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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS GENEVA

TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS

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PROJECT TO CONSIDER THE PUBLICATION OF VARIETY DESCRIPTIONS

Document prepared by the Office of the Union and experts from France and Germany

- 1. The purpose of this document is to report on developments concerning the project to consider the publication of variety descriptions.
- 2. As explained at the thirty-fourth session of the Technical Working Party for Agricultural Crops (TWA) (see document TWA/34/6), the *Ad hoc* Working Group on the Publication of Variety Descriptions (WG-PVD) made the following recommendations at its meeting on April 6, 2005:
 - (a) the model studies should be completed;
 - (b) the Technical Working Parties (TWPs) and the Technical Committee (TC) should:
- (i) review the results of the model studies and seek to draw conclusions on the sources and types of variation (e.g. regional variation, method of examination of characteristics);
- (ii) draw conclusions in relation to the aim of the project concerning the possibility "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";

- (iii) draw conclusions in relation to possible improvements in other relevant aspects of UPOV's work e.g. in relation to the development of Test Guidelines;
- (c) the WG-PVD should consider the conclusions of the TWPs and the TC at its next meeting.

Developments in the Technical Committee

- 3. A report of the results of the model studies presented to the TWPs in 2005 and the conclusions of the TWPs were reported to the TC at its forty-second session, held in Geneva, from April 3 to 5, 2006 (see document TC/42/9). The TC noted the information provided in document TC/42/9 and, in particular, the following aspects, which might be considered as part of a revision of document TGP/7/1 "Development of Test Guidelines".
- (a) the Test Guidelines should explain the use of the 3, 5, 7 abbreviated notes in the 1-9 scale for quantitative characteristics (see document TC/42/5 Annex I: Annex 1: TG Template 6.3); and
- (b) to consider the development of tools such as CD-ROMs containing photographs to enhance the understanding of the characteristics used in the Test Guidelines and thereby reduce observer error (see document TC/42/5 Annex I: Annex 4: Collection of Approved Characteristics").

Recommendations of the WG-PVD

4. At its meeting on April 5, 2006, the WG-PVD considered the report on progress in the model studies (document TC/40/9) and an oral report of the discussions in the forty-second session of the Technical Committee.

5. The WG-PVD recommended:

- (a) to invite the TWPs and the TC to develop a list of criteria for the use of descriptions obtained from different locations and sources (the experts from France and Germany participating in the WG-PVD agreed to provide some key points as a starting point for discussion);
- (b) to invite the TWPs to consider crops where those criteria might be satisfied such that the use of descriptions obtained from different locations and sources would be useful. For those selected crops, to investigate the value of the existing grouping / asterisked characteristics, or possibly other characteristics, in the grouping of varieties based on descriptions from different locations and sources (a "reality" check).

Developments in the Administrative and Legal Committee (CAJ)

6. The CAJ received an oral report from the Vice Secretary-General on the meeting on April 5, 2006 of the WG-PVD. The CAJ took note of that report.

Matters for consideration by the TWPs in 2006

- 7. As explained in paragraph 5, the TWPs are invited to
- (a) develop a list of criteria for the use of descriptions obtained from different locations and sources; and
- (b) to consider crops where those criteria might be satisfied such that the use of descriptions obtained from different locations and sources would be useful. For those selected crops, to investigate the value of the existing grouping / asterisked characteristics, or possibly other characteristics, in the grouping of varieties based on descriptions from different locations and sources (a "reality" check).
- 8. In accordance with the discussions in the WG-PVD, the experts from France and Germany participating in the WG-PVD have provided in the Annex to this document some key points as a starting point for discussion concerning a list of criteria for the use of descriptions obtained from different locations and sources.

[Annex follows]

ANNEX

KEY POINTS AS A STARTING POINT FOR THE DEVELOPMENT OF A LIST OF CRITERIA FOR THE USE OF DESCRIPTIONS OBTAINED FROM DIFFERENT LOCATIONS AND SOURCES

prepared by experts from France and Germany

Introduction

- 1. At its meeting on April 5, 2006, the *Ad hoc* Working Group on the Publication of Variety Descriptions (WG-PVD) recommended that the Technical Working Parties (TWPs) and the Technical Committee (TC) should develop a list of criteria for the use of descriptions obtained from different locations and sources. It was agreed that the experts from France and Germany should provide some key points as a starting point for discussion, which is the basis for this paper.
- 2. Several pilot studies have been conducted in the framework of the TWPs or other bodies out of UPOV during the last years. All of them involved comparisons of descriptions made by different member states on a set of common varieties. They gave useful indications on the level of harmonization of the descriptions which allowed the technical aspects of the project to be considered.
- 3. The pilot studies showed that as soon as more than one country conducts DUS tests in a given species, there is no unique description of a variety. This was found even on crops for which the observations were conducted in semi controlled or fully controlled conditions (greenhouses, growth chambers...). The reasons for such discrepancies were found to include the nature of the material observed (living material), the natural variability of the experimental conditions, and the subjectivity linked to the human observation. Two main sources of variation were identified: the environmental effect (soil and climate) and the observer effect (method of observation). The observer effect can be reduced by technical exchanges between crop experts, whereas the variation due to the locations of the trials cannot be avoided. Controlling the existence and the importance of such variations in a given crop appeared as one of the key aspects when evaluating the interest of constructing an international data base with variety descriptions.
- 4. Recognizing the unavoidable level of "disharmonization" between descriptions lead to several considerations:
- (a) it is in general not appropriate to use the information on variety descriptions available in an international database <u>directly</u> to take decision on distinctness. This cannot be the aim of the project of publication of variety descriptions¹.
- (b) the main interest foreseen from the pilot studies lies in the management of variety collections: having easy access to descriptions of varieties of common knowledge is seen by

¹ The aim of the project to consider the publication of variety descriptions is:

⁽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.

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certain crop experts as a potential help to make the selection of close varieties and the elimination of very distinct varieties from the growing trials. Achieving this aim requires, firstly, to know the level of harmonization between members of the Union providing descriptions. Then, it is necessary to define carefully which information should be published (grouping characteristics, asterisk characteristics, others, conditions of observations, locations, years...). For those characteristics where the information cannot be fully harmonized, it is necessary to define the methods to be used in the process of selection/elimination of reference varieties. In particular, the minimum distances applied when comparing data coming from different origins and locations should control the risk associated with the decision taken "on paper", without "seeing" the concerned varieties in one's own conditions.

(c) the interest of the publication of variety descriptions varies from crop to crop, according to the specificity of the crop and the expected benefits. The interest appears higher for an ornamental crop observed in a greenhouse, described with many qualitative characteristics and spread all over the world, than for a grass variety observed outdoors, described with few quantitative characteristics and highly influenced by the year and location., and regionally cultivated. The decision to establish and update an international database with variety descriptions requires the evaluation of these criteria and crop-by-crop investigation of the advantages brought by the new data which would be made available, bearing in mind the extra work required to build the database and to update and to make use of the information. Only a positive balance would be acceptable.

Key points for a list of criteria

- 5. On the basis explained above, the following key points are proposed for consideration by the TWPs as a starting point for the development of a list of criteria for the use of descriptions obtained from different locations and sources:
 - (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; and
 - (h) to consider the type of access (free or restricted to the contributors).

[End of Annex and of document]