UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

ADMINISTRATIVE AND LEGAL COMMITTEE

Fiftieth Session
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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 Plant Variety Database (UPOV-ROM), the GENIE database and the UPOV Code System since the forty-ninth session of the Administrative and Legal Committee (CAJ) held in Geneva on April 1, 2004. It is recalled that the introduction of the UPOV Code System is necessary for the development of the GENIE database and certain key aspects in the development of a Web-based Plant Variety Database are dependent upon the GENIE database. Therefore, this document takes developments in that order of sequence.

UPOV CODE SYSTEM

2.   It is recalled that the following code construction has been agreed for the UPOV Code System:

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

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

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

thus,   XXXXX_YYY_ZZ1

(d) in all cases, the five-letter genus code is to be provided, but the three-letter species code and the sub-specific code are only provided where necessary.

3. As reported to the CAJ at its forty-ninth session, the Technical Committee (TC), at its fortieth session, held in Geneva from March 29 to 31, 2004, agreed to the inclusion of UPOV codes into the GENIE database on the basis of document TC/40/6-CAJ/49/4. However, the TC noted that there were certain codes which required checking before their inclusion and that further consideration of coding of intergeneric and interspecific hybrids and "multiple ranked names" was required before the completion of the GENIE database could be achieved. The situation with regard to each of these aspects is explained below.

Checking of Codes

4. With regard to those UPOV codes which still required to be checked before inclusion in the GENIE database, the TC agreed that these should be checked by the appropriate Technical Working Party (TWP) during their sessions in 2004. The TWPs agreed that the checking of the codes should be undertaken by the authorities which had contributed the data to the UPOV concerning the genera and species concerned. To aid the experts in the checking of these codes, the Office of the Union (Office) agreed to provide, by the end of August 2004, an Excel spreadsheet containing all UPOV codes in which the codes to be checked by each expert would be highlighted. The Office also agreed to clarify the type of checking which was required by the experts. The TWPs agreed that comments on the code should be sent to the Office no later than October 8, 2004.

Intergeneric and Interspecific Hybrids

5. It was noted by some experts that breeding developments can result in intergeneric hybrids which could result in "grey areas" between genera.

6. The TC agreed that the UPOV code should reflect the taxonomic classification. Thus, if a genus exists for a hybrid formed between two genera (e.g. Triticale), the "genus element" of the UPOV code would be based on the "hybrid" genus. Where a genus for hybrids did not exist, a code would not be created and varieties bred from two genera would be classified according to the available codes. Where confusion concerning variety denominations could arise, it would be possible to create a new variety denomination class containing, for example, two genera and hybrids between those genera.

7. Following the TC session, a further possibility to address hybrid genera (and species) was put forward by the IT expert of the World Intellectual Property Organization (WIPO) developing the GENIE database: A new genus (or species) formed as a hybrid between other genera (or species) would be given a new UPOV code. However, in the database, a link would be made between the parent genera (or species) and the new hybrid. Thus, when searching, it would be possible to search on a UPOV code, but to automatically receive the results on all related codes:

<u>Example</u>:   Hybrid genus formed between *Carlus x Phillipus*

Genus	UPOV Code
Carlus	CARLU_(*linked to* CAPHI_)
Phillipus	PHILL_(*linked to* CAPHI_)
Carlus x Phillipus	CAPHI_(*linked to* CARLU_ *and* PHILL_)

A search on "CARLU" *(Carlus)* would automatically provide all varieties of Carlus and the hybrid genus *Carlus x Phillipus.*   A search on "PHILL" *(Phillipus)* would automatically provide all varieties of Phillipus and the hybrid genus *Carlus x Phillipus.* A search on "CAPHI" *(Carlus x Phillipus)* would provide all varieties of *Carlus, Phillipus* and the hybrid genus *Carlus x Phillipus.* Thus, for example, if it was the case that *Carlus* and *Phillipus* were in different variety denomination classes, the hybrid could, if required, be considered in both classes.

8.   This proposal has been considered and approved by the TWPs at their sessions in 2004 and will be the working basis for the UPOV Code System, subject to approval by the TC at its forty-first session.

Multiple-Ranked Names: Brassica and Beta

9.   With regard to "multiple-ranked names", in relation to *Brassica* and *Beta*, the rapporteur of the International Code of Nomenclature for Cultivated Plants (ICNCP) commented that:

> "Use of names such as *Beta vulgaris* subsp. *cicla* var. *flavescens* should be avoided […]. The International Code of Nomenclature for Cultivated Plants in its 1995 and 2004 editions, promulgates using *Beta vulgaris* Flavescens Group which equates to *Beta vulgaris* Swiss Chard Group (in English).   Your UPOV code could thus be BETAA_VUL_FG.

> "Similarly, *Brassica oleracea* Gemmifera Group (BRASS_OLE_GG) (based on *B. oleracea* var. *gemmifera* would equate to *Brassica oleracea* Brussels Sprout Group (in English) and *B. oleracea* Groupe du Chou de Bruxelles (in French) and *B. oleracea* Rosenkohl Gruppe (in German) etc.

> "In fact these names could be shortened further since the epithets of infraspecific ranked names are always unique. Thus *Beta* Flavescens Group will always equate to Swiss Chard and *Brassica* Gemmifera Group will always equate to Brussels Sprout. You may therefore wish to consider using the formats [BETAA_FLA_GP] and [BRASS_GEM_GP] (the last two letters would indicate that you [are] using the Group method, especially if you ensure that the _GP combination is not used elsewhere in the UPOV Codes: it does not appear in the version you sent me).

> "This simplified but accurate naming system is becoming more widely adopted by users of plant names."

10.   The TC noted that the proposal from the rapporteur of the ICNCP appeared to have potential advantages. However, it was also noted that, until now, UPOV had not used this system in relation to naming for variety denomination classes and Test Guidelines. Nevertheless, it recognized that once the codes were adopted it would be difficult to introduce a change at a later time, and it therefore proposed that this matter should be considered by the TC before the codes were finalized. To avoid delay in finalizing the codes, it agreed that the

Office, in conjunction with the chairmen of the TC, the Technical Working Party for Agricultural Crops (TWA) and the Technical Working Party for Vegetables (TWV), should develop a proposal for consideration by the TWA, TWV and the Working Group on Variety Denominations (WG-VD). If the proposal was agreed by all parties, this would be the basis for codes for *Beta* and *Brassica.* In the absence of agreement by all parties, the code would be based on the proposals presented in Annexes I and II of document TC/40/6-CAJ/49/4.

11.   In accordance with that approach, two options for simplifying the UPOV codes for *Beta* and *Brassica* were developed, with the following option being agreed by the TWV and the TWA:

Botanical name	Group name	UPOV code
Brassica oleracea L. convar. *capitata* (L.) Alef. var. *alba* D.C	Brassica oleracea (White Cabbage Group)	BRASS_**OLE**_GWC
Brassica oleracea L. convar. *capitata* (L.) Alef. var. *sabauda* D.C	Brassica oleracea (Savoy Cabbage Group)	BRASS_**OLE**_GSC
Brassica rapa L. var. *rapa* (L.) Thell.	Brassica rapa (Turnip Group)	BRASS_**RAP**_GTU

12.   This approach would allow all groups within a species to be linked by the UPOV code, e.g. BRASS_OLE = *Brassica oleracea* and would require little change to the existing database of codes. The UPOV code could not, for example, be used to group White Cabbage, Red Cabbage and Savoy Cabbage varieties, currently combined under *Brassica oleracea* L. convar. *capitata* (L.) Alef. (BRASS_OLE_C) in the database, although such grouping can be achieved by linkages between codes in the same way as for intergeneric/interspecific hybrids. This proposal will be presented for consideration by the WG-VD at its meeting on October 18, 2004, and, if agreed, will form the basis for the UPOV Code System.

GENIE DATABASE

13.   The GENIE database is being developed to provide information on the status of protection (see document C/38/6), cooperation in examination (see document C/38/5), experience in DUS testing (see document TC/40/4), and existence of UPOV Test Guidelines (see document TC/40/2) for different genera and species. In addition, the GENIE database will be the repository of the UPOV codes and will be used to provide the botanical names, common names and variety denomination class for the purposes of the Plant Variety Database.

14.   The GENIE database cannot be launched until the UPOV codes have been approved (see section on UPOV Code System). However, document TC/40/4 "List of species in which practical knowledge has been acquired or for which national test guidelines have been established" was produced from the GENIE database in its prototype form. The GENIE database is being populated with UPOV codes and corresponding information, with the aim of completing an Access version of the database in October 2004. This Access version of the database would contain all necessary information and, it is planned, would be used to generate the documents concerning the status of protection (document C/39/6) and cooperation in examination (document C/39/5) for the thirty-ninth session of the Council.

The development of the Web-based version of the GENIE database will take some further time and the launch of the GENIE database on the UPOV Website is scheduled to take place at the end of 2004 / beginning of 2005.

PLANT VARIETY DATABASE

15.   At the forty-ninth session of the CAJ (see document TC/40/6–CAJ/49/4), it was explained that a factor which had been taken into account in the program to improve the Plant Variety Database was the project for a centralized database of variety denominations being undertaken by the Community Plant Variety Office (CPVO) ("the CPVO variety denomination database").   That project is intended to develop a Web-based database for variety denomination examination purposes, but relies on a database of information which should be essentially the same as that of the UPOV Plant Variety Database. It was recognized that there would be mutual benefit if both parties cooperated in the work. In that regard, it was reported that a Memorandum of Understanding was under development for cooperation in the development and maintenance of a UPOV Web-based Plant Variety Database and the CPVO Centralized Database on Variety Denominations in a way which would minimize the overall cost of development of software and maintenance of data, maximize the completeness of the UPOV and CPVO databases, and secure compatibility of both databases. It was explained that more details of the cooperation would be reported at the fiftieth session of the CAJ.

16.   Some of the key aspects of the Memorandum of Understanding, planned to be signed in October 2004, are as follows:

   (a)   Database Software

   In the first instance, CPVO will provide UPOV ("the Parties") with its proposed database model and data dictionary. In the second instance, UPOV will offer initial comments and suggestions with regard to compatibility of the software for the UPOV database. Subsequent collaboration between the Parties in any refinement to the CPVO proposal will take the form of meetings and/or exchange of correspondence as considered appropriate by the Parties. Following this process, CPVO will develop its database software. The database software that CPVO decides to use and release (the "CPVO software") will, subject to certain conditions, be offered to UPOV free of charge.   CPVO will inform UPOV of subsequent updates of the CPVO software. UPOV will advise CPVO on whether it wishes to use the CPVO software or whether it will develop its own software (the "UPOV software"). If UPOV decides to develop its own software, it will provide CPVO with its proposed database model and data dictionary in order to seek comments and suggestions with regard to compatibility of the software for the CPVO database.

   (b)   Maintenance of Data

   The responsibility for providing data would be as follows:

      (i)   subject to the agreement of the countries and owners of other registers concerned, CPVO is to be responsible for variety denomination data for all official registers kept by authorities of the Member States of the European Union, official registers kept by authorities of the European Economic Area (EEA) and

Switzerland, the European Union Common Catalogues and other relevant registers, such as the Dutch database PLANTSCOPE;

(ii)   UPOV is to be responsible for variety denomination data for all official registers kept by authorities of members of the Union which are not mentioned in (i).   UPOV is also to be responsible for data from international organizations (e.g. Organisation for Economic Co-operation and Development (OECD)); and

(iii)   for other data, to be agreed by the Parties on a case-by case basis.

(c)   Use of Data by UPOV and CPVO

UPOV will retain the possibility of charging parties other than UPOV members and contributors to the database ("third party users") for the use of any future database. The use of the CPVO database will be restricted to checking variety denominations for compliance with the requirements of the Community Plant Variety Rights (CPVR) system. In the first instance, use will be confined to contributors of data, comprising CPVO, national authorities and other data providers (e.g. PLANTSCOPE). However, it is possible that, in future, other parties, including breeders, would be granted use of the database. CPVO will retain the possibility of providing the database not only to contributors to the database but also to third party users, free of charge.

(d)   Access to Raw Data for Third Parties

The UPOV policy is that raw data will be available to members of the Union and contributors of data, but will not be available to other parties. The CPVO policy is that raw data will be available to the relevant authorities of the Member States of the European Union and other organizations contributing data, but will not be available to other parties.

(e)   Creation of UPOV Codesfor "New" Species in the Database

UPOV is responsible for the creation and maintenance of UPOV codes and will develop a procedure for the introduction and maintenance of codes in a timely way.

17.   As reported at the forty-ninth session of the CAJ, the CPVO plans to have a first version of the CPVO variety denomination database available on-line at the end of 2004 and it is recognized that, in order to maximize efficiency in the work, the CPVO variety denomination database and the UPOV Plant Variety Database should, as far as possible, develop side by side. It was also noted that the development of the UPOV Code System and GENIE database are critical for both databases. With regard to a timetable for the introduction of the Web-based UPOV Plant Variety Database, it is still anticipated that a prototype will be presented to the TC and CAJ at their forty-first and fifty-first sessions, respectively, in 2005, with a view to the launch taking place later in 2005. Detailed proposals concerning: data to be included; maintenance transfer and use of data and access to data; and links to other Websites (see document TC/40/6–CAJ/49/4, paragraphs 22 to 35), will be put forward in conjunction with the prototype.

18.   It was proposed in document TC/40/6-CAJ/49/4 that members of the Union and other contributors would be encouraged to start to use the UPOV codes when contributing data to

the UPOV-ROM as soon as the GENIE database was made available on the UPOV Website. However, the CPVO has already indicated that it would like to start using the GENIE database as soon as possible and could use the database in its Access form. Therefore, as soon as the Access version of the GENIE database is complete and suitable guidance for users developed, it will be made available for all contributors to the UPOV-ROM. However, as explained in document TC/40/6-CAJ/49/4, in this first phase, use of the UPOV Code System via the GENIE database would be optional, and it is proposed that the use of the UPOV code would only be obligatory as from the time when the UPOV Web-based Plant Variety Database is introduced.

19. As explained in document TC/40/6-CAJ/49/4, a key development in the introduction of the Web-based Plant Variety Database will be to make the transfer of data by contributors easier. At present, the data must be submitted in a specified "TAG" format. It was explained that, for the Web-based Plant Variety Database, it will be possible to submit data in simple table form, thus making it easier for authorities without specialized IT resources to submit data. Nonetheless, the Web-based Plant Variety Database will also continue to accept data in the current "TAG" format. Work has already started on the development of a form for submitting data and it is planned that this form may be used to submit data for the UPOV-ROM, as well as the Web-based, version of the Plant Variety Database. Therefore, as soon as this form has been developed, which is likely to be somewhat in advance of the completion of the Web-based version of the Plant Variety Database, it will be made available to all existing and potential contributors to the UPOV-ROM.

20. The CAJ is invited to note the developments concerning the Plant Variety Database (UPOV-ROM), the GENIE database and the UPOV Code System and, in particular, the plans to:

(a) present a prototype Web-based version of the Plant Variety Database to the CAJ and TC in April 2005 (see paragraph 17);

(b) make the GENIE database available for providing UPOV codes to be used when submitting data to the Plant Variety Database (see paragraph 18); and

(c) develop a simple form for submitting data to the Plant Variety Database (see paragraph 19).

[End of document]