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**TECHNICAL  
COMMITTEE**

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**ADMINISTRATIVE AND  
LEGAL COMMITTEE**

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UPOV INFORMATION DATABASES

*Document prepared by the Chairman of the Technical Committee  
and 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) and the GENIE database. The UPOV Code System is a key element of both databases and, therefore, this document begins with a report on progress concerning the UPOV Code System.

Abbreviations

CAJ:	Administrative and Legal Committee
TC:	Technical Committee
TC-EDC:	Enlarged Editorial Committee
TWP:	Technical Working Party
TWA:	Technical Working Party for Agricultural Crops
TWC:	Technical Working Party on Automation and Computer Programs
TWF:	Technical Working Party for Fruit Crops
TWO:	Technical Working Party for Ornamental Plants and Forest Trees
TWV:	Technical Working Party for Vegetables
WG-PVD:	<i>Ad hoc</i> Working Group on the Publication of Variety Descriptions
WG-VD:	<i>Ad hoc</i> Working Group on Variety Denominations

## UPOV CODE SYSTEM

2. At its thirty-ninth session held in Geneva from April 7 to 9, 2003, the Technical Committee (TC) agreed, on the basis of document TC/39/13, to the following code construction 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
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(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. The following work program for the development of the UPOV Code System was agreed by the TC at its thirty-ninth session:

(a) the TC to invite the 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 of the Union (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 codes 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 System, starting in Summer 2004.

4. The CAJ considered document CAJ/48/4 at its forty-eighth session, held in Geneva on October 20 and 21, 2003. It agreed to the approach for the development of a UPOV code and the work program for the development and introduction of the proposed UPOV code, as set out in paragraph 16 of document CAJ/48/4, and the proposal for the development of the GENIE database.

5. The WG-PVD did not meet in October 2003 and, therefore, has not commented on document TC/39/13. However, all members of the WG-PVD, who are also members of the TC and CAJ, have had an opportunity to comment on the document via these committees.

Recommendations on the Suitability of the Codes Proposed in Document TC/39/13

6. With regard to recommendations from the TWPs and the WG-VD on the suitability of the codes in document TC/39/13, Annex I and Annex II, the following comments were received:

(a) *General Comments on the UPOV Code System*

(i) The TWC agreed with the structure of the code and the proposed program for its introduction. It recommended that the database should indicate which TWP would be responsible for checking the validity of each code. It also agreed that, where appropriate, the GENIE 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 could be used immediately but such new codes should be reviewed by the relevant TWP at their annual sessions.

(ii) The TWC recommended that the code should, in general, not be changed as a result of a change in the botanical 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 - this being of particular importance for variety denomination purposes (see Recommendation 9 of document UPOV/INF/12 Rev. "UPOV Recommendations on Variety Denominations").

(iii) It has been noted by some experts that breeding developments can result in intergeneric hybrids which could result in "grey areas" between genera.

(iv) The TWA noted that intergeneric hybrids used the letter "X" as the fifth letter in the genus element of the UPOV code (e.g. *Festulolium*: UPOV code "FESTX," *Triticale*: UPOV code "TRITX"). At the WG-VD, and in subsequent comments, the rapporteur of the International Code of Nomenclature for Cultivated Plants (ICNCP) noted that:

"the multiplication sign 'X' is used in botany as an optional device to indicate hybridity. It 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. Therefore, I would strongly suggest that you do not use the letter 'X' in your codes."

(v) With regard to "multiple ranked names," in relation to *Brassica* and *Beta*, the rapporteur of the 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\_FLG\_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.”

The Chairman of the TWV has expressed his support for the ICNCP comments.

7. The comments under (i) and (ii) have been incorporated in the proposed program for the development of the UPOV Code System and GENIE database. The proposal in (iv), to avoid the use of the letter “X” to indicate hybrids, is reflected in the proposed new codes presented in Annex I and Annex II of this document.

8. With regard to the issue of intergeneric hybrids mentioned in (iii) above, it is proposed 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 does 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.

9. With regard to codes related to “multiple ranked names,” as set out in (v) above, it is noted that the proposal from the rapporteur of ICNCP appears to have potential advantages. However, it is also noted that, until now, UPOV has not used this system in relation to naming for variety denomination classes and Test Guidelines. Nevertheless, once the codes are adopted it would be difficult to introduce a change at a later time and it is therefore proposed that this matter should be considered by the TC before the codes are finalized. To avoid delay in the agreement of codes, it is proposed that the Office, in conjunction with the chairmen of the TC, TWA and TWV, develop a proposal for consideration by the TWA, TWV and WG-VD. If the proposal is agreed by all parties, this would be the basis for codes for *Brassica* and *Beta*. In the absence of agreement by all parties, the code would be based on the proposals presented in Annexes I and II of this document.

(b) *Comments on Individual Codes*

10. During the course of 2003, the chairpersons of each TWP selected genera and species from document TC/39/13, Annexes I and II, which were reviewed by their respective TWP. Annexes I and II of document TC/39/13 each contain around 7,000 entries. A total of around 4,500 entries was selected for checking by at least one TWP. Of the 2,500 entries which were not allocated to a TWP, around 1,800 were linked to names stabilized by the International

Seed Testing Association (ISTA) and the TC-EDC, at its meeting on January 14, 2004, considered that, on that basis, it was not necessary to seek checks on the codes.

11. Annex I (presented in order of botanical name) and Annex II (presented in UPOV code order) of this document contain the codes as checked and amended by the appointed experts. Amendments are highlighted and the TWP(s) responsible for checking the codes and the countries/organizations of the individual experts appointed by the TWP(s) concerned are indicated.

12. Concerning the approximately 700 entries not checked by a TWP and not linked to an ISTA stabilized name, the TC-EDC recommended that these be checked by the countries which had made these entries in the UPOV databases. Annex III presents those entries, together with the countries making the entries and what is considered to be the most relevant TWP for checking purposes. In some cases, additional information on the type of plant (e.g. fungus) is provided where it is thought that this may help in the checking process.

### New Codes

13. In addition to checking the codes presented in the Annexes to document TC/39/13, some of the appointed experts proposed codes for genera and species which were not already included in the list. Furthermore, the Office has reviewed the UPOV-ROM (version 2003/03) and has identified other genera and species for which codes are required. Annex IV proposes codes for those genera and species, together with the countries/organizations entering data in the UPOV-ROM and what is considered to be the most relevant TWP for checking purposes. In some cases additional information on the type of plant (e.g. fungus) is provided, where it is thought that this may help in the checking process. It is proposed that these codes be checked by the countries/organizations indicated on the table, proposed by the Office on the basis of the countries/organizations making entries in the UPOV-ROM.

### Procedure for Introduction and Amendment of Codes

14. It is recognized that new UPOV codes and amendments to existing codes will need to be introduced in a timely manner to ensure the effectiveness of the databases which are built around the UPOV Code System. It is also recognized that the information linked to the codes may need to be updated from time to time, for example to introduce synonyms generated by taxonomic developments.

15. The following procedure for the introduction and amendment of codes is proposed:

(1) Responsibility for the UPOV Code System

The Office is responsible for the UPOV Code System and the individual codes.

(2) Repository of UPOV Codes

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

(3) Introduction of New UPOV Codes / Amendments to UPOV Codes

(a) In the first instance, the Office will draft a code on the basis of the Germplasm Resources Information Network (GRIN) database, or other suitable references if the species concerned is not included in the GRIN database. The Office has proposed this approach on the basis of the following comment received from the rapporteur of the ICNCP:

“I notice that you use Zander as your secondary basis for code names. Zander is well used in middle Europe, but not elsewhere in the world. It is only as good as its last edition and is slow to adapt to evolving nomenclatural practises. I would strongly suggest that you made GRIN (Germplasm Resources Information Network) your primary source for questions of nomenclature and establishing UPOV codes.

“GRIN contains a number of specialized data sets including those endorsed by the Association of Official Seed Analysts (AOSA) and the International Seed Testing Association (ISTA) for which the nomenclature has been verified by GRIN. GRIN Taxonomy now provides accurate scientific names for nearly 36,000 species of vascular plants. The database is widely consulted by internet with about 25,000 searches per month resulting in the generation of about 50,000 reports as outputs. 29 different reports of varying content are available from GRIN taxonomic data and the compilers work closely with a number of world wide institutions such as the International Plant Genetic Resources Institute (IPGRI). You would be well advised to link your dataset with GRIN for the sake of world-wide harmonization of names and to avoid GENIE making controversial decisions.”

(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 code, it will, wherever possible, check its proposals with those experts before creating the code.

(c) New codes may 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 codes in a timely manner and, in particular, will seek to ensure that new codes are available to allow their use for the forthcoming edition of the Plant Variety Database. In addition, the Office will add new codes where it identifies a need.

(d) In general, amendments to 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 UPOV recommendations on variety denominations are based on the general principle that, unless the list of classes applies, all taxonomic units which belong to the same genus are closely related. Therefore, it is important that the first element of the code can be used to sort species into the correct genus. The 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 codes as in (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 codes will be presented to the relevant TWP(s) for comment at their first available session. If the TWP recommends any change, this will be treated as an amendment according to (d) above.

(4) Updating of Information Linked to UPOV Codes

(a) UPOV codes may 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 may, although it is emphasized that this is not necessarily the case (see section (3)(d) above), result in a need to change the UPOV code. In such cases, the procedure is as explained in section (3) above. In other cases, the Office will amend the information linked to the existing code as appropriate.

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

16. The work program for the development of the UPOV Code System agreed by the TC at its thirty-ninth session was that, subject to comments received from the TC and CAJ, the Office would make the necessary preparations for contributors to use the UPOV Code System, starting in Summer 2004.

17. It is proposed 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 is made available on the UPOV Website. Guidance on how to use the GENIE database for this purpose would be issued at that time. However, in the first instance, such use would be optional. Thereafter, it is proposed that the use of the UPOV code would be obligatory as from the time when the UPOV Web-based Plant Variety Database is introduced (see below).

#### PLANT VARIETY DATABASE

18. The TC, at its thirty-ninth session, and the CAJ, at its forty-eighth session, approved a program to improve the effectiveness of the UPOV-ROM Plant Variety Database as set out in document TC/39/14-CAJ/47/5.

19. Document TC/39/14-CAJ/47/5 explained that certain aspects, raised by the responses to the Questionnaire on how the effectiveness of the UPOV-ROM might be improved (“the questionnaire”), could be addressed without any structural changes to the UPOV-ROM and could be undertaken by the Office within the “short term,” i.e. during the course of 2003. However, other aspects would require major structural improvements, such as moving to a Web-based database which would need careful consideration in terms of resource requirements for both the Office and the members of the Union who contribute data. Nevertheless, it was considered appropriate for the Office to investigate these aspects and undertake a preliminary assessment of benefits and costs during the course of 2003.

20. A factor which has been taken into account in the program to improve the Plant Variety Database has been 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 in both parties cooperating in their work and a Memorandum of Agreement (the Memorandum) is being developed. The purpose of that Memorandum is to set out cooperation for the development and maintenance of the Web-based UPOV Plant Variety Database and CPVO variety denomination database in a way which will minimize the overall cost of development, maximize the completeness of the UPOV Plant Variety Database and CPVO variety denomination database and secure compatibility of both databases. In addition to a close cooperation in the development of the database, another important field of collaboration will be the sharing of the UPOV-CPVO efforts to collect information for populating and maintaining the database, thereby avoiding duplication of work. More details of the cooperation will be reported orally at the fortieth session of the TC and the forty-ninth session of the CAJ.

21. With regard to moving the Plant Variety Database to a Web-based system, it has been concluded that it will be possible for this to be undertaken within available resources. 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 Plant Variety Database should, as far as possible develop side-by-side. It is 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 Plant Variety Database, it is anticipated that a prototype would 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. The following aspects, concerning the development of a Web-based database, are explored for information and comment at this stage and detailed proposals will be put forward with the prototype.

#### Development of a Web-based Plant Variety Database

##### *Data to be Included*

22. An important aspect of the Web-based Plant Variety Database will be the fields which should be completed by contributors. At its thirty-ninth session, the TC clarified that any proposals to change the fields in the UPOV-ROM to be considered as mandatory would need to be agreed by the members of the Union. The TWA agreed that the Web-based Plant Variety Database should have a field which allowed the variety denomination class for each UPOV code to be indicated. The TWC agreed that consideration should be given to the creation of a field to indicate whether the variety denomination is in the form of a “code,” rather than a “fancy name.”

23. With regard to the indication of the UPOV variety denomination class for each UPOV code, this information will be provided by the GENIE database which would be linked to the Plant Variety Database. Similarly, the botanical name(s) and common name(s) would also be provided by the GENIE database.



*Maintenance, Transfer and Use of Data and Access to Data*

## (a) Maintenance of Data

24. The responses to the questionnaire and discussions with the CPVO concerning the CPVO variety denomination database highlighted that the quality and completeness of the data in the Plant Variety Database is crucial for its value. The importance of this is such that certain key ways in which UPOV and CPVO can cooperate in ensuring high quality data are planned to be included in the Memorandum.

25. It is expected that improving the ease of transfer of data (see section (b)(i) below, "Transfer of Data: Data Format") will help to remove obstacles for some authorities which do not currently contribute data. Nevertheless, it is recognized that there may remain authorities which do not have the resources to contribute data electronically and where UPOV would need to consider provisions for manual inputting of data from printed gazettes. In this respect, two options are possible. One option is for the Office to divert some of its resources to this activity. A second option is for members of the Union to assist in this work.

## (b) Transfer of Data

(i) Data Format

26. 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 format. However, it is anticipated that, for the Web-based Plant Variety Database, it will be possible to submit data in simple table form (e.g. Microsoft Word table or Excel spreadsheet), thus making it much easier for authorities without specialized IT resources to submit data. Nevertheless, it is emphasized that the Web-based Plant Variety Database will continue to accept data in the current format as provided for the UPOV-ROM.

(ii) Data Quality Checks

27. At present, it is not practical to perform meaningful checks on the quality of data transferred. However, electronic checking systems would be introduced to check the accuracy of the data being transferred into the database. These would be able to identify, for example, unexpected dates for a field, inconsistent formats, etc.

(iii) Frequency of Data Submission

28. Currently, for the UPOV-ROM, contributors are requested to provide data on a bimonthly basis. Clearly, increasing the frequency of updating data will improve the value of the Plant Variety Database. However, in their responses to the questionnaire, a number of contributors indicated that increasing the frequency of submission of data might not be achievable. The Web-based Plant Variety Database will be developed in such a way that data can be submitted at any frequency (e.g. a daily basis) but would allow, as is the case for the UPOV-ROM, for contributors to update their data at a frequency less than the standard frequency. However, an indication of whether a more frequent submission could be envisaged for the Web-based Plant Variety Database would be very helpful for planning the work.

(c) Use of Data

29. The Plant Variety Database is of primary value in relation to variety denomination information for authorities. However, UPOV would like to retain the possibility, which exists with the UPOV-ROM, to utilize the information which will be contained in the Web-based Plant Variety Database in order to provide additional services to breeders and other users in a way which would, if considered appropriate, allow income generation for UPOV.

30. In order to develop the possibility of UPOV using the Web-based Plant Variety Database for income generation, it would be important for recipients of the raw data to use the data in a way which did not undermine such an approach. In particular, it is anticipated that use of the data by authorities to allow breeders to check possible compliance of variety denominations would not, in itself, undermine the income generating possibilities of the database. However, it would be necessary for each authority to consider how to use the data in a way which did not undermine the UPOV scope for income generation without affecting the service it offered to breeders with regard to variety denomination requirements, which it may wish to make free of charge.

(d) Access to Raw Data for Third Parties

31. The entire data in electronic form is considered as the raw data. It is proposed that the current UPOV policy with regard to access to raw data for parties other than members of the Union and contributors of data (third parties) be retained. Thus, raw data would only be available to members of the Union and contributors of data and would not be available to third parties.

32. In making this proposal it is recognized that it would be important for the Web-based Plant Variety Database to have an effective search capability, which would satisfy the demands of third party users, without a need for access to the raw data as such.

*Links to Other Websites*

33. It is anticipated that allowing breeders to check, in advance, their proposed variety denominations in all territories in which their variety might be registered would reduce the risk of a different variety denomination subsequently being required in different territories. Therefore, one aim in the development of the Web-based Plant Variety Database will be to create a single point of reference for variety denomination checking purposes. Thus, a breeder wishing to check a proposed variety denomination for suitability in several territories could visit the UPOV Website to navigate around the relevant sources of information. Some members of the Union may provide their variety denomination checking software to UPOV in order that users might check their proposed variety denominations on the UPOV Website. However, in other cases, such services may only be available via the authority itself, although it is hoped that their database would be based on the Web-based Plant Variety Database. In such cases, the UPOV Website could provide links to the Websites of such authorities.

34. It is proposed that members of the Union should inform the Office if they wish the UPOV Website to include their software for searching the suitability of variety denominations.

35. In addition to the type of data already included in the UPOV-ROM, there is certain information which may be useful for the examination of proposed variety denominations, but is not considered appropriate for inclusion in the database itself. Examples of such data include information on trademarks and the information held by the International Cultivar Registration Authorities (ICRAs). In order for the UPOV Website to provide a common point of reference for variety denomination checking purposes, it is proposed that the UPOV Website would provide indices and links to the appropriate Web pages or contact details of trademark offices, ICRAs and other useful sources of information.

#### Short-Term Improvements to the UPOV-ROM

36. A consequence of progress on moving the Plant Variety Database to a Web-based system is that the proposed program concerning the short-term improvements to the UPOV-ROM, as identified in paragraph 23 of document TC/39/14-CAJ/47/5, has been revised. Given that a new Web-based version of the Plant Variety Database is planned to be available within 18 months, it would not be an efficient use of the Office's resources to pursue the developments listed below for the existing UPOV-ROM:

- revise the user's guide, including translation into all four UPOV languages;
- provide the user's guide on the UPOV Website;
- include UPOV documents which provide information on members of the Union with experience of a particular species;
- develop a "leaflet" summarizing the uses of the UPOV-ROM for authorities and other users;
- investigate the possibility of saving or printing lists of sorted / selected data; and
- investigate the possibility of including the set-up software with each UPOV-ROM.

37. It is proposed, instead, that the developments listed above, with regard to the UPOV-ROM, should be cancelled and incorporated into the introduction of the new Web-based Plant Variety Database.

38. One proposal for short-term improvements was to develop proposals for training for the purposes of contributing data to the UPOV-ROM and for use of the UPOV-ROM. In that respect, it had been planned to include training on the Plant Variety Database in the UPOV Workshops on Data Handling, held in conjunction with the TWC. It is now planned that this will go ahead, but will be modified to reflect the latest developments.

39. The remaining short-term proposals are related to improving the completeness of data provided by contributors and consideration of making raw data available to third party users for an additional charge. These matters are covered above in relation to the development of the Web-based Plant Variety Database.

#### Future of the UPOV-ROM

40. It is proposed that the UPOV-ROM will continue to be produced on the current basis until further notice.

## GENIE DATABASE

41. At its thirty-ninth session, the TC was informed in document TC/39/13 that the GENIE database was under development with the help of the Information Technology Department of the World Intellectual Property Organization (WIPO), and that a prototype was planned for distribution to members of the Union towards the end of 2003. It was proposed 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. It was noted that any recommendations on the draft from members, or from the parties involved in discussions on the development of the UPOV Code System, would be reflected in the development of this database.

42. Developments in the course of 2003, with regard to the introduction of the UPOV Code System and the Web-based Plant Variety Database, demonstrated that the development of the GENIE database is an integral part of the development of these two other activities. In particular, the GENIE database will be the repository of the UPOV codes and, as explained in paragraph 23, above, will be used to generate the botanical names, common names and variety denomination class for the purposes of the Plant Variety Database.

43. The GENIE database cannot be launched until the UPOV codes have been approved. However, a prototype has been developed and will be demonstrated at the TC and CAJ sessions. At those sessions, the Office will explain the timetable for the development of future prototypes and/or placement of the GENIE database on the UPOV Website.

*44. With regard to the UPOV Code System, the TC is invited:*

*(a) to consider the proposal for providing codes for intergeneric "hybrids," as set out in paragraph 8, above;*

*(b) to consider the proposal for the Office, in conjunction with the chairmen of the TC, TWA and TWV, to prepare a proposal for the TWA, TWV and WG-VD concerning the codes for Brassica and Beta, as set out in paragraph 9, above;*

*(c) to agree to the codes as presented in Annexes I and II of this document (subject to (b), above), and to the checking of the codes in Annexes III and IV of this document, as set out in paragraph 12 and 13, respectively, above;*

*(d) to agree to the procedure for the introduction and amendment of codes, as set out in paragraph 15, above.*

45. *The TC and CAJ are invited to agree to the introduction of the UPOV Code System as set out in paragraph 17, above.*

46. *The TC and CAJ are invited to consider the information concerning the development of the Web-based Plant Variety Database, as set out in paragraphs 18 to 39, above, and, in particular:*

*(a) to comment on the proposal for manual inputting of data from printed gazettes, as set out in paragraph 25, above;*

*(b) to comment on the suitability of the Web-based Plant Variety Database being updated on a monthly basis (see paragraph 28); and*

*(c) to comment on the establishment of links to relevant Websites for variety denomination checking purposes (see paragraphs 33 and 35).*

47. *The TC and CAJ are invited to comment on the proposals regarding short-term improvements to the UPOV-ROM, as set out in paragraphs 36 to 39, and the future of the UPOV-ROM, as set out in paragraph 40, above.*

48. *The TC and CAJ are invited to note the report on the development of the GENIE database, as contained in paragraphs 41 to 43, above.*

[Annex I follows]

**PLEASE NOTE :**

**ANNEXES I, II AND III WILL BE PROVIDED LATER**