

Technical Working Party on Automation and Computer Programs TWC/35/18

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COMMENTS ON TGP DOCUMENTS

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- The purpose of this document is to report the comments on TGP documents made by the Technical Working Party for Agricultural Crops (TWA), at its forty-sixth session, held in Hanover, Germany, from June 19 to 23, 2017, the Technical Working Party for Vegetables (TWV), at its fifty-first session, held in Roelofarendsveen, Netherlands, from July 3 to 7, 2017, the Technical Working Party for Ornamental Plants and Forest Trees (TWO), at its fiftieth session, held in Victoria, British Columbia, Canada, from September 11 to 15, 2017, and the Technical Working Party for Fruit Crops (TWF), at its forty-eighth session, held in Kelowna, British Columbia, Canada, from September 18 to 22, 2017.
- 2. The structure of this document is as follows:

TGP/5: Section 1: Model Administrative Agreement for International Cooperation in the Testing of Varieties Confidentiality of molecular information	
TGP/7: Development of Test Guidelines Duration of DUS tests in the fruit sector Characteristics which only apply to certain varieties	2
TGP/8: Trial Design and Techniques Used in the Examination of Distinctness, Uniformity and Stability The Combined-Over-Years Uniformity Criterion (COYU)	
TGP/10: Examining uniformity	
TGP/14: Glossary of Terms Used in UPOV Documents	4

The TWA, the TWV, the TWO and the TWF considered TGP documents on the basis of documents TWP/1/1 Rev., TWP/1/9, TWP/1/11, TWP/1/12, TWP/1/13, TWP/1/15, TWP/1/17 Rev. and TWP/1/18. The TWV, the TWO and TWF also considered documents TWV/51/15, TWO/50/11 and TWF/48/6 "Comments on TGP documents", respectively (see documents TWA/46/10 "Report", paragraph 15, TWV/51/16 "Report", paragraph 18, TWO/50/14 "Report", paragraph 16 and TWF/48/13 "Report", paragraph 18).

TGP/5: Section 1: Model Administrative Agreement for International Cooperation in the Testing of Varieties

Confidentiality of molecular information

- The TWA, the TWV, the TWO and the TWF considered document TWP/1/9. 4.
- The TWA, the TWV, the TWO and the TWF considered the proposed guidance on confidentiality of 5. molecular information for inclusion in document TGP/5, Section 1, as set out in document TWP/1/9, paragraph 4. The TWA, the TWV, the TWO and the TWF agreed that clarification was needed on whether the term "material" would also include "DNA material" and agreed to propose that Article 4(2) read as follows:

- "(2) Except with the specific authorization of the Receiving Authority and the applicant, the Executing Authority shall refrain from passing on to a third person any material, <u>including DNA</u>, or <u>molecular</u> information of the varieties for which testing has been requested."
- 6. The TWV recalled the decision by the TC at its fifty-third session (see document TC/53/31 "Report", paragraphs 180 and 182), and invited the TC to clarify its view in relation to inviting members to make molecular information available for inclusion in publicly available databases (e.g. GENIE) and, on the other hand, requesting to review existing guidance to increase the confidentiality of molecular information.
- 7. The TWF noted that certain information provided by the applicant might not be available due to trade secret agreement signed between the authority in charge of DUS and the applicant. In contrast, national legislation regarding official information may require passing other information to a third person.

TGP/7: Development of Test Guidelines

Duration of DUS tests in the fruit sector

- 8. The TWA, the TWV the TWO and the TWF considered document TWP/1/11.
- 9. The TWA, the TWV the TWO and the TWF considered the proposed revision of document TGP/7 to clarify the duration of DUS testing, as set out in document TWP/1/11, paragraph 11. The TWF agreed with the TWA, the TWV and the TWO that the term "normally" was preferred and should be used throughout the guidance in ASW 2.
- 10. The TWV and the TWF agreed that the reference to negative conclusion should be deleted as it remains exceptional cases, and that in most of the cases the testing of a variety may be terminated with a positive conclusion on DUS. In that respect, the TWA, the TWV and the TWO agreed that the current standard wording in Test Guidelines allowed the examination of a candidate variety to be terminated earlier in case the differences observed between varieties were so clear that more than one growing cycle was not necessary.
- 11. The TWA and the TWV agreed that it should be possible to terminate earlier the examination of a candidate variety (e.g. during the establishment period of the trial) and the TWA, the TWV and the TWF agreed to propose that particular situations should be addressed as Guidance Note in document TGP/7 instead of amending the standard wording, clarifying that it is the decision of the Authorities to decide whether or not to terminate the examination earlier.
- 12. The TWO and the TWF agreed that it should also be possible to terminate the examination of a candidate variety before the normal duration for reasons other than having achieved a conclusion on DUS examination, such as when there were problems with the plant material submitted.
- 13. The TWO agreed that the term "growing cycle" was not precise for explaining the duration of DUS examination as it referred primarily to the life cycle of a crop. The TWO agreed to consider the possibility of replacing the term "growing cycle" by "testing cycle" in ASW 2(a) and (b) to clarify that the duration of DUS examination was related to the period of testing of a variety, regardless of the number of life cycles the crop would have completed during DUS examination. The TWF agreed that in the case of fruit the growing cycle did not necessarily correspond to the life cycle of the crop and acknowledged that there was a difference between the establishment period and the evaluation period.
- 14. The TWF agreed to suggest to the TC to keep ASW2 as it is, but to propose to amend the GN 8 as follows (proposed insertion of text indicated by highlighting and underlining):

GN 8 (TG Template: Chapter 3.1.2) - Explanation of the growing cycle

Chapter 3.1 makes reference to the number of growing cycles. In some cases it may be necessary to clarify what is meant by a growing cycle. Additional standard wording has been developed for some situations (see ASW 3).

'The testing of a variety may be concluded earlier or later at the moment when the competent authority can determine with certainty the outcome of the test.'

15. The TWO welcomed the offer by an expert from the European Union to propose definitions for growing cycle and testing cycle for ornamental plants to be presented at its next session.

Characteristics which only apply to certain varieties

- 16. The TWA, the TWV, the TWO and the TWF considered document TWP/1/12.
- 17. The TWO noted that the scope of some Test Guidelines for ornamental plants covered an entire plant genus and some characteristics would only be applicable to particular groups of crops. The TWV, the TWO and the TWF agreed with the TWA on the possibility to exclude varieties from observation on the basis of a preceding pseudo-qualitative or quantitative characteristic under particular circumstances, such as the impossibility to describe an organ that was not present in a variety or when variation existed only within a particular group of a crop.
- 18. The TWF agreed with the TWV and the TWO that the approach of excluding varieties from observation on the basis of preceding PQ or QN characteristics should be used carefully and based on experience and discussions during the drafting of Test Guidelines, in order to be fully aware on the consequences.
- 19. The TWV recalled the importance to refer to a table of grouping within a species, such as in the Test Guidelines for lettuce (see document TG/13/11(proj.5), chapter 5.3). The TWO agreed with the TWV that the approach of excluding varieties from observation on the basis of preceding PQ or QN characteristics should be used carefully and based on experience and discussions during the drafting of Test Guidelines, in order to be fully aware on the consequences.

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

The Combined-Over-Years Uniformity Criterion (COYU)

20. The TWF agreed to suggest to the TC to conduct a survey among members of the Union to assess the number of authorities using the COYU method for each crop sector, in order to assess how best to present information in relation to COYU to the TWPs, especially when not relevant for the crop sector.

TGP/10: Examining uniformity

Assessing Uniformity by Off-Types on Basis of More than One Growing Cycle or on the Basis of Sub-Samples

- 21. The TWA, the TWV, the TWO and the TWF considered document TWP/1/17 Rev.
- 22. The TWA and the TWV considered the draft guidance presented in Annexes I and II of document TWP/1/17 Rev. as amended by the TWPs, at their sessions in 2016, for inclusion in a future revision of document TGP/10 "Examining Uniformity".
- 23. The TWA and the TWV agreed to propose that the new sentence introduced in the draft guidance, Annex I, should be amended to read as follows:

"It is important to identify whether differences in number of off-types between growing cycles were due to biological environmental reasons or sampling variation."

24. The TWA agreed to propose a more general criteria for a variety to be rejected after a single growing cycle for inclusion in the different approaches of the draft guidance to read as follows:

"If in the first growing cycle a variety exceeds a predefined upper limit of off-types the variety may be rejected after a single growing cycle."

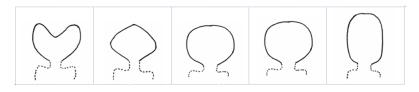
- 25. The TWA agreed that the upper limit of off-types could be defined by each authority according to the approaches used for the assessment of uniformity by off-types.
- 26. The TWA noted that guidance in document TGP/8/2: Part II: Section 8: "The method of uniformity assessment on the basis of off-types" would be revised in order to reflect the practice within members of the Union on the use of methods for more than one single test (year), in conjunction with the revision of document TGP/10 on "Assessing Uniformity by Off-Types on the Basis of More than One Growing Cycle or on the Basis of Sub-Samples".

- 27. The TWA received the following presentations comparing the possible effect on uniformity decisions between Approaches 1 and 3 in document TWP/1/17 Rev., as reproduced in the Annexes to documents TWA/46/4 and TWA/46/4 Add. (in alphabetical order):
 - (a) "Effect of different approaches for the assessment of uniformity by off-types examples for Barley", prepared by an expert from Germany
 - (b) "Assessing Uniformity by Off-types on the basis of more than one Growing Cycle: examples from the Netherlands", prepared by an expert from the Netherlands
 - (c) "Assessing uniformity by off-types on the basis of more than one growing cycle in wheat" prepared by an expert from Poland
 - (d) "The United Kingdom's Experience with Winter Oilseed Rape (WOSR)" prepared by an expert from the United Kingdom
- 28. The TWA noted the approaches used for the assessment of uniformity by off-types in Germany and Poland for cereals, in the Netherlands for tomato and in the United Kingdom for oilseed rape.
- 29. The TWV and the TWF agreed to propose a further clarification to the new sentence introduced in the draft guidance, Annex I, for all approaches to read as follows:
 - "It is important to identify whether differences in number of off-types between growing cycles were <u>not</u> due to biological environmental reasons or sampling variation."
- 30. The TWV and the TWF agreed to propose to modify the sentence for Approach 1 as follows:
 - "Furthermore, on the basis of a clear lack of uniformity, a if a variety clearly exceeds in the first growing cycle the allowed number of off-types in two growing cycles, the variety may be rejected after a single growing cycle.
- 31. The TWV agreed to recall that in the vegetable sector, Approach 1 was the most commonly used.
- 32. The TWV noted that a proposal for revision of guidance in document TGP/8/2: Part II: Section 8: "The method of uniformity assessment on the basis of off-types", would be considered in document TWP/1/1 Rev. "TGP Documents".
- 33. The TWV received a presentation on "Assessing Uniformity by Off-types on the Basis of More than One Growing Cycle: examples from NL" by an expert from the Netherlands. A copy of the presentation was provided in the Annex to document TWV/51/5.

TGP/14: Glossary of Terms Used in UPOV Documents

Illustrations for shape and ratio characteristics

- 34. The TWA and the TWV considered document TWP/1/18.
- 35. The TWA, the TWV and the TWF agreed that no additional examples were available at this time for improving the guidance on providing illustrations for shape and ratio characteristics in document TGP/14.
- 36. The TWF agreed with the TWO that guidance on providing illustrations for shape and ratio characteristics in document TGP/14 should be amended to clarify that the base of a structure was at the point of attachment. The TWF further agreed that the example 6 of Shape-Related Characteristics in document TGP/14: "Variation between range of shapes indicated by the illustrations", reproduced in document TWP/1/18, may be put upside-down in order to make clear that the base on shape illustration should preferably be represented the same way, and as follows:



- 37. The TWO noted the examples of illustrations for shape and ratio characteristics provided in document TGP/14 and agreed that no further examples were necessary to improve the guidance. The TWO noted that characteristics with very few states of expression could be displayed in a single row as in the first two examples in document TWP/1/18, provided that the basis for the different states of expression was clear to readers.
- 38. The TWF agreed that clarification might be needed on the reasons to produce a grid when illustrating shape. The TWF invited the experts of New Zealand and Germany to check whether to develop a wording to explain when it is appropriate to use a grid in Test Guidelines, and to circulate a proposal by correspondence by end of December 2017 to the TWF for its approval. The proposal will be then presented to the TC-EDC at its session in March 2018, for consideration by the TC at its session in October 2018.

UPOV Color Groups

- 39. The TWO considered documents TWO/50/4, TWO/50/4 Add. and TWO/50/5.
- 40. The TWO agreed to propose the revision of the list of UPOV Color Groups in document TGP/14 "Glossary of Terms used in UPOV Documents" on the basis of the color groups set out in document TWO/50/4, paragraph 8, subject to confirmation of color groups 69 to 71 (light, medium and dark grey) by the expert from Germany.
- 41. The TWO noted that editorial changes would be required in document TGP/14 to reflect the introduction of the revised list of UPOV Color Groups.
- 42. The TWO agreed that document TGP/14 should be revised to include the following guidance on the factors to be considered for creating color groups for grouping of varieties and organizing the growing trial:

"Factors to be considered for creating color groups

"When using the color of a plant part for grouping of varieties, a very clear and large difference between the colors is required. However, the color groups are also used in the Technical Questionnaire for applicants who have no RHS Colour Chart. Therefore the groups need to be small enough so that applicants are able to give an adequate state of expression for the characteristic.

"The following factors have to be considered when creating color groups for grouping:

- (a) range of variation of the color of the plant part within the species
- (b) difference between colors for varieties to be considered clearly distinguishable
- (c) possible influence of the environment on the color of the plant part.

"Depending on the species and the plant part observed the color groups for grouping can be different. Examples for color groups in grouping characteristics of different Test Guidelines are listed in the following table.

Test Guideline	Campanula (TG/305/1)	Hosta (TG/299/1)	Cordyline (TG/317/1)	Osteospermum (TG/175/5)
Characteristic	Corolla: main color of inner side	Leaf blade: color covering the largest surface area	Leaf: secondary color	Ray floret: main color of middle part
Color groups for grouping	white	white	white	white
	pink	light yellow	yellow	yellow
	purple red	medium yellow	green	orange
	purple	dark yellow	red	pink
	blue	light green	purple	red
		medium green	brown	purple
		dark green	blackish	violet
		blue green		

"It should be emphasized that not all groups are necessarily clearly distinct from each other when information is used that does not come from the same source (same location, same observer) and cannot always be used to exclude varieties from the trial. E.g. in Cordyline for the characteristic 'Leaf: secondary color' it might not be possible to clearly distinguish between 'brown' and 'blackish' when looking at photos on the internet or in a plant catalogue."