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# INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

## TECHNICAL WORKING PARTY FOR ORNAMENTAL PLANTS AND FOREST TREES

### Forty-Sixth Session Melbourne, Australia, April 22 to 26, 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 (PLUTO database) and to provide information on UPOV code additions and amendments for checking by the relevant authorities, as follows:

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## 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](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							
	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
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 PLUTO database (see document CAJ/66/8 "Report on the Conclusions", paragraph 16).

6. The TC, at its forty-ninth session, held in Geneva, from March 18 to 20, 2013, noted 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 TWPs sessions in 2013 (see document TC/49/41 "Report on the conclusions", paragraph 91).

7. The Excel file provided as Annex V (available on the website only: see [http://upov.int/meetings/en/details.jsp?meeting\\_id=28530](http://upov.int/meetings/en/details.jsp?meeting_id=28530)) to this document provides information on new UPOV codes added to the GENIE database and UPOV code amendments that have not yet been checked by the relevant authorities according to the procedure set out in Section 3.3 of the Guide to the UPOV Code System (see [http://www.upov.int/genie/en/pdf/upov\\_code\\_system.pdf](http://www.upov.int/genie/en/pdf/upov_code_system.pdf)).

8. The Excel file contains two spreadsheets. The file will open on the spreadsheet with UPOV code amendments ("Amendments"): for each change, the old entry is highlighted in the row in red and the changes to the entry are found in the line immediately below that highlighted row (they have the same number in the first column). All Technical Working Parties and Authority(ies) are requested to check the amendments.

9. The second spreadsheet "New\_UPOV\_codes or information", contains the new UPOV codes or new information added for existing UPOV codes. Highlighting in grey indicates that the UPOV code or name has not been changed. In this spreadsheet, the column headers highlighted in yellow indicate the relevant Technical Working Party (TWP) and Authority(ies) which are requested to check the information.

10. *The TWO is invited to check:*

(a) *the amendments to UPOV codes; and*

(b) *the new UPOV codes or new information added for existing UPOV codes, which are provided in Annex V to this document.*

## PLANT VARIETY DATABASE

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

11. 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.

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

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

#### *Information on the latest date of submission by the contributors*

13. For the short-term, information on the latest date of submission by the contributors has been provided for the Plant Variety 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*

14. 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-sixth session of the TWO.

15. The CAJ, at its sixty seventh session, held in Geneva on March 21, 2013, noted the presentation made by the Delegation of the European Union 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/67/14 "Report on the conclusions", paragraph 49).

16. The CAJ welcomed the proposal made during the presentation by the CPVO to explore the possibility to develop a UPOV similarity search tool for variety denomination purposes, based on the CPVO search tool, and agreed to include an item to consider that proposal at its sixty-eighth session, to be held in Geneva on October 21, 2013 (see document CAJ/67/14 "Report on the conclusions", paragraph 50).

#### *Facility to save search settings*

17. An explanation of the possibilities to save search settings for the PLUTO database will be provided and will be demonstrated at the forty-sixth session of the TWO.

### *User registration*

18. The Consultative Committee, at its eighty-second session, held in Geneva on October 19, 2011, agreed to require users of the PLUTO database to register in order that the use of the PLUTO database could be monitored, with a view to using that feedback for future improvements. It was emphasized that this would mean that the PLUTO database would still be freely accessible. The requirement for users to register was implemented in March, 2013, and an explanation of the registration procedure will be demonstrated at the forty-sixth session of the TWO.

### *Alphabets*

19. 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 PLUTO database to provide data in the original alphabet, in addition to the data being provided in Roman alphabet.

20. 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)

21. Annex IV to this document provides a summary of the contributions to the PLUTO database in 2011 and 2012 and the current situation of members of the Union on data contribution.

22. With regard to the assistance provided to contributors, it is recalled that all contributors to the PLUTO 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 PLUTO database.

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

23. The Program in Annex III 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 PLUTO 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)

24. Section 6 of the Program explains that the possibility to create CD-ROM versions of the PLUTO 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 was terminated at the end of 2012, after which time the WIPO Brand Database Unit has made arrangements to produce a CD-ROM version of the PLUTO database (PLUTO CD-ROM), which can be provided to members of the Union upon request.

### Common search platform (Program: Section 7)

25. Document TWO/46/4 "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.

*26. The TWO is invited to note the developments concerning the program for improvements to the Plant Variety Database ("Program") since the forty-fifth session of the TWO, as set out in paragraphs 13 to 25.*

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

27. 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.

*28. 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]

## 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.:

<i>Prunus</i>	PRUNU_
<i>Prunus armeniaca</i>	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*

<u>UPOV Code</u>	<u>Principal Botanical Name</u>
ALPHA_OTW	<i>Alpha one</i> x <i>Alpha two</i>

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

<u>UPOV Code</u>	<u>Principal Botanical Name</u>
ALPHA_OTW	Hybrids between <i>Alpha one</i> and <i>Alpha two</i>

### 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:

<i>UPOV code</i>	<i>Botanical name</i>	<i>Common name</i>
BETAA_VUL	<b>Beta vulgaris</b> L.	
BETAA_VUL_GV	<b>Beta vulgaris</b> L. ssp. <b>vulgaris</b>	<b>Beet</b>
BETAA_VUL_GVA	Beta vulgaris L. ssp. vulgaris var. alba DC.	Fodder beet

<i>UPOV code</i>	<i>Botanical name</i>	<i>Common name</i>
BETAA_VUL_GVC	<i>Beta vulgaris</i> L. ssp. <i>vulgaris</i> var. <i>conditiva</i> Alef.	Beetroot
BETAA_VUL_GVF	<i>Beta vulgaris</i> L. ssp. <i>vulgaris</i> var. <i>flavescens</i> DC.	Leaf beet
BETAA_VUL_GVS	<i>Beta vulgaris</i> L. ssp. <i>vulgaris</i> var. <i>saccharifera</i> Alef.	Sugar beet
<b>BRASS_OLE_GA</b>	<b><i>Brassica oleracea</i> L. convar. <i>acephala</i> (DC.) Alef.</b>	<b>Kale</b>
BRASS_OLE_GAM	<i>Brassica oleracea</i> L. convar. <i>acephala</i> (DC.) Alef. var. <i>medullosa</i> Thell.	Marrow-stem kale
BRASS_OLE_GAR	<i>Brassica oleracea</i> L. var. <i>ramosa</i> DC.	Catjang
BRASS_OLE_GAS	<i>Brassica oleracea</i> L. convar. <i>acephala</i> (DC.) Alef. var. <i>sabellica</i> L.	Curly kale
BRASS_OLE_GAV	<i>Brassica oleracea</i> L. convar. <i>acephala</i> (DC.) Alef. var. <i>viridis</i> L.	Fodder kale
<b>BRASS_OLE_GB</b>	<b><i>Brassica oleracea</i> L. convar. <i>botrytis</i> (L.) Alef.</b>	
BRASS_OLE_GBB	<i>Brassica oleracea</i> L. convar. <i>botrytis</i> (L.) Alef. var. <i>botrytis</i>	Cauliflower
BRASS_OLE_GBC	<i>Brassica oleracea</i> L. convar. <i>botrytis</i> (L.) Alef. var. <i>cymosa</i> Duch.	Broccoli
<b>BRASS_OLE_GC</b>	<b><i>Brassica oleracea</i> L. convar. <i>capitata</i> (L.) Alef. var. <i>capitata</i> (L.) Alef.</b>	<b>Cabbage</b>
BRASS_OLE_GCA	<i>Brassica oleracea</i> L. convar. <i>capitata</i> (L.) Alef. var. <i>capitata</i> L. f. <i>alba</i> DC.	White cabbage
BRASS_OLE_GCR	<i>Brassica oleracea</i> L. convar. <i>capitata</i> (L.) Alef. var. <i>capitata</i> L. f. <i>rubra</i> (L.) Thell.	Red cabbage
BRASS_OLE_GCS	<i>Brassica oleracea</i> L. convar. <i>capitata</i> (L.) Alef. var. <i>sabauda</i> L.	Savoy cabbage
<b>BRASS_OLE_GGM</b>	<b><i>Brassica oleracea</i> L. convar. <i>oleracea</i> var. <i>gemmifera</i> DC.</b>	<b>Brussels sprout</b>
<b>BRASS_OLE_GGO</b>	<b><i>Brassica oleracea</i> L. convar. <i>acephala</i> (DC.) Alef. var. <i>gongylodes</i> L.</b>	<b>Kohlrabi</b>

### 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<sup>1</sup>, 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

<sup>1</sup> 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](http://www.ars-grin.gov/cgi-bin/npgs/html/tax_search.pl)



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 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]

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

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 **UPOV** system: **The Omnibus**).

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 (~, ^, ", °, 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>	<b>Start of record and record status</b>	mandatory	<b>start of record to be mandatory</b>	mandatory, subject to development of facility to calculate record status (by comparison with previous data submission), if required
<190>	<b>Country or organization providing information</b>	mandatory	<b>mandatory</b>	data quality check: to verify against list of codes
<010>	<b>Type of record and (variety) identifier</b>	mandatory	<b>both mandatory</b>	(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>	<b>Species--Latin name</b>	mandatory until UPOV code provided	<b>mandatory (even if UPOV code provided)</b>	
<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>	<b>Species--UPOV Taxon Code</b>	mandatory	<b>mandatory</b>	(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)
<b>DENOMINATIONS</b>				
<540>	<b>Date + denomination, proposed, first appearance or first entry in data base</b>	mandatory if no breeder's reference (<600>) is given	<b>(i) mandatory to have &lt;540&gt;, &lt;541&gt;, &lt;542&gt;, or &lt;543&gt; if &lt;600&gt; is not provided</b> (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>	<b>Date + proposed denomination, published</b>		<b>see &lt;540&gt;</b>	(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>	<b>Date + denomination, approved</b>	mandatory if protected or listed	<b>see &lt;540&gt;</b>	(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>	<b>Date + denomination, rejected or withdrawn</b>		<b>see &lt;540&gt;</b>	(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>	<b>Application number</b>	mandatory if application exists	<b>mandatory if application exists</b>	to be considered in conjunction with <010>
<220>	Application/filing date	mandatory if application exists	<b>mandatory</b>	explanation to be provided if TAG<220> not completed
<400>	Publication date of data regarding the application (protection)/filing (listing)		not mandatory	
<111>	<b>Grant number (protection)/registration number (listing)</b>	mandatory if existing	<b>(i) mandatory to have &lt;111&gt; / &lt;151&gt; / &lt;610&gt; or &lt;620&gt; if granted or registered</b> (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>	<b>Publication date of data regarding the grant (protection) / registration (listing)</b>		<b>see &lt;111&gt;</b>	data quality check: mandatory condition in relation to other items
<610>	<b>Start date--grant (protection)/registration (listing)</b>	mandatory if existing	<b>see &lt;111&gt;</b>	(i) data quality check: mandatory condition in relation to other items; (ii) data quality check: date cannot be earlier than <220>
<620>	<b>Start date--renewal of registration (listing)</b>		<b>see &lt;111&gt;</b>	(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
<b>PARTIES CONCERNED</b>				
<730>	<b>Applicant's name</b>	mandatory if application exists	<b>mandatory if application exists or REQUIRED</b> if <750> is provided	
<750>	Applicant's name in non-Roman alphabet		Not mandatory	
<731>	<b>Breeder's name</b>	mandatory	<b>mandatory</b>	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>	<b>Title holder's name</b>	mandatory if protected	<b>mandatory if protected or REQUIRED</b> 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	
<b>INFORMATION REGARDING EQUIVALENT APPLICATIONS IN OTHER TERRITORIES</b>				
<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))
<i>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"</i>	

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]



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 <sup>2</sup>	Number of new data submissions to the Plant Variety Database in 2012 <sup>3</sup>	Current situation
1.	Albania	16 (2007)	0	0	Awaiting reply to e-mail of 21/11/2013
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	

<sup>2</sup> 6 indicates that new data was submitted for all six (6) new versions of the UPOV-ROM issued in 2011.

<sup>3</sup> 3 indicates that new data was submitted for all 3 new versions of the UPOV-ROM issued in 2012.

\* Data provided via the CPVO.

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	Contributor	Number of applications for Plant Breeders' Rights in 2011	Number of new data submissions to the Plant Variety Database in 2011 <sup>2</sup>	Number of new data submissions to the Plant Variety Database in 2012 <sup>3</sup>	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

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	Contributor	Number of applications for Plant Breeders' Rights in 2011	Number of new data submissions to the Plant Variety Database in 2011 <sup>2</sup>	Number of new data submissions to the Plant Variety Database in 2012 <sup>3</sup>	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]

[Annex V follows]

Part A: UPOV codes amendments to be checked

     = original (old) entries

     = no change

No.	old / new	UPOV Code	Hybrid	Parent	Denomination class	Family	Category	Principal botanical name	Other botanical names	English	French	German	Spanish
114	old	SENEC_FIC						Senecio ficoides (L.) Sch. Bip.					
114	new	NO CHANGE						Senecio ficoides (L.) Sch. Bip.	Curio ficoides (L.) P. V. Heath				
115	old	ECHEV_HOO						Echeveria hookeri (Salm-Dyck) Lem.	Pachyphytum hookeri (Salm-Dyck) A. Berger				
115	new	PACHY_HOO						Pachyphytum hookeri (Salm-Dyck) A. Berger	Echeveria hookeri (Salm-Dyck) Lem.				
116	old	ECHEV_HAG											
116	new	PAECH_HAG											
117	old	FORTU_JAP						Fortunella japonica (Thunb.) Swingle					
117	new	NO CHANGE						Fortunella japonica (Thunb.) Swingle	Citrus japonica Thunb.				
118	old	SOLAN_LHA							Lycopersicon esculentum Mill. var. esculentum x Lycopersicon hirsutum L., Lycopersicon lycopersicum (L.) Karst. ex. Farw. x Lycopersicon hirsutum L.				
118	new	NO CHANGE							Solanum lycopersicum L. x Solanum habrochaites S. Knapp & D.M. Spooner; Lycopersicon esculentum Mill. var. esculentum x Lycopersicon hirsutum L., Lycopersicon lycopersicum (L.) Karst. ex. Farw. x Lycopersicon hirsutum L.				
119	old	PLEUR_OST						Pleurotus ostreatus (Fr.) Quéf.					
119	new	NO CHANGE						Pleurotus ostreatus (Jacq.) P. Kumm.	Pleurotus ostreatus (Fr.) Quéf.				
120	old	PLEUR_ERY						Pleurotus eryngii (Dcex Fr.) Quéf.	Pleurotus ferulae (Lanzi) X.L. Mao; Pleurotus fuscus Battarra ex Bres.; Pleurotus fuscus var. ferulae Lanzi				
120	new	NO CHANGE						Pleurotus eryngii (DC.) Quéf.	Pleurotus eryngii (Dcex Fr.) Quéf.; Pleurotus ferulae (Lanzi) X.L. Mao; Pleurotus fuscus Battarra ex Bres.; Pleurotus fuscus var. ferulae Lanzi				
121	old	SETAR_ITA								Foxtail Bristle Grass; Italian Millet			
121	new	NO CHANGE								dwarf setaria; foxtail bristle grass; giant setaria			
122	old	FORTU_JAP										Marumikumquat, runde Kumquat	
122	new	NO CHANGE										Runde Kumquat	
123	old	RIBES_CUL										Jochelbeere	

No.	old / new	UPOV Code	Hybrid	Parent	Denomination class	Family	Category	Principal botanical name	Other botanical names	English	French	German	Spanish
123	new	NO CHANGE							Ribes nigrum L. x Ribes uva-crispa L.	Jostaberry		Jostabeere	
124	old	PRUNU_SCH											
124	new	NO CHANGE										Schmitts Kirsche	
125	old	PONCI_TRI										dreiblättrige Bitterorange	
125	new	NO CHANGE										Bitterorange	
126	old	PYRUS_PER										mandelblättriger Birnebaum; pfirsichblättrige Birne	
126	new	NO CHANGE										Pfirsichblättrige Birne	
127	old	MALPI_EMA											Grosella
127	new	NO CHANGE											Acerola, Someruco
128	old	JUNIP_SAB							Sabina Mill.				
128	new	NO CHANGE							(deleted)				
129	old	PRUNU_CER											
129	new	DELETED											
130	old	RUDBE				Combretaceae							Grosella
130	new	NO CHANGE				Asteraceae							Acerola, Someruco
131	old	RUDBE_FUL				Combretaceae							
131	new	NO CHANGE				Asteraceae							
132	old	RUDBE_HIR				Combretaceae							
132	new	NO CHANGE				Asteraceae							
133	old	RUDBE_HIR_BIC				Combretaceae							
133	new	NO CHANGE				Asteraceae							
134	old	RUDBE_OCC				Combretaceae							
134	new	NO CHANGE				Asteraceae							
135	old	RUDBE_SUB				Combretaceae							
135	new	NO CHANGE				Asteraceae							
136	old	PHOTI_FRA						Photinia x fraseri Dress	Photinia xfraseri Dress x Photinia glabra (Thunb.) Franch. & Sav.				
136	new	NO CHANGE							Photinia xfraseri Dress x Photinia glabra (Thunb.) Franch. & Sav.; Photinia xfraseri Dress x Photinia serratifolia (Desf.) Kalkman				
137		PAEON								Paeony			
137		NO CHANGE								Peony			
138		PAEON_LAC								Chinese Paeony			
138		NO CHANGE								Chinese Peony			
139		PAEON_OFF								Common Paeony			
139		NO CHANGE								Common Peony			
140		PAEON_SUF								Moutan Paeony; Tree Peony			
140		NO CHANGE								Moutan Peony; Tree Peony			
141		BRCYC_BCA						Brachychiton bidwillii x Brachychiton xcarneus	Brachychiton bidwillii x (Brachychiton garrawayae x Brachychiton grandiflorus)				









Part B: New UPOV codes to be checked

Date proposed	Proposer	UPOV Code	Hybrid	Parent	Denomination class	Checking TWP	Checking authority	Family	Category	Principal botanical name	Other botanical names	English	French	German	Spanish
			= existing code / name												
11-Jun-12	CA	VACCI_OVA			VACCI	TWO	CA, BR, ZA, DE, JP, PL, QZ, AR, AU, NZ, RU, US			Vaccinium ovatum Pursh		California-huckleberry; evergreen-huckleberry			
2-Jul-12	QZ	SENEC_FIC			SENEC	TWO	NL, QZ			Senecio ficoides (L.) Sch. Bip.	Curio ficoides (L.) P. V. Heath				
2-Jul-12	QZ	SOLID_CAN			SOLID	TWO	CA, QZ, DE, IL, JP, NL, BE, AU, CO, EC, US			Solidago canadensis L.		Canadian goldenrod; Harger's goldenrod	verge d'or du Canada	gewöhnliche kanadische Goldrute	
2-Jul-12	QZ	MISCA_GIG			MISCA	TWO	QZ, JP, US			Miscanthus xgiganteus J. M. Greef & Deuter ex Hodk. & Renvoize					
2-Jul-12	QZ	FICUS_AME_GUI			FICUS	TWO	QZ, CL, ZA, VN, IT, NL, US, ZA			Ficus americana Aubl. subsp. guianensis (Ham.) C. C. Berg					
2-Jul-12	QZ	FICUS_AME			FICUS	TWO	QZ, CL, ZA, VN, IT, NL, US, ZA			Ficus americana Aubl.					
2-Jul-12	QZ	HYPER_MOS			HYPER	TWO	QZ, BR, ZA, CA, JP, NL, EC, CA			Hypericum xmoserianum André		goldflower	millepertuis	Bastard-Johanniskraut	
2-Jul-12	QZ	ARGYR_FTE		ARGYR_FRU; ARGYR_TEN	ARGYR	TWO	ZA, CA, QZ, AU, US			Argyranthemum frutescens (L.) Sch. Bip. x Argyranthemum tenerifae Humphries					
2-Jul-12	QZ	ARGYR_FRU	ARGYR_FTE		ARGYR	TWO	BE, ZA, QZ, DE, IT, JP, NZ, PL, AU, CA, US			Argyranthemum frutescens (L.) Sch. Bip.		Boston daisy; Paris daisy; Paris marguerite; white marguerite	anthémis; marguerite	Strauchmargerite	
2-Jul-12	QZ	ARGYR_TEN	ARGYR_FTE		ARGYR	TWO	ZA, CA, QZ, AU, US			Argyranthemum tenerifae Humphries					
2-Jul-12	QZ	OTOME_OCU			OTOME	TWO	QZ			Otomeria oculata S. Moore					
2-Jul-12	QZ	OTOME			OTOME	TWO	QZ	Rubiaceae	Plant / Plant	Otomeria Benth.					
2-Jul-12	QZ	LAMPR_BPO		LAMPR_BIC; LAMPR_POC	LAMPR	TWO	QZ			Lampranthus bicolor (L.) N. E. Br. x Lampranthus pocockiae (L. Bolus) N. E. Br.					
2-Jul-12	QZ	LAMPR_BIC	LAMPR_BPO		LAMPR	TWO	QZ			Lampranthus bicolor (L.) N. E. Br.					
2-Jul-12	QZ	LAMPR_POC	LAMPR_BPO		LAMPR	TWO	QZ			Lampranthus pocockiae (L. Bolus) N. E. Br.					
2-Jul-12	QZ	LAMPR			LAMPR	TWO	QZ	Aizoaceae	Plant / Plant	Lampranthus N. E. Br.					
2-Aug-12	TG/Oncidium	ONCIE			ONCIE	TWO	QZ, JP, NL, SG, US	Orchidaceae	Plant / Plant	xOncidesa hort.	Oncidium Sw. x Gomesa R. Br.				
2-Aug-12	TG/Oncidium	ZELCI			ZELCI	TWO	QZ, JP, NL, SG, US	Orchidaceae	Plant / Plant	xZelenkocidium J. M. H. Shaw	Oncidium Sw. x Zelenkoa M. W. Chase & N. H. Williams				
4-Jul-12	AU	BANKS_INT			BANKS	TWO	AU			Banksia integrifolia L. f.		coast banksia; honeysuckle-oak; white banksia; white bottlebrush; white-honeysuckle			
4-Jul-12	AU	KUNZE_BAX			KUNZE	TWO	AU, NZ, ZA			Kunzea baxteri (Klotzsch) Schauer					

Date proposed	Proposer	UPOV Code	Hybrid	Parent	Denomination class	Checking TWP	Checking authority	Family	Category	Principal botanical name	Other botanical names	English	French	German	Spanish
27-Jul-12	QZ	MECAR_ACU			MECAR	TWO	QZ, GB, CA, JP, US			Mecardonia acuminata (Walter) Small					
9-Aug-12	QZ	PACHY	PAECH		PACHY	TWO	QZ, AU, DE, NL, US	Crassulaceae	Plant / Plant	Pachyphytum Link et al.					
9-Aug-12	QZ	PAECH		PACHY; ECHEV	PAECH	TWO	QZ, AU, DE, NL, US	Crassulaceae	Plant / Plant	Pachyphytum Link et al. x Echeveria DC.					
9-Aug-12	QZ	ECHEV	PAECH		ECHEV	TWO	QZ, AU, DE, NL, US	Crassulaceae	Plant / Plant	Echeveria DC.					
4-Jul-12	AU	CARPO_GLA			CARPO	TWO	AU			Carpobrotus glaucescens (Haw.) Schwantes					
4-Jul-12	AU	CARPO			CARPO	TWO	AU	Aizoaceae	Plant / Plant	Carpobrotus N. E. Br.					
4-Jul-12	AU	CORRE_DRE		CORRE_DEC; CORRE_REF	CORRE	TWO	AU			Correa decumbens F. Muell. x Correa reflexa (Labill.) Vent.					
4-Jul-12	AU	CORRE_DEC	CORRE_DRE		CORRE	TWO	AU			Correa decumbens F. Muell.					
4-Jul-12	AU	CORRE_REF	CORRE_DRE		CORRE	TWO	AU			Correa reflexa (Labill.) Vent.		common correa; native-fuchsia		australische Fuchsia; gemeine Correa	
4-Jul-12	AU	RICNO_CYA			RICNO	TWO	AU			Ricinocarpos cyanescens Müll. Arg.					
4-Jul-12	AU	WESTR_GLA			WESTR	TWO	AU			Westringia glabra R. Br.					
27-Jul-12	QZ	OENOT_FMA			OENOT	TWO	QZ, CA, GB, JP, NL, BE			Oenothera fruticosa L. x O. macrocarpa Nutt.					
27-Jul-12	QZ	OENOT_FRU			OENOT	TWO	QZ, CA, GB, JP, NL, BE			Oenothera fruticosa L.		narrow-leaf evening-primrose; southern sundrops; sundrops			
27-Jul-12	QZ	OENOT_MAC			OENOT	TWO	QZ, CA, GB, JP, NL, BE			Oenothera macrocarpa Nutt.					
27-Jul-12	QZ	ALHAW_AMA		ALOEE_ARI; HAWOR_MAR	ALHAW	TWO	QZ, ZA, NL, JP			Aloe aristata Haw. x Haworthia margaritifera (L.) Haw.	Aloe aristata Haw. x Haworthia margaritifera (L.) Haw.				
27-Jul-12	QZ	ALOEE_ARI	ALHAW_AMA		ALOEE	TWO	QZ, ZA, NL			Aloe aristata Haw.		lace aloe; torchplant			
27-Jul-12	QZ	HAWOR_MAR	ALHAW_AMA		HAWOR	TWO	QZ, JP			Haworthia margaritifera (L.) Haw.					
27-Jul-12	QZ	ALHAW		ALOEE; HAWOR	ALHAW	TWO	QZ, ZA, NL, JP	Xanthorrhoeaceae	Plant / Plant	Aloe L. x Haworthia Duval					
27-Jul-12	QZ	ALOEE	ALHAW		ALOEE	TWO	QZ, ZA, NL	Xanthorrhoeaceae	Plant / Plant	Aloe L.					
27-Jul-12	QZ	HAWOR	ALHAW		HAWOR	TWO	QZ, JP	Xanthorrhoeaceae	Plant / Plant	Haworthia Duval					
27-Jul-12	QZ	PYRUS_BPY			PYRUS	TWF	QZ, AL, BE, CN, PA, ZA, TR, AU, CL, KR, US			Pyrus xbretschneideri Rehder x Pyrus pyrifolia (Burm. f.) Nakai					
27-Jul-12	QZ	PYRUS_BRE			PYRUS	TWF	QZ, AL, BE, CN, PA, ZA, TR			Pyrus xbretschneideri Rehder		Chinese white pear; white pear		weiße Birne	
27-Jul-12	QZ	PYRUS_PYR			PYRUS	TWF	QZ, AL, BE, CN, PA, ZA, TR, AU, CL, KR, US			Pyrus pyrifolia (Burm. f.) Nakai		Asian pear; Chinese pear; Chinese sand pear; Japanese pear; nashi; nashi pear; Oriental pear; sand pear	poirier japonais	China-Birne; Nashi-Birne; Sandbirnbaum	pera
16-Aug-12	CA	CPHLT_OCC			CPHLT	TWO	CA, NL			Cephalanthus occidentalis L.		button-willow; buttonbush; common buttonbush; honey-bells			

Date proposed	Proposer	UPOV Code	Hybrid	Parent	Denomination class	Checking TWP	Checking authority	Family	Category	Principal botanical name	Other botanical names	English	French	German	Spanish
6-Sep-12	AU	LOMAN_MON			LOMAN	TWO	AU, QZ, ZA, NZ, GB			Lomandra montana (R. Br.) L. R. Fraser & Vickery					
6-Sep-12	AU	LOMAN_MUL			LOMAN	TWO	AU, QZ, ZA, NZ, GB			Lomandra multiflora (R. Br.) Britten					
12-Sep-12	CA	VIBUR_BRA			VIBUR	TWO	CA, BE, QZ, FR, IL, NL, RU, SE, US			Viburnum bracteatum Rehder					
14-Sep-12	CA	CALLC			CALLC	TWF	CA, JP	Lamiaceae	Plant / Plant	Callicarpa L.					
14-Sep-12	CA	BUXUS_SIN_INS			BUXUS	TWO	CA, CN, DE			Buxus sinica (Rehder & E. H. Wilson) M. Cheng var. insularis (Nakai) M. Cheng		Korean boxwood			
14-Sep-12	CA	BUXUS_SIN			BUXUS	TWO	CA, CN, DE			Buxus sinica (Rehder & E. H. Wilson) M. Cheng		Chinese boxwood; Korean boxwood			
1-Oct-12	TWO 2012	PAEON_QIU			PAEON	TWO	CN, TR, NL, QZ, US			Paeonia qiui Y. L. Pei & D. Y. Hong					
1-Oct-12	TWO 2012	PAEON_JIS			PAEON	TWO	CN, TR, NL, QZ, US			Paeonia jishanensis T. Hong & W. Z. Zhao					
1-Oct-12	TWO 2012	PAEON_OST			PAEON	TWO	CN, TR, NL, QZ, US			Paeonia ostii T. Hong & J. X. Zhang					
1-Oct-12	TWO 2012	PAEON_ROC			PAEON	TWO	CN, TR, NL, QZ, US			Paeonia rockii (S. G. Haw & Lauener) T. Hong & J. J. Li ex D. Y. Hong				gefleckte Strauch-Pfingstrose	
1-Oct-12	TWO 2012	PAEON_DEL			PAEON	TWO	CN, TR, NL, QZ, US			Paeonia delavayi Franch.		tree peony; yellow tree peony		Delavays Strauch-Pfingstrose; gelbe Pfingstrose	
1-Oct-12	TWO 2012	PAEON_LUD			PAEON	TWO	CN, TR, NL, QZ, US			Paeonia ludlowii (Stern & Taylor) D. Y. Hong					
1-Oct-12	CA	PARRO_PER			PARRO	TWO	CA			Parrotia persica (DC.) C. A. Mey.					
1-Oct-12	CA	PARRO			PARRO	TWO	CA	Hamamelidaceae	Plant / Plant	Parrotia C. A. Mey.					
8-Oct-12	CA	SYRIN_PUB_PAT			SYRIN	TWO	CA, BE, CN, RU, QZ			Syringa pubescens Turcz. subsp. patula (Palib.) M. C. Chang & X. L. Chen					
8-Oct-12	CA	DEUTZ_GRO		DEUTZ_GRA; DEUTZ_ROS	DEUTZ	TWO	ALL			Deutzia gracilis Siebold & Zucc. x Deutzia xrosea (Lemoine) Rehder					
8-Oct-12	CA	DEUTZ_GRA	DEUTZ_GRO		DEUTZ	TWO	ALL			Deutzia gracilis Siebold & Zucc.		Japanese snowflower; slender deutzia			
8-Oct-12	CA	DEUTZ_ROS	DEUTZ_GRO		DEUTZ	TWO	ALL			Deutzia xrosea (Lemoine) Rehder					
22-Aug-12	TR	PANCR_MAR			PANCR	TWO	TR			Pancretrium maritimum L.		sea-daffodil			
22-Aug-12	TR	PANCR			PANCR	TWO	TR	Amaryllidaceae	Plant / Plant	Pancretrium L.					
22-Aug-12	TR	CRATA_RHI			CRATA	TWO	TR, CZ, HU, MX, US, DE			Crataegus rhipidophylla Gand.	Crataegus oxyacantha L.				
22-Aug-12	TR	CITRO_TLI		PONCI_TRI; CITRU_LIM	CITRO	TWF	TR, BR, QZ, ES, JP, AU, CL, NZ, US, UY			Poncirus trifoliata (L.) Raf. x Citrus limon (L.) Burm. f.					
22-Aug-12	TR	PONCI_TRI	CITRO_TLI		PONCI	TWF	TR, BR, QZ, ES, JP, AU, CL, NZ, US, UY			Poncirus trifoliata (L.) Raf.		Golden Apple; Hardy orange; hardy-orange; Japanese bitter-orange; trifoliolate-orange; Trifoliolate Orange; Trifoliolate-orange	Oranger trifolié; oranger trifoliolé; poncirus; Orangier trifoliolé; Poncirus	Dreiblättrige Bitterorange; dreiblättrige Bitterorange; Dreiblättrige Orange	Naranjo trébol; naranjo trébol; Naranjo trifoliado

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Date proposed	Proposer	UPOV Code	Hybrid	Parent	Denomination class	Checking TWP	Checking authority	Family	Category	Principal botanical name	Other botanical names	English	French	German	Spanish
22-Aug-12	TR	CITRU_LIM	CITRO_TLI		CITRU	TWF	TR, BR, QZ, ES, JP, AU, CL, NZ, US, UY			Citrus limon (L.) Burm. f.		lemon	citronnier; limonier	Limone; Sauerzitrone; Zitrone	limón; limonero
15-Nov-12	TG/Tomato root stock	SOLAN_LYC	SOLAN_LPE; SOLAN_LCH		Class 4.2	TWV	ALL			Solanum lycopersicum L.		cherry tomato; tomato	tomate; tomato cerise	Kirschtomate; Tomato	tomate; tomatera; tomatillo
14-Nov-12	TG/Tomato root stock	SOLAN_PER	SOLAN_LPE		Class 4.2	TWV	MK, JP			Solanum peruvianum (L.) Mill.					
14-Nov-12	TG/Tomato root stock	SOLAN_LPE		SOLAN_LYC; SOLAN_PER	Class 4.2	TWV	ALL			Solanum lycopersicum L. x Solanum peruvianum (L.) Mill.					
14-Nov-12	TG/Tomato root stock	SOLAN_CHE	SOLAN_LCH		Class 4.2	TWV	MK			Solanum cheesmaniae (L. Ridley) Fosberg		Galápagos tomato			tomatillo
14-Nov-12	TG/Tomato root stock	SOLAN_LCH		SOLAN_LYC; SOLAN_CHE	Class 4.2	TWV	ALL			Solanum lycopersicum L. x Solanum cheesmaniae (L. Ridley) Fosberg					
17-Oct-12	QZ	IRISS_GER			IRISS	TWO	QZ, BE, ZA, TR			Iris xgermanica L.		common iris; flags; Florentine iris; German iris; orris; orris-root	iris de Florence	deutsche Schwertlilie; florentinische Schwertlilie	lirio blanco; lirio de Florencia
17-Oct-12	QZ	PHILA_DMI		PHILA_DEL; PHILA_MIC	PHILA	TWO	QZ, SE, US			Philadelphus delavayi L. Henry x Philadelphus microphyllus A. Gray					
17-Oct-12	QZ	PHILA_DEL	PHILA_DMI		PHILA	TWO	QZ, SE, US			Philadelphus delavayi L. Henry					
17-Oct-12	QZ	PHILA_MIC	PHILA_DMI		PHILA	TWO	QZ, SE, US			Philadelphus microphyllus A. Gray		desert mock orange; littleleaf mock orange			
17-Oct-12	QZ	HLNTS_DEC			HLNTS	TWO	QZ, AL, MK			Helianthus decapetalus L.		ten-petals sunflower; thin-leaf sunflower	hélianthe à dix rayons	Stauden-Sonnenblume	
17-Oct-12	QZ	MECAR_PRO			MECAR	TWO	QZ, GB, CA, JP, US			Mecardonia procumbens (Mill.) Small		baby jump-up			
17-Oct-12	QZ	MECAR_ACU			MECAR	TWO	QZ, GB, CA, JP, US			Mecardonia acuminata (Walter) Small					
17-Oct-12	QZ	FICUS_AME_GUI			FICUS	TWO	CL, QZ, IT, NL, ZA, US, VN			Ficus americana Aubl. subsp. guianensis (Ham.) C. C. Berg					
5-Nov-12	AU	PLTCR_SUP			PLTCR	TWO	AU, QZ, NL			Platycerium superbum de Joch. & Hennipman		staghorn fern			
5-Nov-12	AU	EUCAL_AMP			EUCAL	TWO	AU, BR, CN, ZA, IL			Eucalyptus amplifolia Naudin		cabbage gum			
17-Oct-12	QZ	PENNI_PSQ		PENNI_PUR; PENNI_SQU	PENNI	TWO	QZ, BR, OM, VN, US			Pennisetum purpureum Schumach. x Pennisetum squamulatum Fresen.					
17-Oct-12	QZ	PENNI_PUR	PENNI_PSQ		PENNI	TWO	QZ, BR, OM, VN, US			Pennisetum purpureum Schumach.		barner grass; elephant grass; Merker grass; Napier grass	napier	Elefantengras	hierba elefante; pasto elefante
17-Oct-12	QZ	PENNI_SQU	PENNI_PSQ		PENNI	TWO	QZ			Pennisetum squamulatum Fresen.					
5-Nov-12	AU	DIANE_CON			DIANE	TWO	QZ, ZA, NL, GB, JP			Dianella congesta R. Br.					
28-Nov-12	ZA	PRUNU_CER			PRUNU	TWF	ALL			Prunus cerasus L.		dwarf cherry; Maraschino cherry; morello cherry; pie cherry; sour cherry; tart cherry	cerisier acide; griottier	Maraschino-Kirsche; Sauerkirsche; Sauerkirschenbaum; Weichsel	cerezo ácido; guindo
28-Nov-12	ZA	COREO_PUB			COREO	TWO	ZA, CA, QZ, PL, KR, GB, AU, NZ, US			Coreopsis pubescens Elliott					

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28-Nov-12	ZA	PORTR_AFR			PORTR	TWO	ZA			Portulacaria afra (L.) Jacq.		elephant-bush	pourpier en arbre	Speckbaum	
28-Nov-12	ZA	PORTR			PORTR	TWO	ZA	Didiereaceae	Plant / Plant	Portulacaria Jacq.					
5-Dec-12	QZ	AMARI			AMARI	TWO	QZ	Amaryllidaceae	Plant / Plant	x Amarine Sealy					
12-Dec-12	CA	CAMPA_ICA		CAMPA_ISO; CAMPA_CAR	CAMPA	TWO	CA, QZ, GB, AU			Campanula isophylla Moretti x Campanula carpatica Jacq.					
12-Dec-12	CA	CAMPA_ISO	CAMPA_ICA		CAMPA	TWO	CA, QZ, GB			Campanula isophylla Moretti		falling-stars; Italian bellflower; star-of-Bethlehem		Stern-Glockenblume	
12-Dec-12	CA	CAMPA_CAR	CAMPA_ICA		CAMPA	TWO	CA, QZ, AU			Campanula carpatica Jacq.		Carpathian harebell; tussock bellflower	campanule des Carpates	Karpaten-Glockenblume	
19-Dec-12	CA	NEPET_FAA			NEPET	TWO; TWV	CA, US			Nepeta xfaassenii Bergmans ex Stearn		catmint	chataire; herbe aux chats	blaue Katzenminze; Blauminze	
2-Jan-13	AU	MACPL_FUL			MACPI	TWO	AU			Macropidia fuliginosa (Hook.) Druce		black kangaroo-paw			
2-Jan-13	AU	MACPI			MACPI	TWO	AU	Haemodoraceae	Plant / Plant	Macropidia J. Drumm. ex Harv.					
14-Jan-13	QZ	CLEMA_COU			CLEMA	TWO	QZ, BE, ZA, CA, DE, JP, NL, NZ, PL, KR, GB			Clematis courtoisii Hand.-Mazz.					
14-Jan-13	QZ	LIGUS_OBT			LIGUS	TWO	QZ, DE, HU, US			Ligustrum obtusifolium Siebold & Zucc.		Amur privet			
14-Jan-13	QZ	AMARI_TUB			AMARI	TWO	QZ			xAmarine tubergenii Sealy					
14-Jan-13		ASTLB			ASTLB	TWO	QZ	Xanthorrhoeaceae	Plant / Plant	Astroloba Uitewaal					
14-Jan-13	QZ	ASTLB_SPI			ASTLB	TWO	QZ			Astroloba spiralis (L.) Uitewaal					
14-Jan-13	QZ	ARTHUR_CAN			ARTHUR	TWO	QZ, NL			Arthropodium candidum Raoul					
14-Jan-13	QZ	MANDE_SPL			MANDE	TWO	QZ, ZA, AU, CA, JP, NL, NZ			Mandevilla splendens (Hook. f.) Woodson					
14-Jan-13	QZ	PEPER_PRO			PEPER	TWO	QZ, NL, US, JP			Peperomia prostrata B. S. Williams					
14-Jan-13	QZ	CLEMA_CAD			CLEMA	TWO	ALL			Clematis cadmia Buch.-Ham. ex Hook. f. & Thomson					
14-Jan-13	QZ	SILEN_ARK			SILEN	TWO	QZ, NL, JP, US, GB			Silene xarkwrightii (Heydt) hort., nom. inval.	Lychnis xarkwrightii Heydt	Arkwright's campion			
14-Jan-13	QZ	CAREX_PHY			CAREX	TWO	QZ, DE, NL, US, JP			Carex phyllocephala T. Koyama					
14-Jan-13	QZ	ACTAE_RSI		ACTAE_RAC; ACTAE_SIM	ACTAE	TWO; TWV	QZ, DE, US			Actaea racemosa L. x Actaea simplex (DC.) Wormsk. ex Prantl					
14-Jan-13	QZ	ACTAE_RAC	ACTAE_RSI		ACTAE	TWO; TWV	QZ, DE, US			Actaea racemosa L.	Cimicifuga racemosa (L.) Nutt.	Black cohosh; Black snakeroot		Lanzen-Silberkerze	
14-Jan-13	QZ	ACTAE_SIM	ACTAE_RSI		ACTAE	TWO; TWV	QZ, DE, US			Actaea simplex (DC.) Wormsk. ex Prantl					
7-Feb-13	TWA 2012	SOLAN_TUB_AND			CLASS 4.1	TWA	ALL			Solanum tuberosum L. subsp. andigenum (Juz. & Bukasov) Hawkes		limeña potato; yellow potato			andigena; papa amarilla
31-Jan-13	IL	FERUL_TIN			FERUL	TWO	IL			Ferula tingitana L.		downy ash; green ash; red ash		rödask	
31-Jan-13	IL	FRAXI_UHD			FRAXI	TWO	IL, CN, NL			Fraxinus uhdei (Wenz.) Lingelsh.		shamel ash			fresno

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31-Jan-13	IL	PISTA_LEN			PISTA	TWO	IL, ZA, TR, US, QZ			Pistacia lentiscus L.		Chios mastic tree; lentiscus; lentisk; mastic; masticshrub; mastic tree	arbre au mastic; lentisque	Mastix-Pistazie; Mastixbaum; Mastixstrauch	almácigo; lentisco
15-Feb-13	AR	SARAC			SARAC	TWO	AR	Solanaceae	Plant / Plant	Saracha Ruiz & Pav.					
18-Feb-13	CA	VIBUR_DIL			VIBUR	TWO	CA, BE, OZ, FR, RU, IL, NL, SE, US			Viburnum dilatatum Thunb.		linden viburnum			
19-Feb-13	NZ	PYRUS_PUS		PYRUS_PYR; PYRUS_USS	PYRUS	TWF	NZ, AL, BE, CN, PA, ZA, TR, AU, CL, KR, US, RU, CA			Hybrids between Pyrus pyrifolia and Pyrus ussuriensis	Pyrus pyrifolia (Burm. f.) Nakai x Pyrus ussuriensis Maxim.				
19-Feb-13	NZ	PYRUS_PYR	PYRUS_PUS		PYRUS	TWF	NZ, AL, BE, CN, PA, ZA, TR, AU, CL, KR, US			Pyrus pyrifolia (Burm. f.) Nakai		Asian pear; Chinese pear; Chinese sand pear; Japanese pear; nashi; nashi pear; Oriental pear; sand pear	poirier japonais	China-Birne; Nashi-Birne; Sandbirnbaum	pera
19-Feb-13	NZ	PYRUS_USS	PYRUS_PUS		PYRUS	TWF	NZ, AL, BE, CN, PA, ZA, TR, RU, CA			Pyrus ussuriensis Maxim.		Harbin pear; Ussurian pear		Ussuri-Birne	
1-Mar-13	CA	SALIX_VEU		SALIX_VIM; SALIX_EUE	SALIX	TWO	ALL			Salix viminalis x Salix xueerata	Salix viminalis L. x (Salix sachalinensis F. Schmidt x Salix miyabeana Seemen)				
1-Mar-13	CA	SALIX_VIM	SALIX_VEU		SALIX	TWO	DK, QZ, DE, NL, NO, PL, RU, SE, GB			Salix viminalis L.		basket willow; common osier; hemp willow; osier	saule des vanniers	Hanfweide; Korbweide	mimbre; mimbrera; salguero blanco
1-Mar-13	CA	SALIX_EUE	SALIX_VEU		SALIX	TWO	CA			Salix xueerata Kimura	Salix udensis x Salix miyabeana				
23-Feb-13	PL	SPIRA_CIN			SPIRA	TWO	PL, CA, CZ, JP, NL, QZ, GB, US			Spiraea xcinerea Zabel					
25-Feb-13	QZ	ANEMO_HYB			ANEMO	TWO	BE, OZ, JP, DE, NL, RU			Anemone xhybrida Paxton		Japanese anemone			
25-Feb-13	QZ	ASPIL_MON			ASPIL	TWO	QZ			Aspilia montevidensis (Spreng.) Kuntze					
25-Feb-13	QZ	ASPIL			ASPIL	TWO	QZ	Asteraceae	Plant / Plant	Aspilia Thouars					
25-Feb-13	QZ	HELLE_HYB			HELLE	TWO	QZ, BE, NL, NZ, GB, JP, US			Helleborus xhybridus hort. ex Voss		garden hellebore; hybrid hellebore		Garten-Nieswurz	
25-Feb-13	QZ	KOELE_GLA			KOELE	TWO	QZ, NL, ZA			Koeleria glauca (Spreng.) DC.					
25-Feb-13	QZ	NEPEN_AVE		NEPEN_AMP; NEPEN_VEN	NEPEN	TWO	QZ, NL, BE			Hybrids between Nepenthes ampullaria and Nepenthes ventricosa	Nepenthes ampullaria x Nepenthes ventricosa				
25-Feb-13	QZ	NEPEN_AMP	NEPEN_AVE		NEPEN	TWO	QZ, NL, BE			Nepenthes ampullaria Jack					
25-Feb-13	QZ	NEPEN_VEN	NEPEN_AVE		NEPEN	TWO	QZ, NL, BE			Nepenthes ventricosa Blanco					
25-Feb-13	QZ	POPUL_MAX			POPUL	TWO	QZ, AR, BE, CN, DE, HU, JP, RU, NZ, ES			Populus maximowiczii A. Henry		Japanese balsam poplar; Japanese poplar		Maximowicz's Pappel	
25-Feb-13	QZ	TILIA_EUR			TALIA	TWO	QZ, BE, CZ, DE, HU, GB, US			Tilia xeuropaea L.		common lime; European linden; lime	tilleul commun	holländische Linde	

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25-Feb-13	QZ	BEGON_BPE		BEGON_BOL; BEGON_PEN	BEGON	TWO	QZ, CN, ZA, VN, AU, NZ, US, CA			Hybrids between Begonia boliviensis and Begonia pendula	Begonia boliviensis A. DC. x Begonia pendula Ridl.				
25-Feb-13	QZ	BEGON_BOL	BEGON_BPE		BEGON	TWO	QZ, CN, ZA, VN, AU, NZ, US, CA			Begonia boliviensis A. DC.					
25-Feb-13	QZ	BEGON_PEN	BEGON_BPE		BEGON	TWO	QZ, CN, US			Begonia pendula Ridl.					
25-Feb-13	QZ	ECRUD_PHI		ECNCE_PUR; RUDBE_HIR		TWO	QZ, CA, PL, AU, US, RO, SK, DE			Echinacea purpurea (L.) Moench x Rudbeckia hirta L.					
25-Feb-13	QZ	ECNCE_PUR	ECRUD_PHI		ECNCE	TWO	QZ, CA, PL, AU, US, RO, SK			Echinacea purpurea (L.) Moench		Eastern purple-coneflower			
25-Feb-13	QZ	RUDBE_HIR	ECRUD_PHI		RUDBE	TWO	QZ, DE			Rudbeckia hirta L.		Black-eyed Susan; Cone Flower	Rudbeckia	Sonnenhut	
25-Feb-13	QZ	ECRUD		ECNCE; RUDBE	ECRUD	TWO	QZ, NL, NZ, RO, GB, JP, CA, US, DE, JP, HU, FR, RU	Asteraceae	Plant / Plant	Echinacea x Rudbeckia					
25-Feb-13	QZ	ECNCE	ECRUD		ECNCE	TWO	QZ, NL, NZ, RO, GB, JP, CA, US	Asteraceae	Plant / Plant	Echinacea Moench.		Echinacea	Échinacée	Igelkopf	
25-Feb-13	QZ	RUDBE	ECRUD		RUDBE	TWO	QZ, DE, JP, HU, GB, FR, RU, US	Asteraceae	Plant / Plant	Rudbeckia L.		Cone Flower	Rudbeckia	Sonnenhut	
7-Mar-13	AU	ACACI_SAL			ACACI	TWO	AU, QZ, FR, NZ, IT, NL, US			Acacia saligna (Labill.) H. L. Wendl.		blue-leaf wattle, golden-wreath wattle, orange wattle, Port Jackson wattle, Port Jackson-willow, silver wattle, weeping wattle, willow wattle, Western Australian golden wattle			
7-Mar-13	AU	VIBUR_ODO			VIBUR	TWO	AU, BE, QZ, FR, IL, NL, RU, CA, US			Viburnum odoratissimum Ker Gawl.					
7-Mar-13	AU	SCAEV_ALB			SCAEV	TWO	AU, QZ, ZA, DE, NL, NZ, US			Scaevola albida (Sm.) Druce					
20-Mar-13	VN	CRINU_LAT			CRINU	TWO	VN, ZA, NL			Crinum latifolium L.					

[End of Annex V and of document]