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| International Union for the Protection of New Varieties of Plants |  |

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| Technical CommitteeFifty-Eighth SessionGeneva, October 24 and 25, 2022 | TC/58/4Original: EnglishDate: July 19, 2022 |

Development of guidance and information materials - Matters for adoption by the Council in 2022

Document prepared by the Office of the Union

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# EXECUTIVE SUMMARY

 The purpose of this document is to report on developments concerning the adoption of guidance and information materials and to invite the TC to consider relevant documents to be put forward for adoption by the Council, in 2022; subject to approval by the CAJ.

 The TC is invited to:

1. consider the proposed revision of document UPOV/INF/16 “Exchangeable Software” on the basis of document UPOV/INF/16/11 Draft 1 and the recommendations from the TWM, at its first session;
2. note that, subject to agreement by the CAJ, an agreed draft of document UPOV/INF/16 will be presented for adoption by the Council in 2022;
3. consider the proposed revision of document UPOV/INF/22 “Software and Equipment Used by Members of the Union” on the basis of document UPOV/INF/22/9 Draft 1;
4. note that, subject to agreement by the CAJ, an agreed draft of document UPOV/INF/22 will be presented for adoption by the Council in 2022;
5. note that, subject to agreement by the CAJ, the proposed revision of document UPOV/EXN/DEN/1 will be presented for adoption by the Council in 2022;
6. note that, subject to agreement by the CAJ, an agreed draft of document TGP/5: Section 6 will be presented for adoption by the Council in 2022;
7. note that, subject to agreement by the CAJ, the proposed revision of document TGP/8/4 will be presented for adoption by the Council in 2022; and
8. note that, subject to agreement by the CAJ, the proposed revision of document TGP/12/2 will be presented for adoption by the Council in 2022.

 The structure of this document is as follows:

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ANNEX I Document UPOV/EXN/DEN: Explanatory Notes on Variety Denominations under the UPOV Convention (Revision)

ANNEX II Document TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability (Revision)

ANNEX III Document TGP/12: Guidance on certain physiological characteristics (Revision)

 The following abbreviations are used in this document:

CAJ: Administrative and Legal Committee

TC: Technical Committee

TWM: Technical Working Party on Testing Methods and Techniques

TWPs: Technical Working Parties

# BACKGROUND

 The approved guidance and information materials are published on the UPOV website at <http://www.upov.int/upov_collection/en/>.

# Matters proposed for adoption by the Council in 2022

## Information Materials

### Revision of document UPOV/INF/16 “Exchangeable Software” (document UPOV/INF/16/11 Draft 1)

#### Information on use by members of the Union

 Section 4 of document UPOV/INF/16 “Exchangeable Software” provides the following:

“4. Information on use by members of the Union

“4.1 A circular is issued to members of the Union on an annual basis, inviting them to provide information on their use of the software included in document UPOV/INF/16.

“4.2 The information on software use by members of the Union is indicated in the columns ‘Member(s) of the Union using the software’ and ‘Application by user(s)’. With regard to the indication of ‘Application by user(s)’, members of the Union can indicate, for example, crops or types of crop for which the software is used.”

 The Office of the Union issued on January 18, 2022, Circular E-22/002 to the designated persons of the members of the Union in the TC, inviting them to provide or update information regarding the use of the software included in document UPOV/INF/16/11 Draft 1 “Exchangeable software”. In response to Circular E‑22/002, China, Czech Republic, France, Poland and Uzbekistan provided information on use of software included in document UPOV/INF/16.

 The TC and the CAJ will be invited to agree on the proposals to revise document UPOV/INF/16/10 “Exchangeable Software”, as presented in document UPOV/INF/16/11 Draft 1.

#### Inclusion of software in document UPOV/INF/16

 Section 2 of document UPOV/INF/16 “Exchangeable Software” provides the following:

“Software proposed for inclusion in document UPOV/INF/16 by members of the Union is, in the first instance, presented for review by the Technical Working Party on Automation and Computer Programs (TWC). On the basis of such presentations and the experience of members of the Union, the TWC makes a recommendation to the Technical Committee (TC) on whether to include that software in document UPOV/INF/16 […].”

 The Office of the Union issued on January 18, 2022, Circular E-22/002 to the designated persons of the members of the Union in the TC, inviting them to submit proposals for new or updated information of software for inclusion in document UPOV/INF/16/11 Draft 1 “Exchangeable software”.

 The TC, at its fifty-seventh session, agreed to invite members of the Union to propose the inclusion of software incorporating their methods for converting observations into notes in document UPOV/INF/16 or document UPOV/INF/22, as appropriate, with a reference to the availability of such methods in document TGP/8 Part I, new Section 2.5 (see document TC/57/25 “Report”, paragraph 28). This invitation was included in Circular E-22/002, of January 18, 2022.

##### Proposals for inclusion of software in document UPOV/INF/16

 In response to Circular E-22/002, the Office of the Union received proposals for the inclusion of software in document UPOV/INF/16 from China (DUSCEL), France (PATHOSTAT) and Uzbekistan (SATOZ).

 Software proposed for inclusion in document UPOV/INF/16 will be presented for review by the TWM, at its first session, to be held from September 19 to 23, 2022. The TWM will be invited to make a recommendation for consideration by the TC, at its fifty‑eighth session, on whether to include the proposed software in document UPOV/INF/16.

 The TC is invited to:

 (a) consider the proposed revision of document UPOV/INF/16 “Exchangeable Software” on the basis of document UPOV/INF/16/11 Draft 1 and the recommendations from the TWM, at its first session; and

 (b) note that, subject to agreement by the CAJ, an agreed draft of document UPOV/INF/16 will be presented for adoption by the Council in 2022.

### Revision of document UPOV/INF/22 “Software and Equipment Used by Members of the Union” (document UPOV/INF/22/9 Draft 1)

 The TC and the CAJ will be invited to agree on the proposals to revise document UPOV/INF/22/8 “Software and equipment used by members of the Union”, as presented in document UPOV/INF/22/9 Draft 1.

 The TC is invited to:

 (a) consider the proposed revision of document UPOV/INF/22 “Software and Equipment Used by Members of the Union” on the basis of document UPOV/INF/22/9 Draft 1; and

 (b) note that, subject to agreement by the CAJ, an agreed draft of
document UPOV/INF/22 will be presented for adoption by the Council in 2022.

## Explanatory Notes

### Explanatory Notes on Variety Denominations under the UPOV Convention (document UPOV/EXN/DEN)

 The TC, at its fifty-seventh session[[1]](#footnote-2), agreed to propose the revision of document UPOV/EXN/DEN/1 “Explanatory Notes on Variety Denominations under the UPOV Convention”, as presented in Annex I to this document (see document TC/57/25 “Report”, paragraph 34).

 Subject to agreement by the CAJ, the proposed revision of document UPOV/EXN/DEN/1 will be presented for adoption by the Council in 2022.

 The TC is invited to note that, subject to agreement by the CAJ, the proposed revision of document UPOV/EXN/DEN/1 will be presented for adoption by the Council in 2022.

## TGP Documents

### TGP/5:  Experience and Cooperation in DUS Testing, Section 6: UPOV Report on Technical Examination and UPOV Variety Description (Revision) (document TGP/5: Section 6/4 Draft 1)

 The TC, at its fifty-seventh session[[2]](#footnote-3), agreed to propose the revision of document TGP/5 “Experience and Cooperation in DUS Testing”, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description”, as presented in document TGP/5: Section 6/4 Draft 1 (see document TC/57/25 “Report”, paragraph 22).

 Subject to agreement by the CAJ, an agreed draft of document TGP/5: Section 6 will be presented for adoption by the Council in 2022.

 The TC is invited to note that, subject to agreement by the CAJ, an agreed draft of document TGP/5: Section 6 will be presented for adoption by the Council in 2022.

### TGP/8:  Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability (Revision) (Annex II)

 The TC, at its fifty-seventh session[[3]](#footnote-4), agreed to propose the revision of document TGP/8/4“Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability”, as presented in Annex II to this document (see document TC/57/25 “Report”, paragraph 27).

 Subject to agreement by the CAJ, the proposed revision of document TGP/8/4 will be presented for adoption by the Council in 2022.

 The TC is invited to note that, subject to agreement by the CAJ, the proposed revision of document TGP/8/4 will be presented for adoption by the Council in 2022.

### TGP/12:  Guidance on Certain Physiological Characteristics (Revision) (Annex III)

 The TC, at its fifty-seventh session[[4]](#footnote-5), agreed to propose the revision of document TGP/12/2 “Guidance on certain physiological characteristics”, as presented in Annex III to this document (see document TC/57/25 “Report”, paragraphs 44 and 45).

 Subject to agreement by the CAJ, the proposed revision of document TGP/12/2 will be presented for adoption by the Council in 2022.

 The TC is invited to note that, subject to agreement by the CAJ, the proposed revision of document TGP/12/2 will be presented for adoption by the Council in 2022.

[Annexes follow]

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ANNEX I

Document UPOV/EXN/DEN: Explanatory Notes on Variety Denominations under the UPOV Convention (Revision)

*Revision of denomination Class 201*

The TC, at its fifty-seventh session, held via electronic means on October 25 and 26, 2021, considered a proposal to revise document UPOV/EXN/DEN/1, Annex I, Part II “Classes encompassing more than one genus” and agreed to propose the inclusion of genus “×*Trititrigia*” in the variety denomination Class 201, as follows (see document TC/57/25 “Report”, paragraph 34):

LIST OF CLASSES (Part II)

*Classes encompassing more than one genus*

|  | Botanical names | UPOV codes |
| --- | --- | --- |
|  |  |  |
| Class 201 | *Secale*, *Triticale*, *Triticum,* ×*Trititrigia* | SECAL; TRITL; TRITI; TRITT |

[Annex II follows]

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ANNEX II

Document TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability (Revision)

*Data processing for the production of variety descriptions for measured quantitative characteristics*

The TC, at its fifty-seventh session, held via electronic means on October 25 and 26, 2021, agreed to include guidance on “Different forms that variety descriptions could take and the relevance of scale levels” in document TGP/8 Part I Section 2 “Data to be recorded” as new Section 2.5, as follows (see document TC/57/25 “Report”, paragraph 27):

“DIFFERENT FORMS THAT VARIETY DESCRIPTIONS COULD TAKE

AND THE RELEVANCE OF SCALE LEVELS

“Variety descriptions can be based on different data depending on the purpose of the description. Different variety descriptions may be used for the assessment of distinctness or in the official document which forms the basis for granting protection. When variety descriptions are used for the assessment of distinctness it is important to take into account on which data the descriptions for different varieties are based. Special attention has to be given to the potential influence of years and locations.

“The different forms of variety descriptions and their relevance for the assessment of distinctness can be classified according to the different process levels to look at a characteristic. The process levels are defined in document TGP/8: Part I “DUS trial design and data analysis” Section 2 “Data to be recorded” as follows:

*Table 5: Definition of different process levels to consider characteristics*

|  |  |
| --- | --- |
| Process level | Description of the process level |
| 1 | characteristics as expressed in trial |
| 2 | data for evaluation of characteristics |
| 3 | variety description |

“The process levels relevant for the assessment of distinctness are level 2 and 3. Any comparison between varieties in the same trial (same year(s), same location) is carried out on the actual data recorded in the trial. This approach relates to process level 2. If varieties are not grown in the same trial, they have to be compared on the basis of variety descriptions which relates to process level 3. In general, the identification of similar varieties to be included in the growing trial ("Management of variety collection") relates to process level 3, whereas data evaluation within the growing trial relates to process level 2.

|  |  |  |  |
| --- | --- | --- | --- |
| Process level | Measurements(QN) | Visual assessment(QN/QL/PQ) | Remark |
| 2 | Values | Notes | Basis for comparison within the same trial |
| 3 | Transformation into notes Notes | Same Notes as in Process level 1Notes | Notes resulting from one year and location |
|  | "**Mean variety description**" If varieties are assessed in several trials/years/locations mean descriptions can be established. | Basis for management of variety collection |

“In general, quantitative characteristics are influenced by the environment. An efficient way to reduce the environmental influence is the transformation of actual measurements into notes. The notes represent a standardized description of varieties in relation to example varieties (see TGP/7). In addition, the comparability of variety descriptions for varieties not tested in the same trial can be improved by calculating a mean description over several growing cycles. In particular, the mean description over several growing cycles at the same location can provide a representative description related to the location. The calculation of a mean description over different locations should only be considered if the effects of the locations are very well known and variety x location interactions can be excluded for all characteristics. The calculation of mean descriptions over locations should be restricted to the cases where these conditions are fulfilled.

“If variety descriptions from different growing trials are used for the assessment of distinctness - that means for the management of variety collections - it is important to take into account the origin of the different variety descriptions of the candidate variety and the varieties of common knowledge. The comparability of variety descriptions is influenced by many factors, for example:

* Description based on a single year or a mean over several years?
* Description based on the same location or different locations?
* Are the effects of the different location known?
* Varieties described in relation to the same variety collection or a variety collection which might cover a different range of variation?

“The potential bias of variety descriptions due to environmental effects between candidate varieties and varieties in the variety collection have to be taken into account in the process of distinctness testing, and in particular, for the identification of varieties of common knowledge to be included in the growing trial.”

[Annex III follows]

TC/58/4

ANNEX III

Document TGP/12: Guidance on certain physiological characteristics (Revision)

The TC, at its fifty-seventh session, held via electronic means on October 25 and 26, 2021, agreed to amend document TGP/12/2, Section 2.3.2, to replace state of expression “moderately resistant” by “intermediate”’ in the example of disease resistance characteristic with ‘1-3’ scale, to read as follows (see document TC/57/25 “Report”, paragraphs 44 and 45):

Example with “1–3” scale: Resistance to *Sphaerotheca fuliginea* (*Podosphaera xanthii*) (Powdery mildew) in Melon (UPOV Test Guidelines: TG/104/5)

|  |  | English |  |  | Example Varieties | Note |
| --- | --- | --- | --- | --- | --- | --- |
| **70.(+)** | **VG** | **Resistance to Sphaerotheca fuliginea (Podosphaera xanthii) (Powdery mildew)** |  |  |  |  |
| **70.1** |  | **Race 1** |  |  |  |  |
| QN |  | susceptible |  |  | […] | 1 |
|  |  | ~~moderately~~ intermediateresistant[[5]](#footnote-6)  |  | […] | 2 |
|  |  | highly resistant |  |  | […] | 3 |

 [End of Annex III and of document]

1. Held via electronic means on October 25 and 26, 2021 [↑](#footnote-ref-2)
2. Held via electronic means on October 25 and 26, 2021 [↑](#footnote-ref-3)
3. Held via electronic means on October 25 and 26, 2021 [↑](#footnote-ref-4)
4. Held via electronic means on October 25 and 26, 2021 [↑](#footnote-ref-5)
5. The TWV, at its fifty-sixth session, held via electronic means from April 18 to 22, 2022, agreed that state “intermediate” in the example provided in document TWP/6/1, paragraph 28, should read “intermediate resistant” (see document TWV/56/22 “Report”, paragraph 20). [↑](#footnote-ref-6)