



TWC/27/6

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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
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**TECHNICAL WORKING PARTY ON AUTOMATION AND
COMPUTER PROGRAMS**

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VARIETY DESCRIPTIONS DATABASES

Document prepared by the Office of the Union

1. At its forty-fifth session, held in Geneva from March 30 to April 1, 2009, the Technical Committee (TC) agreed to replace the agenda item "Publication of variety descriptions" with an item for "Variety description databases" on the agendas of the forthcoming sessions of the TC, Technical Working Parties and the Working Group on Biochemical and Molecular Techniques, and DNA-Profiling in Particular (BMT). The background to that development is explained in this document.
2. It is recalled that the aim of the project to consider the publication of variety descriptions (see document TC/38/10, Annex) was:
 - (a) to increase the availability of variety description information to interested parties (i.e. DUS examiners, breeders and maintainers of varieties of common knowledge) and thereby to maximize the effectiveness of the examination of distinctness; and
 - (b) to use appropriate elements of the variety description, in the process of examining distinctness, to eliminate varieties which do not require further comparison and to identify those varieties against which a further comparison is required,

3. At its meeting in Geneva, on March 31, 2004, the *Ad hoc* Working Group on the Publication of Variety Descriptions (WG-PVD) clarified that, with respect to the UPOV Plant Variety Database, the intention was not to develop an “on-line” DUS examination.

4. At its forty-third session, held in Geneva, from March 26 to 28, 2007, the Technical Committee (TC) agreed the list of criteria for consideration by the Technical Working Parties (TWPs) for the use of descriptions obtained from different locations and sources as follows:

- (a) to consider the species for which they see a real interest in creating an international database with variety descriptions;
- (b) to specify the aim and benefits expected;
- (c) to select the characteristics for which descriptions should be published;
- (d) to specify for each characteristic the degree of harmonization already achieved or aimed at (in the latter case, to specify if actions should be planned in order to improve the level of harmonization: ring tests, revision of the description of the way of observation in the guideline, ...);
- (e) to study the pertinence of a “regional approach”, rather than an “international approach” (to consider groups of countries and to compare descriptions within those groups only);
- (f) to propose minimum distances when making comparisons of data, for the relevant characteristics;
- (g) to list the countries which would contribute to the publication;
- (h) to consider the type of access (free or restricted to the contributors); and
- (i) to consider the cost of any project.

5. The TC agreed that no further meeting of the WG-PVD should be arranged unless or until specific proposals were developed for the consideration of the WG-PVD by the TC or by a TWP.

6. At its forty-fifth session, the TC observed the apparent commonality between certain matters reported under the agenda items “Matters arising from the Technical Working Parties” (see document TC/45/3, paragraph 10: “Development of common databases for the management of variety collections”) and “Molecular techniques” (see document TC/45/7, paragraphs 26 to 33: “Practical exercise in the development of an exchangeable database”) with the item “Publication of variety descriptions” (see document TC/45/9 and this document).

7. The relevant extracts from documents TC/45/3 and TC/45/7 are reproduced here for convenience.

8. Extract from document TC/45/3:

“Development of common databases for the management of variety collections

“10. The Technical Working Party on Automation and Computer Programs (TWC), at its twenty-sixth session held in Jeju, Republic of Korea, from September 2 to 5, 2008, discussed the following documents concerning databases for the management of variety collections.

“(a) Information on Zea mays common database

(document TWC/26/16, prepared by experts from France, Germany, Spain and the Community Plant Variety Office of the European Community (CPVO))

“11. The TWC considered document TWC/26/16, presented by Mr. Sylvain Grégoire (France). It was explained that the purpose of the project was to develop a database for use by the project partners in the management of reference collections and that it was not intended to publish descriptions from the database.

“(b) A research project co-financed by the Community Plant Variety Office of the European Community (CPVO): “Management of winter oilseed rape reference collections”

(document TWC/26/18, prepared by experts from the United Kingdom)

“12. The TWC considered document TWC/26/18, presented by Mr. Sylvain Grégoire (France). He explained that the document had been prepared primarily for consideration at the eleventh session of the Working Group on Biochemical and Molecular Techniques, and DNA-Profiling in Particular (BMT), to be held in Madrid, from September 16 to 18, 2008.

“(c) Correlation between different types of distance/similarity measures on a set of Winter Oilseed Rape characteristics of different types (nominal to ratio scale)

(document TWC/26/20, prepared by experts from Germany)

“13. The TWC considered document TWC/26/20 and a presentation made by Mr. Uwe Meyer (Germany), a copy of which is reproduced in document TWC/26/20 Add.. It was noted that the type of characteristic should be checked in Tables 1 and 2. For example, UPOV numbers 13 and 14 should be changed from QL to QN.”

9. Extract from document TC/45/7:

“PRACTICAL EXERCISE IN THE DEVELOPMENT OF AN EXCHANGEABLE DATABASE

“26. At its forty-second session, the TC agreed to investigate the possibility of a practical exercise, involving a small number of crops, in the development of an exchangeable database. It agreed that it would be necessary to set clear terms of reference for that work and agreed that such terms of reference should be considered at its forty-third session. In the meantime, it agreed to invite the BMT, at its tenth session, to suggest suitable crops where such a practical exercise might be appropriate. At its tenth session, the BMT agreed to suggest oilseed rape, potato and rose as suitable crops where a practical exercise in the development of an exchangeable database might be appropriate. It was agreed that the terms of reference to be established by the TC for that work should clarify what was meant by an exchangeable database and whether it referred to the structure of the database or the quality of the data and whether it would involve a test data set rather than the complete set of data which an authority had for the crop concerned. At its forty-third session, the TC agreed that the Crop Subgroups for Rose, for Potato and for Oilseed Rape should be invited to consider how to take that matter forward. With respect to the terms of reference for such an exercise, the TC agreed that the exercise should consider both the quality and structure of the data.

“27. There have been no substantial developments in relation to a practical exercise in the development of an exchangeable database beyond those reported in

document TC/44/7. However, the following information from that document is recalled for information.

“28. The Crop Subgroup for Potato, at its second session held in Quimper, France, on April 17, 2007 agreed that it would be useful for the experts working on the Community Plant Variety Office of the European Community (CPVO) project and at the French Federation of Potato Seed Growers (FNPPPT), to cooperate in order to investigate the compatibility of data obtained using different technologies.

“29. At the thirty-sixth session of the TWA, held in Budapest, Hungary, from May 28 to June 1, 2007, an expert from the United Kingdom informed the TWA that NIAB was working on the use of molecular techniques for variety identification in potato. The TWA agreed that it would be useful for that expert to contact the coordinator of the CPVO project who was discussing with the *Institut national de la recherche agronomique* (INRA, France) the possibility to cooperate in order to investigate the compatibility of data obtained using different technologies.

“30. At the twenty-fifth session of the TWC, held in Sibiu, Romania, from September 3 to 6, 2007, the expert from the Netherlands noted that the TC had agreed to investigate the possibility of a practical exercise, involving a small number of crops, in the development of an exchangeable database and observed that the TWC might be able to provide assistance on techniques for checking repeatability. An expert from the United Kingdom reported on a project on oilseed rape, financed by the CPVO. He explained that, in that project, the biggest problems in harmonization had been with morphological data rather than with molecular data. An expert from Germany considered that it was necessary to develop a harmonized structure for exchanging data as well as harmonizing the data itself, before developing any database. He added that the TWC could provide guidance in that process of harmonization. An expert from France reported that a database containing descriptions of maize varieties from France, Germany and Spain had been developed.

“31. The TWC agreed to invite experts from France, Germany and Spain to make a presentation at the next session of the TWC on the development and operation of the maize database and the benefits which it offered for the participating partners. A report on that presentation is made under agenda item 5 “Matters arising from the Technical Working Parties” (see document TC/45/3, paragraph 10).

“32. At its eleventh session, held in Madrid, from September 16 to 18, 2008, the BMT agreed that it would be more appropriate to change the title of this item to “Development of common database structure for molecular data”.

10. The TC noted from the developments reported above, that members of the Union were developing databases containing morphological and/or molecular data and, where considered appropriate, were collaborating in the development of databases for the management of variety collections, particularly on a regional basis. The TC agreed that it could be beneficial to offer the possibility for members of the Union to report on that work in a coherent way to the Technical Committee, the Technical Working Parties and the BMT. On that basis, the TC agreed to replace the agenda item “Publication of variety descriptions” with an item for “Variety description databases” on the agendas of the forthcoming sessions of the TC, TWPs and the BMT. In that respect, it recalled the importance of the list of criteria for consideration for the use of descriptions obtained from different locations and sources as set out in paragraph 4 of this document. The TC also agreed that the information presented would not need to be related to the publication of descriptions.

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