

Disclaimer: unless otherwise agreed by the Council of UPOV, only documents that have been adopted by the Council of UPOV and that have not been superseded can represent UPOV policies or guidance.

This document has been scanned from a paper copy and may have some discrepancies from the original document.

Avertissement: sauf si le Conseil de l'UPOV en décide autrement, seuls les documents adoptés par le Conseil de l'UPOV n'ayant pas été remplacés peuvent représenter les principes ou les orientations de l'UPOV.

Ce document a été numérisé à partir d'une copie papier et peut contenir des différences avec le document original.

Allgemeiner Haftungsausschluß: Sofern nicht anders vom Rat der UPOV vereinbart, geben nur Dokumente, die vom Rat der UPOV angenommen und nicht ersetzt wurden, Grundsätze oder eine Anleitung der UPOV wieder.

Dieses Dokument wurde von einer Papierkopie gescannt und könnte Abweichungen vom Originaldokument aufweisen.

Descargo de responsabilidad: salvo que el Consejo de la UPOV decida de otro modo, solo se considerarán documentos de políticas u orientaciones de la UPOV los que hayan sido aprobados por el Consejo de la UPOV y no hayan sido reemplazados.

Este documento ha sido escaneado a partir de una copia en papel y puede que existan divergencias en relación con el documento original.

UPOV

TWV/29/19

ORIGINAL: English

DATE: October 2, 1995

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

TECHNICAL WORKING PARTY FOR VEGETABLES

Twenty-ninth Session

Roelofarendsveen, Netherlands, June 26 to July 1, 1995

REPORT

adopted by the Technical Working Party for Vegetables

Opening of the Session

- 1. The twenty-ninth session of the Technical Working Party for Vegetables (hereinafter referred to as "the Working Party") was held in Roelofarendsveen, Netherlands, from June 26 to July 1, 1995. The list of participants is reproduced as Annex I to this report.
- 2. Mr. Nico Koomen, Director of the NAKG, welcomed the participants to Roelo-farendsveen. Mr. N.P.A. van MARREWIJK from the CPRO-DLO Department for DUS-testing welcomed the participants on behalf of the Board of Plant Breeders' Rights of the Netherlands. The session was opened by Dr. Elisabeth Kristóf (Hungary), Chairman of the Working Party.

Adoption of the Agenda

3. The Working Party adopted the agenda of its twenty-ninth session as reproduced in document TWV/29/1 after having agreed to delete items 6(vi) Witlof, (viii) Curcurbita moschata and (xiv) Lentil. Due to lack of time, items 6(iv) Shallot and (ix) Garlic were also not discussed. It discussed several of the working papers in parallel meetings of subgroups which reported on the results of their discussions to the session of the Working Party.

Short Reports on Special Problems or Difficulties Encountered

The Working Party received from some of its experts short reports on recent developments in their countries. The expert from the United Kingdom reported on problems in the testing of turnip rape with respect to variations in leaf characteristics as a result of different environmental influences. Results from some other countries showed different degrees of uniformity. There was a need to discuss these results with the testing experts. The expert from Germany reported on the exercise on French Bean made with the help of the computer expert to select the best characteristics and suitable states of expression for given Test Guidelines documents. Mr. Thiele-Wittig reported that it was planned to repeat the same exercise with respect to an agricultural species and that soya bean had been selected by the TWA for that purpose. It would be worthwhile for the experts to study at home document TWC/13/14 once it had been distributed by the UPOV Office. The expert from France reported on additional restrictions to be observed with respect to transgenic varieties. The expert from the Netherlands added that the transqenic varieties would also create problems for the correct naming of the species to which the variety belonged. The expert from France will prepare by September 15 a questionnaire with answers to be sent to him by December 15, 1995, and a document with a summary of the answers would be prepared by March 1, 1996.

Presentation on Characteristics of Attitude in the Test Guidelines

- 5. The Working Party discussed the differing names of attitude characteristics on the basis of document TWV/29/7 prepared by Mr. van Ettekoven (NL). The Working Party finally agreed to propose to the Technical Committee that attitude characteristics should always have the same states of expression as follows: erect (1), semi-erect (3), horizontal (5), semi-pendulous (7), pendulous (9). The Working Party was aware of the fact that in certain cases only the range from 0 to 90° was covered whereas in other cases the whole range from 0 to 180° was applicable. This fact should not, however, effect using the same wording as above. Where only 0 to 90° applied, only half of the scale from 1 to 5 should be used.
- 6. Some experts considered that no more than five states could ever be identified for attitude. Others considered that the specific situation of a crop should also play a role. Breeders often dealt with one or a small number of crops only and would have difficulty in understanding unusual situations, compared with their own crops.

Characteristics on Size, Weight, Length and Width

7. The Working Party noted on several occasions that similarly to the question of attitude, for the characteristics size and weight or length and width, different decisions were taken in different Test Guidelines for the same or similar situations. In some cases, the characteristic was called size but the weight was observed. In other cases, instead of the size, the length and width were observed. In others, the ratio of length/width was also added, sometimes even in addition to the characteristic on size, which several experts considered to be double observation of the same fact. Mr. van Ettekoven, Netherlands, offered to prepare by the end of February 1996, a paper with proposals for harmonized handling in the Test Guidelines.

Report on the Thirty-First Session of the Technical Committee and Recommendations Resulting from the Session

8. Mr. Thiele-Wittig gave a brief report on the main items discussed during the previous session of the Technical Committee and referred participants who needed further details to the full report reproduced in document TC/31/6.

Electrophoretic Characteristics

9. The Working Party noted that the majority of the Technical Committee had been of the view that it was not possible to establish distinctness solely on the basis of a difference found in a characteristic derived by using electrophoresis and that such characteristics should therefore only be used to supplement other differences in morphological or physiological characteristics. It noted that the Technical Committee had decided to take these characteristics out of the main text of the Test Guidelines and to place them in an Annex, thereby creating a special category of characteristic and had decided that the Test Guidelines should state that these characteristics were considered useful, but that they might not be sufficient on their own to establish distinctness and should thus not be used as a routine characteristic, but only at the request or with the agreement of the applicant for the candidate variety.

UPOV Documents in Electronic Form

10. The Working Party noted that the Technical Committee had requested that a survey should be made in order to ascertain who would be interested in documents in electronic form and for which purpose they would be needed, before asking the Office of UPOV to keep an electronic version of documents in full agreement with the printed versions. The Working Party saw at present no need for such documents for species within its competence. It saw, however, a need for an exchange of variety descriptions in electronic form.

Working Procedure for Establishing Test Guidelines

- 11. The Working Party noted that the Technical Committee had recommended that in the preparation of new or revised Test Guidelines there should be at least two responsible experts/countries and not just one as at present, especially in small crops where large subgroups were not justified, so as to ensure that work would continue even if a responsible expert was prevented from attending a given session of a Working Party. It had also agreed that in future new drafts would be presented to the Editorial Committee at the same time as they were sent to the professional organizations for comments and that the Editorial Committee would not limit itself to highlighting linguistic discrepancies but would also ensure that UPOV concepts were maintained in the documents, would highlight where this was not the case and would propose, as far as possible, solutions for any such shortcomings.
- 12. Example Varieties: The Working Party noted that the Technical Committee had asked all Technical Working Parties to rediscuss the handling of example varieties and report to it during its next session. It agreed that it would try to reduce the number of varieties by making more frequent use of selected varieties for as many characteristics as possible.
- 13. <u>Image Analysis</u>: The Working Party noted that the Technical Committee had requested that a survey should be made of what had already been done in the field of image analysis and what problems had been encountered. The Working Party stressed that image analysis should not be neglected vis-à-vis other new techniques such as molecular techniques. At present, in the view of the Working Party, there was no need to make a special survey in the field of vegetables. Other questions were of much greater importance.

- 14. List of Species of Which Practical Technical Knowledge has been Acquired: The Working Party noted that the Technical Committee had requested that the present document TWO/27/13 comprising a list of species of ornamental plants tested in the UPOV member States should be extended to cover all species of which practical knowledge has been acquired in the member States and that a new questionnaire had been sent out.
- 15. Use of Disease Resistance Characteristics in Distinctness Testing: The Working Party noted with satisfaction that the Technical Committee had agreed that disease resistance and tolerance characteristics were acceptable for the establishing of distinctness if they fulfilled the same requirements for acceptance as any other characteristic. It was of importance that any such characteristic be well defined and that an accepted, standardized method exist for its evaluation. Although the Technical Committee accepted the inclusion with an asterisk of resistance characteristics in the Test Guidelines adopted during the session, as well as the inclusion of a resistance characteristic with quantitative expressions from "absent or very weak" to "very strong," future cases should be decided on a disease-by-disease and species-by-species basis. The Technical Committee also agreed to the following definition:

Resistance: The ability of a variety or of a mono-specific population to limit the activities of a given pest or pathogen throughout the whole or a part of a growing cycle. Several resistance levels may generally be defined.

Susceptibility: Susceptibility corresponds to a zero-resistance level of a variety or population with respect to a given pest or pathogen.

Tolerance: Ability of a variety or population to tolerate the development of a pest or pathogen whilst displaying disorders that are without serious consequences for their growth, appearance or yield.

- 16. <u>Cooperation with Breeders in the Testing of Varieties</u>: The Working Party noted that the Technical Committee had asked that the survey on the involvement of breeders or applicants in the testing of varieties be repeated so as to also cover non-agricultural species in order to have full details of the testing systems of the individual member States and noted that a new question-naire had been circulated for completion.
- 17. Test Guidelines for French Bean: The Working Party noted a mistake in characteristic 48 of document TG/12/8 where characteristic 48.1 should apply to "US race 1" and characteristic 48.2 to "US race 2." It will also check whether an additional characteristic 48.3 with a European race would have to be added. The expert from Germany will inform the Office of UPOV in August 1995 to enable it to prepare a correction and a possible addendum to the above document TG/12/8.
- 18. UPOV Central Computerized Data Base: The Working Party noted the latest stage of preparation of the UPOV central computerized data base on CD-ROM as set forth in Circular U 2229 dated February 24, 1995. The Office of UPOV had invited all its member States to submit data for the envisaged UPOV-ROM demonstration disc by April 15, 1995. It had received data from 15 States (Argentina, Austria, Canada, Denmark, France, Germany, Hungary, Israel, Japan, Netherlands, New Zealand, Spain, Sweden, United Kingdom, United States of America (PVPO and PTO)). The Office of UPOV, with the help of experts from WIPO, had checked the data received and had requested, if necessary and possible, corrections from some countries. Afterwards all data were submitted to JOUVE for the preparation of the above-mentioned UPOV-ROM demonstration disc.

- The Working Party received a detailed expla-19. COYD and COYU Analyses: nation from the Netherlands on the basis of document TC/30/4. It repeated its criticil position vis-à-vis those methods. Several experts repeated their position that they did not like methods being imposed on them which they did not need, which were not appropriate in their field with often small plots, few plots with little interaction, few varieties, several changing from year to year, many characteristics not observed on all varieties, few measured characteristics and few cross-pollinated species. The application of the COYU analysis would only create more work, require more replicates, more field space, etc. The Working Party finally concluded its discussion in asking that the Technical Committee be informed that it would not like these methods to be made obligatory. The expert should be given the choice to apply them or not. In most cases of difficulties of distinctness in a measured characteristic it was easier to find another characteristic to distinguish a given candidate than to follow the COYD and COYU methods. In vegetable species, the methods are not needed and not routinely used. If no other possibilities for distinctness existed, only then would COYD and COYU be used. For that purpose, however, an easier explanation and a cookbook-style recipe presentation with a selected example should be prepared. An open question remaining would also be how to combine data from the COYU analysis with other visual observations, e.g. an off-type in another characteristic observed visually.
- 20. <u>Visually-assessed Characteristics</u>: The Working Party noted document TWC/11/12 but postponed discussions on that subject until the next session together with discussions on the planned document on sequential analysis.

Final discussions on draft Test Guidelines

Cauliflower (Revision)

21. The Working Party noted the draft Test Guidelines for Cauliflower (Revision) as reproduced in document TG/45/4(proj.) and proposals for changes received in writing contained in documents TWV/29/13 and TWV/29/14. It finally made the following main changes to document TG/45/4(proj):

(i) Table of Characteristics:

- 1 To receive an asterisk
- 4 To have the Notes "1, 3, 5"
- 11 The expert from the Netherlands to supply drawings, the expert from Spain example varieties
- 23 To have the states "whitish (1), yellow (2), orange (Orange Bouquett) (3), green (4)"
- To receive explanations reading: "In cauliflower earliness is strongly influenced by the temperature and the period of growing. Nevertheless, at one and the same place and for the same growing season "earliness" is an important characteristic for the distinction of varieties. For these reasons the variety description should always state the place of testing and the season of growing."
- (ii) <u>Technical Questionnaire</u>: Characteristic 5.4 should be deleted and the request for that information included under paragraph 7.2.

Broccoli

- 22. The Working Party noted the draft Test Guidelines for Broccoli as reproduced in document TG/151/1(proj.) and proposals for changes received in writing contained in documents TWV/29/13 and TWV/29/14. It finally made the following main changes to document TG/151/1(proj.):
 - (i) Table of Characteristics:

Characteristics

- 1, 14, 25 To have the spelling of the example variety "Ramoso" corrected
- 3 To have the third state read "semi-pendulous"; the expert from France to prepare drawings and indicate new example varieties
- 6 To receive several additional example varieties
- 10 To have several example varieties deleted
- 20 To have the following example varieties for state "9": "Brigadeer, Shogun, Viola"
- 21 To have the words "absent or" in the first state deleted.

Chamomile

- 23. The Working Party noted the draft Test Guidelines for Chamomile as reproduced in document TG/152/1(proj.) and proposals for changes received in writing contained in documents TWV/29/13 and TWV/29/14. It finally made the following main changes to document TG/152/1(proj.):
- (i) Material Required: To have the word "certified" in paragraph 1 deleted.
 - (ii) Table of Characteristics:

Characteristics

- 2 To have the first state read "short"
- 5 To have the words "intensity of" added

To have, for the states indicated, the example varieties copied from document TWV/29/13.

Discussion on Working Paper on Test Guidelines

Spinach (Revision)

- 24. The Working Party noted documents TG/55/3, TWV/28/5 and TWV/29/2 and made the following main changes to document TWV/29/2:
 - (i) To have the spelling of the Latin name "Spinacea" corrected.
 - (ii) Material Required: To have the word "certified" deleted.

- (iii) <u>Conduct of Tests</u>: In paragraph 3, the third sentence to be deleted and replaced by the following: "Each test in the open should include 200 drilled plants and/or 100 single spaced plants. For additional tests in the glasshouse, plants should be sown on a surface of $2m^2$."
- (iv) <u>Methods and Observations</u>: For paragraph 2, the first two sentences should be copied from the draft Test Guidelines for cauliflower, however with a population standard of 2%. The maximum number of off-types would be 7 in 200 and 5 in 100.
 - (v) Table of Characteristics:

Characteristics

- 1, 3, 5, 6, 7, 8 To be deleted
- 5/6, 7/8 To have the words "intensity of green" inserted in the characteristic and to have the word "green" in the states deleted
- 7/8 To receive an asterisk
- 13 To have the last state read "semi-pendulous"
- 16 To receive an asterisk
- 17 To receive the Notes "3, 5, 7"
- 21 To have the spelling of the example variety "Lavewa" corrected
- 23 To have the word "Cucumis" replaced by "Cucumber"
- 13 To receive a new drawing for the state 7 to be prepared by experts from Germany
- 22 To receive a new explanation of the method of observation; to be prepared by experts from the Netherlands
- 23 To receive a new method for observation as submitted during the session.
- (vi) <u>Technical Questionnaire</u>: Paragraphs 5.2 and 5.3 to be combined as already proposed in the Table of Characteristics; after paragraph 5.4, characteristic 16 to be inserted.

Leaf Chicory

- 25. The Working Party noted documents TWV/27/4 Rev. and TWV/29/5 and made the following main changes to document TWV/29/5:
- (i) <u>Subject of these Guidelines</u>: The Test Guidelines to exclude witlof and industrial chicory.
 - (ii) Material Required: To have the word "certified" deleted.
- (iii) <u>Conduct of Tests</u>: To have the words "as a minimum" in paragraph 3 deleted.

- (iv) <u>Methods and Observations</u>: To have the second sentence of paragraph 1 deleted and the first two sentences of paragraph 2 replaced by the wording as in the draft Test Guidelines for Cauliflower, however with a population standard of 5% resulting in 9 off-types in 100 plants.
 - (v) Table of Characteristics:

Characteristics

- 1, 2, 7, 10, 21, 22, 24, 26, 29, 33 To receive an asterisk
- 3 To have the Notes "1, 3, 5"
- 4 To have the bracket deleted, but to have its content remaining
- 5, 12 To have the content of the bracket replaced by "at maturity"
- 11 To have the bracket deleted, but to have its content remaining
- 13 To read: "Leaf: type of anthocyanin distribution (as for 12)"
- 17 To be placed after characteristic 18
- 19 To read: "Plant: head formation"
- 25 To have the words "weak, strong" deleted
- 28 To be deleted
- 30 To read: "Stem: degree of fasciation" with the states "low, medium, high"
- 31, 32 To be deleted
- 33 To have the state "pink" deleted.
- (vi) Technical Questionnaire: To have paragraph 5.4 placed under paragraph 7.2 and to have characteristics 7, 10, 24, 26, 29 and 33 included under paragraph 5.

Onion (Revision) and Shallot

26. The Working Party noted documents TG/46/3, TWV/28/16, TWV/28/20 Rev., TWV/29/10 and TWV/29/11. It agreed to hold a subgroup meeting on onion and shallot on the occasion of the EU comparative meeting to be held in Brion, France, on October 9 and 10, 1995. The meeting would take place on October 11, 1995, in the same place.

Pumpkin

- 27. The Working Party noted documents TWV/25/4, TWV/28/19, TWV/29/9 and TWV/29/17 and made the following main changes to document TWV/29/17:
- (i) To have the Technical Notes copied from the draft Test Guidelines for Squash (TG/119/3) with the following changes: The number of plants to be 10, observations on the leaf should be made on the fully developed leaf when fruit starts developing, observation on the ripe fruit should be made on first full physiologically ripe fruits.

(ii) Table of Characteristics:

- After this characteristic a new characteristic with an asterisk to be inserted reading: "Plant: growth habit" with the states "bushy, trailing"
- 14 To have the asterisk deleted; for the new characteristic after characteristic 14, the experts from Hungary to indicate example varieties, otherwise the characteristic would be deleted
- 22 After this characteristic a new characteristic with an asterisk to be inserted reading "Fruit: size" with the states "small, medium, large" and characteristics 31 and 32 to be included after that characteristic; both characteristics to receive an asterisk
- To have the drawings copied from the document TWV/25/4 and to have the states "capped, narrow transverse elliptic, globular, broad elliptic, quadrangular, obovate, ovate, narrow elliptic"; the two new characteristics after characteristic 23 to receive an asterisk
- To receive an asterisk and drawings to be prepared by experts from France 24 and to read: "Ripe fruit: grooves" with the states "absent, present"; the first new characteristic included after characteristic 24 to read: "Ripe fruit: distance between grooves" with the states "short, medium, long," the second characteristic to receive an asterisk; the next characteristic to receive an asterisk and to read: fruit: distribution of secondary color" with the states "spots, stripes, marbled"; in the following characteristics "major color" to be replaced by "main color"; the characteristic on the main color of flesh to have the fourth stage read "reddish orange"; the characteristic on the intensity of the main color to have the states "light, medium, dark"; the new characteristic on the secondary color of the skin to have the additional state "creme" and to receive an asterisk; the order of all these new characteristics to be changed slightly
- 30 To be deleted
- 33 To read: "Ripe fruit: texture of surface" with the states "smooth, rough"
- 36 An expert from France to prepare drawings; the new characteristic after characteristic 36 to read: "Seed: texture of surface"
- 37 To have the additional state "greyish"; the expert from Hungary to check that state; the second new characteristic inserted after characteristic 37 to have the state "low, medium, high"; a further characteristic with an asterisk to be inserted after characteristic 36 reading: "Ripe fruit: warts" with the states "absent, present"
- (iii) <u>Grouping Characteristics</u>: For grouping characteristic 2 and 23 should be used and the size of the fruit, the number of colors of the skin, main color of the skin and the absence and presence of grooves. In the technical questionnaire, in addition to the grouping characteristics, the main color of the flesh should also be included.

Beetroot (Revision)

- 28. The Working Party noted documents TG/60/3, TWV/28/11 and TWV/29/4 and made the following main changes to document TWV/29/4:
 - (i) Material Required: To have the word "certified" deleted.
- (ii) <u>Methods and Observations</u>: To have in paragraph 2, after the first sentence, the words "For hybrid varieties" inserted with a population standard of 1% and an acceptance probability of 95% resulting in 5 off-types in 100 plants.
- (iii) <u>Grouping of Varieties</u>: To have the second and third grouping characteristic combined to read "Root: shape (characteristic 19)."
 - (iv) Table of Characteristics:

- 3, 4, 5, 5d, 7, 7c, 9, 10, 12, 13, 14, 15, 19b, 19c, 19d, 19e, 20, 21, 24, 26, To be deleted
- 4a To have the states "erect, semi-erect, horizontal"
- 4b To have the last two states read "semi-pendulous, pendulous"
- 5a, 5c, 6 To receive an asterisk
- 6 To have the example variety "Formanova" replaced by "Detroit 2"
- 7b To have the words "intensity of" deleted
- 8 To have "Avonearly" deleted as example variety for stage 7
- 11 To have the example variety "Dardani" replaced by "Amigo"
- 16 To receive the following bracketed addition "at root insertion"
- 17 To have the example variety for state 4 deleted
- 19 To have the example varieties for states 4 and 5 deleted and to receive the former drawings for explanation
- 19a, 19b To have the word "maximum" deleted
- 21 To have a new characteristic inserted after characteristic 21 reading: "Root: shape of base" with the states "pointed, rounded, flat, recessed," with example varieties to be indicated by experts from the United Kingdom
- 22 To have the example variety "Formanova" deleted and the example variety "Motora" replaced by "Monami"
- 25b To have the asterisk deleted
- 26a To have the words "light colored" deleted
- To have the example varieties "Boltardy, Dragon (1), Detroit (3), Juwa-kugel (7)."

- (v) Literature: The expert from Germany to indicate further literature.
- (vi) <u>Technical Questionnaire</u>: Under paragraph 5, the characteristics 1, 6, 7a, 8, 19, 19a, 23, 25a and 28 to be indicated.

Globe Artichoke

- 29. The Working Party noted document TWV/28/18 and made the following main changes to that document:
- (i) <u>Subject of these Guidelines</u>: The expert from France to try to include further characteristics to cover Cardoon (<u>Cynara cardunculus</u>).
 - (ii) Table of Characteristics:

<u>Characteristics</u>

- 1 To read: "Leaves: (stage 10-12 leaves): type" with the states "non pinnate, pinnate"
- 2 To read: "Leaves: spines"; explanations to be prepared by the expert from France
- 4 To have the states "erect, semi-erect, horizontal"
- 5 In this and the following characteristics, the word "feather" to be replaced by "lobes"
- 6 To read: "Petiole: anthocyanin coloration at base"
- 7 To read: "Leaf blade: blistering" with the states "absent or very weak, weak, medium, strong"
- 8 To be deleted
- 10 To have the states "light, medium, dark"
- 11 To read: "Leaf blade: shape of transverse section" and to have the drawings amended by the experts from France
- 12 To have the Notes "1, 2, 3"
- To read: "Lobes: number of incisions" with the states "none or very few, few, medium, many, very many"
- 14 To have the states "accuminate, acute, rounded"; the expert from France to check whether this characteristic is correlated with characteristic 12
- 15 To read: "Plant: height (flower head included)" with the states "short, medium, tall"
- 16 To read: "Plant: height of highest lateral flower head (flower head included)" with the states "short, medium, tall"
- 18 To have the word "develop" deleted
- 19, 20 To be deleted

- 21 To have the word "principal" deleted and the states "globular, elliptic, ovoid, conical, transverse elliptical"
- 23 To read: "Central flower head: size" with the states "small, medium, large"
- 24 To be split into two characteristics, the first to read: "Flower head: degree of opening" with the states "weak, medium, strong" and the second to read: "Outer bract: reflexing of top" with the states "absent, present"
- 25 To have the first stage read "concave"
- 26 To have the word "tip" replaced by "top" and the states "round, depressed"
- 27 To read: "Outer bract: depth of terminal depression" with the states "shallow, medium, deep"
- 28 To be split into two characteristics, the first to read: "Outer bract: spine" with the states "absent, present" and the second to read: "Outer bract: mucron" with the states "absent, present"
- 29 To be deleted
- 31 To read: "Outer bract (external part): color of secondary color (streaks)" with the states "bronze, red"; the order of the following characteristic to be as follows, characteristic 32, 33, 34, 30, 31
- 35 To be deleted
- 36, 37, 38 To have the word "basis" replaced by "insertion"
- 36 To have the word "large" replaced by "broad"
- 37 To have the word "height" replaced by "length"
- 39 To read: "Central flower head: density of inner bracts" with the states "loose, medium, dense"
- 41 To have the words "clearly depressed" replaced by "strongly depressed"
- 43 To be deleted
- 44 To have the word "principal" replaced by "main" and the order of state as characteristic 21
- 46, 48 To be deleted
- 47 To read: "Grain: diameter" with the states "small, medium, large"; thereafter a new characteristic to be inserted reading: "Time of appearance of central flower head" with the states "early, medium, late."
- (iii) <u>Technical Notes</u>: In the Technical Notes the following characteristics to be inserted: "All leaf characteristics should be observed when the main flower head measures at least 3cm in diameter. All observations on the central flower head should be made at harvest market stage.
- (iv) <u>Technical Questionnaire</u>: Under paragraph 5 the following characteristics to be deleted: 19, 20, 26, 28, 29, 30, 40, 41, 43, 44, 45, 46 and characteristics 33 and 34 to be included.

Ginger

- 30. The Working Party noted documents TWV/28/9 and TWV/29/6 and made the following main changes to document TWV/29/6:
- (i) To have the spelling of the Latin name "Zingiber officinale Rosc." corrected.
- (ii) <u>Methods and Observations</u>: To copy the corresponding paragraph in the draft Test Guidelines on Cauliflower, however with a population standard of 1% and an acceptance probability of 95%, resulting in 1 off-type in 30 plants. Paragraph 2 to read: "Unless otherwise indicated, all observations on the plant and the leaf should be made before the end of the growing phase." Thereafter a new paragraph to be inserted reading: "Unless otherwise indicated, all observations of the stem should be made on the main stem at time of harvest maturity."

(iii) Table of Characteristics:

- 1 To have the Notes "1, 2, 3"
- 4 To read: "Leaf: attitude of top leaf" with the Notes "1, 3, 5"
- 5 To have the word "first" replaced by "main"
- To be split into two characteristics, the first to read: "Leaf: length (upper third of main stem)" with the states "short, medium, long," the second to read: "Leaf: width" with the states "narrow, medium, broad"; both characteristics to receive an asterisk
- 7 To read: "Leaf: intensity of green color (as for 6)"
- 8 To have the bracket and its contents deleted
- To have the bracket and its contents deleted and to have the states "small, medium, large"; the expert from Japan to inquire at what position the characteristic should be measured
- 10 To be deleted
- 11 To read: "Stem: intensity of green color (before end of growing phase)"
- 12 To read: "Stem: anthocyanin coloration" with the states "absent or very weak, weak, medium, strong, very strong"; the expert from Japan to check whether the expression can be really absent.
- 13 To be deleted
- 14 To read: "Rhizome: total weight" with the states "small, medium, high"; the expert from Japan to check whether the volume is observed or the weight
- 18, 19 To be deleted
- 20 To have the states "absent or very weak, weak, medium, strong, very strong"

764 page 14

- 21 To receive an asterisk
- 23 To have Notes "1, 2, 3" instead of "3, 5, 7"
- 24, 27 To be deleted
- 25 To have the bracketed addition "after planting"
- 26 To have the word "maturity" added.
- (iv) Having had difficulties in including more of the proposals received from South Africa, the Working Party asked the expert from South Africa to give more information and also example varieties for certain of the characteristics, which were so far not included. The Working Party already decided not to include flower characteristics in the Test Guidelines.
- (v) <u>Explanations</u>: The expert from Japan to check the explanations on the rhyzome and, especially, to give a better description of the differences between the three types.

Poppy

- 31. The Working Party noted documents TWV/28/10 and TWV/29/3 and made the following main changes to document TWV/29/3:
- (i) <u>Subject of these Guidelines</u>: The Guidelines to exclude ornamental varieties. The English term to be Opium/Seed Poppy.
- (ii) Material Required: To have in paragraph 1 the brackets and the content deleted.
- (iii) <u>Methods and Observations</u>: To have in paragraph 1 the number of plants changed from 20 to 40. Paragraph 2 to be copied from the Test Guidelines for Cauliflower with a population standard of 2%, an acceptance probability of 95%, resulting in 7 off-types in 200 plants. Paragraph 3 to be deleted, paragraph 4 to read: "All observations on the capsule should be made on the main stem."
- (iv) <u>Grouping of Varieties</u>: To have characteristics 1, 6, 20 and 47 as grouping characteristics and keep the former characteristic 53 (Capsule: morphine content) although the characteristic has not been given an asterisk in the Table of Characteristics.
 - (v) Table of Characteristics:

- 1, 6, 23, 26, 39 To receive an asterisk
- 5, 25, 31, 36, 49, 52, 55 59 To be deleted
- 2 To read: "Plant: diameter of rosette"
- 3 To read: "Rosette leaves: hairs"
- 6 To read: "Stem: branching" with the states "absent, present"
- 8 To receive drawings to be prepared by experts from Hungary

- 9 To have the states 1 and 9
- 11 To read: "Stem: hairiness of main stem below capsule"
- 13 To read: "Stem leaf: color (upper side)"
- 14 To have the word "ground" deleted and to have the states "light, medium, dark"
- 16 To read: "Stem leaf: form of blade (upper third)" with the states "not curled, curled" and to receive drawings to be prepared by experts from Hungary
- 17 To read: "Stem leaf: incisions of margin (as for 16)" with the states "sinuate, serrate, biserrate, lacerate"
- 18 To read: "Flower bud: hairs" and to be recorded on stage "3"
- 19 To have the states "single, semi double, double"
- 20 To read: "Petal: color" to be included after characteristic 27 and to have the example varieties "Marianne (1), Rosemarie (2)"
- 21 To read: "Petal: intensity of color" and to have the states "light, medium, dark"
- 22 To read: "Petal: blotch" and to receive drawings
- 23 To read: "Petal: type of blotch" with the states "entire, band, radial, stripes"
- 24 To read: "Petal: color of blotch"
- 26 28 To start with the word "Petal"
- 26 To read: "Petal: incisions of margin" with the states "absent, present"
- 27 To read: "Petal: type of incisions of margin" with the states "sinuate, biserrate, fringed, laciniate"
- 29 To read: "Filament: shape"; the expert from Hungary to prepare drawings
- 30 To read: "Filament: color" with the states "white, light violet, blackish"
- 34 To have the states "transverse elliptic, circular, rectangular, ovate, elliptic, obovate"; the expert from Hungary to check the states
- 35 To read: "Capsule: shape of base" and to have the states "pointed, flat, recessed"
- 37, 38 To have the word "maximum" deleted and to receive drawings
- 37 To receive the bracketed addition: "from base to the stigmatic disc"
- 38 To have the word "width" replaced by "diameter" with the states "very small, small, medium, large, very large"
- 39 To read: "Capsule: ribbing" with the states "absent, present"

- 40 To read: "Capsule: intensity of ribbing" with the states from "very weak" to "very strong"
- 41 To have the second stage deleted and to receive drawings
- 43 To read: "Stigmatic disc: shape" with the last two states reading "weakly conical, strongly conical"
- 44 To read: "Stigmatic disc: number of lobes"; the expert from Hungary to check the stability of observations
- 45 To read: "Stigmatic disc: surface of lobes" with the states "smooth, ribbed"; the expert from Hungary to prepare drawings of the expressed section of the lobe
- 46 To read: "Stigmatic disc: apex of lobe" with the states "pointed, rounded, rectangular"
- 47 To receive for state 6 the following example varieties "Marianna, Rose-marie"
- 48 To have the states "light, medium, dark"
- 50 To have the states "low, medium, high."
- (vi) Explanations on the Table of Characteristics: The explanations to characteristics 5, 20, 25, 44, 47, 50, 52 to be deleted. The explanations to characteristics 16, 37, 38 to be included in the Table of Characteristics. The explanations to characteristic 44 to read: "At harvesting the capsule should be held upside-down and shaken. If seeds fall out it is dehiscent and if not it is indehiscent." The explanations to characteristics 53 to 59 should remain unchanged although only the characteristic on morphine and codein were 'ept.
- (vii) <u>Technical Questionnaire</u>: In paragraph 5, characteristic 43 to be deleted, characteristic 53 to be placed under paragraph 7 and under 5, the characteristics 1, 6, 23 and 39 to be added.
- (viii) The Working Party agreed to send the document TWV/29/3 in its present version, together with an extract of the report of the session containing the decisions of the TWV to the TWA, asking for comments before the end of the year, to be sent to the expert from Hungary. The expert would prepare a new document by the end of February 1996.

Status of Test Guidelines

- 32. The Working Party agreed that the draft Test Guidelines for Cauliflower (Revision), Broccoli and Chamomile should be sent to the Technical Committee for final adoption.
- 33. The Working Party agreed that the draft Test Guidelines for Spinach (Revision), Leaf Chicory, Pumpkin, Beetroot (Revision) and Ginger should be sent to the professional organizations for comments. It also agreed to discuss or rediscuss the Test Guidelines for the other species mentioned on the agenda at its next session.

TWV/29/19 page 17

Future Program, Date and Place of Next Session

- 34. At the invitation of Mrs. Safaríková of the Czech Republic, the Working Party agreed to hold its next session in Brno, Czech Republic, from July 8 to 12, 1996. The Working Party planned to discuss the following items at that session:
 - (i) Short reports on special problems or difficulties encountered;
 - (ii) Report on the last session of the Technical Committee and recommendations resulting from that session;
 - (iii) General presentation of characteristics in Test Guidelines (Mr. van Ettekoven (NL) to prepare document)
 - (iv) Statistical methods (TWC/11/12)
 - (v) GMO varieties (Mr. Brand (FR) to prepare a document)
 - (vi) Final Discussions of the draft Test Guidelines for:
 - (a) Spinach (Revision) (TG/55/4(proj.))
 - (b) Beetroot (Revision)(TG/60/4(proj.))
 - (c) Ginger (TG/153/1(proj.))
 - (d) Leaf Chicory (TG/154/1(proj.))
 - (e) Pumpkin (TG/155/1(proj.))
 - (iv) Discussions of Working Papers on Test Guidelines for
 - (a) Onion (Revision) and Shallot (TG/46/3, TWV/28/16 Rev., TWV/29/10, TWV/28/20 Rev., TWV/29/11)
 - (b) Welsh Onion/Bunching Onion (TWV/28/17 Rev., TWV/29/8, TWV/29/12)
 - (c) Witlof (TWV/XXIII/5 Rev., TWV/29/8, TWV/29/16; working paper to be prepared by Mr. van Marrewijk (NL))
 - (d) <u>Cuc bita moschata</u> (working paper to be prepared by Mr. Brand and Mrs. Delalande (FR))
 - (e) Garlic (TWV/29/15; working paper to be prepared by Mr. Brand (FR))
 - (f) Globe Artichoke (TWV/28/18; working paper to be prepared by Mr. Brand and Mrs. Delalande (FR))
 - (g) Opium/Seed Poppy (TWV/28/10, TWV/29/3; working paper to be prepared by Mrs. Kristóf (HU))
 - (h) Lentil (working paper to be prepared by Messrs. Brand and Boulineau (FR)).
 - (i) Broad Bean (Revision)(TG/8/4; working paper to be prepared by Mr. Green (GB))
 - (j) Rhubarb (Revision)(TG/62/3; working paper to be prepared by Mr. van Ettekoven (NL))
 - (k) Celeriac (Revision)(TG/74/3; working paper to be prepared by Mr. Pfülb (DE))
 - (1) Cornsalad (Revision)(TG/75/3; working paper to be prepared by Mr. van Ettekoven (NL))
 - (m) Leek (Revision)(TG/85/3; working paper to be prepared by Mr. van Marrewijk (NL))
 - (n) Swede (Revision)(TG/89/3; working paper to be prepared by Mr. Green (GB))
 - (o) Fennel (working paper to be prepared by Mr. van Ettekoven (NL))
 - (p) Industrial Chicory (working paper to be prepared by Mr. van Marrewijk (NL))

- (q) Okra (<u>Abelmoschus esculentus</u>)(working paper to be prepared by Mr. Singh (IN) in cooperation with Mr. Yuasa (JP))
- (r) Dill (working paper to be prepared by Mrs. Borys (PL) in cooperation with Mr. Pfülb (DE))
- 35. In order to accelerate the preparation of Test Guidelines listed above, the Working Party agreed that comments on working papers should be sent to the experts responsible for the drafting of individual Test Guidelines mentioned in the above list, before the end of the year. The experts should send a draft of a revised working paper to the Office of UPOV before the end of February 1996.
- 36. The Working Party already planned to start revising the Test Guidelines for the following species in one years time: black radish, radish, Kohlrabi, celery, curly kale, turnip, turnip rape.

<u>Visits</u>

37. On June 26, 27, 30 and July 1, in the early afternoon, the Working Party visited the seed testing facilities of the NAKG at Roelofarendsveen. On June 28, the Working Party visited the VBA Flower Auction at Aalsmeer and the firms Sluis and Groot and Enza Zaden in the Enkhuizen area, as well as the Saet and Cruy Museum on the History of Research and Growing of Vegetables. During the morning of June 29, the Working Party held its meeting in the CPRO-DLO Department for DUS testing at Wageningen and received an introduction to the official testing for plant variety protection in the Netherlands and to the activities of the CPRO-DLO. In the afternoon of June 29, the Working Party visited the trial fields of the CPRO-DLO.

38. <u>The present report has been adopted by correspondence</u>.

[Two annexes follow]

ANNEX I

LIST OF PARTICIPANTS AT THE TWENTY-NINTH SESSION OF THE TECHNICAL WORKING PARTY FOR VEGETABLES HELD IN ROELOFARENDSVEEN, NETHERLANDS, FROM JUNE 26 TO JULY 1, 1995

I. MEMBER STATES

CZECH REPUBLIC

Radmila SAFARIKOVA (Mrs.), Skzuz, Ukzúz, Hroznová 2, 65600 Brno (tel.: +42-5-4332-1308; fax: +42-5-4321-2440)

DENMARK

Birthe HOEGH (Mrs.), Afdeling for Sortsafprovning, Teglvaerksvej 10, Tystofte, 4320 Skaelskor (tel.: +45-5359-6141; fax: +45-5359-0166)

FRANCE

Richard BRAND, GEVES, B.P. 1, Les Vignères, 84300 Cavaillon (tel.: +33-9071-2685; fax: +33-9078-0161)

GERMANY

Elmar PFUELB, Bundessortenamt, Prüfstelle Rethmar, Hauptstrasse 1, 31319 Sehnde (tel.: +49-5138-2013; fax: +49-5138-9112)

Reinhold BAUR, Bundessortenamt, Am Sendelbach 15, 96050 Bamberg (tel.: -49-951-17225; fax: +49-951-12414)

HUNGARY

Elisabeth KRISTOF (Mrs.), National Institute for Agricultural Quality Control, Keleti Károly u.24, 1024 Budapest (tel.: +36-1-2125-620; fax: +36-1-2125-800)

JAPAN

Mitsuo YUASA, Ministry of Agriculture, Forestry and Fisheries, Seeds and Seedlings Division, 1-2-1 Kasumigaseki, Chiyoda-ku, 100 Tokyo (tel.: +81-3-3591-0524; fax: +81-3-3502-6572)

NETHERLANDS

Anton FRANKEN, Deputy Director, CPRO-DLO, Dept DUS-testing, P.O. Box 16, 6700 AA Wageningen (tel.: +31-8370-76880; fax: +31-8370-16513 from 95-10-10: tel.: +31-317-476880; fax: +31-317-816513)

NETHERLANDS (cont'd)

- Huib GHIJSEN, Head of DUS Department, CPRO-DLO, P.O. Box 16, 6700 AA Wageningen (tel.: +31-317-476888; fax: +31-317-416513)
- H.J. GREEF, CPRO-DLO Dept DUS-testing, P.O. Box 16, 6700 AA Wageningen (tel.: +31-8370-76878; fax: +31-8370-18094 from 95-10-10, tel.: +31-317-876878; fax: +31-317-816513)
- M. HOOGENBOOM (Mrs.), NAKG, P.O. Box 27, 2370 AA Roelofarendsveen (tel.: +31-1713-19102; fax: +31-1713-16256)
- Nico KOOMEN, Director, NAKG, P.O. Box 27, 2370 AA Roelofarendsveen (tel.: +31-1713-19102; fax: +31-1713-16256)
- W. SANGSTER, NAKG, P.O. Box 27, 2370 AA Roelofarendsveen (tel.: +31-1713-19102; fax: +31-1713-16256)
- S.H. VAN DER WAL, CPRO-DLO Dept DUS-testing, P.O. Box 16, 6700 AA Wageningen (tel.: +31-8370-76881; fax: +31-8370-16513)
- Fred A. VAN EEUWIJK, CPRO-DLO, P.O. Box 16, 6700 AA Wageningen (tel.: +31-317-477062; fax: +31-317-418094)
- K. VAN ETTEKOVEN, NAKG, P.O. Box 27, 2370 AA Roelofarendsveen (tel.: +31-1713-19102; fax: +31-1713-16256)
- M. VAN LEEUWEN (Mrs.), NAKG, P.O. Box 27, 2370 AA Roelofarendsveen (tel.: +31-1713-19102; fax: +31-1713-16256)
- N.P.A. VAN MARREWIJK, Head, CPRO-DLO Dept DUS-testing, P.O. Box 16, 6700 AA Wageningen (tel.: +31-8370-76880; fax: +31-8370-16513 from 95-10-10: tel.: +31-317-476880; fax: +31-317-816513)
- A. VELDHUIZEN (Mrs.), NAKG, P.O. Box 27, 2370 AA Roelofarendsveen (tel.: +31-1713-19102; fax: +31-1713-16256)

NORWAY

Haakon SONJU, The Plant Variety Board, Fellesbygget, 1432 As (tel.: +47-6494-9230; fax: +47-6494-0208)

POLAND

Julia BORYS (Mrs.), Head of DUS Department, Research Centre for Cultivar Testing, 63-022 Slupia Wielka (tel.: +48 665-52341; fax: +48-665-53558)

Danuta WIDLARZ (Mrs.), Experimental Station for Cultivars Testing (SD00), 63-022 Slupia Wielka (tel.: +48-665-52307; fax: +48-665-53558)

SPAIN

David CALVACHE, Delegación del Ministerio de Agricultura, Joaquin Ballester 39, 46009 Valencia (tel.: +34-6-3881086; fax: +34-6-3881046)

UNITED KINGDOM

Niall GREEN, Scottish Agricultural Science Agency, East Craigs, Edinburgh, EH12 8NJ (tel.: +44-131-2448853; fax: +44-131-2448940)

URUGUAY

Carlos GOMEZ ECHEBARNE, Plant Variety Register, División Cultivares, Unidad Ejecutora de Semillas - DIGRA, Ministerio de Ganadería, Agricultura y Pesca, Avda. Millán 4703, Montevideo CP 12900 (tel.: +598-2-397924; fax: +598-2-396053)

II. OBSERVER STATE

INDIA

D.P. SINGH, Assistant Director General (Vegetable Crops), Indian Council of Agricultural Research, Krishi Bhavan, New Delhi 110001 (tel.: 91-11-385357; fax: 91-11-387293)

III. TECHNICAL EXPERTS

Pierre ROGER, Agronomist, Groupe Limagrain, B.P. 1, 63720 Chappes, France (tel.: +33-736-34069; fax: +33-736-34004

Gérard J. URSELMANN, Senior Registration Specialist, S&G Seeds B.V., Box 26, 1600 AA Enkhuizen, Netherlands (tel.: +31-2280-66288; fax: +31-2280-19744)

IV. OFFICER

Elisabeth KRISTOF (Mrs.), Chairman

V. OFFICE OF UPOV

Max-Heinrich THIELE-WITTIG, Senior Counsellor, 34, chemin des Colombettes, 1211 Geneva 20, Switzerland (tel.: +41-22-730.91.52; fax: +41-22-733.54.28; telex 412 912 ompi ch)

ANNEX II

E-mail Addresses of Participants in UPOV Technical Working Party and Technical Committee (TC) Sessions

Country	Working Party/ TC	Department/ Unit	Name	e-mail address
AT		Sorten- schutzamt	B. Fürnweger G. Pesendorfer	no e-mail adress
AU	BMT		C. Buller	buller@rsbs-central. anu.edu.au
AU	BMT		M. Morell	morell@rsbs-central. anu.edu.au
AU	BMT		R. Peakall	rod.peakall@anu.edu.au
AU		Plant Variety Rights Office	M.M. Kethro	no e-mail address
CA	TC	Agriculture Canada	L. Mougeot	mougeotl@ncccot7agr.ca
CA	TC	Agriculture Canada	B. Cole	coleb@ncccot7.agr.ca
СН		Eidg. Forschungsanstalt für Obst-, Wein- und Gartenbau	P. Rusterholz	no e-mail adress (in about 6 months)
cs		Plant Variety Rights	J. Soucek	no e-mail adress
DK	TWC	ABI/DIPS	K. Kristensen	kk@dina.kvl.dk
ES	TC	JNSPV	J.M. Elena	jmer@ispv.inia.es
ES	TWA	JNSPV	L. Salaices	salaice@ispv.inia.es
ES	TWC	JNSPV	M. del Fresno	fresno@ispv.inia.es
FI	TC	PPIC/STD	K. Paavilainen	*)
FR	TWC TWO	GEVES	M.H. Gandelin	gandelin@antibes.inra.fr
FR	TWC	GEVES	S. Grégoire	no e-mail adress

^{*)} Use x-400 address:

[&]quot;/G=KAARINA/S=PAAVILAINEN/O=MMM/OU1=HKIO1/P=AGRIFIN/A=MAILNET/C=FI/"

TWV/29/19 Annex II, page 2

E-mail Addresses of Participants in UPOV Technical Working Party and Technical Committee (TC) Sessions (continued from page 1)

Country	Working Party/ TC	Department/ Unit	Name	e-mail address
GB	TC	PVRO	A. Bould	a.bould@pvs.maff.gov.uk
GB	BMT TWA	DANI	M. Camlin	gece6424@agvl.qub.ac.uk
GB	TWC	DANI	C. Weatherup	acjb0341@agvl.qub.ac.uk
GB	TWC	NIAB	G. Pullen	f.g.pullen@pvs.maff.gov.u
GB	TWC	BIOSS	M. Talbot	m.talbot@sass.sari.ac.uk
GB	TWF	WYE	P. Dodd	p.dodd@wye.lon.ac.uk
GB	TWV	SASA	N. Green	green@sasa.gov.uk
GB	TWC	NIAB	J. Law	j.law@pvs.maff.gov.uk
GB		PVRO	D. Stavard	d.stavard@maff.pvs.gov.uk
GB		Ministry of Agriculture PVRO Office at Cambridg	All staff	(name)@ maff.pvs.gov.uk
IE		Department of Agriculture & Food	I. Byrne	no e-mail adress (in 12 months time)
NL	TC	CPRO-DLO	H.C.H. Ghijsen	h.c.h.ghijsen@cpro.agro.n
NL	TWO TWF	CPRO-DLO	C.J. Barendrecht	<pre>c.j.Barendrecht@cpro. agro.nl</pre>
NL	TWV TWO	CPRO-DLD	N.P.A. Van Marrewijk	n.p.a.van.marrewijk @cpro.agro.nl
NL	TWC	CPRO-DLO	F. van Eeuwijk	<pre>f.a.van.eeuwijk@cpro. agro.nl</pre>
NL	TWC	CPRO-DLO	G. van der Heijden	g.w.a.m.van.der.heijden @cpro.agro.nl
NZ	TWA	PVRO	P. Rhodes	rhodesp@christchurch. mafqual.govt.nz