



TWC/29/31

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

**TECHNICAL WORKING PARTY ON AUTOMATION AND  
COMPUTER PROGRAMS**

**Twenty-Ninth Session  
Geneva, June 7 to 10, 2011**

REPORT

*adopted by the Technical Working Party on Automation and Computer Programs*

Opening of the Session

1. The Technical Working Party on Automation and Computer Programs (TWC) held its twenty-ninth session in Geneva, Switzerland, from June 7 to June 10, 2011. The list of participants is reproduced in Annex I to this report.
2. The session was opened by Mr. Gerie van der Heijden (Netherlands), Chairperson of the TWC, who welcomed the participants. The Chairperson recalled that the session was being webcast and welcomed participants that would follow the meeting via that service.

Adoption of the Agenda

3. The TWC adopted the revised agenda as reproduced in document TWC/29/1 Rev., according to the order of agenda items agreed at the session.

### Short Reports on Developments in Plant Variety Protection

#### *(a) Reports from members and observers*

4. The TWC noted the information on development in plant variety protection from members provided in document TWC/29/20. The TWC noted that reports submitted to the Office of the Union during or after the session would be included in an addendum to document TWC/29/20.

#### *(b) Reports on developments within UPOV*

5. The TWC received an oral report from the Office of the Union (Office) on the latest developments within UPOV, a copy of which is provided as Annex II to this document.

### Molecular Techniques

6. The TWC received a report on developments within UPOV concerning molecular techniques, on the basis of document TWC/29/2. The TWC expressed its interest to cooperate with crop experts on biochemical and molecular techniques.

### TGP Documents

7. The TWC considered the TGP documents below in conjunction with document TWC/28/3.

#### *Revision of TGP documents:*

#### TGP/7 Development of Test Guidelines

- (i) Summary of revisions proposed for document TGP/7 "Development of Test Guidelines" (document TWC/29/11)*
- (ii) Providing photographs with the Technical Questionnaire (document TWC/29/12)*
- (iii) Quantity of plant material required (document TWC/29/17)*
- (iv) Example varieties (document TWC/29/18)*

8. The TWC considered document TWC/29/11 and noted the information on Part I concerning proposals for revisions on which the TC had reached a conclusion:

- Number of plants to be examined (for distinctness)
- Coverage of ornamental varieties in Test Guidelines
- Applications for varieties with low germination
- Selection of asterisked characteristics
- Indication of grouping characteristics
- Standard references in the Technical Questionnaire

9. The TWC examined Part II of document TWC/29/11 and made the following comments:

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

10. The TWC considered the proposal in Annex I to document TWC/29/11, prepared by an expert from Germany. The TWC proposed that experts from Germany and Poland establish a sub-group for further development on guidance on the number of plants to be examined (for distinctness).

11. The TWC agreed to suggest to the TC that it consider the proposal as a possible matter for discussion on the Monday session of the TC, in 2013.

- Guidance for method of observation

12. The TWC considered the background information concerning “Guidance for method of observation” (see document TWC/29/11, Annex II) and noted the comments by the TWPs at their sessions in 2010.

13. The TWC agreed that any records of observation by notes correspond to a visual (V) observation.

(ii) *Providing photographs with the Technical Questionnaire*

14. The TWC considered document TGP/7 “Development of Test Guidelines” (document TWC/29/12) and proposed the text should read as follows:

“Introduction

4. The taking of photographs of candidate varieties is influenced by factors, such as light conditions, quality and setting of camera and the background. The perception of the photograph can also be affected by the quality, settings and resolution of the screen and printout or developed photographs. It is certainly [...]”

15. The TWC agreed to add the advantages of having an image in electronic format in paragraph 5, e.g. additional information in the image on the camera type and settings, and possibilities for digital storage, display and analysis.

(iii) *Quantity of plant material required*

16. The TWC considered and noted the information provided in document TWC/29/17.

(iv) *Example varieties*

17. The TWC considered document TWC/29/18 and noted the comments from the TWPs in 2010 and the Technical Working Party for Agricultural Crops (TWA), at its fortieth session, held in Brasilia, Brazil, from May 16 to 20, 2011. The TWC agreed with the comments made at that session of the TWA.

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

18. The TWC considered document TWC/29/14 and agreed the following with regard to the development of the items covered by the annexes:

ANNEX I - TGP/8 PART I: DUS TRIAL DESIGN AND DATA ANALYSIS  
New Section 2 - Data to be recorded (Drafter: Mr. Uwe Meyer (Germany))

The TWC agreed the following amendments:

Section

- 2.3.2.2 To replace the term “inevitable” by “logical” in the second sentence.
- 2.3.2.3 The second line to read as follows “form of a nominal scaled characteristic.”.
- 2.3.3.5 To delete the first sentence.
- 2.3.3.6.2 To read as follows:  
“The definition of an absolute zero point makes it possible to define meaningful ratios. This is a requirement for the construction of indexes, which are the combination of at least two characteristics (e.g. the ratio of length to width). In the General Introduction, this is referred to as a combined characteristic (see document TG/1/3, section 4.6.3).”
- 2.3.3.7.1 To replace the term “expressions” by “units” in the second sentence.
- 2.3.3.7.3 The second line to read “is illustrated by the following example.”.
- 2.3.3.7.4 To replace “impossible” by “incorrect” in the first.
- 2.3.3.7.5 To read as follows:  
“The interval scale is lower classified than the ratio scale (Table 1). At the interval scale, no useful indexes can be formed such as ratios. The interval scale is theoretically the minimum scale to calculate arithmetic mean values.”
- 2.3.3.8.2 The third sentence to read: “It is not important which numbers are used to denote the categories.”
- Table 3 In the column “Procedure and further Conditions”  
- Subject to agreement, to refer to the new recommendation on the number of degrees of freedom  
- To replace “Long term LSD” by Long term COYD”  
- To replace “2 out of 3 method” by “2 x 1% Method”
- Table 6 In the column “Type of Scale”, to refer to the type of scale and distribution as in Table 4.

19. The TWC agreed that a new version of the document be prepared for discussion with the view of its incorporation into TGP/8.

ANNEX II – TGP/8 PART I: DUS TRIAL DESIGN AND DATA ANALYSIS  
New Section 3 – Control of variation due to different observers (Drafter: Mr. Gerie van der Heijden (Netherlands))

20. The TWC received a presentation from Mr. Gerie van der Heijden. A copy of the presentation is contained in the Addendum to document TWC/29/14.

21. The TWC agreed with the comments made by the TWA at its fortieth session.
22. The TWC agreed that Mr. Gerie van der Heijden (Netherlands) and Mr. Adrian Roberts (United Kingdom) should prepare a new document taking into account the information contained in document TWC/25/12 Rev. “Review of Test Design: Checking Levels of Quality (Revised)”.

#### ANNEX III - TGP/8 PART I: DUS TRIAL DESIGN AND DATA ANALYSIS

New Section 6 – Data processing for the assessment of distinctness and for producing variety descriptions (Drafters: experts from France, Germany, Japan, Kenya and the United Kingdom)

23. The TWC recalled that the objective of this New Section 6 on PART I of TGP/8 was to present the principles for producing variety descriptions whilst New Section 13 was aimed to present the methods.
24. The TWC has expressed a preference to develop this section for Part I in TGP/8, describing the principles for producing variety descriptions, whereas New Section 13 “Methods for data processing for the assessment of distinctness and for producing variety descriptions” should reflect the methods to be included in Part II of TGP/8.

#### ANNEX IV - TGP/8 PART I: DUS TRIAL DESIGN AND DATA ANALYSIS

New Section – Information of good agronomic practices for DUS field trials (Drafters: Mrs. Anne Weitz (European Union) and Argentina and France to contribute))

25. The TWC took note of the information contained in Annex IV to document TWC/29/14 and the recommendation made by the TWA at its fortieth session.

#### ANNEX V - TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section after COYU – Statistical Methods for very small sample sizes (Drafter: Mr. Gerie van der Heijden (Netherlands))

26. The TWC agreed that it would be useful to extend the draft from a perspective of presenting possible solutions to the different situations presented, although this might be difficult from a statistical point of view. Input from other Technical Working Parties was welcomed.

#### ANNEX VI - TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section 11 Examining DUS in bulk samples (Drafter: Mr. Kristian Kristensen (Denmark))

27. The TWC agreed that the paper could be included in TGP/8 but that the content of sections 11.3 “Distinctness” and 11.4 “Uniformity” should be excluded from the main text and presented in an appendix.

#### ANNEX VII - TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section 12 - Examining characteristics using image analysis (Drafter: Mr. Gerie van der Heijden (Netherlands))

28. The TWC agreed that a new section should be prepared on the basis of the discussion on documents TWC/29/19, TWC/29/21, TWC/29/27 and TWC/29/29. Drafters: experts

from Netherlands (first drafter), Czech Republic, Finland and the United Kingdom.

#### ANNEX VIII - TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section 13 - Methods for data processing for the assessment of distinctness and for producing variety descriptions (Drafters: experts from France, Germany, Japan, Kenya and the United Kingdom)

29. The TWC agreed that Mrs. Sally Watson should update the information on the species presented in the method from the United Kingdom and that it should be included in TGP/8. It is also agreed that the method provided by Japan should be included in TGP/8.

30. The TWC received a presentation from Mr. Vincent Gensollen (France) on a method used in France for producing variety descriptions for herbage crops. The information presented by Mr. Gensollen is contained in the Addendum to document TWC/29/14.

31. The TWC agreed that the method presented by Mr. Gensollen should be included in document TGP/8.

#### ANNEX IX TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section - Guidance of data analysis for blind randomized trials (Drafters: France and Israel to provide examples)

32. The TWC considered that this was a section to be developed by crop experts.

#### ANNEX X TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section - Statistical methods for visually observed characteristics (Drafter: Kristian Kristensen)

33. The TWC agreed that it would be necessary to explore the consequences of the decisions for DUS examination, as the method is a test for differences in the distribution (both location and dispersion). Also, the consequences of excluding certain varieties from the test, as they did not have sufficient numbers in some cells, should be further investigated.

#### ANNEX XI TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

New Section - Guidance for the development of variety descriptions (Drafter to be agreed)

34. The TWC considered that, for the time being, there was no information to develop guidance for the development of descriptions with information from more than one location.

#### ANNEX XII TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

Section 4 – 2x1 % Method - Minimum number of degrees of freedom for the 2x1% Method (Drafter: Mrs. Sally Watson)

35. The TWC agreed that the explanation proposed in Annex XII should be included in document TGP/8.

#### ANNEX XIII TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

Section 9 - The Combined-Over-Years Uniformity Criterion (COYU) - Minimum number of degrees of freedom for COYU (Drafter: Mrs. Sally Watson)

36. The TWC agreed that the explanation proposed in Annex XIII should be included in document TGP/8.

## ANNEX XIV - TGP/8 PART II: TECHNIQUES USED IN DUS EXAMINATION

Section 10 – Minimum number of comparable varieties for the Relative Variance Method  
(Drafter: Mr. Nik Hulse (Australia))

37. The TWC received a presentation from Mr. Nik Hulse (Australia). A copy of the presentation is included in the Addendum to document TWC/29/14.

38. The TWC conditionally agreed with the proposal made by Australia. Doubts were expressed regarding some assumptions of the method and further investigation will be done by Australia with respect to these assumptions and the F value used in the calculations.

*TGP/12: Guidance on Certain Physiological Characteristics  
(document TWC/29/15)*

39. The TWC noted the information provided in document TWC/29/15.

*TGP/14: Glossary of Terms Used in UPOV Documents*

40. The TWC considered documents TWC/29/3 Annexes I and II and TWC/29/16.

41. The TWC took note of the comments presented in paragraphs 2.10 to 2.17 of Annex I of document TWC/29/3.

42. The TWC noted that different color groups, as established in Section 3 of Annex I of document TWC/29/16, were not created for the purpose of grouping varieties for DUS trials and should not be used for that purpose.

43. The TWC agreed to invite papers on how information on colors is used for DUS examination for presentation at the next session of the TWC and to inform other Working Parties.

44. The TWC agreed the following changes to the Annex to document TWC/29/16:

Section 4.3.2 The proposal from New Zealand to read as follows:

Dotted:	Having clear, regular, very small spots
Patched:	Having clear, irregular, medium spots
Blotched:	Having clear, irregular, large spots
Flecked:	Having diffuse, irregular, small spots
Speckled:	Having diffuse, irregular, medium spots
Mottled:	Having diffuse, irregular, large spots

Appendix I and Appendix II To exchange titles

Annex II To have “Positional” in one line

“Pattern” To read: “Width”

To replace “Positional” with “Alignment”

Annex II            Example 1: To read “Marginal Zone”  
“Distribution”  
                         Example 3: Patch: To read “Spotted”

### UPOV Information Databases

45. The TWC noted the information provided in document TWC/29/5.

46. On the afternoon of June 9, the TWC received a presentation from Mr. Glenn Mac Stravic on the latest prototype of the online UPOV plant variety database. The interface for searching the database was advanced and flexible. The request for storing personalized search results was noted, as was the request for the facility to download data from the database for local purposes and the addition of phonetic fields. The TWC agreed that there was a strong need for unique identifiers in the data provided by the countries.

### Variety description databases

47. The TWC noted the information provided in document TWC/29/6.

48. The TWC considered document TWC/29/13 “Concept of a Database Containing Pea Variety Descriptions”, presented by Mr. Vincent Gensollen (France). The TWC expressed its concern with regard to the relative low number of corresponding varieties found by the different countries. The grouping characteristics were the characteristics least influenced by the environment and an ICT solution would not be able to solve these harmonization problems. The TWC suggested that the Technical Working Party for Vegetables (TWV) should continue to discuss the concept and ways to achieve harmonization.

49. The TWC received a presentation entitled “Gemma: A Technical Website to Share DUS Data” (document TWC/29/24) by Mr. Christophe Chevalier (France)).

### Exchangeable software

50. The TWC considered document TWC/29/7 and received a presentation by Mrs. Hedwich Teunissen (Netherlands) on “Bionumerics Software for Databasing and Data Analysis” (document TWC/29/30), regarding the proposal provided by the Netherlands in Annex I to document TWC/29/7.

51. The TWC agreed that the Bionumerics Software for Databasing and Data Analysis should be included in the exchangeable software for biochemical and molecular data, subject to agreement by the Biochemical and Molecular Techniques and DNA Profiling in Particular (BMT) at its thirteenth session, to be held in Brasilia, Brazil, from November 22 to 24, 2011.

52. The TWC noted the proposals made by the Russian Federation provided in Annex II to document TWC/29/7 and looked forward to receiving a presentation by experts from the Russian Federation at a future session.



Electronic application systems

53. The TWC considered document TWC/29/8

54. The TWC considered that the inclusion of the possibility of transferring data from the database hosted by UPOV, proposed in paragraph 9 (d) of document TWC/29/8, to the Form of the Authority would be very useful.

Variety Denominations

55. The TWC noted the information provided in document TWC/29/4.

Image Analysis

56. The TWC received presentations on image analysis by Mr. Adrian Roberts (United Kingdom) (document TWC/29/19), by Mr. Sami Markkanen (Finland) (document TWC/29/21), by Mr. David Hampel (Czech Republic) (document TWC/29/27) and by Mr. Gerie van der Heijden (Netherlands) (document TWC/29/29). The TWC agreed to propose the development of a questionnaire concerning software and hardware used for image analysis and invited UPOV members to make presentations on image analysis at the thirtieth session of TWC session, in 2012.

Data Loggers

57. The TWC noted the information provided in document TWC/29/28 and agreed that a new circular concerning hand-held data capture devices should be sent by the Office of the Union, inviting further entries in advance of the thirtieth session of the TWC.

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

58. The TWC considered document TWC/29/9. The TWC agreed that Mr. Uwe Meyer (Germany) and Mr. Humberto Vaquera Huerta (Mexico), with the assistance of crop experts, would prepare a document to explore the consequences of different approaches on using real data.

59. Furthermore the TWC requested the UPOV Office to prepare a summary document of the results of the questionnaire.

Development of COY

60. The TWC took note of the information contained in document TWC/29/10.

(a) COYU possible proposals for improvements to COYU (document TWC/29/22)

61. The TWC received a presentation by Mr. Kristian Kristensen (Denmark) "Analysis of the Relation Between Log SD and Mean of Varieties", prepared by experts from Denmark and the United Kingdom. The TWC agreed that a new document based on the cubic spline model should be prepared for the next session of the TWC.

- (b) A comparison of COYU and a method based on Bennett's Test for coefficients of variation (document TWC/29/23)

62. The TWC took note of the information in document TWC/29/23, presented by Mr. Wieslaw Pilarczyk (Poland). Some experts wondered whether better results could be obtained if the Bennett's Test were compared with COYU at other significance levels and with COYU improved with the cubic spline model.

- (c) A rationale for excluding varieties of common knowledge from the second growing cycle when COYD is used (document TWC/29/26)

63. The TWC received a presentation by Mrs. Sally Watson (United Kingdom) on "Cyclic Planting of Established Varieties to Reduce Trial Size". The TWC agreed that the text should be included in TGP/8 Part I in a new section on the reduction of the size of the trials.

- (d) Use of COYD when varieties are grouped (document TWC/29/25)

64. The TWC received the presentation by Mr. Adrian Roberts (United Kingdom) on "An Adjustment to the COYD Method When Varieties are Grouped Within the DUS Trial". The TWC agreed that the text should be included in TGP/8 Part II Section 3.

#### Future Program, Date and Place of the Next Session

65. The TWC agreed to hold its thirtieth session in Chisinau, Republic of Moldova, from June 26 to 29, 2012, with the preparatory workshop on June 25, 2012. During the thirtieth session, the TWC planned to discuss the following items:

1. Opening of the session
2. Adoption of the agenda
3. Short reports on developments in plant variety protection:
  - (a) Reports from members and observers (oral reports by the participants)
  - (b) Reports on developments within UPOV (oral report by the Office of the Union)
4. Molecular techniques (document to be prepared by the Office of the Union and documents invited)
5. TGP documents
6. Information and databases
  - (a) UPOV information databases (document to be prepared by the Office of the Union and documents invited)
  - (b) Variety description databases (document to be prepared by the Office of the Union and documents invited)
  - (c) Exchangeable software (document to be prepared by the Office of the Union and documents invited)
  - (d) Electronic application systems (document to be prepared by the Office of the Union and documents invited)

7. Variety denominations (document to be prepared by the Office of the Union)
8. Data loggers (document to be prepared by the Office of the Union)
9. Image analysis (papers invited)
10. Assessing uniformity by off-types on the basis of more than one sample or sub-samples (document to be prepared by Germany and Mexico)
11. Development of COY
  - (a) COYU: possible proposals for improvements to COYU (document to be prepared by Denmark and United Kingdom)
  - (b) A rationale for excluding varieties of common knowledge from the second growing cycle when COYD is used (document to be prepared by United Kingdom)
12. Statistical analysis of categorical data (document to be prepared by China and documents invited)
13. Database for researching TWC documents (CD to be prepared by Germany)
14. Date and place of the next session
15. Future program

Chairperson

66. Mr. Gerie van der Heijden was awarded a UPOV bronze medal in recognition of his chairmanship of the TWC from 2009 to 2011.

*67. The TWC adopted this report at the close of the session.*

[Annexes follow]

ANNEX I

LIST OF PARTICIPANTS

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[Annex II follows]

 UPOV

TECHNICAL WORKING PARTY  
ON AUTOMATION AND  
COMPUTER PROGRAMS

Twenty-Ninth Session

**REPORT ON DEVELOPMENTS IN UPOV**

Geneva, June 7 to 10, 2011

1

 UPOV

**OVERVIEW**

- Membership / Examination of Laws
- Council
- Consultative Committee
- CAJ & CAJ-AG
- TC
- Other developments
  - Publications
  - Second World Seed Conference / World Seed Project
  - Open day
- Information on DUS guidance and cooperation

 **MEMBERSHIP OF UPOV**

**69 Members**  
(68 States and the European Community)

New Members

Former Yugoslav Republic of  
Macedonia as of May 4, 2011

<u>Laws examined</u>	<u>Council session</u>	<u>Advice</u>
Republic of Tajikistan	October 21, 2010	Positive
Republic of Serbia	April 8, 2011	Positive

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**COUNCIL**

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 **COUNCIL**  
**ELECTED**  
for a term of three years ending in 2013


Chair of the Administrative and Legal Committee  
**Mr. Lü Bo (China)**

Vice-Chair of the Administrative and Legal Committee  
**Mr. Martin Ekvad (European Union)**

Chair of the Technical Committee  
**Mr. Joël Guiard (France)**

Vice-Chair of the Technical Committee  
**Mr. Alejandro Barrientos-Priego (Mexico)**


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 **COUNCIL**

**INFORMATION MATERIALS ADOPTED OCTOBER 2010**

Latest reference	Explanatory Notes on:
UPOV/EXN/VAR/1	<b>Definition of Variety under the 1991 Act of the UPOV Convention</b>
UPOV/EXN/CAL/1	<b>Conditions and Limitations Concerning the Breeder's Authorization in Respect of Propagating Material under the UPOV Convention</b>
	INF documents
UPOV/INF/4/1	<b>Financial Regulations and Rules of UPOV</b>
UPOV/INF/10/1	<b>Internal Audit</b>
UPOV/INF/12/3	<b>Explanatory Notes on Variety Denominations under the UPOV Convention</b>
UPOV/INF/15/1	<b>Guidance for Members of UPOV on Ongoing Obligations and Related Notifications</b>
UPOV/INF/16/1	<b>Exchangeable Software</b>
UPOV/INF/17/1	<b>Guidelines for DNA-Profiling: Molecular Marker Selection and Database Construction ("BMT Guidelines")</b>

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 **COUNCIL**

INFORMATION MATERIALS ADOPTED (reminder)

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

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

(available in English, French, German, Spanish,  
Arabic, Chinese, Russian, Bahasa Indonesian)<sub>7</sub>

 **COUNCIL**

TGP DOCUMENTS ADOPTED OCTOBER 2010

Document reference	Issue	Title
TGP/0	/3	List of TGP Documents and Latest Issue Dates
TGP/5		Experience and Cooperation in DUS Testing:
Section 2	/3	UPOV Model Form for the Application for Plant Breeders' Rights
TGP/7	/2	Development of Test Guidelines
TGP/8	/1	Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability
TGP/14	/1	Glossary of Terms Used in UPOV Documents

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**UPOV**

## Mr. Jördens Gold Medal



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**UPOV**

## Plant Variety Database




Freely accessible  
on the UPOV website  
during 2011

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**CONSULTATIVE  
COMMITTEE**

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**CONSULTATIVE COMMITTEE**

**Observers**

- Established a working group to review the rules concerning observers and recommend appropriate changes
- Granted observer status to:
  - Association for Plant Breeding for the Benefit of Society (APBREBES): Council, CAJ, TC, TWPs
  - European Coordination Via Campesina (ECVC): Council, CAJ, TC, TWPs
- Extended observer status to:
  - CropLife International: CAJ, TC, TWPs

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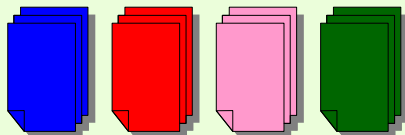
**UPOV** **CONSULTATIVE COMMITTEE**

- Established Organizing Committee for the celebration of the **Fiftieth Anniversary**
- Associated activities / developments
  - Symposium on Plant Breeding for the Future
  - restructuring of the UPOV website
  - visual presentation on UPOV website
  - new “UPOV Collection”



**UPOV** **CONSULTATIVE COMMITTEE**

**UPOV Collection**



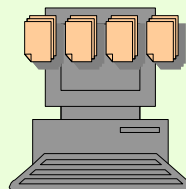
- (a) UPOV Convention
- (b) UPOV/INF document series
- (c) Explanatory notes on the UPOV Convention
- (d) General Introduction
- (e) TGP documents
- (f) Test Guidelines (website link)
- (g) UPOV Collection of Laws and Treaties (website link)
- (h) List of UPOV members (website link)
- (i) Addresses of Plant Variety Protection Offices (website link)
- (j) UPOV Organigram (website link)
- (k) Databases and information (website link)
  - List of the Taxa Protected by the Members of the Union
  - Cooperation in Examination
  - List of Species in which practical technical knowledge has been acquired or for which National Guidelines have been established
- (l) Plant Variety Database (website link)
- (m) GENIE Database (website link)

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## CONSULTATIVE COMMITTEE

### UPOV Collection: website maintenance



- UPOV Collection on website
- Status document (c.f. document TGP/0)
- Electronic notification of updates to “subscribers”

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## CONSULTATIVE COMMITTEE

### UPOV Collection: physical collection

- SET OF BINDERS with PRINTED DOCUMENTS
  - two sets per member of the Union
  - one set per observer State
  - one set per observer organization
- In the first instance only (and for new members and observers), printed versions of all documents in the “UPOV Collection”, except for Test Guidelines, would be provided with the binders
- Members of the Union, observer States and observer organizations will be notified, electronically, of updates and will need to print the documents



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**UPOV**

## ADMINISTRATIVE AND LEGAL COMMITTEE (CAJ)

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**UPOV**

## CAJ/ CAJ-AG

OVERVIEW OF THE DEVELOPMENT OF INFORMATION MATERIALS

CAJ/63 to consider CIOPORA request to develop explanatory notes on “propagation and propagating material”


Latest reference	Explanatory Notes on:	Status
UPOV/EXN/HRV Draft 6	<b>Acts in Respect of Harvested Material under the 1991 Act of the UPOV Convention</b>	CAJ-AG October 2011
UPOV/EXN/BRD Draft 4	<b>Definition of Breeder under the 1991 Act of the UPOV Convention</b>	CAJ-AG October 2011
CAJ-AG/11/6/3	<b>Essentially Derived Varieties under the 1991 Act of the UPOV Convention (revision)</b>	CAJ-AG October 2011

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**TECHNICAL COMMITTEE (TC)**

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**TECHNICAL COMMITTEE (TC)**


written reports to the Office of the Union in advance of the Technical Working Party (TWP)

experts from France to present the concept of a database containing pea variety descriptions of member of the Union to the TWP 2011 and to the TC at its forty-eighth session.

Draft UPOV/INF/16/2 “Exchangeable Software” (to CAJ and Council)

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 **TECHNICAL COMMITTEE (TC)**

UPOV/INF/16 “Exchangeable Software”

- should be modified in order to allow the offer for assistance on the electronic office management systems made by the CPVO
- Netherlands and the Russian Federation would be invited to TWC

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 **TECHNICAL COMMITTEE (TC)**

a summary of information for all adopted Test Guidelines and made available to Leading Experts on the TG Drafters' webpage

The TC agreed that, the adopted Test Guidelines should also be made available in Word format on the freely accessible area of the UPOV website.

copies of all previous adopted versions of Test Guidelines available on the first restricted area of the UPOV website


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 **TECHNICAL COMMITTEE (TC)**

forty-eighth session should be held over three days:  
Monday morning to Wednesday afternoon.

Monday should be dedicated to a discussion on  
experiences of members of the Union in measures to  
improve the efficiency and effectiveness of DUS testing

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 **TECHNICAL COMMITTEE (TC)**

In considering how to improve the effectiveness of the TC work, the following measures were agreed:

- (a) to display documents under consideration at the session on the screen in the language of the original document.
- (b) to add an indication in document reference of the language.
- (c) to consider **ways of improving the quality of draft Test Guidelines** submitted by the TWPs for adoption to the TC. In that regard, the TC noted the importance of all necessary information being provided by the Leading Expert by the specified date, the importance of the role of the TWP chairpersons and the importance of posting the draft Test Guidelines on the UPOV website sufficiently in advance of the TC-EDC meeting in order that comments could be made before the TC-EDC meeting.
- (d) The TC-EDC to hold a two-day meeting in January.

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<b>UPOV</b>		<b>TECHNICAL COMMITTEE (TC) TGs adopted</b>	
<b>NEW TEST GUIDELINES (11)</b>			
TG/ACERO(proj.4)		Acerola, Barbados-cherry, West Indian-cherry	
TG/AGAPA(proj.4)		African Lily, Agapanthus, Blue Lily, Lily of the Nile	
TG/BOUGA(proj.5)		Bougainvillea	
TG/CACAO(proj.4)		Cacao	
TG/CAMEL(proj.4)		Camellia	
TG/DRAGON(proj.5)		Dragon Fruit, Strawberry pear	
TG/HIBIS(proj.7)		Rose-of-Sharon, shrub-althaea	
TG/RUMEX(proj.7)		Dock, Garden sorrel, sorrel, sorrel dock, sour dock	
TG/SETARIA(proj.5)		Foxtail Millet, Italian Millet, Hungary Millet	
TG/TOREN(proj.4)		Bluewings, Torenia, Wishbone-flower	
TG/VRIES(proj.6)		Vriesea	25

<b>UPOV</b>		<b>TECHNICAL COMMITTEE (TC) TGs adopted</b>	
<b>REVISIONS OF TEST GUIDELINES (8)</b>			
TG/44/11(proj.5)		Tomato	
TG/51/7(proj.4)		Gooseberry	
TG/52/6(proj.4)		Red and White Currant	
TG/56/4(proj.4)		Almond	
TG/57/7(proj.6)		Flax, Linseed	
TG/84/4(proj.4)		Japanese Plum	
TG/99/4(proj.4)		Olive	
TG/184/4(proj.3)		Cardoon, Globe Artichoke, Cardoon	
<b>PARTIAL REVISIONS OF TEST GUIDELINES (2)</b>			
TG/13/10 Rev. (TC/47/2, TC/47/24)		Lettuce	
TG/55/7 Rev. (TC/47/2, TC/47/24)		Spinach	26

**UPOV**

**TECHNICAL COMMITTEE (TC)  
TGs adopted**

Test Guidelines for Mandarins (Citrus; Group 1)  
(document TG/201/1) to be referred back to the TWF for  
further consideration

Test Guidelines for Canna (document TG/CANNA(proj.7))  
and Eucalyptus (document TG/EUCAL(proj.6)) be referred  
back to the TWO for further consideration.


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**TECHNICAL COMMITTEE (TC)  
Chairpersons TWP**


**TWA: Mrs. Robyn Hierse (South Africa)**  
**TWC: Mr. Sami Markkanen (Finland)**  
**TWF: Mrs. Carensa Petzer (South Africa)**  
**TWO: Mr. Nik Hulse (Australia)**  
**TWV: Mr. François Boulineau (France)**  
**BMT: Mr. Alejandro Barrientos Priego (Mexico)**

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**DOCUMENTS PROPOSED TO THE  
COUNCIL FOR ADOPTION BY TC AND CAJ**

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**DOCUMENTS PROPOSED TO THE COUNCIL FOR  
ADOPTION BY TC AND CAJ**

BMT/DUS Draft 5: Possible use of Biochemical and  
Molecular Markers in the Examination of Distinctness,  
Uniformity and Stability (DUS)

document TGP/15 (models with a positive assessment  
and with accepted examples) should be developed  
separately, but in parallel, to document BMT/DUS

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**DOCUMENTS PROPOSED TO THE COUNCIL FOR  
ADOPTION BY TC AND CAJ**

TGP/11/1: Examining Stability

TGP/5: Section 10/2 Draft 2: Experience and  
Cooperation in DUS Testing: Notification of Additional  
Characteristics

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**OTHER DEVELOPMENTS**

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**UPOV** **DECLARATION FROM THE SECOND WORLD SEED CONFERENCE**

**DECLARATION FROM THE SECOND WORLD SEED CONFERENCE**  
**Responding to the challenges of a changing world:  
The role of new plant varieties  
and high quality seed in agriculture**  
held at the FAO Headquarters in Rome, September 8-10, 2009

**DÉCLARATION DE LA DEUXIÈME CONFÉRENCE MONDIALE SUR LES SEMENCES**  
**Défis à relever dans un monde en évolution:  
Rôle des obtentions végétales et des semences  
de qualité dans l'agriculture**  
tenue au siège de la FAO, à Rome, du 8 au 10 septembre 2009

Spanish,  
Chinese,  
Russian and  
Arabic to  
follow



# Second World Seed Conference



**DECLARATION FROM THE SECOND WORLD SEED CONFERENCE**  
**Responding to the challenges of a changing world:  
The role of new plant varieties  
and high quality seed in agriculture**  
held at the FAO Headquarters in Rome, September 8-10, 2009

**World food security: urgent measures on seed needed**

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

Governments are strongly encouraged to implement a predictable, reliable, cost-benefit and affordable regulatory environment to ensure that farmers have access to high quality seed at a fair price. In particular, IAO member countries are urged to participate in the international harmonized system of the Organization for Economic Cooperation and Development (OECD), the International Union for the Protection of New Varieties of Plants (UPOV), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and the International Seed Federation (ISF). Participants in these systems will facilitate the availability of germplasm, new plant varieties and high quality seed for the benefit of their farmers, without which their ability to respond to the challenges ahead will be substantially impaired. The conference emphasized the important role of both the public and the private sector to meet the challenges ahead and the benefits when they work together. The Second World Seed Conference emphasized that agriculture needs to provide sustainable food security and economic development in the context of current and future global challenges. The Conference highlighted the critical role of new plant varieties and high quality seed in providing a dynamic and sustainable agriculture that can meet these challenges. It concluded that governments need to develop and maintain an enabling environment to encourage plant breeding and the production and distribution of high quality seed. The global seed market has grown rapidly in recent years and is currently worth USD 17 billion. Cross-border seed trade was estimated to be worth around USD 4 billion in 2007. The Second World Seed Conference was held at FAO headquarters from September 8-10 and organized in collaboration with the OECD, UPOV, EPPO, ISF, ICR, etc.

**Conference conclusions:**


- Plant breeding has significantly contributed and will continue to be a major contributor to increased food security while reducing input costs, greenhouse gas emissions and deforestation. While plant breeding significantly mitigates the effects of population growth, climate change and other social and physical challenges.
- ITPGRFA is an essential instrument that aims at providing food security through conservation, as well as facilitated access to genetic resources under its multilateral system of access and benefit sharing. The multilateral system represents a reservoir of genetic traits and breeding material for the improvement of global food security.
- Intellectual property protection is crucial for a sustainable contribution of plant breeding and seed supply. An effective system of plant variety protection is a prerequisite for investment in breeding and the development of new varieties of plants. A country's membership of UPOV is an important global signal for breeders to have the confidence to introduce their new varieties in that country.
- Seed quality deterioration, as established by IFA, can lead to be applied to farmers in an important manner for achieving successful agricultural production. The establishment or maintenance of an appropriate infrastructure on the scientific as well as technical level in developed and developing countries is highly recommended.
- The development of reliable and internationally accepted standards through close collaboration between all stakeholders along the supply chain for varietal certification, phytosanitary measures and laboratory testing, contributes substantially to the strong growth in international trade and development of seed markets to the benefit of farmers.



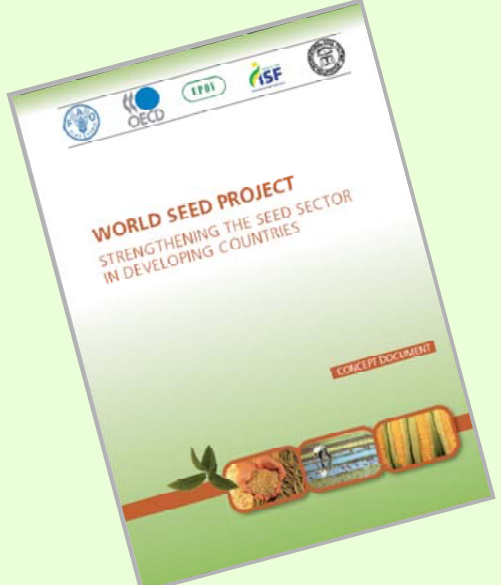
**"Follow-up"**

... proposal for the five organizations to work together in selected countries to provide an example of how to put in place a framework to encourage the development of new varieties and deliver high quality seed for farmers

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# World Seed Project



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## Seminar

	<b>UPOV</b>	<b>E</b> UPOV/SEM/GE/11/1 Rev. ORIGINAL: English DATE: March 28, 2011
INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS GENEVA		

**SEMINAR ON  
PLANT VARIETY PROTECTION AND TECHNOLOGY TRANSFER:  
THE BENEFITS OF PUBLIC-PRIVATE PARTNERSHIP**

Geneva, April 11 and 12, 2011

REVISED PROGRAM

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**UPOV**

## Open Day


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## UPOV OPEN DAY

Exhibitors/Exhibiteurs: (from left to right / de gauche à droite)

Mr. Bruno Etavard, Meilland International - Rose varieties / variétés de rose  
Mrs. Dominique Thevenon, CIOPORA – Apple varieties / variétés de pommes  
Mr. Wilhelm Wicki, Delley Seeds and Plants Ltd, Switzerland – Wheat varieties / variétés de blé



**Posters on view in lobby**

**UPOV**

## UPOV OPEN DAY



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## Information on DUS Guidance and Cooperation

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