “above fruit” with “above”.
- Char. 37 To replace “attitude of the calyx segment” with “attitude of calyx”, “clasping” with “upwards”, “spreading” with “outwards”, “reflexed” to “downwards” and “PQ” with “QN”.
- Char. 38 To replace “size of calyx in relation to fruit diameter” with “diameter of calyx in relation to diameter of fruit”.
- Char. 41 To replace “except for core” with “excluding core” and “pale pink” with “light pink”.
- Char. 42 To delete “in longitudinal section”. To replace “pale red” with “light red”.
- Char. 43 To replace “hollow center” with “cavity in center”, “absent or weak” with “absent or very small”, “moderate” with “medium” and “strong” with “large”.
- Char. 44 To replace “Time of flowering” with “Time of beginning of flowering”.
- Char. 45 To replace “Time of ripening” with “Time of beginning of ripening”.

After characteristic 25 to add new characteristics

“Flower: stamen”

absent (1)	Pondora, Yamasaka
present (9)	Gariguette

“Pedicel: attitude of hairs”

upwards (1)	Cigaline
slightly outwards (2)	Darselect
strongly outwards (3)	Parker

- Ad. 2 To replace “7, 8, 9” with “3, 5, 7”, and to correct the order of the illustrations.

### Recommendations on Draft Test Guidelines

59.\* The TWF agreed that the draft Test Guidelines below would be sent to the TC for adoption at its forty-third session in 2007, on the basis of the following documents with the amendments presented in this document:

Apricot (Partial Revision)	(document TWF/37/12)
Blackcurrant (Revision)	(document TG/40/7(proj.2))
Blueberry (Revision)	(document TG/137/4(proj.2))
Hawthorn ( <i>Crataegus</i> spp.)	(document TG/HAWTH(proj.3))

60.\* It was noted that the Office would incorporate the amendments specified in this document in order to prepare the draft Test Guidelines for the TC. The leading experts noted that they

were not required to submit revised draft Test Guidelines, but were required to provide the Office with all the information necessary for the document to be finalized.

61.\* The TWF decided to re-discuss the following draft Test Guidelines at its thirty-eighth session:

- Banana (*Musa* spp) (Revision)
- Coffee
- Fig (*Ficus carica*)
- Grapevine (*Vitis* L.)
- Papaya (*Carica papaya* L.)
- Passion Fruit (Fruit species)
- Peach (Revision)
- Pecan nut
- Pineapple (*Ananas comosus*)
- Sea Buckthorn (*Hippophae* L.)
- Strawberry (Revision)

62.\* The TWF decided to start discussions on the following draft Test Guidelines at its thirty-eighth session:

- Dragon-fruit (*Hylocereus undatus* (Haw.) Britton et Rose)
- Durian
- Rambutan
- Pistachio (*Pistacia vera* L.)
- Pomegranate (*Punica granatum* L.)
- Solanum muricatum* Aiton (Melon-pear, Pepino)

63.\* The TWF decided that in the case of new species where the TWF has no experience, such as Durian and Rambutan, prior drafting should be carried out before the TWF considers it.

64.\* The leading experts, interested experts and timetables for the development of the Test Guidelines, are set out in Annex IV.

65.\* The TWF decided to consider discussing the following draft Test Guidelines at its thirty-ninth session:

- Cacao (*Theobroma cacao* L.)

66.\* The TWF agreed that the partial revision for the Test Guidelines for Apricot presented a concrete proposal with fully justified and illustrated proposed changes. It was considered a good example on the way to deal with these revisions which could be the basis for the development of guidance to be incorporated in future versions of TGP/7.

67.\* The TWF agreed that a list of TWF Test Guidelines be prepared.

#### Date and Place of the Next Session

68.\* At the invitation of the expert from the Republic of Korea, the TWF agreed to hold its thirty-eighth session in Seoul, from July 9 to 13, 2007.

Future Program

69.\* The TWF proposed to discuss the following items at its thirty-eighth 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 (oral reports by the participants).
  - (b) Reports on developments within UPOV (oral report by the Office of the Union).
4. Molecular techniques
5. TGP documents
6. UPOV information databases
7. Variety denominations
8. Project to consider the publication of variety descriptions
9. Drafters' Kit for Test Guidelines
10. Information on probability levels used in COY and population standards used in the assessment of uniformity by off-types
11. Additional characteristics
12. Discussion on draft Test Guidelines (Subgroups)
13. Recommendations on draft Test Guidelines
14. Date and place of the next session
15. Future program
16. Report of the session (if time permits)
17. Closing of the session

Technical Visit

70.\* On August 22, 2006, the TWF visited the *Empresa Brasileira de Pesquisa Agropecuária* (EMBRAPA) Center for Cassava and Tropical Fruits located in the city of Cruz das Almas. The TWF was welcomed by Mr. José Carlos Mascimento, General Director, and by Mr. Domingo Haroldo Reinhardt, Director of Research and Development. A copy of the presentation is included in Annex III to this document.

71. *The present report has been adopted by correspondence.*

[Annexes follow]

ANNEX I

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JANG Jun-yon, 1095-47, seokcheon-ri, Nangsan-myun, Ikan-si, Chunlabuk-do 570-892 (tel.: +82 63 8612595 fax: +82 63 862 0069 e-mail: jangiy@seed.go.kr)

KIM Eung-Bon, Director, Plant Variety Protection Division, National Seed Management Office, 433 Anyang 6-dong, Manan-gu, Anyang-si, Anyang City, Kyunggi-do 430-016 (tel.: +82 31 467 0150 fax: +82 31 467 0161 e-mail: ebkim@seed.go.kr)

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Carensa PETZER (Mrs.), Directorate Genetic Resources, Private Bag X5015, Stellenbosch 7599 (tel.: +27 21 809 1653 fax: +27 21 887 2264 e-mail: carensap@nda.agric.za)

### SPAIN

Pedro Miguel CHOMÉ FUSTER, Jefe del Servicio de Plantas de Vivero, Oficina Española de Variedades Vegetales (OEVV), Ministerio de Agricultura, Pesca y Alimentación (MAPA), Calle Alfonso XII, No. 62, E-28014 Madrid (tel.: +34 91 347 69 13 fax: +34 91 347 6703 e-mail: pchomefu@mapya.es)

### III. ORGANIZATION

#### INTERNATIONAL SEED FEDERATION (ISF)

Vincent PÉTIARD, Plant Science & Technology, Centre R&D Nestlé Tours, BP 49716, 101 Avenue Gustave Eiffel, 37097 Tours Cedex 2, France (tel.: +33 2 47628374 fax: +33 2 47491414 e-mail: vincent.petiard@rdto.nestle.com)

### IV. OFFICER

Alejandro F. BARRIENTOS-PRIEGO, Chairman

### V. OFFICE OF UPOV

Raimundo LAVIGNOLLE, Senior Counsellor, International Union for the Protection of New Varieties of Plants (UPOV), 34, chemin des Colombettes, 1211 Geneva , Switzerland (tel.: +41 22 338 9565 fax: +41 22 733 0336 e-mail: raimundo.lavignolle@upov.int)

[Annex II follows]



ANNEX II

Welcome Address on behalf of  
the Minister of Agriculture, Livestock and Food Supply

made by Mrs. Vera Lucia Santos do Machado  
Head  
Register and Norms Division  
National Plant Variety Protection Service (SNPC)  
Ministry of Agriculture, Livestock and Supply

Mr. Barrientos, Chairman of the Technical Working Party for Fruit Crops; Mr. Raimundo Lavignolle, Senior Counsellor of the UPOV; Distinguished Participants; Ladies and Gentlemen. Welcome to the 37<sup>th</sup> TWF UPOV Meeting.

I'll read a few words from Mr. Helinton Rocha, the Director of the Intellectual Property Department of Ministry of Agriculture, Livestock and Food Supply. He shall meet this Wednesday.

Let me extend my sincere gratitude to the Chairman and the UPOV Secretariat for giving us this opportunity to host the UPOV TWF meeting in Salvador, State of Bahia, Brazil.

In 2002 we hosted the UPOV TWA meeting in Rio de Janeiro, where our staff had a great opportunity to get acquainted with the UPOV system and procedures.

The Federative Republic of Brazil will also host the next session of the Technical Working Group on Ornamental and Forest Trees, to be held next week in the city of Fortaleza. As such, the Federative Republic of Brazil has been very active member of the organization.

As a member of the UPOV, the Federative Republic of Brazil will continue to play a leading role in fulfilling its obligations as a member State and in actively protecting intellectual property rights of new varieties.

This TWF meeting is not only a great opportunity for us to exchange ideas about the topics related to plant variety protection, but also is a way for Brazil to improve its own national agricultural mechanisms of production.

Brazil is playing a progressive role in international organizations such as the United Nations and the World Trade Organization. We are talking to our South American neighbors to build a regional community of nations, based on the principle of mutual interests. In this context, we regard the UPOV as a partner to help us and other developing countries to reach integral development.

We shall leave Salvador aware that in this room we will discuss and make significant progress on some very important test guidelines and procedures that compose the UPOV agenda, such as pineapple, coffee, banana, papaya and passion flower.

Finally, we are pleased with hosting this meeting, especially by allowing the interaction between national designated authorities, and our important contribution towards the creation and promotion of international use of top quality products, for the benefits of farmers and society worldwide.

Thank you.

**Agricultura**

AGRICULTURAL DEVELOPMENT AND  
COOPERATIVISM SECRETARIAT

INTELLECTUAL PROPERTY AND  
AGRICULTURAL TECHNOLOGY DEPARTMENT  
DEPTA

National Plant Variety Protection  
Office  
SNPC

Ministry of Agriculture, Livestock and Food Supply

**Agricultura**

Plant Variety Protection  
in Brazil

Luís Gustavo Asp Pacheco  
Register Information Service - SNPC

Ministry of Agriculture, Livestock and Food Supply

**Agricultura**

**1997** April 25  
Enactment of Plant Variety Protection Law

**1999** Brazil became a member of the  
International Union for the Protection  
of New Varieties of Plants (UPOV)  
ACT 1978

➤ **The Essentially Derived Plant Variety concept**  
Predominantly derived from the initial variety maintaining the essential characteristics resulting from the genotype or from the combination of genotypes of the variety from which it derived

➤ **Congress Proposal to restrict the Farmers' Privilege**  
Farmers may keep and use their own seeds of protected varieties, except for ornamental plants, cut flowers, fruits and forest trees, without infringing the holder's rights.

Ministry of Agriculture, Livestock and Food Supply

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**PBR EXCEPTIONS**

- save seeds (farmers' privilege);
- uses or sells as food or raw material;
- breeder programs;
- small farmers (for donation or exchange).

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**Agricultura**

## APPLICATIONS

### DECLARATORY SYSTEM

- Application and Denomination Forms
- Variety description, specific species form
- Technical Report on the breeding method and DUS
- Table of Characteristics
- Live sample declaration and location
- Sworn Statement
- Tax

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## FOREIGN TESTS AND TRIALS

Foreign tests and trials may be accepted when they are purchased by SNPC from UPOV member countries.

Tests may also be conducted outside Brazil. In that case, it is recommended to repeat a test in Brazil to confirm the characteristics.

### COST OF PROTECTION

The total cost of protection is 340 USD. This price includes a 90 USD fee for application and analysis, and a certificate fee of 250 USD, upon issuance of the certificate.

The annual fee for the maintenance of the certificate is about 175 USD.

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**Agricultura**

## LIVE SAMPLE

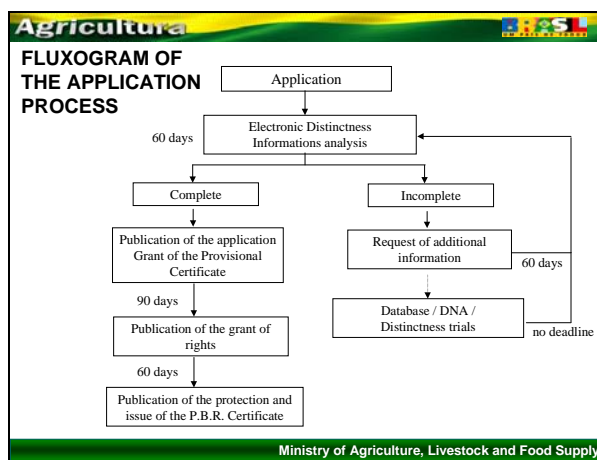
When demanded, a live sample must be submitted to the SNPC. The applicant must comply with all import procedures.

### ENFORCEMENT

The holder of the PBR may bring a civil action against any person infringing on his or her rights.

He may ask a court to issue an injunction to prevent from further violations and also might bring a suit in such cases.

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## RIGHTS PROTECTED

The effect of the right granted to the breeder is that his prior authorization shall be required for:


- the production for purposes of commercial marketing;
- the offering for sale;
- the marketing;

of the reproductive or vegetative propagating material, as such, of the variety.


Ministry of Agriculture, Livestock and Food Supply


**Agricultura**

## DATABASE AND TESTS



**Prepare of live samples**





**Distinctness test**

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**LADIC - NATIONAL LABORATORY FOR DIFFERENTIATION, ANALYSIS AND CHARACTERIZATION OF VARIETIES**

**MISSION**  
To provide laboratorial support to PVP related activities concerning the characterization and differentiation of varieties and maintenance of live samples

Ministry of Agriculture, Livestock and Food Supply

Ministério da Agricultura, Pecuária e Abastecimento - Microsoft Internet Explorer

Endereço: <http://www.agricultura.gov.br>

**Agricultura**  
Ministério da Agricultura, Pecuária e Abastecimento

**Agricultura 145**  
Busca Rápida

Institucional | Serviços | Legislação | Planos e Programas | Localização de Processos | Convênios | Estatísticas | Fale Conosco

Notícias: 28/08/2005 - Certificação, 28/08/2005 - Ordenamento, 28/08/2005 - Cultivares, 28/08/2005 - Distâncias / Usinas, 28/08/2005 - Genética, 28/08/2005 - Infra-Estrutura Rural, 28/08/2005 - Leilões, 28/08/2005 - Registro, 28/08/2005 - Requisitos para Exportação, 28/08/2005 - Requisitos para Importação, 28/08/2005 - Tarifas e Multas, 28/08/2005 - Tratamento Fitossanitário

OUVIDORIA  
Transparência e Cidadania da Agricultura, Pecuária e Abastecimento  
0800 61 1995

AGROFIT

Ministério da Agricultura, Pecuária e Abastecimento - Microsoft Internet Explorer

Endereço: <http://www.agricultura.gov.br>

**Serviços**  
Cultivares - Proteção

**Formulários para Proteção de Cultivares**

- Formulário de Solicitação de Proteção de Cultivares
- Formulário de Solicitação de Denominação de Cultivares
- Relatório Técnico Descritivo da Obtenção da Cultivar
- Declaração de Existência de Amostra Viva
- Declaração Juramentada

**Formulários de Espécies incluídas no Regime de Proteção**

- Agrícolas**
  - Algodão (*Gossypium hirsutum* L.)  
Data da publicação dos descritores: 07/11/1997
  - Azeite (*Olea sativa* L.)  
Data da publicação dos descritores: 05/11/1997

<http://www.agricultura.gov.br/images/MAPA/cultivares/lat1200.htm> - Microsoft Internet Explorer

Endereço: <http://www.agricultura.gov.br/images/MAPA/cultivares/lat1200.htm>

**SERVIÇO NACIONAL DE PROTEÇÃO DE CULTIVARES**

Certificados de proteção concedidos  
Período: 01/01/1999 a 06/07/2005  
Atualizado em 06/07/2005

Certificado	Cultivar	Tubular	Data Concessão	Válido até
26 - abacaxi ( <i>Ananas comosus</i> (L.) Merril)				
00566	BR5 Imperial	0008	11/03/2004	11/03/2019
11 - açaí ( <i>Latuca sativa</i> L.)				
00432	Gregia	0126	10/02/2003	10/02/2018
00596	G-0825 [3]	0170	31/05/2004	31/05/2019
00428	Lidia	0136	23/12/2002	23/12/2017
00422	Mavara	0122	30/09/2002	30/09/2017
CP 00688	Vanda	0126	27/01/2005	27/01/2020
1 - algodão ( <i>Gossypium spp</i> )				
00230	BR5 187	0008	25/09/2000	25/09/2015
00217	BR5 197	0008	26/07/2000	26/07/2015
00302	BR5 200	0008	12/07/2001	12/07/2016
00361	BR5 201	0008	27/08/2001	27/08/2016
00072	BR5 96	0026	31/03/1999	31/03/2014
00542	BR5 Adelia	0028	15/12/2003	15/12/2018
00071	BR5 Antares	0028	31/03/1999	31/03/2014
CP 00709	BR5 Aragá	0008	24/03/2005	24/03/2020

Concluído

**65 SPECIES ELIGIBLE FOR PLANT BREEDERS' RIGHTS**

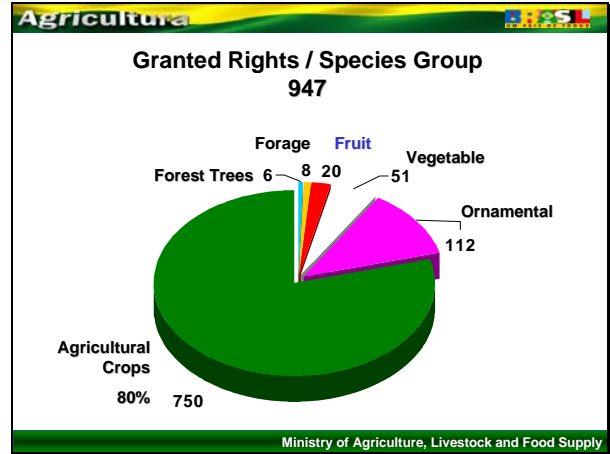
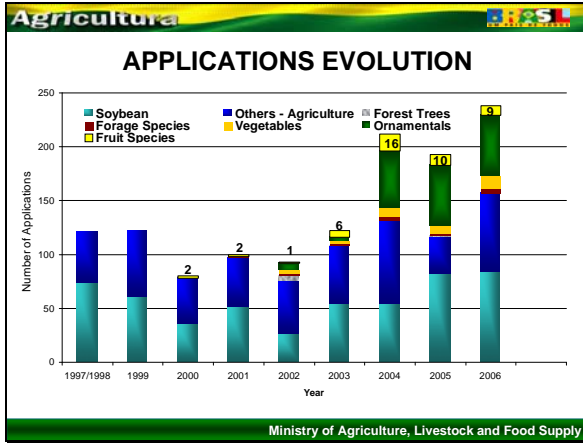
- FRUIT:** pineapple, banana, apple, mango, strawberry, pear and grape
- ORNAMENTALS:** amaryllis, anthurium, aster, begonia, rose, guzmania, kalanchoe, cymbidium, zantedeschia, dianthus, chrysanthemum, statice (3 species), grasses (2 species), gerbera, gypsophilla, hibiscus, hypericum, Impatiens walleriana, Impatiens x New Guinea, liliun, poinsettia, solidago and saintpaulia
- FOREST TREES:** eucalyptus
- AGRICULTURAL:** cotton, rice, oat, potato, sugarcane, coffee, barley, french bean, corn, soybean, sorghum, wheat and triticale
- VEGETABLES:** pumpkin, lettuce, garlic, onion, carrot, okra, tomato, pepper and sweet pepper
- FORRAGE:** brachiaria (syn. urochloa)(5 species), Panicum maximum, Pennisetum purpureum, Cajanus cajan, macrotyloma and pearl millet

Ministry of Agriculture, Livestock and Food Supply

**1149 APPLICATIONS**

Applications in Analysis: 112  
Withdraw Applications: 90  
Granted Rights: 947

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**SNPC**

**Internet:** [www.agricultura.gov.br](http://www.agricultura.gov.br)  
serviços > cultivares > proteção

**Telefones:** (+55) 61 3218 2549 / 3218 2547

**E-mail:** [snpc@agricultura.gov.br](mailto:snpc@agricultura.gov.br)  
[luispacheco@agricultura.gov.br](mailto:luispacheco@agricultura.gov.br)

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[Annex III follows]

ANNEX III

Presentation made by  
Mr. Domingo Haroldo Reinhardt  
Director of Research and Development  
Center for Cassava and Tropical Fruits (EMBRAPA)

**WELCOME to Embrapa Cassava and Tropical Fruits!**

**Embrapa**

**EMBRAPA, Brazilian Fruitculture  
and Genetic Resources of Tropical Fruits**

Domingo Haroldo Reinhardt, R&D director  
and the GR group



37<sup>o</sup> International Meeting / UPOV / Salvador, Bahia, Brazil, August 22, 2006

**Embrapa**


**EMBRAPA - Brazilian Corporation for Agricultural  
Research**

- → Created in 1973 (32 years)
- → Central Divisions of Headquarters: 3 Service Centers and 37 Research Centers distributed in different states of Brazil.
  - 2.221 researches
  - about 8.000 employees
- → International cooperation with 56 countries
- → Important and distinction contribution to the Tropical Agriculture

Ministério da Agricultura,  
Pecuária e Abastecimento

**Embrapa** National Agricultural Research System - SNPA

- ✦ Embrapa
- ◆ Headquarters
- 09 National Thematic Centers
- ▲ 15 National Product Centers
- 13 Agroforestry or Ecorregional Research Centers
- 03 Special Services
- 17 State Ag. Research Organizations



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Pecuária e Abastecimento

**Embrapa**

**MISSION**

The Brazilian Agricultural Research Corporation's mission is to provide feasible solutions for the sustainable development of the Brazilian agribusiness by knowledge and technology generation and transfer.

Ministério da Agricultura,  
Pecuária e Abastecimento

**Embrapa**

**INTERNATIONAL COOPERATION**

Embrapa is world-known as an enterprise with an expressive and qualified number of technological and scientific knowledge, especially for the tropics, stimulating international cooperation.

Ministério da Agricultura,  
Pecuária e Abastecimento

**Embrapa**

**BILATERAL COOPERATION**

In bilateral cooperation Embrapa keeps international cooperation partnership with 55 countries and 155 institutions, corresponding to about 270 actions of cooperation.

Ministério da Agricultura,  
Pecuária e Abastecimento

**Embrapa**


### MULTILATERAL COOPERATION

- Partnerships with 34 countries and 29 institutions
- Active participation on global initiatives, such as the Global Forum for Agricultural Research (GFAR) and the Consultative Group of International Agricultural Research (CGIAR) (positions in the Executive Council).
- Regionally, Embrapa has the presidency of the Forum of Investigation and Development of Agriculture (Foragro)
- Member of several sub-regional research networks, as the Procisur and the Procitrópicos, programs coordinated by Inter-American Institute of Cooperation for Agriculture (IICA).

Ministério da Agricultura, Pecuária e Abastecimento

**Embrapa**

### Embrapa Cassava and Tropical Fruits



Ministério da Agricultura, Pecuária e Abastecimento

**Embrapa**

### MISSION

The Embrapa Cassava & Tropical Fruits' mission is to provide solutions for the sustainable development of the cassava and tropical fruit crops agribusiness by generation, adaptation and transfer of knowledge and technologies for social benefit.

Ministério da Agricultura, Pecuária e Abastecimento

**Embrapa**

### IMPORTANCE OF BRAZILIAN FRUITCULTURE

Job generation: 5 millions, 2 to 5 per ha  
Production value: US\$ 6 billions  
3º World producer: behind China and India  
More than 2 million hectares



Ministério da Agricultura, Pecuária e Abastecimento

**Embrapa**

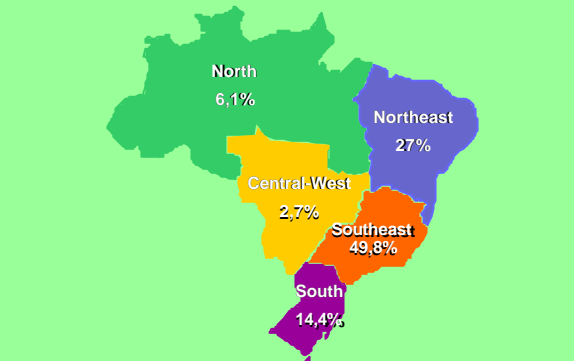
### IMPORTANCE OF BRAZILIAN FRUITCULTURE

- First world producer of citrus, cashew, passion fruit, acerola, papaya, pineapple and several other less important fruits
- Second producer of banana
- Seventh producer of mango

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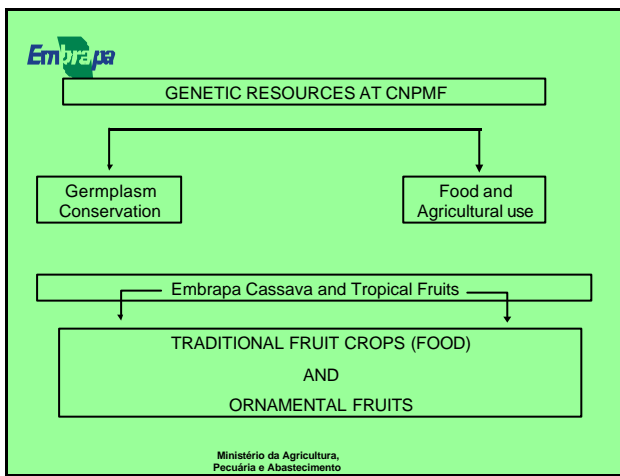
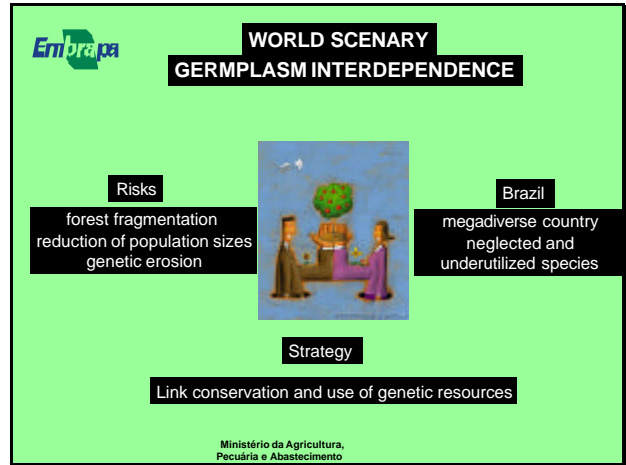
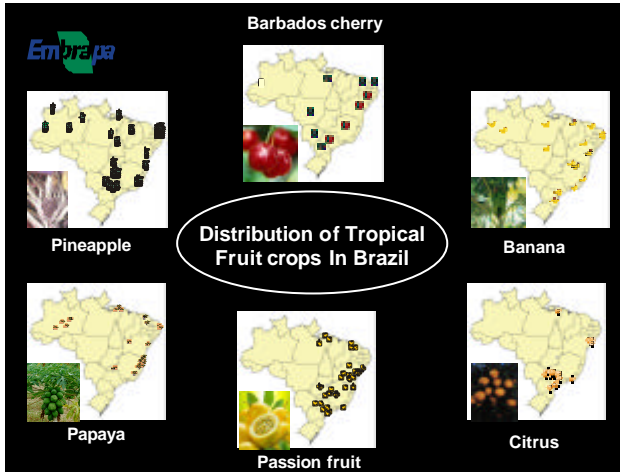
**Embrapa**

### Brazilian Geographical Regions Distribution of fruit production in Brazil



Fonte: IBGE, 2003

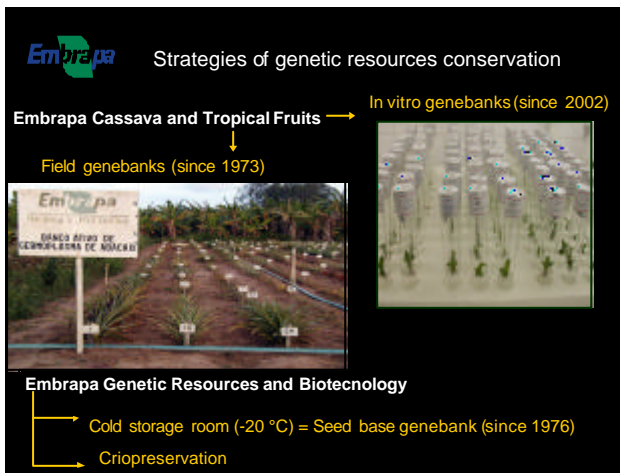
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**The contribution of Embrapa Cassava & Tropical Fruits on germplasm conservation in Brazil (\* Ferreira, 2001; 2005)**

PRODUCTS	NUMBER OF GENE BANKS	Nº OF ACCESSIONS	
		BRAZIL*	CNPMF
Pineapple	3	823 *	641 (77,8%)
Barbados cherry	8	309 *	154 (49,8%)
Banana	6	554 *	400 (72,2%)
Citrus	4	3023 *	700 (23,15%)
Papaya	5	382 *	161 (42,1%)
Passion fruit	8	305 *	94 (30,8%)
Mango	7	458 *	115 (25,1%)
Cassava	7	4721	1800 (38,1%)
<b>TOTAL</b>		<b>10575</b>	<b>4065</b>

Ministério da Agricultura, Pecuária e Abastecimento





**Embrapa** Ornamental Citrus

Fortunella sp. Citrus amblicarpa JIN DOU Murraya

Kunkuat Nagami Citrus medica L. (cidra) Citrus mitis Calamondin variegado

Landscape plants

**Embrapa** Breeding program: Development of híbrids, specially rootstocks

Focus on varieties:

- Tolerant to water stress and adapted to soils with high level of aluminum
- Resistant to *Phytophthora* gummosis
- Resistant to CTV (Citrus Tristeza Virus)
- Resistant to Citrus Sudden Death
- Ornamental potential

**Embrapa** Varieties released by Embrapa Cassava and Tropical Fruits

'TANGELO PAGE' 'SALUSTIANA' 'PINEAPPLE 1'

'SUNKI TROPICAL' 'CRAVO SANTA CRUZ' 'SUNKI MARAVILHA'

**Embrapa** Conservation and use of genetic resources

PASSION FRUIT

•Genebank created in 1997  
•Morphological and physical-chemical characterization  
•Evaluation for resistance to main diseases (Fusarium wilt and bacterium diseases)  
•Evaluation of ornamental potential and new conduction strategies as pot plants

Number of accessions: 94

**Embrapa** Potential ornamental plants



**Embrapa** Conservation and use of genetic resources

PINEAPPLE

**Embrapa** *Ananas comosus* / *Ananas macrodentes* / *Ananas paraguayensis*  
Other Bromeliaceae: *Bromelia*, *Dickia*, *Tillandsia* e *Bilbergia*

•Field genebank created in 1975      Number of accessions: 641  
•In vitro conservation  
•Molecular characterization in advance (RAPD)  
•Morphological characterization using 20 IPGRI's descriptors for pineapple  
•Evaluation to fusariosis resistance

**Embrapa** Genetic variability in crowns

**Embrapa** Ornamental Pineapples selected and new hybrid

*A. comosus* var. *bracteatus* tricolor      *A. comosus* var. *bracteatus*      *A. macrodentes*  
*A. paraguayensis*      *A. comosus* var. *erectifolius*      Hybrid 1      Hybrid 2

**Embrapa**

Ornamental pineapple selected

Embrapa

Varieties released by Embrapa Cassava and Tropical Fruits

direct use of germplasm

Hybrid

'PRIMAVERA' 'PEROLERA' 'IMPERIAL'

Embrapa

Hybrid under study

Hybrid 48

Embrapa

Conservation and use of genetic resources

PAPAYA

Embrapa

•Genebank created in 1991 Number of accessions: 161  
•Focus on *Carica papaya*  
Other Caricaceae: *Vasconcellea cauliflora* / *Vasconcellea quercifolia* / *Jaracatia spinosa*  
•Morphological characterization  
•Black spot disease and papaya's weevil evaluation

Embrapa

Variety to be released by Embrapa Cassava and Tropical Fruits (developed in cooperation with Cornell University)

Papaya GM

Resistant to papaya's ringspot virus



Strain: GCP of PRSV- BR

Under biosafety evaluations


Embrapa

Conservation and use of genetic resources

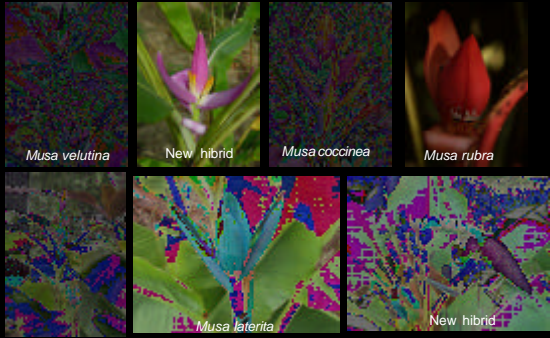
BANANA

- Field genebank created in 1976      Number of accessions: 400
- In vitro conservation
- Molecular characterization of accessions: RAPD and SSR
- Morphological characterization using 113 descriptors




Ornamental Banana selected

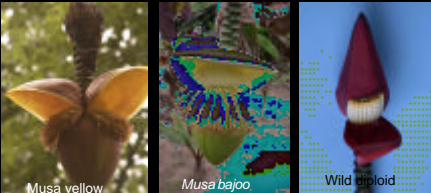


*Musa velutina*      New hibrid      *Musa coccinea*      *Musa rubra*


*Musa laterita*      New hibrid



Ornamental banana  
Used as cut flowers

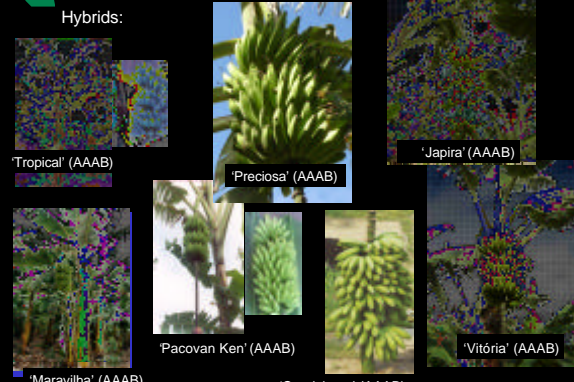


*Musa yellow*      *Musa bajoo*      Wild diploid




Varieties released by Embrapa Cassava & Tropical Fruits

Hybrids:




*Tropical* (AAAB)      *Preciosa* (AAAB)      *Japira* (AAAB)

*Maravilha* (AAAB)      *Pacovan Ken* (AAAB)      *Caprichosa* (AAAB)      *Vitória* (AAAB)




FHIA's cultivars:




'Fhia 18' (AAAB)      'Prata Graúda' (AAAB)

Cultivars:



'Caipira' (AAA)      'Thap Maeo' (AAB)      'Prata Baby' (AAB)



Cultivars protection in Brazil (since 1997, Law 9456; Decree 2366)

Can be protected { Hybrids  
new cultivars  
GM varieties (CTNBIO/ Biosafety law)

Direct use of germplasm can not be protected

Embrapa Cassava and TropicalFruits → CLPI

Thanks for your attention !



Embrapa Cassava & Tropical Fruits  
Rua Embrapa, s/n, C.P. 007, CEP: 44380-000, Cruz das Almas - Bahia.  
Tel.: 55 75 36218002, Fax: 55 75 36218097.  
<http://www.cnpmf.embrapa.br>

1950's: crop introduced in Brazil



Embrapa Field genebank created in 1992 154 accessions

High variability in intraspecific level

Variations in color of flowers

Variations observed in fruits: shape, size, skin color, pulp color, number of furrows, contents of vit. C and total soluble solids

Embrapa

Ornamental Barbados Cherry

Embrapa Landscape Plants

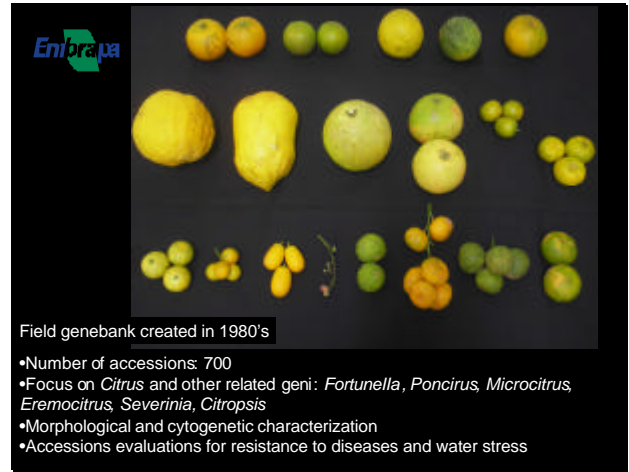
CNPMF Accession nº: 030

Embrapa Varieties released by Embrapa Cassava and Tropical Fruits

'CABOCLA' direct use of germplasm 'RUBRA'

Recommended use: processing and fresh consumption Recommended use: fresh consumption

PERSPECTIVES ===== Selection of varieties with potential use as:  
===== (1) rootstocks (perspectives CMF 101 and 102),  
===== (2) for processing (CMF 017),  
===== (3) fresh consumption (F10),  
===== (4) and ornamental use (CMF 030)



[Annex IV follows]

## LIST OF LEADING EXPERTS

**DRAFT TEST GUIDELINES TO BE SUBMITTED  
TO THE TECHNICAL COMMITTEE IN 2007**

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

**before October 6, 2006**

Species	Basic Document(s)	Leading expert(s)
Apricot (Partial Revision)	TG/70/4 and TWF/37/12	Mr. Harsanyi (HU), Mr. Sergio Semon (QZ), Mr. Richard Brand (FR)
Blackcurrant (Revision)	TG/40/7(proj.2)	Mr. Barnaby (NZ)
Blueberry (Revision)	TG/137/4(proj.2)	Mrs. Julia Borys (PL)
Hawthorn ( <i>Crataegus</i> spp.)	TG/HAWTH(proj.3)	Mr. Barrientos-Priego (MX)

**DRAFT TEST GUIDELINES TO BE DISCUSSED AT TWF/38**  
(\* indicates possible final draft Test Guidelines)

New draft to be submitted to the Office of the Union

**before May 25, 2007**

**(Guideline date for Subgroup draft to be circulated by Leading Expert: March 23, 2007  
Guideline date for comments to Leading Expert by Subgroup: April 20, 2007)**

Species	Basic Document(s)	Leading expert(s)	Interested experts (countries) <sup>1</sup>
Banana* ( <i>Musa</i> spp) (Revision)	TG/123/4(proj.4)	Mrs. dos Santos Machado (BR)	CPVO, ES, FR, IL, KE, ZA, IPGRI
Coffee*	TG/COFFEE (proj.4 Rev.)	TWA (BR)	KE, MX
Dragon-fruit ( <i>Hylocereus undatus</i> (Haw.) Britton et Rose)	New	Mr. Barrientos-Priego (MX)	IL,
Fig ( <i>Ficus carica</i> )	TG/FIG(proj.1)	Mr. Chomé Fuster (ES)	AR, DE, ES, FR, IL, JP, PT, IPGRI

<sup>1</sup> For name of experts, see List of Participants.

TWF/37/15  
Annex IV, page 2

Species	Basic Document(s)	Leading expert(s)	Interested experts (countries) <sup>1</sup>
Grapevine* ( <i>Vitis</i> L.)	TG/50/8 and TWF/37/13	Mr. Chomé Fuster (ES), Mr. Schulte (DE)	AR, AU, BR, CZ, FR, HU, IL, KR, NZ, JP, MX, PL, SK, ZA
Papaya ( <i>Carica papaya</i> L.)	TG/PAPAYA(proj.2)	Mr. Barrientos-Priego (MX)	AU, BR, IL, ZA
Passion Fruit (Fruit species)	TG/PASSI(proj.2)	Mr. Venter (ZA)	BR, IL, JP, KE, MX, IPGRI
Peach (Revision)	TG/53/6 Rev.(proj.1)	Mr. Brand (FR)	AU, BR, CA,CL, CPVO, DE, ES, HU, JP, KR, MX, NZ, PL, ZA
Pecan nut	TG/PECAN(proj.4)	Mr. Labarta (AR)	BR, IL, MX, ZA, IPGRI
Pineapple ( <i>Ananas comosus</i> )	TG/PINEAP(proj.3)	Mr. Brand (FR) and Mr. Salaices (ES)	AU, BR, CPVO, JP, KE, MX, PT, IPGRI, ZA
Pistachio ( <i>Pistacia vera</i> L.)	New	Mr. Bar-Tel (IL)	ES, ZA
Pomegranate ( <i>Punica granatum</i> L.)	New	Mr. Bar-Tel (IL)	ES, ZA
Sea Buckthorn* ( <i>Hippophae</i> L.)	TG/HIPPH(proj.2)	Mrs. Bátorová (SK)	DE, FR, HU, PL, RO
<i>Solanum muricatum</i> Aiton (Melon-pear, Pepino)	New	Mr. Richard Brand (FR)	ES, IL, NZ
Strawberry* (Revision)	TG/22/10(proj.1)	Mr. Nakamura (JP)	AU, BR, CA, CL, CPVO, DE, ES FR, HU, IL, KR, MX, NL, NZ, PL, SK, ZA

DRAFT TEST GUIDELINES TO POSSIBLY BE DISCUSSED IN 2008

Species	Basic Document	Leading expert(s)	Interested experts (countries) <sup>1</sup>
Cacao ( <i>Theobroma cacao</i> L.)	New	Mrs. dos Santos Machado (BR)	FR, MX

[End of Annex IV and of document]