UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

TECHNICAL WORKING PARTY
FOR
AGRICULTURAL CROPS

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UPOV INFORMATION DATABASES

Document prepared by the Office of the Union

1.   At its thirty-eighth session, held in Geneva from April 15 to 17, 2002, the Technical Committee (TC) noted that the Office of the Union (Office) planned to develop and maintain a single database of information based on species/taxonomic groups, which would be used to generate different reports). It noted that, in order to construct a single database, it would be necessary to use a "unique identifier" which would be the code developed in document TC/35/16 "Revised Working Paper for a UPOV Taxon Code for Use in the UPOV-ROM Plant Variety Database." However, it noted that the construction of this code could be changed relatively easily and quickly before the code is put into use, to meet the demands for the work on variety descriptions and denominations.

2.   The Office presented a copy of the consolidated database of taxa to the TC, at its thirty-ninth session held in Geneva from April 7 to 9, 2003, as document TC/39/13. The TC agreed to invite the Technical Working Parties (TWPs), the WG-PVD and the WG-VD to examine the codes provided in document TC/39/13, during their meetings in 2003, and to make their recommendations on the suitability of the codes. In order to facilitate the task of the TWPs in their work, the Office has invited the Chairman of each TWP to identify those genera and species of particular interest for their respective TWP. The codes relating to these taxa have been extracted from document TC/39/13 Annexes I and II. Annex I of this document contains the relevant taxa and their codes sorted alphabetically by taxa, and Annex II of this document contains the relevant taxa and their codes sorted by codes.

3.   The purpose of this document is to present the database of relevant taxa for the TWA with their proposed UPOV codes and, in addition, to explain a project for the development of a new database (the "GENIE") to provide information on: the status of protection; experience in distinctness, uniformity and stability (DUS) testing; cooperation in examination; existence of UPOV Test Guidelines for each GENus/specIEs (hence "GENIE").

Taxa Database / UPOV Code

4.   The main purpose of the development of the UPOV code (the "code") is to enhance the usefulness of the UPOV-ROM Plant Variety Database (the "UPOV-ROM") by overcoming the problem of synonyms for plant taxa.

5.   The Office has now used the code construction proposed in document TC/35/16 to develop codes and to produce a database of taxa. The database of relevant taxa for the TWA is presented in Annex I, sorted alphabetically by taxa, and in Annex II, sorted by UPOV codes. These Annexes are only attached to the electronic version of this document because of the large volume of data.

6.   Based on document TC/35/16, with some minor modifications, the code is constructed as follows:

        (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

7.   In all cases, the five-letter genus code is provided, but the three-letter species code and the sub-specific code are only provided where necessary.

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

        Prunus   PRUNU_

        Prunus armeniaca   PRUNU_ARM

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

10.   In the case of interspecific hybrids, the three-letter species element starts with an "X," e.g. BEGON-XTU for *Begonia x tuberhybrida* Voss.

11. In the case of the sub-specific unit element, the 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 code, e.g.:

BETAA_VUL_VB	Beta vulgaris L. ssp. vulgaris var. alba DC.
BETAA_VUL_VC	Beta vulgaris L. ssp. vulgaris var. conditiva Alef.
BETAA_VUL_VF	Beta vulgaris L. ssp. vulgaris var. flavescens DC.
BETAA_VUL_VT	Beta vulgaris L. ssp. vulgaris var. altissima Doell

12. The starting point for the development of the database was the ISTA (International Seed Testing Association) List of Stabilized Plant Names (4th edition). This database provided around 2,500 ISTA stabilized names and around 370 recognized synonyms. Codes concerning these taxa are always based on the ISTA stabilized names. Thereafter, the taxa from the following documents were added:

Ref.	Title
C/36/6	List of the taxa protected in the member States of UPOV and in those States and Organizations that have initiated the procedure for acceding to UPOV and which have provided information
C/36/5	Cooperation in examination
TC/39/4	List of species in which practical technical knowledge has been acquired or for which national guidelines have been established
TC/35/16	Revised working paper for a UPOV taxon code for use in the UPOV-ROM Plant Variety Database

13. The full database presented in Annexes I and II of document TC/39/13 contains all the individual taxa entries from the documents above, in order to develop the GENIE database (see below) and, therefore, contains a number of duplications of the same taxa. The source of each taxon entry is stated. In total, there are currently around 7,000 entries in the database.

14. For those taxa for which there are no ISTA stabilized names, the basis for the code is the name recognized by Zander (16th edition) or, where this is not available, the Germplasm Resources Information Network (GRIN) database (www.ars-grin.gov/npgs/tax/index.html). In cases where the taxa could not be found in these or the other reference books held in the Office the code is based on the taxa provided by the authorities contributing to the documents above.

15. With regard to other aspects concerning the practical applicability of the code, the responses to the questionnaire seeking information on how the effectiveness of the UPOV-ROM (or similar web-based database) might be improved (see document TC/39/14-CAJ/47/5), indicated that there should be an easy way of adding new codes, and the code should be able to operate at the genus level to avoid problems where a plant cannot be clearly allocated to a species. The latter point has already been covered in paragraph 7. With

respect to the easy introduction of new codes, it is proposed that, in the first instance, the Office introduce new codes upon request and adds the relevant taxa and codes to the database.

16.   The Office will maintain the database and code until the requirements of a UPOV code for the publication of variety descriptions and/or variety denominations are clear. However, it is proposed that, in the absence of any objections by the TC, the Administrative and Legal Committee (CAJ) or the *Ad hoc* Working Group on the Publication of Variety Descriptions (WG-PVD) or the Working Group on Variety Denominations (WG-VD), the code could be adopted for use by contributors to the UPOV-ROM starting in 2004, in line with the program for improving the effectiveness of the UPOV-ROM (see document TC/39/14-CAJ/47/5).

17.   With this approach and timetable in mind, the following work program has been proposed:

(a)   the TC to invite the Technical Working Parties (TWPs), the WG-PVD and the WG-VD to examine the codes provided in this document, during their meetings in 2003, and make their recommendations on the suitability of the codes;

(b)   the Office to maintain the current database, adding new taxa and codes as required, including the addition of codes for taxa contained in the UPOV-ROM which are not already included in the database;

(c)   the Office to prepare a document, explaining this approach, for consideration by the CAJ at its forty-eighth session, to be held in Geneva on October 20 and 21, 2003;

(d)   the Office to modify, where necessary, the UPOV code on the basis of the input from the TWPs, WG-PVD, WG-VD and CAJ and present a document for consideration by the TC at its fortieth session to be held in spring 2004;

(e)   subject to comments received from the TC and CAJ, the Office to make the necessary preparations for contributors to use the UPOV code, starting in Summer 2004.

18. The Technical Working Party for Automation and Computer Programs (TWC) considered document TC/39/13 at its twenty-first session, held in Tjele, Denmark, from June 10 to 13, 2003, and concluded as follows:

(document TWC/21/9 Report on the Conclusions)

14.   With regard to the UPOV code proposed in document TC/39/13, the TWC agreed with the structure of the code and the proposed program for its introduction. The TWC agreed that if members had any comments after further consideration of the codes, these would be sent to the Office of the Union by the end of September 2003. It recommended that the database should indicate which Technical Working Party would be responsible for checking the validity of each code. It also agreed that, where appropriate, the database should indicate the relevant Test Guidelines for each code and, furthermore, that the third element of the code should be used to generate different codes for different types of varieties of the same species or sub-species, which were covered by different Test Guidelines. The TWC agreed that new codes created by the Office of the Union could be used immediately but such new codes should be reviewed by the relevant TWP at their annual sessions.

15.   The TWC agreed that the code should, in general, not be changed as a result of a change in the Latin name of a species. However, it recognized that a change in the structure and content of a genus may require a change in the UPOV code to ensure that the first element of the code could be used to sort species into the correct genus."

19.   The Technical Working Party for Vegetables (TWV), at its thirty-seventh session held in Roelofarendsveen, Netherlands, from June 23 to 27, 2003, was invited to consider the proposed UPOV codes, relevant to the TWV, as presented in document TWV/37/6. It was agreed that more time would be needed to check these codes and a deadline of September 1, 2003, was set for comments to be sent to the Office.

The "GENIE" Database

20.   In addition to providing the basis for the development of the code, the taxa database presented in Annexes I and II allows the development of a new consolidated database capable of providing information on the status of protection, experience in DUS testing, cooperation in examination and existence of UPOV Test Guidelines for each GENus/specIEs (hence "GENIE").

21.   The information in the taxa database is being introduced into a Microsoft Access format which is planned to be made available on the UPOV Website and UPOV-ROM. This Access format would allow users to make an inquiry for a particular taxon, select the appropriate code and then see the following type of information:

UPOV code	DCTLS_GLO
Latin name(s)	*Dactylis glomerata L.
Common English name(s)	Cocksfoot, Orchard Grass
Common French name(s)	Dactyle
Common German name(s)	Knaulgras
Common Spanish name(s)	Dactilo
Family	Poaceae/Gramineae
Countries/Authorities in which protection is provided	AR, AT, AU, BE, BG, BO, CA, CH, CL, CO, CZ, DE, DK, EC, EE, ES, FI, FR, GB, HU, IE, IL, IT, JP, KG, KR, LV, MX, NI, NO, NZ, PL, QZ, RO, RU, SE, SK, US, UY, ZA.
Countries with experience in DUS examination	AR, CZ, DE, DK, ES, FR, HU, JP, NZ, PL, SK, UY, ZA.
Cooperation agreements for DUS testing	DE offers to AT, BE, CH, NO; DK offers to AT, SE; FR offers to GB; SK offers to CZ, SI. DE and DK exchange reports DK and FR exchange reports
UPOV Test Guidelines	TG/31/8
Countries with national test guidelines	AR, CZ, DE, ES, FR, HU, JP, NZ, PL, UY, ZA.

*   ISTA stabilized name.

22.   The availability of this particular type of query would be helpful in reducing the day-to-day work of the Office by automatically answering such routine queries, which occur on a regular basis from various third parties, and which take time to research and respond to on an individual basis. However, the intention is that, equally, it will be a database of practical help for the members. For example, members could use an enquiry to select all countries with which they have agreements in DUS testing or countries with experience in DUS examination, etc.

23.   The GENIE database would also be used to produce all future versions of the following documents:

C/[36]/6	List of the taxa protected in the member States of UPOV and in those States and Organizations that have initiated the procedure for acceding to UPOV and which have provided information
C/[36]/5	Cooperation in examination
TC/[39]/4	List of species in which practical technical knowledge has been acquired or for which national guidelines have been established

24.   The GENIE database is currently under development with the help of the Information Technology Department of the World Intellectual Property Organization (WIPO), and a prototype is planned for distribution to members of the Union later in 2003. The proposal is that, on the basis of the comments on the prototype, the Office would prepare a version for consideration by the TC, the CAJ and the Consultative Committee at their sessions in Spring 2004. Any recommendations on the draft from members, or from the parties involved in discussions on the development of the code (see paragraph 17 of this document), would be reflected in the development of this database.

25.   The TWA is invited to:

(a)   comment on the recommendation made by the TWC as set out in paragraph 18 of this document;

(b)   examine the codes provided in Annexes I and II of this document and to make its recommendations on the suitability of the codes.

[Two Annexes follow (electronic version only)]