INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

WORKING GROUP ON BIOCHEMICAL AND MOLECULAR TECHNIQUES,
AND DNA-PROFILING IN PARTICULAR

Thirteenth Session
Brasilia, November 22 to 24, 2011

ADDENDUM

REPORTS ON DEVELOPMENTS IN UPOV CONCERNING BIOCHEMICAL AND
MOLECULAR TECHNIQUES

Document prepared by the Office of the Union
Working Group on Biochemical and Molecular Techniques and DNA Profiling in particular
Thirteenth Session

REPORT ON DEVELOPMENTS IN UPOV

Brasilia, November 21, 2011

OVERVIEW

• Membership / Examination of Laws
• New website
• Council
• Consultative Committee
• CAJ & CAJ-AG
• TC
• Other developments
UPOV: INDEPENDENT INTERGOVERNMENTAL ORGANIZATION

The International Convention for the Protection of New Varieties of Plants established in 1961

The International Union for the Protection of New Varieties of Plants

Union internationale pour la protection des obtentions végétales

MEMBERSHIP OF UPOV

70 Members

New Members
Peru as of Aug. 8, 2011
Former Yugoslav Republic of Macedonia as of May 4, 2011

Laws examined Council session Advice
Republic of Tajikistan October 21, 2010 Positive
Republic of Serbia April 8, 2011 Positive
Members of UPOV (green) & initiating States & organizations (brown)
Ashiro Rindo Story

Table of Contents
- UPV Convention
- UPV/ERAB document series
- Explanation of the UPPOC concept
- General Introduction to the Concept of Disasters, Uniformity and Stability and the Development of Harmonized Documents of Disasters of Species
- PDF Document
- Text Guidelines
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
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)

COUNCIL
ELECTED
for a term of three years ending in 2014

Chair of:
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)
Mr. Jördens Gold Medal

COUNCIL
INFORMATION MATERIALS ADOPTED OCTOBER 2010

<table>
<thead>
<tr>
<th>Latest reference</th>
<th>Explanatory Notes on:</th>
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<tbody>
<tr>
<td>UPOV/EXN/VAR/1</td>
<td>Definition of Variety under the 1991 Act of the UPOV Convention</td>
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<td>UPOV/EXN/CAL/1</td>
<td>Conditions and Limitations Concerning the Breeder’s Authorization in Respect of Propagating Material under the UPOV Convention</td>
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<td>INF documents</td>
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<tr>
<td>UPOV/INF/4/1</td>
<td>Financial Regulations and Rules of UPOV</td>
</tr>
<tr>
<td>UPOV/INF/10/1</td>
<td>Internal Audit</td>
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<tr>
<td>UPOV/INF/12/3</td>
<td>Explanatory Notes on Variety Denominations under the UPOV Convention</td>
</tr>
<tr>
<td>UPOV/INF/15/1</td>
<td>Guidance for Members of UPOV on Ongoing Obligations and Related Notifications</td>
</tr>
<tr>
<td>UPOV/INF/16/1</td>
<td>Exchangeable Software</td>
</tr>
<tr>
<td>UPOV/INF/17/1</td>
<td>Guidelines for DNA-Profiling: Molecular Marker Selection and Database Construction (“BMT Guidelines”)</td>
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COUNCIL
INFORMATION MATERIALS ADOPTED OCTOBER 2011

<table>
<thead>
<tr>
<th>Latest reference</th>
<th>INF documents</th>
</tr>
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<tbody>
<tr>
<td>UPOV/INF-EXN/1</td>
<td>Guidance for the preparation of laws based on the 1991 Act of the UPOV Convention (Revision)</td>
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<tr>
<td>UPOV/INF-18/2</td>
<td>Exchangeable Software (Revision)</td>
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<tr>
<td>UPOV/INF/18/1</td>
<td>Possible use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)</td>
</tr>
<tr>
<td>UPOV/INF-EAN/1</td>
<td>List of INF-EAN Documents and Latest Issue Dates</td>
</tr>
</tbody>
</table>

COUNCIL
INFORMATION MATERIALS ADOPTED (reminder)

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

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

(available in English, French, German, Spanish, Arabic, Chinese, Russian, Bahasa Indonesian)
### COUNCIL

**TGP DOCUMENTS ADOPTED OCTOBER 2010**

<table>
<thead>
<tr>
<th>Document reference</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TGP/0/3</td>
<td>List of TGP Documents and Latest Issue Dates</td>
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<tr>
<td>TGP/5</td>
<td>Experience and Cooperation in DUS Testing:</td>
</tr>
<tr>
<td>Section 2/3</td>
<td>UPOV Model Form for the Application for Plant Breeders' Rights (Revision)</td>
</tr>
<tr>
<td>TGP/7/2</td>
<td>Development of Test Guidelines (Revision)</td>
</tr>
<tr>
<td>TGP/8/1</td>
<td>Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability</td>
</tr>
<tr>
<td>TGP/14/1</td>
<td>Glossary of Terms Used in UPOV Documents</td>
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### COUNCIL

**TGP DOCUMENTS ADOPTED OCTOBER 2011**

<table>
<thead>
<tr>
<th>Document reference</th>
<th>Title</th>
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<td>TGP/0/4</td>
<td>List of TGP Documents and Latest Issue Dates</td>
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<tr>
<td>TGP/5</td>
<td>Experience and Cooperation in DUS Testing:</td>
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<tr>
<td>Section 10/2</td>
<td>Notification of Additional Characteristics (Revision)</td>
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<tr>
<td>TGP/7/3</td>
<td>Development of Test Guidelines (Revision)</td>
</tr>
<tr>
<td>TGP/11/1</td>
<td>Examination of Stability</td>
</tr>
</tbody>
</table>
Experience of members of the Union in the Examination of New Plant Varieties

The Council welcomed the report made at the forty-seventh session of the Technical Committee, held in Geneva from April 4 to 6, 2011, that the number of genera and species for which members of the Union had practical experience in the examination of distinctness, uniformity and stability (DUS) had exceeded 2,500 in 2011. That number had increased by 19% from 2,254 in 2010, to 2,679 in 2011. The Council noted that information on members of the Union with practical experience in DUS examination was freely accessible via the GENIE database.
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
  - Asia Pacific Seed Association (APSA): CAJ, TC, TWPs

CONSULTATIVE COMMITTEE

- The Consultative Committee approved the assistance of the Office of the Union to the International Treaty on Genetic Resources for Food and Agriculture (ITPGRFA) in explaining the content and search options in the Plant Variety Database in the context of the ITPGRFA research project.
# Administrative and Legal Administrative and Legal Committee (CAJ)

## Overview of the Development of Information Materials

<table>
<thead>
<tr>
<th>Latest reference</th>
<th>Explanatory Notes on:</th>
<th>Status</th>
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<tbody>
<tr>
<td>UPOV/EXN/BRD Draft 4</td>
<td>Definition of Breeder under the 1991 Act of the UPOV Convention</td>
<td>CAJ-AG October 2011</td>
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<tr>
<td>CAJ-AG/11/6/3 &amp; UPOV/EXN/EDV/2 Draft 1</td>
<td>Essentially Derived Varieties under the 1991 Act of the UPOV Convention (revision)</td>
<td>CAJ-AG October 2011</td>
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<td></td>
<td>Matters arising after the grant of a breeder’s right</td>
<td>CAJ-AG October 2011</td>
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<tr>
<td></td>
<td>Propagation and Propagating Material</td>
<td>CAJ-AG October 2011</td>
</tr>
<tr>
<td>UPOV/INF/15</td>
<td>UPOV model plant breeders’ rights gazette</td>
<td>To start 2012</td>
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</table>
**TECHNICAL COMMITTEE (TC)**

<table>
<thead>
<tr>
<th>NEW TEST GUIDELINES (11)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG/ACERO</td>
<td>Acerola, Barbados-cherry, West Indian-cherry</td>
</tr>
<tr>
<td>TG/AGAPA</td>
<td>African Lily, Agapanthus, Blue Lily, Lily of the Nile</td>
</tr>
<tr>
<td>TG/BOUGA</td>
<td>Bougainvillea</td>
</tr>
<tr>
<td>TG/CACAO</td>
<td>Cacao</td>
</tr>
<tr>
<td>TG/CAMEL</td>
<td>Camellia</td>
</tr>
<tr>
<td>TG/DRAGON</td>
<td>Dragon Fruit, Strawberry pear</td>
</tr>
<tr>
<td>TG/HIBIS</td>
<td>Rose-of-Sharon, shrub-althaea</td>
</tr>
<tr>
<td>TG/RUMEX</td>
<td>Dock, Garden sorrel, sorrel, sorrel dock, sour dock</td>
</tr>
<tr>
<td>TG/SETARIA</td>
<td>Foxtail Millet, Italian Millet, Hungary Millet</td>
</tr>
<tr>
<td>TG/TOREN</td>
<td>Bluewings, Torenia, Wishbone-flower</td>
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<tr>
<td>TG/VRIES</td>
<td>Vriesea</td>
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</tbody>
</table>
REVISIONS OF TEST GUIDELINES (8)

<table>
<thead>
<tr>
<th>TG</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TG/44/11</td>
<td>Tomato</td>
</tr>
<tr>
<td>TG/51/7</td>
<td>Gooseberry</td>
</tr>
<tr>
<td>TG/52/6</td>
<td>Red and White Currant</td>
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<tr>
<td>TG/56/4</td>
<td>Almond</td>
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<tr>
<td>TG/57/7</td>
<td>Flax, Linseed</td>
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<tr>
<td>TG/84/4</td>
<td>Japanese Plum</td>
</tr>
<tr>
<td>TG/99/4</td>
<td>Olive</td>
</tr>
<tr>
<td>TG/184/4</td>
<td>Cardoon, Globe Artichoke, Cardoon</td>
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</tbody>
</table>

PARTIAL REVISIONS OF TEST GUIDELINES (2)

<table>
<thead>
<tr>
<th>TG</th>
<th>Description</th>
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<tbody>
<tr>
<td>TG/13/10 Rev. (TC/47/2, TC/47/24)</td>
<td>Lettuce</td>
</tr>
<tr>
<td>TG/55/7 Rev. (TC/47/2, TC/47/24)</td>
<td>Spinach</td>
</tr>
</tbody>
</table>

98. The TC agreed that the wording of document TGP/7/2, as adopted by the Council at its forty-fourth ordinary session, held in Geneva on October 21, 2010, with regard to Chapter 4.1.4 should not be followed in the Test Guidelines to be adopted at its forty-seventh session. It agreed that the Test Guidelines to be adopted by the TC should incorporate the amended wording for Chapter 4.1.4, as follows:

Alternative 1: “Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on \( x \) plants or parts taken from each of \( x \) plants and any other observations made on all plants in the text, disregarding any off-type plants.”

Alternative 2: “Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on \( x \) plants or parts taken from each of \( x \) plants and any other observations made on all plants in the text, disregarding any off-type plants. In the case of observations of parts taken from single plants, the number of parts to be taken from each of the plants should be \( y \).”

99. The TC noted that the Council, at its forty-fifth ordinary session to be held on October 20, 2011, would need to adopt the revised text for document TGP/7 before the Test Guidelines could be adopted. Therefore, it agreed to adopt the Test Guidelines subject to the Council adopting the necessary revision to document TGP/7.
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.

Adoption of Test Guidelines

Adoption of Test Guidelines

2001: TWP Subgroups / removal consultation year

Partial revisions
Revisions
New
Experiences of members of the Union in measures to improve the efficiency and effectiveness of DUS testing
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.

GENIE Database

Protection offered by UPOV members
DUS information
- UPOV Test Guidelines
- practical experience (UPOV members)
- cooperation in DUS examination
Variety denomination related information
Practical Experience

Number of Genera/Species for which UPOV Members have Practical Experience

Cooperation

Number of Genera/Species for which UPOV Members have Agreements for Cooperation
Broader items

Preparatory workshops

92. The TC considered document TC/47/10.

93. The TC noted the report of the preparatory workshops held in 2010 and agreed the proposed program for 2011. It agreed that consideration should be given to the inclusion of items for molecular techniques, essentially derived varieties, variety identification and the relationship between the UPOV Convention and other international treaties.
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

Spanish, Chinese, Russian and Arabic to follow
Second World Seed Conference

“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

World Seed Project

WORLD SEED PROJECT
STRENGTHENING THE SEED SECTOR IN DEVELOPING COUNTRIES
Seminar on PVP & Technology Transfer: the Benefits of Public-Private Partnership
April 11-12, 2011

Closing remarks by the Chairs


Use of Plant Variety Protection by National Research Centers
Chair: Enriqueta Molina

Conclusions – Session 1

Plant Variety Protection:

• Promotes private sector involvement in research and development
• A tool for technology transfer
• Provides a legal framework for financial investment
• Encourages innovation in breeding aims, particularly for the development of new or niche markets
• Focuses investment on meeting the needs of farmers and consumers

1. Ryudai Oshima, NARO
2. Jenn James, Grasslanz
3. Shadrack R. Moephuli, ARC
4. Filipe de Moraes Teixeira, EMBRAPA
5. Yves Lespinasse, INRA

Chair: Enriqueta Molina
**Technology Transfer by the Private Sector**

**Chair: Kitisri Sukhapinda**  
**Conclusions – Session 2**

Private sector:
- An effective means of delivering varieties to farmers
- Assessment of the market potential of varieties
- Link between public research and the needs of farmers
- Provides a channel for income for public sector research
- Facilitates strategic associations and coordinated technology transfer

1. Willi Wicki, DSP  
2. Barry Barker, Masstock Arable  
3. Diego Risso, URUPOV  
4. Evans Sikinyi, KY

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**International Research Centers**

**Chair: David Boreham**  
**Conclusions – Session 3**

- PVP provides a mechanism to facilitate dissemination of varieties to farmers: open access does not ensure widespread dissemination or use
- PVP provides a system to increase availability of varieties suited to farmers’ needs
- PVP provides incentives for SME’s, particularly local breeders and seed distributors
- The breeders’ exemption provides a mechanism to facilitate access to germplasm
- The use of PVP is consistent with the ITPGRFA and SMTA

1. Lloyd Le Page, CGIAR  
2. Ruaraidh Sackville Hamilton, IRRI  
3. Ian Barker, Syngenta
SUMMARY

BREEDERS

NEW VARIETIES

FARMERS, GROWERS

CONSUMERS

Tech. Transfer / Added value

Knowledge & income

THANK YOU