

Technical Working Party for Vegetables

Fifty-Sixth Session

Virtual meeting, April 18 to 22, 2022

TWP/6/1**Original:** English**Date:** February 23, 2022**Technical Working Party for Agricultural Crops**

Fifty-First Session

Cambridge, United Kingdom, May 23 to 27, 2022

Technical Working Party for Ornamental Plants and Forest Trees

Fifty-Fourth Session

Hanover, Germany, June 13 to 17, 2022

Technical Working Party for Fruit Crops

Fifty-Third Session

Virtual meeting, July 11 to 15, 2022

Technical Working Party on Testing Methods and Techniques

First Session

Virtual meeting, September 19 to 23, 2022

DEVELOPMENT OF GUIDANCE AND INFORMATION MATERIALS*Document prepared by the Office of the Union**Disclaimer: this document does not represent UPOV policies or guidance***EXECUTIVE SUMMARY**

1. The purpose of this document is to provide an overview of the development of guidance and information materials.
2. This document is presented in two sections. The first section, "Matters for consideration by the Technical Working Parties" (TWPs) identifies matters where the Technical Committee has invited the TWPs to consider proposals for possible future revision of guidance and information materials. The second section, "Matters for information", is provided for information of the TWPs but does not require consideration at this stage.

Matters for consideration by the Technical Working Parties*Document UPOV/INF/23 "UPOV Code System"*

3. The TWPs are invited to consider the proposal to revise document UPOV/INF/23 "Guide to the UPOV Code System" to clarify the maximum number of six characters to be used in the appended element, as set out in paragraph 13 of this document.

Document TGP/7 “Development of Test Guidelines”

Example varieties for asterisked quantitative characteristics when illustrations are provided

4. The TWPs are invited to consider:

- (a) the proposal to amend document TGP/7 to remove the requirement to provide example varieties for asterisked quantitative characteristics if illustrations are provided, as set out in paragraphs 18 and 19; and
- (b) to clarify situations when example varieties would still be required.

Indication of grouping characteristics in UPOV Test Guidelines (Table of characteristics and TQ 5)

5. The TWPs are invited to consider the proposal to revise document TGP/7 “Development of Test Guidelines” to indicate characteristics in the table of characteristics and technical questionnaire used as grouping characteristics, as set out in paragraph 22 of this document.

Converting standard wording in the Test Guidelines template, paragraph 4.2.2, into additional standard wording (ASW).

6. The TWPs are invited to consider whether to amend document TGP/7 “Development of Test Guidelines” to convert the standard wording in the Test Guidelines template, paragraph 4.2.2, into additional standard wording (optional), as set out in paragraph 25 of this document.

Document TGP/12 ‘Guidance on certain physiological characteristics’

7. The TWV is invited to consider whether to revise the states of expression in the example characteristic in document TGP/12/2, Section 2.3.2, to address the use of the word “highly” in only one state of expression.

Matters for information

8. The TWPs are invited to note:

(a) that matters for information concerning a proposal to revise document TGP/5, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description” to include additional information in DUS test reports and alternative approaches to enhance the use of existing DUS test reports are presented in Annex VI to this document;

(b) that matters for information concerning the addition of state of expression and placement of non-asterisked disease resistance characteristics in the Technical Questionnaire are presented in Annex VII to this document; and

(c) that matters concerning a possible future revision of document TGP/8, Section 9, “The Combined-Over-Years Uniformity Criterion (COYU)” are presented in document TWP/6/11 “The Combined-Over-Years Uniformity Criterion (COYU)”; and

(d) that matters for adoption by the Council in 2022 are presented in Annex VIII to this document;

(e) the program for the development of relevant guidance and information materials presented in Annexes IX and X to this document;

9. The structure of this document is as follows:

EXECUTIVE SUMMARY.....	1
MATTERS FOR CONSIDERATION BY THE TECHNICAL WORKING PARTIES”.....	4
Document UPOV/INF/23 “UPOV Code System”	4
<i>Maximum number of characters in the appended element to UPOV codes</i>	4
Document TGP/7 “Development of Test Guidelines”.....	4

<i>Example varieties for asterisked quantitative characteristics when illustrations are provided</i>	4
<i>Indication of grouping characteristics in UPOV Test Guidelines (Table of characteristics and TQ 5)</i>	5
<i>Converting standard wording in Test Guidelines into optional wording</i>	7
Document TGP/12 ‘Guidance on certain physiological characteristics’	7
<i>Word “highly” in only one state of expression</i>	7
MATTERS FOR INFORMATION	8
Matters for adoption by the Council in 2022	8
Possible future revisions of guidance and information materials	8
<i>Document TGP/7: Development of Test Guidelines</i>	8
<i>Document TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability</i>	8
Program for the development of relevant guidance and information materials	8
MATTERS FOR ADOPTION BY THE COUNCIL IN 2022	1
Document TGP/5 Section 6: UPOV Report on Technical Examination and UPOV Variety Description	1
<i>Testing facility and location</i>	1
Document TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability (Revision).....	1
<i>Data processing for the production of variety descriptions for measured quantitative characteristics</i>	1
Document TGP/12 ‘Guidance on certain physiological characteristics’	2
<i>Use of disease resistance characteristics</i>	2
Document UPOV/EXN/DEN “Explanatory Notes on Variety Denominations under the UPOV Convention”.....	3
<i>Revision of denomination Class 201</i>	3
Document UPOV/INF/23 “UPOV Code System”	1
<i>Maximum number of characters in the appended element to UPOV codes</i>	1
Document TGP/7 “Development of Test Guidelines”	1
<i>Example varieties for asterisked quantitative characteristics when illustrations are provided</i>	1
<i>Indication of grouping characteristics in UPOV Test Guidelines (Table of characteristics and TQ 5)</i>	1
<i>Converting standard wording in the Test Guidelines template, paragraph 4.2.2, into additional standard wording (ASW)</i>	1
Document TGP/12 ‘Guidance on certain physiological characteristics’	1
<i>Use of disease resistance characteristics</i>	1
Document TGP/5 Section 6: UPOV Report on Technical Examination and UPOV Variety Description	1
<i>Additional information to be included in DUS test reports</i>	1
<i>Disease resistance characteristics: Addition of state of expression and placement of non-asterisked disease resistance characteristics in Section 5 of the Technical Questionnaire</i>	1
ANNEX I: Maximum number of characters in the appended element to UPOV codes	
ANNEX II: Requirement to provide example varieties for asterisked quantitative characteristics	
ANNEX III: Indication of grouping characteristics in UPOV Test Guidelines	
ANNEX IV: Converting standard wording in Test Guidelines into optional wording	
ANNEX V: Document TGP/12: Example disease resistance characteristic: Word “highly” in only one state of expression	
ANNEX VI: UPOV report on technical examination and UPOV variety description	
ANNEX VII: Addition of state of expression and placement of non-asterisked disease resistance characteristics	
ANNEX VIII: Matters for adoption by the Council in 2022	
ANNEX IX: Program for the development of TGP documents	
ANNEX X: Program for the development of information materials	

10. The following abbreviations are used in this document:

BMT:	Working Group on Biochemical and Molecular Techniques and DNA-Profiling in Particular
CAJ:	Administrative and Legal Committee
TC:	Technical Committee
TC-EDC:	Enlarged Editorial Committee
TWA:	Technical Working Party for Agricultural Crops
TWC:	Technical Working Party on Automation and Computer Programs
TWF:	Technical Working Party for Fruit Crops
TWM:	Technical Working Party on Testing Methods and Techniques
TWO:	Technical Working Party for Ornamental Plants and Forest Trees
TWV:	Technical Working Party for Vegetables
TWPs:	Technical Working Parties

MATTERS FOR CONSIDERATION BY THE TECHNICAL WORKING PARTIES”

11. The TC, at its fifty-seventh session¹, agreed to invite the TWPs to consider the following proposals for possible future revision of guidance and information materials at their sessions in 2022 (see document TC/57/25 “Report”, paragraphs 38 and 39).

Document UPOV/INF/23 “UPOV Code System”

Maximum number of characters in the appended element to UPOV codes

12. The background to this matter is provided in Annex I to this document.

13. It is proposed to amend document UPOV/INF/23 “UPOV Code System” to clarify the maximum number of characters to be used in the appended element to UPOV codes, as follows (deletions indicated with highlighting and ~~strike through~~; additions indicated with highlighting and underline):

“5 UPOV CODE: APPENDED INFORMATION

“5.1 Appended element construction

“5.1.1. Where required, an element may be appended to a UPOV code to provide information on the variety group, variety type and/or denomination class.

“The appended element to UPOV codes is identifiable through the following naming convention:

- “A digit (number from 1 to 9) prefix identifies the new appended element.
- “Different digits or letters could, if appropriate, indicate different categories of information.
- “The appended element should contain a maximum of six digits or letters in total (e.g. ‘1AC2TG’)”

“This element may be appended to any UPOV code, regardless of plant taxa (genera, species or subspecies levels). Examples:

“UPOV code for genus *Abies*: ABIES

“UPOV code with appended element: ABIES 1234 1AC2TG

“UPOV code for species *Abies sibirica*: ABIES_SIB

“UPOV code with appended element: ABIES_SIB 1234 1AC2TG

“UPOV code for sub-species *Abies sibirica* subsp. *semenovii*: ABIES_SIB_SEM

“UPOV code with appended element: ABIES_SIB_SEM 1234 1AC2TG”

14. *The TWPs are invited to consider the proposal to revise document UPOV/INF/23 “Guide to the UPOV Code System” as set out in paragraph 13 of this document.*

Document TGP/7 “Development of Test Guidelines”

Example varieties for asterisked quantitative characteristics when illustrations are provided

Proposal to amend document TGP/7 on requirement to provide example varieties

15. The background to this matter is provided in Annex II to this document.

16. The TWO, at its fifty-third session, agreed that most quantitative and pseudo-qualitative characteristics in ornamental Test Guidelines could be illustrated by drawings or photographs and only a few required example varieties, such as height, length, width and diameter.

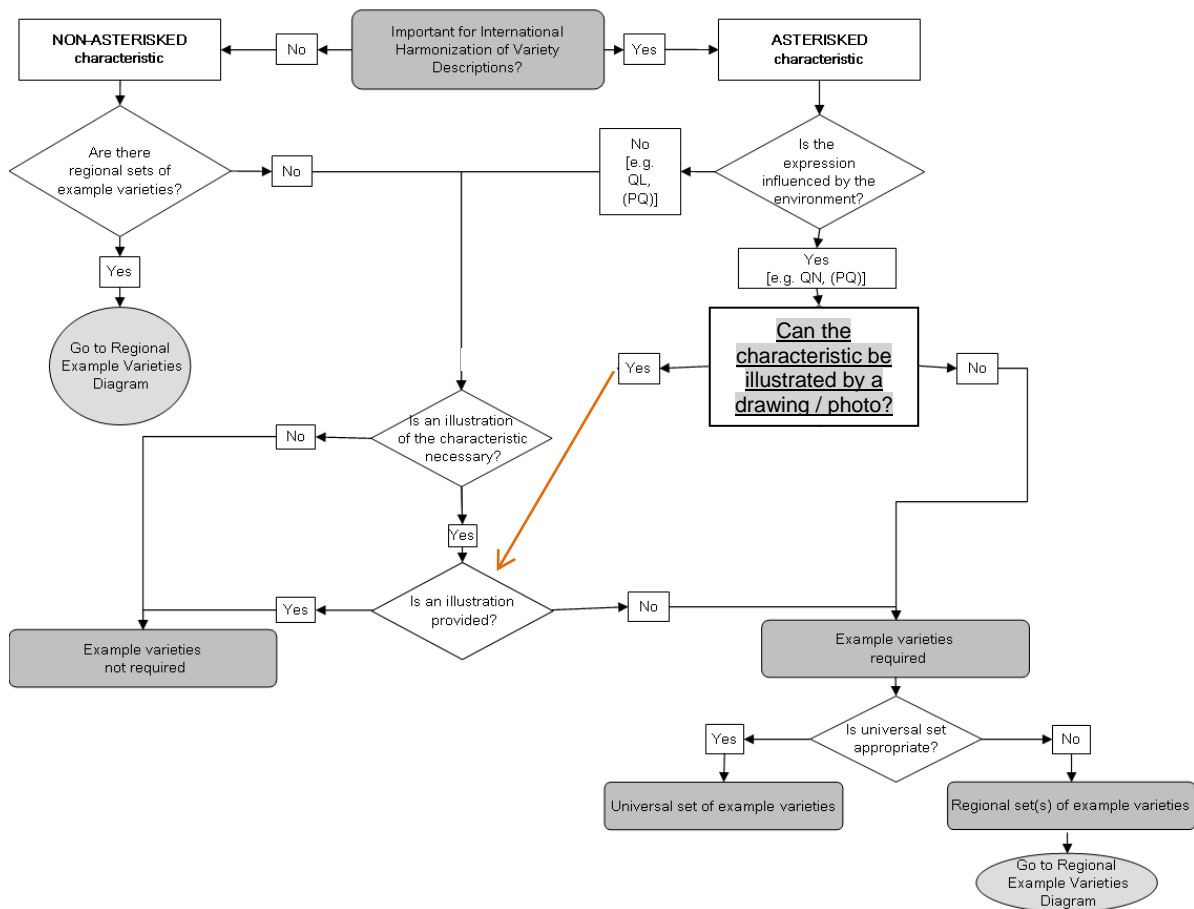
¹ Held via electronic means on October 25 and 26, 2021

17. The TC, at its fifty-seventh session, considered the proposal to amend document TGP/7 GN 28, paragraph 1.3 (iii) and Flow Diagram 1. The TC agreed to request the TWPs, at their sessions in 2022, to consider the proposal to amend document TGP/7 to remove the requirement to provide example varieties for asterisked quantitative characteristics when illustrations were provided and to clarify the situations when example varieties would still be required (see document TC/57/25 "Report", paragraphs 40 and 41).

18. The TWPs are invited to consider the proposal to amend document TGP/7 GN 28, paragraph 1.3 (iii) and Flow Diagram 1 to read as follows:

"(iii) If a characteristic is important for the international harmonization of variety descriptions (asterisked characteristics) ~~and is influenced by the environment and cannot be illustrated by photographs or drawings in a meaningful way (most quantitative and pseudo-qualitative characteristics) or example varieties are necessary for illustration of the characteristic (see Section 3.1)~~ it is necessary to provide example varieties."

19. The following amendment was proposed by the TWO for Flow Diagram 1:



20. The TWPs are invited to consider:

(a) the proposal to amend document TGP/7 to remove the requirement to provide example varieties for asterisked quantitative characteristics if illustrations are provided, as set out in paragraphs 18 and 19; and

(b) to clarify situations when example varieties would still be required.

21. The background to this matter is provided in Annex III to this document.

22. It is proposed to amend document TGP/7 “Development of Test Guidelines”, Annex 1 “TG Structure and Universal Standard Wording”, Sections 6.5, 7 and 10 to indicate characteristics used for grouping of varieties, as follows (additions indicated with highlighting and underline):

Table of Characteristics: Sections 6.5 and 7

“6.5 Legend

English				français		deutsch		español		Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1	2	3	4	5	6	7	<u>8</u>				
Name of characteristics in English				Nom du caractère en français		Name des Merkmals auf Deutsch		Nombre del carácter en español			

[...]

“8 (G) Characteristic used for grouping of varieties and organizing trials

“7. Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

[...]

English				français		deutsch		español		Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1	2	3	4	5	6	7	<u>8</u>				
Name of characteristics in English				Nom du caractère en français		Name des Merkmals auf Deutsch		Nombre del carácter en español			

[...]

“8 { GN 13 Grouping characteristics}”

Technical Questionnaire: Section 10, Item 5

“5. Characteristics of the variety to be indicated: please mark the note which best corresponds (the number in brackets refers to the corresponding characteristic in Test Guidelines; characteristics used for grouping of varieties and organizing the growing trial are indicated with ‘G’.”

Example of possible indication grouping characteristic (“G”):

5.2	Lower glume: hairiness on external surface		
(12)			
(G)			
absent		(w) Variety A, (s) Variety C	1 []
present		(w) Variety B, (s) Variety D	9 []

23. The TWPs are invited to consider the proposal to revise document TGP/7 “Development of Test Guidelines” to indicate characteristics in the table of characteristics and technical questionnaire used as grouping characteristics, as set out in paragraph 22 of this document.

Converting standard wording in Test Guidelines into optional wording

24. The background to this matter is provided in Annex IV to this document.

25. The TC, at its fifty-seventh session, agreed to request the TWPs, at their sessions in 2022, to consider the proposal to convert the following standard wording in the Test Guidelines template, paragraph 4.2.2, into additional standard wording (optional) (see document TC/57/25 “Report”, paragraphs 42 and 43):

“4.2.2 These Test Guidelines have been developed for the examination of [type or types of propagation] varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5: “Testing Uniformity” should be followed.”

26. *The TWPs are invited to consider whether to amend document TGP/7 “Development of Test Guidelines” to convert the standard wording in the Test Guidelines template, paragraph 4.2.2, into additional standard wording (optional), as set out in paragraph 25 of this document.*

Document TGP/12 ‘Guidance on certain physiological characteristics’

Word “highly” in only one state of expression

27. The background to this matter is provided in Annex V to this document.

28. The TC, at its fifty-seventh session, 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 <i>Sphaerotheca fuliginea</i> (<i>Podosphaera xanthii</i>) (Powdery mildew)		
70.1	Race 1		
QN	susceptible	[...]	1
	moderately resistant intermediate	[...]	2
	highly resistant	[...]	3

29. The TC noted that the word “highly” was only used for the resistant state of expression and agreed to invite the TWV to consider the example further.

30. *The TWV is invited to consider whether to revise the states of expression in the example characteristic in document TGP/12/2, Section 2.3.2, to address the use of the word “highly” in only one state of expression.*

MATTERS FOR INFORMATION

31. The following section presents matters that do not require consideration of proposals at this stage and are provided for information purposes only.

Possible future revisions of guidance and information materials

TGP/5 Section 6: UPOV Report on Technical Examination and UPOV Variety Description

32. Matters for information on a proposal to revise document TGP/5, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description” to include additional information in DUS test reports and alternative approaches to enhance the use of existing DUS test reports are presented in Annex VI to this document.

33. The TC agreed to discontinue discussions on a possible future revision of document TGP/5, Section 6, to address additional information to be included in DUS test reports, for the time being.

Document TGP/7: Development of Test Guidelines

Disease resistance characteristics: Addition of state of expression and placement of non-asterisked disease resistance characteristics in Section 5 of the Technical Questionnaire

34. The background to this matter is provided in Annex VII to this document.

35. Discussions on a possible revision of document TGP/7 “Development of Test Guidelines” concerning the relationship between asterisks in the Test Guidelines and TQ characteristics are ongoing at the TWPs and presented in document TWP/6/10 “Revision of Test Guidelines”.

36. The TC, at its fifty-seventh session, agreed to postpone until its fifty-eighth session considering whether to revise document TGP/7 to clarify the placement of non-asterisked disease resistance characteristics in the TQ, in conjunction with proposals from the TWPs on the relationship between asterisks in the Test Guidelines and TQ characteristics, if any.

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

Section 9 “The Combined-Over-Years Uniformity Criterion (COYU)”

37. Matters concerning a possible future revision of document TGP/8 Section 9 “The Combined-Over-Years Uniformity Criterion (COYU)” are considered in document TWP/6/11 “The Combined-Over-Years Uniformity Criterion (COYU)”.

Matters for adoption by the Council in 2022

38. The revisions of guidance and information materials agreed to be proposed for adoption by the Council in 2022 are presented for information purposes in Annex VIII to this document.

39. Matters concerning the revision of documents UPOV/INF/16 “Exchangeable Software” and UPOV/INF/22 “Software and Equipment Used by Members of the Union” are presented in document TWP/5/5 “Exchange and use of software and equipment”.

Program for the development of relevant guidance and information materials

40. The TC, at its fifty-seventh session, and the CAJ, at its seventy-eighth session, agreed the program for the development of TGP documents, as set out in Annexes XI and X to this document (see

documents TC/57/25 “Report”, paragraphs 46 and 47, and CAJ/78/12 “Outcome of consideration of documents by correspondence”, paragraph 28).

41. *The TWPs are invited to note:*

(a) that matters for information concerning a proposal to revise document TGP/5, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description” to include additional information in DUS test reports and alternative approaches to enhance the use of existing DUS test reports are presented in Annex VI to this document;

(b) that matters for information concerning the addition of state of expression and placement of non-asterisked disease resistance characteristics in the Technical Questionnaire are presented in Annex VII to this document; and

(c) that matters concerning a possible future revision of document TGP/8, Section 9, “The Combined-Over-Years Uniformity Criterion (COYU)” are presented in document TWP/6/11 “The Combined-Over-Years Uniformity Criterion (COYU)”; and

(d) that matters for adoption by the Council in 2022 are presented in Annex VIII to this document; and

(e) the program for the development of relevant guidance and information materials presented in Annexes IX and X to this document.

[Annexes follow]

DOCUMENT UPOV/INF/23 "UPOV CODE SYSTEM"

Maximum number of characters in the appended element to UPOV codes

42. The TC, at its fifty-seventh session, considered a proposal to clarify the maximum number of characters to be used in the appended element to UPOV codes, as set out in document UPOV/INF/23 "UPOV Code System". The TC agreed to request the Office of the Union to develop a proposal for consideration by the TWPs and the TC, at their sessions in 2022 (see document TC/57/25 "Report", paragraph 35).

43. It is proposed to amend document UPOV/INF/23 "UPOV Code System" to clarify the maximum number of characters to be used in the appended element to UPOV codes as follows (deletions indicated with highlighting and ~~strike through~~; additions indicated with highlighting and underline):

"5 UPOV CODE: APPENDED INFORMATION

"5.1 Appended element construction

"5.1.1. Where required, an element may be appended to a UPOV code to provide information on the variety group, variety type and/or denomination class.

"The appended element to UPOV codes is identifiable through the following naming convention:

- "A digit prefix identifies the new appended element (e.g. any natural number from 1 to 9).
- "Different ~~digits~~ letters or numbers could, if appropriate, indicate different categories of information.
- "The appended element should contain up to six characters in total (e.g. '1AC2TG')

"This element may be appended to any UPOV code, regardless of plant taxa (genera, species or subspecies levels). Examples:

"UPOV code for genus *Abies*: ABIES

"UPOV code with appended element: ABIES ~~1234~~ 1AC2TG

"UPOV code for species *Abies sibirica*: ABIES_SIB

"UPOV code with appended element: ABIES_SIB ~~1234~~ 1AC2TG

"UPOV code for sub-species *Abies sibirica* subsp. *semenovii*: ABIES_SIB_SEM

"UPOV code with appended element: ABIES_SIB_SEM ~~1234~~ 1AC2TG"

Correction of cross-references to document UPOV/EXN/DEN

44. Cross-references to document UPOV/INF/12 "Explanatory Notes to Variety Denominations under the UPOV Convention" should be corrected to be replaced by UPOV/EXN/DEN in paragraph 4.3 of document UPOV/INF/23, as follows:

"4.3 Introduction of New UPOV Codes / Amendments to UPOV Codes

"(d) In general, amendments to UPOV 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 "Explanatory notes on variety denominations under the UPOV Convention" (document ~~UPOV/INF/12~~ UPOV/EXN/DEN) contain UPOV variety denomination classes; for genera and species not covered by the List of Classes in Annex I to document ~~UPOV/INF/12~~ UPOV/EXN/DEN, the general rule ("one genus / one class") is that a genus is considered to be a class (see document ~~UPOV/INF/12~~ UPOV/EXN/DEN, Section 2.5.2 and its Annex I). [...]"

[Annex II follows]

DOCUMENT TGP/7 "DEVELOPMENT OF TEST GUIDELINES"

Example varieties for asterisked quantitative characteristics when illustrations are provided*Background*

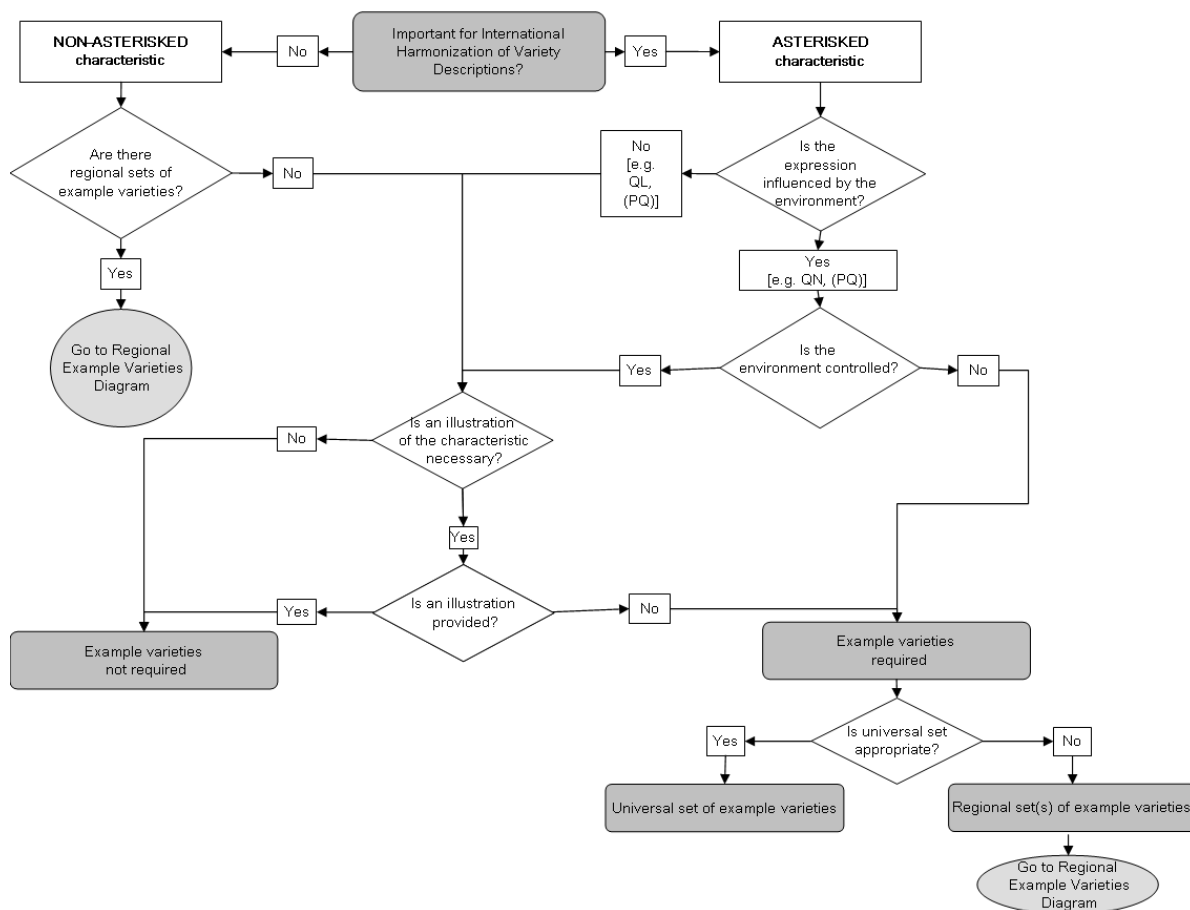
45. The TWO, at its fifty-third session², considered document TWO/53/5 (see document TWO/50/10 "Report", paragraphs 76 to 82).

46. The TWO noted that current guidance in document TGP/7 GN28 paragraph 1.3 (iii) and paragraph 1.4 reads as follows:

"(iii) If a characteristic is important for the international harmonization of variety descriptions (asterisked characteristics) and is influenced by the environment (most quantitative and pseudo-qualitative characteristics) or example varieties are necessary for illustration of the characteristic (see Section 3.1) it is necessary to provide example varieties."

[...]

"1.4 The process for deciding if example varieties need to be provided for a characteristic is illustrated in the following Flow Diagram 1. [...]"



47. The TWO recalled that the flow diagram established that example varieties were not required for quantitative characteristics which were observed in a controlled environment and where an illustration was provided.

² hosted by the Netherlands and held via electronic means, from June 7 to 11, 2021

48. The TWO recalled that guidance in document TGP/7 GN 28 paragraph 4.1 established the following:

"Although example varieties have the benefit of enabling examiners to see a characteristic in "real life", in many cases the illustration of a characteristic by photographs or drawings (to be provided in chapter 8 of the Test Guidelines) may provide a clearer illustration of the characteristic. Furthermore, the difficulty in selecting suitable example varieties, which satisfy all the requirements in Section 4.2 below, means that photographs or drawings are an important alternative or addition to example varieties as a means of illustrating characteristics."

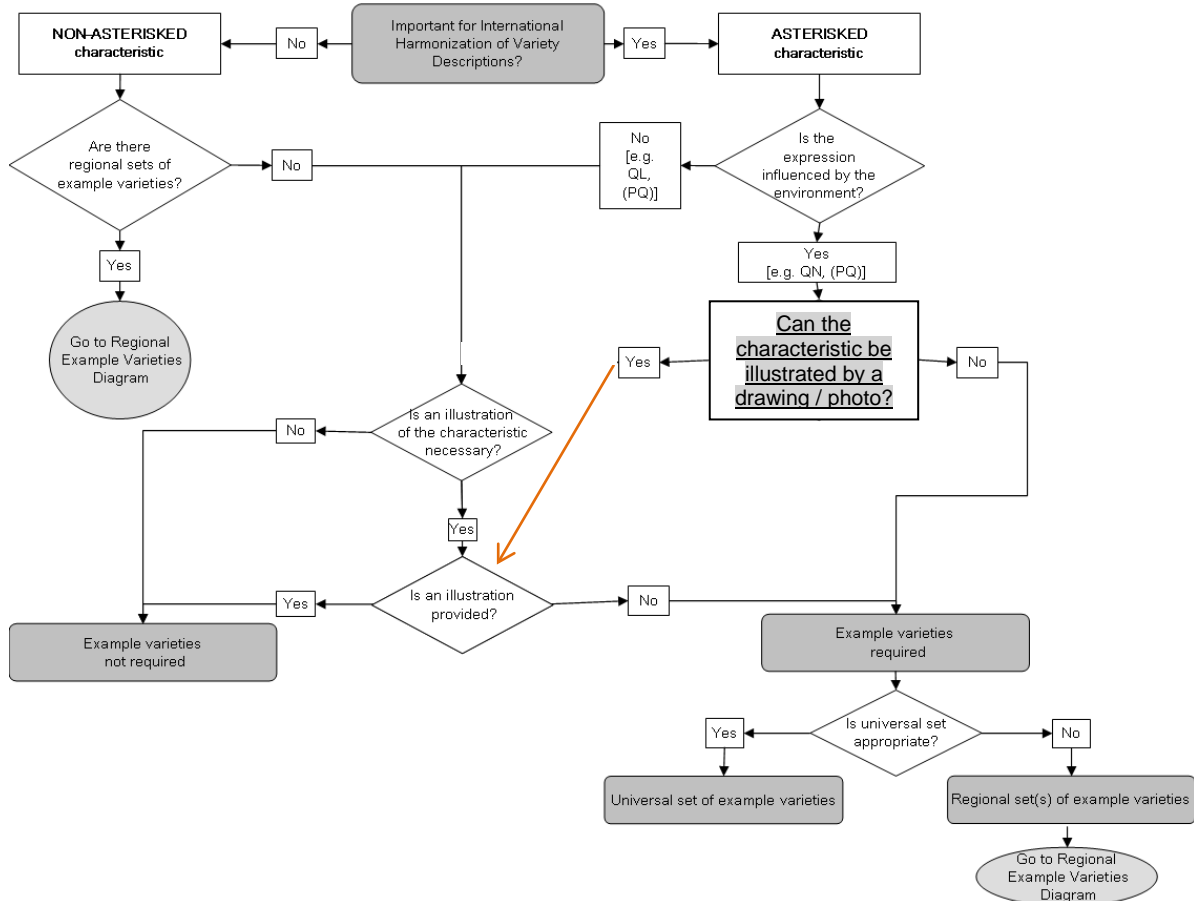
Proposal to amend document TGP/7 on requirement to provide example varieties

49. The TWO agreed that most quantitative and pseudo-qualitative characteristics in ornamental Test Guidelines could be illustrated by drawings or photographs and only a few required example varieties, such as height, length, width and diameter.

50. The TWO agreed to propose amending document TGP/7 GN 28, paragraph 1.3 (iii) to read as follows:

"(iii) If a characteristic is important for the international harmonization of variety descriptions (asterisked characteristics) and is influenced by the environment and cannot be illustrated by photographs or drawings in a meaningful way (most quantitative and pseudo-qualitative characteristics) or example varieties are necessary for illustration of the characteristic (see Section 3.1) it is necessary to provide example varieties."

51. The TWO agreed that Flow Diagram 1 should be amended as follows



52. The TC, at its fifty-seventh session, considered the proposal to amend document TGP/7 GN 28, paragraph 1.3 (iii) and Flow Diagram 1. The TC agreed to request the TWPs, at their sessions in 2022, to consider the proposal to amend document TGP/7 to remove the requirement to provide example varieties for asterisked quantitative characteristics when illustrations were provided and to clarify the situations when example varieties would still be required (see document TC/57/25 "Report", paragraphs 40 and 41).

DOCUMENT TGP/7 "DEVELOPMENT OF TEST GUIDELINES"

Indication of grouping characteristics in UPOV Test Guidelines (Table of characteristics and TQ 5)*Background*

53. The TWV, at its fifty-fifth session³, received a presentation on "Grouping characteristics - Addition of the grouping information (G) in the table of characteristic and the technical questionnaire" by an expert from the European Union. A copy of the presentation is provided in document TWV/55/5 (see document TWV55/16 "Report", paragraphs 35 and 36).

54. The TWV agreed that the proposal to add the indication of grouping characteristics in Test Guidelines (Table of characteristics and Technical Questionnaire) should be proposed to the Technical Committee for a possible future revision of document TGP/7 and inclusion in the Web based TG template.

Consideration by the Technical Committee

55. The TC, at its fifty-seventh session, considered the proposal to add the indication of grouping characteristics in the Table of Characteristics and Technical Questionnaire of UPOV Test Guidelines (see document TC/57/25 "Report", paragraphs 38 and 39).

56. The TC agreed to request the Office of the Union to develop a proposal for the TWPs and the TC, at their sessions in 2022, to indicate characteristics in the Table of Characteristics and Technical Questionnaire when used as grouping characteristics. The proposal should consider the introduction of such functionality in the Web-based TG Template and the required revision of document TGP/7 "Development of Test Guidelines".

Proposal

57. It is proposed to amend document TGP/7 "Development of Test Guidelines", Annex 1 "TG Structure and Universal Standard Wording", Sections 6.5, 7 and 10 to indicate characteristics used as grouping characteristics, as follows (additions indicated with highlighting and underline):

*Table of Characteristics: Sections 6.5 and 7**"6.5 Legend*

		English		français		deutsch		español		Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1	2	3	4	5	6	7	8				
		Name of characteristics in English		Nom du caractère en français		Name des Merkmals auf Deutsch		Nombre del carácter en español			
[...]											
		<u>8 (G) Characteristic used for grouping of varieties and organizing trials</u>									

³ hosted by Turkey and held via electronic means, from May 3 to 7, 2021

"7. Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

[...]

English		français		deutsch		español		Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1	2	3	4	5	6	7	8		
Name of characteristics in English		Nom du caractère en français		Name des Merkmals auf Deutsch		Nombre del carácter en español			
[...]									

[...]

"8 { GN 13 Grouping characteristics}"

Technical Questionnaire: Section 10, Item 5

58. The standard wording in the Technical Questionnaire, item 5, reads as follows:

"5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds)."

59. It is proposed to amend to standard wording to read as follows:

"5. Characteristics of the variety to be indicated: please mark the note which best corresponds (the number in brackets refers to the corresponding characteristic in Test Guidelines; characteristics used for grouping of varieties and organizing the growing trial are indicated with 'G'.")"

60. Once approved, changes to the standard wording of Test Guidelines would be introduced in the Web-based TG Template in due course, subject to availability of resources.

[Annex IV follows]

DOCUMENT TGP/7 “DEVELOPMENT OF TEST GUIDELINES”

Converting standard wording in the Test Guidelines template, paragraph 4.2.2, into additional standard wording (ASW).

Background

61. The TWA, at its fiftieth session⁴, considered the Test Guidelines for Rape Seed and Sunflower and noted that only seed-propagated varieties existed for these crops. The TWA agreed that the following standard wording in the “Uniformity” chapter of Test Guidelines was not appropriate in such cases (see document TWA/50/9 “Report”, paragraphs 31 and 32):

“4.2.2 These Test Guidelines have been developed for the examination of [type or types of propagation] varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5: “Testing Uniformity” should be followed.”

62. The TWA proposed deleting the standard wording in paragraph 4.2.2 from the Test Guidelines for Rape Seed and Sunflower. The TWA proposed converting the standard wording in paragraph 4.2.2 into additional standard wording (ASW) in document TGP/7 “Development of Test Guidelines”.

Consideration by the Technical Committee

63. The TC, at its fifty-seventh session, considered a proposal to convert the following standard wording in the “Uniformity” chapter of Test Guidelines into additional standard wording (see document TC/57/25 “Report”, paragraphs 42 and 43):

“4.2.2 These Test Guidelines have been developed for the examination of [type or types of propagation] varieties. For varieties with other types of propagation the recommendations in the General Introduction and document TGP/13 “Guidance for new types and species”, Section 4.5: “Testing Uniformity” should be followed.”

64. The TC agreed to request the TWPs, at their sessions in 2022, to consider the proposal to amend document TGP/7 “Development of Test Guidelines” to convert the standard wording in the Test Guidelines template, paragraph 4.2.2, into additional standard wording (ASW).

[Annex V follows]

⁴ hosted by the United Republic of Tanzania and held via electronic means, from June 21 to 25, 2021

DOCUMENT TGP/12 'GUIDANCE ON CERTAIN PHYSIOLOGICAL CHARACTERISTICS'

Use of disease resistance characteristics*Background*

65. The TWV, at its fifty-fifth session⁵, recalled discussions at its fifty-fourth session on the naming of the intermediate state of expression in disease resistance characteristics (document TWV/54/9, paragraphs 81 to 83) and the conclusion from the group, as reproduced below (see document TWV55/16 "Report", paragraph 37 to 39):

"[...] The TWV noted that guidance in document TGP/12 'Guidance on certain physiological characteristics' provided an example of quantitative disease resistance characteristic with intermediate state of expression 'moderately'.

"The TWV agreed that the term 'intermediate' was commonly used among experts and agreed to propose amending the example for quantitative disease resistance characteristics with '1–3' scale in document TGP/12 to replace state of expression 'moderately' by 'intermediate'. The TWV agreed that, in general, this should be the term used in Test Guidelines for disease resistance characteristics. [...]"

Consideration by the Technical Committee

66. The TC, at its fifty-seventh session, 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 <i>Sphaerotheca fuliginea</i> (<i>Podosphaera xanthii</i>) (Powdery mildew)		
70.1	Race 1		
QN	susceptible	[...]	1
	moderately resistant intermediate	[...]	2
	highly resistant	[...]	3

67. The TC noted that the word "highly" was only used for the resistant state of expression and agreed to invite the TWV to consider the example further.

[Annex VI follows]

⁵ hosted by Turkey and held via electronic means, from May 3 to 7, 2021

DOCUMENT TGP/5 SECTION 6: UPOV REPORT ON TECHNICAL EXAMINATION AND UPOV VARIETY DESCRIPTION

Additional information to be included in DUS test reports*Background*

68. At their sessions in 2021, the TWV⁶, TWO⁷, TWA⁸ and TWF⁹ considered the proposal to revise document TGP/5, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description” to include additional information in DUS test reports, and whether alternative approaches to provide the desired information might be appropriate (see documents TWV/55/16 “Report”, paragraphs 18 to 20; TWO/53/10 “Report”, paragraphs 14 to 16; TWA/50/9 “Report”, paragraphs 18 to 20; and TWF/52/10 “Report”, paragraphs 30 to 32).

69. The TWV, TWO, TWA and TWF agreed that the proposed additional information was not useful for individual DUS test reports and presented practical difficulties for reporting authorities.

70. The TWV agreed that the proposed additional information should be provided through other means, such dedicated information platforms and specified in cooperation agreements, where appropriate.

71. The TWO noted the comments from Australia and New Zealand that information on the most similar variety and differences from the candidate variety were important for utilizing existing DUS test reports. The TWO recalled that authorities were invited to provide this information in Item 16 of the “UPOV Variety Description”.

72. The TWO and TWA agreed that authorities should communicate with regard to varieties for inclusion in trials before commissioning examination, or request further information for particular cases.

73. The TWF agreed that authorities providing DUS test reports should provide information on the most similar variety, as far as possible, in accordance with guidance in the UPOV variety description (document TGP/5 Section 6). The TWF agreed to invite the expert from New Zealand to make a presentation at its fifty-third session, on what should be required as information to enhance the use of existing DUS test reports.

74. Matters relating to measures to enhance cooperation in DUS examination are reported in document TWP/6/9 “Cooperation in examination”.

Consideration by the Technical Committee

75. The TC, at its fifty-seventh session, noted the comments from the TWPs, at their sessions in 2021, on the proposal to revise document TGP/5, Section 6 “UPOV Report on Technical Examination and UPOV Variety Description” to include additional information in DUS test reports and alternative approaches to enhance the use of existing DUS test reports (see document TC/57/25 “Report”, paragraphs 23 to 25).

76. The TC noted the invitation from the TWF for the expert from New Zealand to make a presentation at its fifty-third session, on what should be required as information to enhance the use of existing DUS test reports.

77. The TC agreed to discontinue discussions on a possible future revision of document TGP/5, Section 6, to address additional information to be included in DUS test reports, for the time being.

[Annex VII follows]

⁶ at its fifty-fifth session, hosted by Turkey and held via electronic means, from May 3 to 7, 2021

⁷ at its fifty-third session, hosted by the Netherlands and held via electronic means, from June 7 to 11, 2021

⁸ at its fiftieth session, hosted by the United Republic of Tanzania and held via electronic means, from June 21 to 25, 2021

⁹ at its fifty-second session, hosted by China and held via electronic means, from July 12 to 16, 2021

DOCUMENT TGP/7 “DEVELOPMENT OF TEST GUIDELINES”

Disease resistance characteristics: Addition of state of expression and placement of non-asterisked disease resistance characteristics in Section 5 of the Technical Questionnaire*Background*

78. The TWV, at its fifty-fifth session¹⁰, agreed to propose that disease resistance characteristics should be presented in Section 5 of Technical Questionnaires (TQ) with the addition of a state of expression “not tested”, when a characteristic was not indicated with an asterisk at the table of characteristics (see document TWV55/16 “Report”, paragraph 37 to 39).

Current guidance in document TGP/7

79. Current guidance in document TGP/7 reads as follows:

“GN 13 *Characteristics with specific functions*

[...]

“3. *Technical Questionnaire (TQ) characteristics (Chapter 10: TQ 5)*

[...]

“3.6 *GN 13(4)(b) explains that “TQ characteristics selected from the Table of Characteristics should, in general, receive an asterisk in the Table of Characteristics”. Certain characteristics, particularly disease resistance characteristics, which are potentially useful as grouping characteristics might not be indicated with an asterisk in the Table of Characteristics. In the case of disease resistance characteristics, for example, there may be obstacles to the use of the characteristic for a number of members of the Union because of technical or quarantine requirements. Those same obstacles might also make it difficult for applicants to provide information on those characteristics if they were included in the Technical Questionnaire, Section 5 “Characteristics of the variety to be indicated”. Therefore, for such characteristics, information should be sought in Section 7 “Additional information which may help in the examination of the variety” of the Technical Questionnaire. The guidance on the presentation of the characteristics for Section 5 (see GN 13.3 & 13.4 above) would also apply for the presentation of characteristics in Section 7.”*

80. Discussions on a possible revision of document TGP/7 “Development of Test Guidelines” concerning the relationship between asterisks in the Test Guidelines and TQ characteristics is ongoing at the TWPs and reported in document TWP/6/10 “Revision of Test Guidelines”.

Consideration by the Technical Committee

81. The TC, at its fifty-seventh session, considered a proposal to revise document TGP/7, GN 13 “Characteristics with specific functions” to clarify that disease resistance characteristics should be presented in Section 5 of Technical Questionnaires with the addition of a state of expression “not tested”, when a characteristic was not indicated with an asterisk at the table of characteristics (see document TC/57/25 “Report”, paragraphs 36 and 37).

82. The TC noted that there were ongoing discussions at the TWPs on the relationship between asterisks in the Test Guidelines and TQ characteristics. The TC agreed to postpone considering the placement of non-asterisked disease resistance characteristics in the TQ until its fifty-eighth session, to be considered in conjunction with any proposals from the TWPs on the relationship between asterisks in the Test Guidelines and TQ characteristics.

[Annex VIII follows]

¹⁰ hosted by Turkey and held via electronic means, from May 3 to 7, 2021

MATTERS FOR ADOPTION BY THE COUNCIL IN 2022

83. The following revisions of guidance and information materials were agreed to be proposed for adoption by the Council at its fifty-sixth ordinary session, to be held in Geneva on October 28, 2022, subject to approval by the CAJ, at its seventy-ninth session, to be held in Geneva on October 26, 2022:

Document TGP/5 Section 6: UPOV Report on Technical Examination and UPOV Variety Description

Testing facility and location

84. The TC, at its fifty-seventh session, agreed to revise document TGP/5 Section 6, chapters “UPOV Report on Technical Examination” and “UPOV Variety Description”, to read as follows (see document TC/57/25 “Report”, paragraph 22):

- Chapter: UPOV Report on Technical Examination

13. Testing ~~station~~ facility(ies) and ~~place~~ location(s)

[...]

16. Date and document number of UPOV Test Guidelines

17. Date and/or document number of Reporting Authority’s test guidelines

- Chapter: UPOV Variety Description

Item 11 to read “Testing ~~station~~ facility(ies) and ~~place~~ location(s)”

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

85. The TC, at its fifty-seventh session, 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	<p>↓</p> <p>Transformation into notes</p> <p>↓</p> <p>Notes</p> <p>↓</p> <p>"Mean variety description"</p> <p>If varieties are assessed in several trials/years/locations mean descriptions can be established.</p>	<p>↓</p> <p>Same Notes as in Process level 1</p> <p>↓</p> <p>Notes</p> <p>↓</p> <p>"Mean variety description"</p>	<p>Notes resulting from one year and location</p> <p>Basis for management of variety collection</p>

"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."

Document TGP/12 'Guidance on certain physiological characteristics'

Use of disease resistance characteristics

86. The TC, at its fifty-seventh session, 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 <i>Sphaerotheca fuliginea</i> (<i>Podosphaera xanthii</i>) (Powdery mildew)		
70.1	Race 1		
QN	susceptible	[...]	1
	moderately resistant intermediate	[...]	2
	highly resistant	[...]	3

Document UPOV/EXN/DEN “Explanatory Notes on Variety Denominations under the UPOV Convention”

Revision of denomination Class 201

87. The TC 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 “~~x~~*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	<i>Secale, Triticale, Triticum, xTrititrigia</i>	SECAL; TRITL; TRITI; <u>TRITT</u>

[Annex IX follows]

PROGRAM FOR THE DEVELOPMENT OF TGP DOCUMENTS

	Title of document	Current approved documents	2021					2022					2023						
			TC-EDC	TWPs	TC/57	CAJ/78	C/55	TC-EDC	TWPs	TC/58	CAJ/79	C/56	TC-EDC	TWPs	TC/59	CAJ/80	C/57		
TGP/0	List of TGP Documents and Latest Issue Dates	TGP/0/12 ADOPTED																	TGP/0/13 Adopt
TGP/1	General Introduction with Explanations	-																	
TGP/2	List of Test Guidelines Adopted by UPOV	TGP/2/2 ADOPTED																	
TGP/3	Varieties of Common Knowledge	C(Extr.)/19/2 Rev.																	
TGP/4	Constitution and Maintenance of Variety Collections	TGP/4/1 ADOPTED																	
TGP/5	Experience and Cooperation in DUS Testing	ADOPTED																	
	Section 6: UPOV Report on Technical Examination and UPOV Variety Description (Drafter: Office of the Union)	TGP/5: Sec. 6/3 ADOPTED		TWP/5/14	TC/57/5				X				X						TGP/5: S.6/4 Adopt
TGP/6	Arrangements for DUS Testing	ADOPTED																	
TGP/7	Development of Test Guidelines	TGP/7/8 ADOPTED																	
	Indication of grouping characteristics (Drafter: Office of the Union)	TGP/7/8 ADOPTED									X	X		X				X	TGP/7/9 Adopt
TGP/8	Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability	TGP/8/4 ADOPTED																	
	Method of Calculation of COYU (Drafter: Adrian Roberts (GB))			TWP/5/11	TC/57/7					X	X			X				X	TGP/8/6 Adopt
	Data Processing for the Assessment of Distinctness and for Producing Variety Descriptions (Drafter: Office of the Union)			TWP/5/10	TC/57/6				X			X		TGP/8/5 Adopt					
TGP/9	Examining Distinctness	TGP/9/2 ADOPTED																	
TGP/10	Examining Uniformity	TGP/10/1 ADOPTED																	
TGP/11	Examining Stability	TGP/11/1 ADOPTED																	
TGP/12	Guidance on Certain Physiological Characteristics	TGP/12/2 ADOPTED																	
	Disease resistance example: Replacing "moderately resistant" by "intermediate" (Drafter: Office of the Union)								X			X		TGP/12/3 Adopt					
TGP/13	Guidance for New Types and Species	TGP/13/1 ADOPTED																	
TGP/14	Glossary of Terms Used in UPOV Documents	TGP/14/5 ADOPTED																	
TGP/15	Guidance on the Use of Biochemical and Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)	TGP/15/3 ADOPTED																	

[Annex X follows]

PROGRAM FOR THE DEVELOPMENT OF INFORMATION MATERIALS

	Title of document	Current approved documents	2021					2022					2023				
			TC-EDC	TWPs	TC/57	CAJ/78	C/55	TC-EDC	TWPs	TC/58	CAJ/79	C/56	TC-EDC	TWPs	TC/59	CAJ/80	C/57
C(Extr.)/19/2 Rev.	The Notion of Breeder and Common Knowledge	C(Extr.)/19/2 Rev. ADOPTED															
INF/5	UPOV Model Plant Breeders' Rights Publication	INF/5/2 ADOPTED															
INF/12	Explanatory Notes on Variety Denominations under the UPOV Convention	INF/12/5 ADOPTED				CAJ/78/11	EXN/DEN/1 Adopt										
	Inclusion of <i>x Trittrigia</i> in class 201 (Drafter: Office of the Union)			TWP/5/6	TC/57/5						X	EXN/DEN/2 Adopt					
	Updating UPOV Codes for Beta (Drafter: Office of the Union)			TWP/5/4	TC/57/5						X	EXN/DEN/2 Adopt					
INF/16	Exchangeable Software	INF/16/9 ADOPTED		TWP/5/5	TC/57/5	CAJ/78/3	INF/16/10 Adopt	X	X	X	X	INF/16/11 Adopt		X	X	X	INF/16/12 Adopt
INF/17	Guidelines for DNA-Profiling: Molecular Marker Selection and Database Construction ("BMT Guidelines")	INF/17/1 ADOPTED		TWP/5/5	TC/57/5	CAJ/78/3	INF/17/2 Adopt										
INF/18	Possible use of Molecular Markers in the Examination of Distinctness, Uniformity and Stability (DUS)	INF/18/1 ADOPTED															
INF/22	Software and equipment used by members of the Union	INF/22/7 ADOPTED		TWP/5/5	TC/57/5	CAJ/78/3	INF/22/8 Adopt		X	X	X	INF/22/9 Adopt		X	X	X	INF/22/10 Adopt
INF/23	UPOV Code System	New		TWP/5/5	TC/57/5	CAJ/78/3	INF/23/1 Adopt										
	Appended element: Maximum number of characters (Drafter: Office of the Union)								X	X			X			X	INF/23/2 Adopt

[End of Annex X and of document]