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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

TECHNICAL COMMITTEE

Forty-Ninth Session
Geneva, March 18 to 20, 2013

UPOV INFORMATION DATABASES

Document prepared by the Office of the Union

1. The purpose of this document is to provide an update on developments concerning the GENIE database, the UPOV Code System and the Plant Variety Database.

GENIE DATABASE 2

UPOV CODE SYSTEM 2

Guide to the UPOV Code System *2*

UPOV code developments *2*

PLANT VARIETY DATABASE 3

Program for Improvements to the Plant Variety Database ("Program") *3*

Web-based version of the Plant Variety Database (Program: Section 6) *3*

Information on the latest date of submission by the contributors 3
Search rules 3
Facility to save search settings 3
User registration 3
Alphabets 3

Provision of assistance to contributors (Program: Section 2) *3*

Data to be included in the Plant Variety Database (Program: Section 3) *4*

CD-ROM version of the Plant Variety Database (Program: Section 6) *4*

Common search platform (Program: Section 7) *4*

SURVEY OF MEMBERS OF THE UNION ON THEIR USE OF DATABASES AND ELECTRONIC APPLICATION SYSTEMS 5

ANNEX I GUIDE TO THE UPOV CODE SYSTEM

ANNEX II AMENDMENTS TO UPOV CODES FOR HYBRIDS

ANNEX III PROGRAM FOR IMPROVEMENTS TO THE PLANT VARIETY DATABASE

ANNEX IV REPORT ON THE USE OF UPOV CODES BY MEMBERS OF THE UNION AND OTHER CONTRIBUTORS

GENIE DATABASE

2. It is recalled that the GENIE database (http://www.upov.int/genie/en/) has been developed to provide, for example, online information on the status of protection (see document C/46/6), cooperation in examination (see document C/46/5), experience in DUS testing (see document TC/49/4), and existence of UPOV Test Guidelines (see document TC/49/2) for different GENera and specIEs (hence GENIE), and is used to generate the relevant Council and Technical Committee (TC) documents concerning that information. In addition, the GENIE database is the repository of the UPOV codes and also provides information concerning alternative botanical and common names.

UPOV CODE SYSTEM

Guide to the UPOV Code System

3. The "Guide to the UPOV Code System" (see http://www.upov.int/genie/en/pdf/upov_code_system.pdf), as amended by the Technical Committee (TC), at its forty-eighth session, held in Geneva from March 26 to 28, 2012, and the Administrative and Legal Committee (CAJ), at its sixty-fifth session, held on March 29, 2012, is reproduced in Annex I to this document (see documents TC/48/22 "Report on the Conclusions", paragraphs 95 to 100 and CAJ/65/13 "Report", paragraphs 38 to 43).

UPOV code developments

4. In 2012, 212 new UPOV codes were created and amendments were made to 5 UPOV codes. The total number of UPOV codes in the GENIE database at the end of 2012 was 7,061.

	Year							
	2005	2006	2007	2008	2009	2010	2011	2012
New UPOV codes	n/a	n/a	n/a	300 (approx)	148	114	173	212
Amendments	n/a	n/a	n/a	30 (approx)	17	6	12*	5
Total UPOV Codes (at end of year)	5,759	5,977	6,169	6,346	6,582	6,683	6,851	7,061

* including changes to UPOV codes resulting from reclassification of *Lycopersicon, Solanum* and *Cyphomandra* (see document TC/47/8).

5. As a consequence of the amended procedure for allocating UPOV codes for hybrid genera and species, such that a single UPOV code covers all hybrid combinations of the same genera/species (see document TC/48/22 "Report on the Conclusions", paragraph 96, and document CAJ/65/13 "Report", paragraph 13), a number of existing UPOV codes have been amended as indicated in Annex II to this document. The CAJ, at its sixty-sixth session, held in Geneva on October 29, 2012, noted that the publication of the amended UPOV Code System would be arranged in conjunction with the consequential changes of a number of UPOV codes, which would be coordinated with the notification to all members of the Union and other contributors to the Plant Variety Database (see document CAJ/66/8 "Report on the Conclusions", paragraph 16).

6. In accordance with the procedure set out in Section 3.3 of the Guide to the UPOV Code System (see Annex I), the Office of the Union will prepare tables of UPOV code additions and amendments, for checking by the relevant authorities, for each of the Technical Working Party (TWP) sessions in 2013.

7. The TC is invited to note the amendments to UPOV codes and the plan of the Office of the Union to prepare tables of UPOV code additions and amendments, for checking by the relevant authorities, for each of the Technical Working Party (TWP) sessions in 2013.

PLANT VARIETY DATABASE

Program for Improvements to the Plant Variety Database ("Program")

8. Annex III to this document contains the Program as approved by the CAJ, at its fifty-ninth session, held in Geneva on April 2, 2009, and amended by the CAJ at its sixty-fifth session, held in Geneva on March 29, 2012.

9. The following paragraphs provide an update on developments concerning the program for improvements to the Plant Variety Database ("Program") since the forty-eighth session of the TC.

Web-based version of the Plant Variety Database (Program: Section 6)

Information on the latest date of submission by the contributors

10. For the short-term, information on the latest date of submission by the contributors has been provided for the PLUTO database in the form of a pdf document. However, in the longer term, it is planned that the date of submission will be provided for individual data retrieved from the database.

Search rules

11. An explanation of the search rules for the PLUTO database, including the new page that has been provided for searching variety denominations, will be provided and will be demonstrated at the forty-ninth session of the TC.

12. The CAJ, at its sixty-sixth session, held in Geneva on October 29, 2012, welcomed the proposal by the Delegation of the European Union to make a presentation at the sixty-seventh session of the CAJ, to be held on March 21, 2013, on the Community Plant Variety Office (CPVO) experience in the use of its denomination similarity search tool in the examination of proposed denominations (see document CAJ/66/8 "Report on the Conclusions", paragraph 20).

Facility to save search settings

13. An explanation of the possibilities to save search settings for the PLUTO database will be provided and will be demonstrated at the forty-ninth session of the TC.

User registration

14. The Consultative Committee, at its eighty–second session, held in Geneva on October 19, 2011, agreed to require users of the Plant Variety Database to register in order that the use of the Plant Variety Database could be monitored, with a view to using that feedback for future improvements. It was emphasized that this would mean that the Plant Variety Database would still be freely accessible. The requirement for users to register will be implemented shortly before the forty-ninth session of the TC and an explanation of the registration procedure will be demonstrated at the forty-ninth session of the TC.

Alphabets

15. The CAJ, at its sixty-fifth session, agreed to amend the Program, as set out in Annex III to document CAJ/65/6, with regard to Section 3.2 "Data quality and completeness" and Section 3.3 "Mandatory items", in order to introduce the possibility for contributors to the Plant Variety Database to provide data in the original alphabet, in addition to the data being provided in Roman alphabet.

16. The necessary arrangements for the inclusion of data in the original alphabet, in addition to the data being provided in Roman alphabet, have been made.

Provision of assistance to contributors (Program: Section 2)

17. Annex IV to this document provides a summary of the contributions to the Plant Variety Database in 2011 and 2012 and the current situation of members of the Union on data contribution.

18. With regard to the assistance provided to contributors, it is recalled that all contributors to the Plant Variety Database are responsible for the correctness and completeness of the data they supply (see Program, Section 2.4). In cases where assistance is provided to contributors, the contributor will continue to be responsible for the correctness and completeness of the data. Thus, contributors will always be requested to approve any suggested modifications of data they supply, including the addition or amendment of UPOV codes, before the data is entered in the Plant Variety Database.

Data to be included in the Plant Variety Database (Program: Section 3)

19. The Program in Annex I to this document reflects the modification of Section 3.2 "Data quality and completeness" (see new TAG <800>), in order to introduce the possibility for contributors to the Plant Variety Database to provide information on dates on which a variety was commercialized for the first time in the territory of application and other territories. Contributors can now provide information on dates on which a variety was commercialized for the first time in the territory of application and other territories.

CD-ROM version of the Plant Variety Database (Program: Section 6)

20. Section 6 of the Program explains that the possibility to create CD ROM versions of the Plant Variety Database, without the need for the services of Jouve, will be developed in parallel to the web-based version of the database. The production of the UPOV-ROM by Jouve will terminate at the end of 2012, after which time the WIPO Brand Database Unit will produce a CD-ROM version of the PLUTO database (PLUTO CD-ROM).

21. Members of the Union wishing to continue to receive a CD-ROM version of the Plant Variety Database from 2013 are invited to inform the Office of the Union in order to ensure that the PLUTO CD-ROM will be compatible with their IT systems.

Common search platform (Program: Section 7)

22. Document TC/49/8 "Variety Denominations" provides background information on a possible future meeting with the International Society for Horticultural Science (ISHS) and other relevant partners to discuss denomination classes and the concept of a common search platform for variety denomination searching purposes.

23. The TC is invited to:

(a) note the developments concerning the program for improvements to the Plant Variety Database, as reported in this document;

(b) note the new features of the PLUTO database, which will be presented to the TC at its forty-ninth session;

(c) note the information on the contribution of data and the provision of assistance to contributors, as set out in Annex IV to this document; and

(d) invite members of the Union wishing to receive the PLUTO CD-ROM version of the Plant Variety Database from 2013 to inform the Office of the Union in order to ensure that the PLUTO CD-ROM will be compatible with their IT systems.

SURVEY OF MEMBERS OF THE UNION ON THEIR USE OF DATABASES AND ELECTRONIC APPLICATION SYSTEMS

24. The CAJ, at its sixty-sixth session, held in Geneva on October 29, 2012, requested the Office of the Union to conduct a survey of members of the Union on their use of databases for plant variety protection purposes and also on their use of electronic application systems (see document CAJ/66/8 “Report on the Conclusions”, paragraph 21). The Office of the Union intends to issue that survey after the forty-ninth session of the TC and the sixty-seventh session of the CAJ, to be held on March 21, 2013.

25. The TC is invited to note the plans of the Office of the Union to conduct a survey of members of the Union on their use of databases for plant variety protection purposes and on their use of electronic application systems.

[Annexes follow]

ANNEX I

GUIDE TO THE UPOV CODE SYSTEM

1. PURPOSE

1.1 The main purpose of the UPOV Code System is to enhance the usefulness of the UPOV Plant Variety Database by overcoming the problem of synonyms for plant taxa. That is achieved by attributing each taxa a code according to the UPOV Code System ("UPOV code"); synonyms for the same plant taxa are attributed the same UPOV code.

1.2 The UPOV Code System is employed in the GENIE database, which has been developed to provide, for example, online information on the status of protection (see document C/40/6), cooperation in examination (see document C/40/5), experience in DUS testing (see document TC/43/4), and existence of UPOV Test Guidelines (see document TC/43/2) for different GENera and specIEs (hence GENIE), and is also used to generate the relevant Council and Technical Committee (TC) documents concerning that information.

2. UPOV CODE CONSTRUCTION

2.1 General basis

2.1.1 In general, the following UPOV code construction is used for the UPOV Code System:

(a) an alphabetic element of five letters (e.g. XXXXX) indicating the genus ("genus element");

(b) a three-letter element (e.g. YYY) indicating the species ("species element");

(c) where relevant, a further element of up to three characters (e.g. ZZ1) indicating a sub-specific unit ("sub-species element");

thus, XXXXX_YYY_ZZ1

2.1.2 In all cases, the five-letter genus element is to be provided, but the three-letter species element and the sub-specific element are only provided where necessary.

2.1.3 As far as possible, the elements try to follow the first letters of the botanical name of that element, e.g.:

Prunus	PRUNU_
Prunus armeniaca	PRUNU_ARM

2.1.4 In some cases, it is necessary to improvise to ensure that similar taxa have different UPOV codes (e.g. *Platycodon* = "PLTYC_" and *Platymiscium* = "PLTYM_"). In cases where the name is shorter than the UPOV code, the last letter of the name is repeated e.g. *Poa* = POAAA.

2.1.5 In the case of the sub-specific element, the UPOV code is used in a more flexible way to contain more than one level of ranking, thereby avoiding the need for extra elements in the UPOV code.

2.2 Inter-generic and inter-specific hybrids

2.2.1 The letter "x" is not used in the UPOV code to indicate hybrids.

(Background note: the multiplication sign 'x' is used in botany as an optional device to indicate hybridity, but is not part of a name in any sense and may or may not be applied according to the wishes and opinions of a botanical author or editor. What one person considers a hybrid, may not be so considered by another, thus we may see *Solanum tuberosum* or *Solanum* x *tuberosum* if the writer of the second version understands the potato species to be of hybrid origin.)

2.2.2 In the case of a genus which is formed as a hybrid between other genera and for which there is a binomial name (e.g. ×*Triticosecale* [= *Triticum* x *Secale*]), the "genus element" of the UPOV code is based on the binomial name. For example, ×*Triticosecale* has the UPOV code "TRITL".

2.2.3 In the case of a genus which is formed as a hybrid between two genera ("hybrid genus") (e.g. *Alpha* x *Beta*) and for which there is no binomial name, a UPOV code is created for the new "hybrid genus". The genus element of the UPOV code is produced by combining the first two letters of the female parent genus and the first three letters of the male parent genus. For example, a "hybrid genus" which was formed as a hybrid between *Alpha* (UPOV code: ALPHA) and *Beta* (UPOV code: BETAA) would have the UPOV code "ALBET".

2.2.4 In the case of a species which is formed as a hybrid between two species and for which there is no binomial name ("hybrid species") (e.g. *Alpha one* x *Alpha two*), a UPOV code is created for the new "hybrid species". The species element of the UPOV code is produced by combining the first letter of the female parent species and the first two letters of the male parent species. For example, a "hybrid species" which was formed as a hybrid between *Alpha one* (UPOV code: ALPHA_ONE) x *Alpha two* (UPOV code: ALPHA_TWO) would have the UPOV code "ALPHA_OTW".

2.2.5 In the case of a hybrid genus (or species) which is formed as a hybrid between more than two genera (or species) and for which there is no binomial name, the same general approach is followed as for a hybrid between two genera (or species); the sequence of letters used in the UPOV code is based on the order of female parent followed by male parent.

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

Example:

UPOV code request received for: *Alpha one* x *Alpha two*

UPOV Code	Principal Botanical Name
ALPHA_OTW	*Alpha one* x *Alpha two*

Subsequently, UPOV code request received for: *Alpha two* x *Alpha one*
or
(Alpha one x *Alpha two)* x *Alpha one*
etc.

UPOV Code	Principal Botanical Name
ALPHA_OTW	Hybrids between *Alpha one* and *Alpha two*

2.3 Grouping classification: *Brassica* and *Beta*

A grouping classification is used for UPOV codes within *Beta vulgaris* and part of *Brassica oleracea*. To indicate that a grouping classification is being used for those two species, the first letter of the third element of the UPOV code starts with "G". A summary of the structuring of the species is presented below:

UPOV code	*Botanical name*	*Common name*
BETAA_VUL	**Beta vulgaris L.**	
BETAA_VUL_GV	**Beta vulgaris L. ssp. vulgaris**	**Beet**
BETAA_VUL_**G**VA	Beta vulgaris L. ssp. vulgaris var. alba DC.	Fodder beet
BETAA_VUL_**G**VC	Beta vulgaris L. ssp. vulgaris var. conditiva Alef.	Beetroot
BETAA_VUL_**G**VF	Beta vulgaris L. ssp. vulgaris var. flavescens DC.	Leaf beet
BETAA_VUL_**G**VS	Beta vulgaris L. ssp. vulgaris var. saccharifera Alef.	Sugar beet
BRASS_OLE_GA	**Brassica oleracea L. convar. acephala (DC.) Alef.**	**Kale**

UPOV code	*Botanical name*	*Common name*
BRASS_OLE_**G**AM	Brassica oleracea L. convar. acephala (DC.) Alef. var. medullosa Thell.	Marrow-stem kale
BRASS_OLE_**G**AR	Brassica oleracea L. var. ramosa DC.	Catjang
BRASS_OLE_**G**AS	Brassica oleracea L. convar. acephala (DC.) Alef. var. sabellica L.	Curly kale
BRASS_OLE_**G**AV	Brassica oleracea L. convar. acephala (DC.) Alef. var. viridis L.	Fodder kale
BRASS_OLE_GB	**Brassica oleracea L. convar. botrytis (L.) Alef.**	
BRASS_OLE_**G**BB	Brassica oleracea L. convar. botrytis (L.) Alef. var. botrytis	Cauliflower
BRASS_OLE_**G**BC	Brassica oleracea L. convar. botrytis (L.) Alef. var. cymosa Duch.	Broccoli
BRASS_OLE_GC	**Brassica oleracea L. convar. capitata (L.) Alef. var. capitata (L.) Alef.**	**Cabbage**
BRASS_OLE_**G**CA	Brassica oleracea L. convar. capitata (L.) Alef. var. capitata L. f. alba DC.	White cabbage
BRASS_OLE_**G**CR	Brassica oleracea L. convar. capitata (L.) Alef. var. capitata L. f. rubra (L.) Thell.	Red cabbage
BRASS_OLE_**G**CS	Brassica oleracea L. convar. capitata (L.) Alef. var. sabauda L.	Savoy cabbage
BRASS_OLE_GGM	**Brassica oleracea L. convar. oleracea var. gemmifera DC.**	**Brussels sprout**
BRASS_OLE_GGO	**Brassica oleracea L. convar. acephala (DC.) Alef. var. gongylodes L.**	**Kohlrabi**

3. PROCEDURE FOR THE INTRODUCTION AND AMENDMENT OF UPOV CODES

3.1 Responsibility for the UPOV Code System

The Office of the Union (Office) is responsible for the UPOV Code System and the individual UPOV codes.

3.2 Repository of UPOV Codes

The definitive collection of UPOV codes exists exclusively in the GENIE database.

3.3 Introduction of New UPOV Codes / Amendments to UPOV Codes

(a) In the first instance, the Office will create a UPOV code on the basis of the Germplasm Resources Information Network (GRIN) database[1], or other suitable references if the species concerned are not included in the GRIN database.

(b) Where the Office is aware of relevant experts for the genus or species concerned, or is advised of such experts, for example by the proposer of a new UPOV code, it will, wherever possible, check its proposals with those experts before creating the UPOV code.

(c) New UPOV codes might be proposed by any party, but it is expected that the majority of proposals will be made by contributors to the Plant Variety Database. Where the Office receives such proposals, it will respond by updating the GENIE database with the new UPOV codes in a timely manner and, in particular, will seek to ensure that new UPOV codes are available to allow their use for the forthcoming edition of the Plant Variety Database. In addition, the Office will add new UPOV codes where it identifies a need.

(d) In general, amendments to UPOV codes will not be made as a result of taxonomic developments unless these result in a change to the genus classification of a species. The “Explanatory notes on variety denominations under the UPOV Convention” (document UPOV/INF/12) contain UPOV variety denomination classes; for genera and species not covered by the List of Classes in Annex I to document UPOV/INF/12, the general rule (“one genus / one class”) is that a genus is considered to be a class (see document UPOV/INF/12, Section 2.5.2 and its Annex I). Therefore, it is important that the first element of the UPOV code can be used to sort species into the correct genus. The UPOV codes will also be amended if there are consequences for the content of a variety denomination class where the list of classes applies. Amendments to UPOV codes will be handled by the same procedure as the introduction of new

[1] USDA, ARS, National Genetic Resources Program. *Germplasm Resources Information Network - (GRIN)* [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland. URL: http://www.ars-grin.gov/cgi-bin/npgs/html/tax_search.pl

UPOV codes as in paragraphs (a) and (b), above. However, in addition, all members of the Union and contributors of data to the Plant Variety Database will be informed of any amendments.

(e) New and amended UPOV codes will be presented to the relevant Technical Working Parties (TWP(s)) for comment at their first available session. If the TWP recommends any change, this will be treated as an amendment according to paragraph (d), above.

(f) Checking by Technical Working Party(ies): the Office determines the relevant TWP(s) for checking each UPOV code on the basis of available information.

(g) Checking by all authorities: all the experts of the relevant TWP(s) to be invited to check the UPOV codes where:

(i) many authorities (e.g. 10 or more) have practical experience in DUS testing (based on GENIE database / document TC/xx/4 (e.g. TC/43/4)), have provided interested experts in the drafting of relevant Test Guidelines and/or have protected varieties (based on UPOV Plant Variety Database); or

(ii) they concern genera or species for which a wide review is considered appropriate by the Office (e.g. because it concerns a proposal for a species or sub-species not previously recognized within the genus, or a proposal for restructuring of the UPOV code).

(h) Checking by specific authorities: in cases not covered by (g) above, the experts of the relevant TWP(s) of specific authorities will be invited to check the UPOV codes. The specific authorities being those which have practical DUS testing experience, have provided interested experts in the drafting of relevant Test Guidelines, or which have granted protection for varieties covered by the relevant UPOV code.

3.4 Updating of Information Linked to UPOV Codes

(a) UPOV codes might need to be updated to take account of, for example, changes in taxonomic classification, new information on common names, etc. In the case of changes of taxonomic classification, this might, although it is emphasized that this is not necessarily the case (see section 3.3 (d), above), result in a need to change the UPOV code. In such cases, the procedure is as explained in section 3.3, above. In other cases, the Office will amend the information linked to the existing UPOV code as appropriate.

(b) The TC, the TWPs and individual communications from members and observers of these bodies will be the principal routes by which the Office will update its information.

4. PUBLICATION OF UPOV CODES

4.1 As explained in Section 3.2, all UPOV codes can be accessed in the GENIE database, which is available on the UPOV website (see http://www.upov.int/genie/en/).

4.2 In addition, the UPOV codes, together with their relevant botanical and common names and variety denomination class as contained in the GENIE database, are published on the UPOV website (see http://www.upov.int/genie/en/updates/). That information is published in a form that facilitates electronic downloading of the UPOV codes.

[Annex II follows]

ANNEX II

AMENDMENTS TO UPOV CODES FOR HYBRIDS

previous			amended		
UPOV code	*principal botanical name*	*other botanical name(s)*	***UPOV code***	***principal botanical name***	*other botanical names*
BRCYC_BCA	*Brachychiton bidwilli*i x *Brachychiton xcarneus*	*Brachychiton bidwillii* x (*Brachychiton garrawayae* x *Brachychiton grandiflorus*)	**BRCYC_BCA**	**hybrids between *Brachychiton bidwillii* and *Brachychiton x carneus***	*Brachychiton bidwillii* x *Brachychiton xcarneus*
BRCYC_CBI	*Brachychiton xcarneus* x *Brachychiton bidwillii*	(*Brachychiton garrawayae* x *Brachychiton grandiflorus*) x *Brachychiton bidwillii*			*Brachychiton xcarneus* x *Brachychiton bidwillii* *Brachychiton bidwillii* x (*Brachychiton garrawayae* x *Brachychiton grandiflorus*) (*Brachychiton garrawayae* x *Brachychiton grandiflorus*) x *Brachychiton bidwillii*
GERAN_HWA	*Geranium himalayense* Klotzch x *Geranium wallichianum* D. Don		**GERAN_HWA**	**hybrids between *Geranium himalayense* and *Geranium wallichianum***	*Geranium himalayense* x *Geranium wallichianum*
GERAN_WHI	*Geranium wallichianum* x *himalayense*				*Geranium wallichianum* x *Geranium himalayense*
LEUCD_LSA	*Leucadendron laureolum* x *Leucadendron salignum*		**LEUCD_LSA**	**hybrids between *Leucadendron laureolum* and *Leucadendron salignum***	*Leucadendron laureolum* x *Leucadendron salignum*
LEUCD_SLA	*Leucadendron salignum* Berg x *Leucadendron laureolum* Lam Fourc				*Leucadendron salignum* x *Leucadendron laureolum*
LOTUS_BMA	*Lotus berthelotii* x *Lotus maculatus*		**LOTUS_BMA**	**hybrids between *Lotus berthelotii* and *Lotus maculatus***	*Lotus berthelotii* x *Lotus maculatus*
LOTUS_MBE	*Lotus maculatus* x *berthelotii*				*Lotus maculatus* x *Lotus berthelotii*
PELAR_PZO	*Pelargonium peltatum* x *P. zonale-Hybridae*		**PELAR_PZO**	**hybrids between *Pelargonium peltatum* and *Pelargonium zonale-Hybridae***	*Pelargonium peltatum* x *Pelargonium zonale-Hybridae*
PELAR_ZPE	*Pelargonium ×hortorum* L. H. Bailey x *Pelargonium peltatum* (L.) L'Her.				*Pelargonium ×hortorum* x *Pelargonium peltatum*
PRUNU_ADO	*Prunus armeniaca* x *Prunus domestica*		**PRUNU_ADO**	**hybrids between *Prunus armeniaca* and *Prunus domestica***	*Prunus armeniaca* x *Prunus domestica*
PRUNU_ADA	*Prunus armeniaca* x *Prunus domestica* x *Prunus armeniaca*				*Prunus armeniaca* x *Prunus domestica* x *Prunus armeniaca*
PRUNU_DAR	*Prunus domestica* x *Prunus armeniaca*	*Prunus domestica* x *Prunus domestica* x *Prunus armeniaca* *Prunus domestica* x *Prunus domestica* x *Prunus domestica* x *Prunus armeniaca*			*Prunus domestica* x *Prunus armeniaca* *Prunus domestica* x *Prunus domestica* x *Prunus armeniaca* *Prunus domestica* x *Prunus domestica* x *Prunus domestica* x *Prunus armeniaca*
PRUNU_APS	*Prunus avium* x *P. pseudocerasus* L.		**PRUNU_APS**	**hybrids between *Prunus avium* and *Prunus pseudocerasus***	*Prunus avium* x *Prunus pseudocerasus*
PRUNU_PAV	*Prunus pseudocerasus* x *P. avium*				*Prunus pseudocerasus* x *Prunus avium*
PRUNU_SAM	*Prunus salicina* x *P. armeniaca* L.		**PRUNU_SAM**	**hybrids between *Prunus salicina* and *Prunus armeniaca***	*Prunus salicina* x *Prunus armeniaca*
PRUNU_ASA	*Prunus armeniaca* x *Prunus salicina* x *Prunus armeniaca*				*Prunus armeniaca* x *Prunus salicina* x *Prunus armeniaca*
PRUNU_SAS	*Prunus salicina* x *Prunus armeniaca* x *Prunus salicina*				*Prunus salicina* x *Prunus armeniaca* x *Prunus salicina*
PRUNU_SSP	*Prunus salicina* x *Prunus salicina* x *Prunus armeniaca*				*Prunus salicina* x *Prunus salicina* x *Prunus armeniaca*
PRUNU_DOP	*Prunus domestica* x *Prunus persica*		**PRUNU_DOP**	**hybrids between *Prunus domestica* and *Prunus persica***	*Prunus domestica* x *Prunus persica*
PRUNU_PDO	*Prunus persica* x *Prunus domestica* L.	*Amygdalus communis* L. x genus *Prunus*			*Prunus persica* x *Prunus domestica*
PRUNU_PDP	*Prunus persica* x *Prunus domestica* x *Prunus persica*				*Prunus persica* x *Prunus domestica* x *Prunus persica*
PRUNU_DPE	*Prunus davidiana* x *Prunus persica*		**PRUNU_DPE**	**hybrids between *Prunus davidiana* and *Prunus persica***	*Prunus davidiana* x *Prunus persica*
PRUNU_PDA	*Prunus persica* x *Prunus davidiana*				*Prunus persica* x *Prunus davidiana*
PRUNU_CMA	*Prunus cerasus* x *Prunus maackii*		**PRUNU_CMA**	**hybrids between *Prunus cerasus* and *Prunus maackii***	*Prunus cerasus* x *Prunus maackii*
PRUNU_CCM	*Prunus cerasus* x (*Prunus cerasus* x *Prunus maackii*)				*Prunus cerasus* x (*Prunus cerasus* x *Prunus maackii*)
TAGET_PMM	*Tagetes patula* L. ssp nana × *T. minuta* L. × *T. minuta* L.		**TAGET_PMM**	**hybrids between *Tagetes patula* and *Tagetes minuta***	*Tagetes patula* ssp *nana* × *Tagetes minuta* × *Tagetes minuta*
TAGET_MPM	*Tagetes minuta* L. × *Tagetes patula* L. ssp. *nana* × *Tagetes minuta* L.				*Tagetes minuta* × *Tagetes patula* ssp. *nana* × *Tagetes minuta*
VITIS_RVI	*Vitis riparia* Michx. x *V. vinifera* L.		**VITIS_RVI**	**hybrids between *Vitis riparia* and *Vitis vinifera***	*Vitis riparia* x *Vitis vinifera*
VITIS_VRI	*Vitis vinifera* L. x *Vitis riparia* Michx.				*Vitis vinifera* x *Vitis riparia*

[Annex III follows]

ANNEX III

PROGRAM FOR IMPROVEMENTS TO THE PLANT VARIETY DATABASE

as approved by the Administrative and Legal Committee (CAJ),
at its fifty-ninth session, held in Geneva on April 2, 2009
and amended by the CAJ
at its sixty-fifth session, held in Geneva on March 29, 2012

1. Title of the Plant Variety Database

The name of the Plant Variety Database will be the "PLUTO Plant Variety Database", abbreviated to PLUTO as appropriate (PLUTO = **PL**ant varieties in the **U**POV system: **T**he **O**mnibus).

2. Provision of assistance to contributors

2.1 The Office will continue to contact all members of the Union and contributors to the Plant Variety Database that do not provide data for the Plant Variety Database, do not provide data on a regular basis, or do not provide data with UPOV codes. In each case, they will be invited to explain the type of assistance that would enable them to provide regular and complete data for the Plant Variety Database.

2.2 In response to the needs identified by members of the Union and contributors to the Plant Variety Database in 2.1, the designated World Intellectual Property Organization (WIPO) staff, in conjunction with the Office, will seek to develop solutions for each of the Plant Variety Database contributors.

2.3 An annual report on the situation will be made to the Administrative and Legal Committee (CAJ) and Technical Committee (TC).

2.4 With regard to the assistance to be provided to contributors, the UPOV-ROM "General Notice and Disclaimer" states that "[…] All contributors to the UPOV-ROM are responsible for the correctness and completeness of the data they supply. […]". Thus, in cases where assistance is provided to contributors, the contributor will continue to be responsible for the correctness and completeness of the data.

3. Data to be included in the Plant Variety Database

3.1 Data format

3.1.1 In particular, the following data format options to be developed for contributing data to the Plant Variety Database:

(a) data in XML format;
(b) data in Excel spreadsheets or Word tables;
(c) data contribution by on-line web form;
(d) an option for contributors to provide only new or amended data

3.1.2 To consider, as appropriate, restructuring TAG items; for example, where parts of the field are mandatory and other parts not.

3.1.3 Subject to Section 3.1.4, the character set for data shall be the ASCII [American Standard Code for Information Interchange] representation, as defined in ISO [International Standards Organization] Standard 646. Special characters, symbols or accents (˜, ˆ, ¨, º, etc.) are not accepted. Only characters of the English alphabet may be used.

3.1.4 In the case of data submitted for TAG <520>, <550>, <551>, <552>, <553>, <650> <651>, <652>, <750>, <751>, <752>, <753>, <760>, <950> and <960>, the data must be submitted in Unicode Transformation Format-8 (UTF-8).

3.2 Data quality and completeness

The following data requirements to be introduced in the Plant Variety Database

TAG	Description of Item	Current Status	Proposed status	Database developments required
<000>	**Start of record and record status**	mandatory	**start of record to be mandatory**	mandatory, subject to development of facility to calculate record status (by comparison with previous data submission), if required
<190>	**Country or organization providing information**	mandatory	**mandatory**	data quality check: to verify against list of codes
<010>	**Type of record and (variety) identifier**	mandatory	**both mandatory**	(i) meaning of "(variety) identifier" to be clarified in relation to item <210>; (ii) to review whether to continue type of record "BIL"; (iii) data quality check: to check against list of types of record
<500>	**Species--Latin name**	mandatory until UPOV code provided	**mandatory (even if UPOV code provided)**	
<509>	Species--common name in English	mandatory if no common name in national language (<510>) is given.	not mandatory	
<510>	Species--common name in national language other than English	mandatory if no English common name (<509>) is given	REQUIRED if <520> is provided	
<520>	Species--common name in national language other than English in non-Roman alphabet		not mandatory	
<511>	**Species--UPOV Taxon Code**	mandatory	**mandatory**	(i) if requested, the Office to provide assistance to the contributor for allocating UPOV codes; (ii) data quality check: to check UPOV codes against the list of UPOV codes; (iii) data quality check: to check for seemingly erroneous allocation of UPOV codes (e.g. wrong code for species)
DENOMINATIONS				
<540>	**Date + denomination, proposed, first appearance or first entry in data base**	mandatory if no breeder's reference (<600>) is given	**(i) mandatory to have <540>, <541>, <542>, or <543> if <600> is not provided** (ii) date not mandatory (iii) REQUIRED if <550>, <551>, <552> or <553> are provided	(i) to clarify meaning and rename; (ii) data quality check: mandatory condition in relation to other items
<550>	Date + denomination, proposed, first appearance or first entry in data base in non-Roman alphabet		not mandatory	
<541>	**Date + proposed denomination, published**		**see <540>**	(i) to clarify meaning and rename (ii) data quality check: mandatory condition in relation to other items
<551>	Date + proposed denomination, published in non-Roman alphabet		not mandatory	

TAG	Description of Item	Current Status	Proposed status	Database developments required
<542>	**Date + denomination, approved**	mandatory if protected or listed	**see <540>**	(i) to clarify meaning and rename; (ii) to allow for more than one approved denomination for a variety (i.e. where a denomination is approved but then replaced) (iii) data quality check: mandatory condition in relation to other items
<552>	Date + denomination, approved in non-Roman alphabet		not mandatory	
<543>	**Date + denomination, rejected or withdrawn**		**see <540>**	(i) to clarify meaning and rename (ii) data quality check: mandatory condition in relation to other items
<553>	Date + denomination, rejected or withdrawn in non-Roman alphabet		not mandatory	
<600>	Breeder's reference	mandatory if existing	REQUIRED if <650> is provided	
<650>	Breeder's reference in non-Roman alphabet		not mandatory	
<601>	Synonym of variety denomination		REQUIRED if <651> is provided	
<651>	Synonym of variety denomination in non-Roman alphabet		not mandatory	
<602>	Trade name		REQUIRED if <652> is provided	(i) to clarify meaning (ii) to allow multiple entries
<652>	Trade name in non-Roman alphabet		not mandatory	
<210>	**Application number**	mandatory if application exists	**mandatory if application exists**	to be considered in conjunction with <010>
<220>	Application/filing date	mandatory if application exists	**mandatory**	explanation to be provided if TAG<220> not completed
<400>	Publication date of data regarding the application (protection)/filing (listing)		not mandatory	
<111>	**Grant number (protection)/registration number (listing)**	mandatory if existing	**(i) mandatory to have <111> / <151> / <610> or <620> if granted or registered** (ii) date not mandatory	(i) data quality check: mandatory condition in relation to other items; (ii) to resolve any inconsistencies concerning the status of TAG<220>
<151>	**Publication date of data regarding the grant (protection) / registration (listing)**		**see <111>**	data quality check: mandatory condition in relation to other items
<610>	**Start date--grant (protection)/registration (listing)**	mandatory if existing	**see <111>**	(i) data quality check: mandatory condition in relation to other items; (ii) data quality check: date cannot be earlier than <220>
<620>	**Start date--renewal of registration (listing)**		**see <111>**	(i) data quality check: mandatory condition in relation to other items: (ii) data quality check: date cannot be earlier than <610> (iii) to clarify meaning
<665>	Calculated future expiration date	mandatory if grant/listing	not mandatory	
<666>	Type of date followed by “End date”	mandatory if existing	not mandatory	

TAG	Description of Item	Current Status	Proposed status	Database developments required
PARTIES CONCERNED				
<730>	**Applicant's name**	mandatory if application exists	**mandatory if application exists or** REQUIRED if <750> is provided	
<750>	Applicant's name in non-Roman alphabet		Not mandatory	
<731>	**Breeder's name**	mandatory	**mandatory**	to clarify meaning of "breeder" according to document TGP/5 (see <733>)
<751>	Breeder's name in non-Roman alphabet		Not mandatory	
<732>	Maintainer's name	mandatory if listed	REQUIRED if <752> is provided	to be accompanied by start and end date (maintainer can change)
<752>	Maintainer's name in non-Roman alphabet		Not mandatory	
<733>	**Title holder's name**	mandatory if protected	**mandatory if protected** or REQUIRED if <753> is provided	(i) to clarify meaning of "title holder" according to document TGP/5 (see <731>) (ii) to be accompanied by start and end date (title holder can change)
<753>	Title holder's name in non-Roman alphabet		Not mandatory	
<740>	Type of other party followed by party's name		REQUIRED if <760> is provided	
<760>	Type of other party followed by party's name in non-Roman alphabet		not mandatory	
INFORMATION REGARDING EQUIVALENT APPLICATIONS IN OTHER TERRITORIES				
<300>	Priority application: country, type of record, date of application, application number		not mandatory	
<310>	Other applications: country, type of record, date of application, application number		not mandatory	
<320>	Other countries: Country, denomination if different from denomination in application		not mandatory	
<330>	Other countries: Country, breeder's reference if different from breeder's reference in application		not mandatory	
<900>	Other relevant information (phrase indexed)		REQUIRED if <950> is provided	
<950>	Other relevant information (phrase indexed) in non-Roman alphabet		not mandatory	
<910>	Remarks (word indexed)		REQUIRED if <960> is provided	
<960>	Remarks (word indexed) in non-Roman alphabet		not mandatory	
<920>	Tags of items of information which have changed since last transmission (optional)		not mandatory	to develop option to generate automatically (see 2.1.1.(a))
<998>	FIG		not mandatory	
<999>	Image identifier (for future use)		not mandatory	to create possibility to provide hyperlink to image (e.g. an authority's webpage)

TAG	Description of Item	Current Status	Proposed status	Database developments required
DATES OF COMMERCIALIZATION				
<800>	Commercialization dates		not mandatory	

<800> example: "AB CD 20120119 source status"
or "AB CD 2012 source status"

3.3 Mandatory and required "items"

3.3.1 With respect to items that are indicated as "mandatory" in Section 3.2, data will not be excluded from the Plant Variety Database if that item is absent. However, a report of the non-compliances will be provided to the contributor.

3.3.2 A summary of non-compliances will be reported to the TC and CAJ on an annual basis.

3.3.3 With respect to items that are indicated as "REQUIRED" in Section 3.2, data will be excluded from the Plant Variety Database if the required item is absent in Roman alphabet.

3.4 Dates of commercialization

3.4.1 An item will be created in the Plant Variety Database to allow for information to be provided on dates on which a variety was commercialized for the first time in the territory of application and other territories, on the following basis:

Item <XXX>: dates on which a variety was commercialized for the first time in the territory of application and other territories (not mandatory)

	Comment
(i) Authority providing the [following] information	ISO two letter code
(ii) Territory of commercialization	ISO two letter code
(iii) Date on which the variety was commercialized* for the first time in the territory (*The term "commercialization" is used to cover "sold or otherwise disposed of to others, by or with the consent of the breeder, for purposes of exploitation of the variety" (Article 6(1) of the 1991 Act of the UPOV Convention) or "offered for sale or marketed, with the agreement of the breeder" (Article 6(1)(b) of the 1978 Act of the UPOV Convention), as appropriate.	according to the format YYYY[MMDD] (Year[MonthDay]): month and day will not be mandatory if not available
(iv) Source of information	mandatory for each entry in item <XXX>
(v) Status of information	mandatory for each entry in item <XXX> (to provide an explanation or a reference to where an explanation is provided (e.g. the website of the authority providing the data for this item)
Note: for the same application, the authority in (i) could provide more than one entry for items (ii) to (v). In particular, it could provide information on commercialization in the "territory of application", but also "other territories"	

3.4.2 The following disclaimer will appear alongside the title of the item in the database:

"The absence of information in [item XXX] does not indicate that a variety has not been commercialized. With regard to any information provided, attention is drawn to the source and status of the information as set out in the fields 'Source of information' and 'Status of information'. However, it should also be noted that the information provided might not be complete and accurate."

4. Frequency of data submission

The Plant Variety Database will be developed in such a way as to allow updating at any frequency determined by the members of the Union. Prior to completion and publication of the web-based version of the Plant Variety Database, no change is proposed to the frequency of updating, i.e. contributors will be requested to update their data on a bimonthly basis. Once that stage is complete, the TC and CAJ will be invited to consider whether to create possibilities for data to be updated on a more frequent basis.

5. Discontinuation of inclusion of general information documents in UPOV-ROM

On the basis that such information is readily available on the UPOV website, the following general information documents will no longer be included in the UPOV-ROM:

Addresses of Plant Variety Protection Offices
List of members of the Union
Cover with some useful information
UPOV: What it is, what it does ("UPOV flyer")
List of UPOV publications

6. Web-based version of the Plant Variety Database

6.1 A web-based version of the Plant Variety Database will be developed. The possibility to create CD-ROM versions of the Plant Variety Database, without the need for the services of Jouve, will be developed in parallel to the web-based version of the database.

6.2 An update on the planned timetable for development of a web-based version of the Plant Variety Database will be provided to the TC and CAJ.

7. Common search platform

A report on developments concerning the development of a common search platform will be made to the TC and CAJ. Any proposals concerning a common search platform will be put forward for consideration by the TC and CAJ.

[Annex IV follows]

ANNEX IV

REPORT ON DATA CONTRIBUTED TO THE PLANT VARIETY DATABASE BY MEMBERS OF THE UNION AND OTHER CONTRIBUTORS AND ASSISTANCE FOR DATA CONTRIBUTION

	Contributor	Number of applications for Plant Breeders' Rights in 2011	Number of new data submissions to the Plant Variety Database in 2011[2]	Number of new data submissions to the Plant Variety Database in 2012[3]	Current situation
1.	Albania	16 (2007)	0	0	Awaiting reply to e-mail of 21/1/2013
2.	Argentina	231 (2010)	0	0	Awaiting submission following e-mail of 21/11/2012
3.	Australia	330	6	5	[Contributing data]
4.	*Austria	2	4	4	
5.	Azerbaijan	62	0	0	Awaiting reply to e-mail of 21/11/2012
6.	Belarus	59	0	1	[Contributing data]
7.	*Belgium	1	3	4	
8.	Bolivia	10	0	0	Awaiting reply to fax on 23/11/2012
9.	Brazil	324	2	5	[Contributing data]
10.	*Bulgaria	30	5	6	
11.	Canada	305	5	6	[Contributing data]
12.	Chile	92	3	3	[Contributing data]
13.	China	1,255	0	1	[Contributing data]
14.	Colombia	114	0	0	Awaiting reply to e-mail of 22/11/2012
15.	Costa Rica	5	0	0	Awaiting reply to e-mail of 6/12/2012
16.	*Croatia	32	1	1	[Contributing data]
17.	*Czech Republic	92	6	4	
18.	*Denmark	15	6	6	
19.	Dominican Republic	0	0	0	Awaiting reply to e-mail of 1/11/2012
20.	Ecuador	85	2	3	[Contributing data]
21.	*Estonia	12	4	5	
22.	*European Union	3,184	6	6	[Contributing data]
23.	*Finland	15 (2010)	4	3	
24.	*France	109	6	6	
25.	Georgia	11	0	0	Awaiting reply to e-mail of 21/2/2012
26.	*Germany	105	6	6	
27.	*Hungary	31	5	6	
28.	*Iceland	0	1	0	

[2] 6 indicates that new data was submitted for all six (6) new versions of the UPOV-ROM issued in 2011.

[3] 3 indicates that new data was submitted for all 3 new versions of the UPOV-ROM issued in 2012.

* Data provided via the CPVO.

	Contributor	Number of applications for Plant Breeders' Rights in 2011	Number of new data submissions to the Plant Variety Database in 2011[2]	Number of new data submissions to the Plant Variety Database in 2012[3]	Current situation
29.	*Ireland	3	4	2	
30.	Israel	402	1	0	Awaiting reply to e-mail of 28/9/2012
31.	*Italy	8	6	6	
32.	Japan	1,126	2	1	[Contributing data]
33.	Jordan	0 (2010)	0	0	Awaiting reply to e-mail of 20/11/2012
34.	Kenya	93	0	0	Data contribution planned (assistance provided)
35.	Kyrgyzstan	0	0	1	[Contributing data]
36.	*Latvia	6	3	2	
37.	*Lithuania	4	3	2	
38.	Mexico	145	0	1	[Contributing data]
39.	Morocco	62	0	1	[Contributing data]
40.	*Netherlands	783	5	6	
41.	New Zealand	121	6	5	[Contributing data]
42.	Nicaragua	2	0	0	Awaiting reply to e-mail of 14/11/2012
43.	*Norway	23	5	3	
44.	Oman	0 (2010)	0	0	Awaiting reply to e-mail of 28/8/2012
45.	Panama	2	0	0	Awaiting reply to e-mail of 23/8/2012
46.	Paraguay	17	0	0	Awaiting reply to e-mail of 6/12/2012
47.	Peru	29	0	0	[Contributing data] Data being processed
48.	*Poland	70	4	6	
49.	*Portugal	5	1	1	
50.	Republic of Korea	587	5	1	[Contributing data]
51.	Republic of Moldova	18	1	1	[Contributing data]
52.	*Romania	35	6	4	
53.	Russian Federation	452	5	5	[Contributing data]
54.	Serbia	-	-	-	[New member of the Union]
55.	Singapore	0	0	0	Awaiting reply to e-mail of 9/10/2012
56.	*Slovakia	16	4	5	
57.	*Slovenia	1	5	4	
58.	South Africa	285	0	2	[Contributing data]
59.	*Spain	61	6	6	
60.	*Sweden	19	5	4	
61.	*Switzerland	72	4	5	
62.	The former Yugoslav Republic of Macedonia	-	0	0	No communication

	Contributor	Number of applications for Plant Breeders' Rights in 2011	Number of new data submissions to the Plant Variety Database in 2011[2]	Number of new data submissions to the Plant Variety Database in 2012[3]	Current situation
63.	Trinidad and Tobago	0	0	0	Awaiting reply to e-mail of 1/11/2012
64.	Tunisia	35 (2010)	0	0	Awaiting reply to e-mail of 23/10/2012
65.	*Turkey	111	3	2	
66.	Ukraine	1,095	0	0	Awaiting reply to e-mail of 29/8/2012
67.	*United Kingdom	49	6	6	
68.	United States of America	1,613	4	5	[Contributing data]
69.	Uruguay	68	0	1	[Contributing data]
70.	Uzbekistan	14	0	0	Awaiting submission following e-mail of 5/2/2013
71.	Viet Nam	52	0	0	Awaiting reply to e-mail of 23/11/2012
72.	OECD		2	1	[Contributing data]

[End of Annex IV and of document]