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UPOV

TWA/XIII/11

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## INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

**TECHNICAL WORKING PARTY  
FOR  
AGRICULTURAL CROPS****Thirteenth Session  
Lund, Sweden, June 27 to 29, 1984**

REPORT

adopted by the Technical Working Party for Agricultural CropsOpening of the Session

1. The thirteenth session of the Technical Working Party for Agricultural Crops (hereinafter referred to as "the Working Party") was held in Lund, Sweden, from June 27 to 29, 1984. The list of participants is given in the Annex to this report. Meetings of Subgroups on several species were held at the same place on June 26, 1984.

2. Mr. Kåhre, Director of the Swedish Seed Testing and Certification Institute, welcomed the participants to his Institute at Lund, Sweden. The session was opened by Dr. G. Fuchs, Chairman of the Working Party.

Adoption of the Agenda

3. The Working Party unanimously adopted the agenda of the thirteenth session as reproduced in document TWA/XIII/1, after having agreed to discuss under item 15 the question of minimum distances between varieties and of disease on the material submitted for testing.

Adoption of the Report on the Twelfth Session

4. The Working Party unanimously adopted the report on its twelfth session as reproduced in document TWA/XII/10, after having agreed on the following changes:

(i) to insert, after the last sentence of paragraph 6(i)1, two sentences reading: "The French experts proposed including a sentence that would give a country the possibility of asking for individual plants where its testing requirements so provided. This was, however, not approved by the Working Party."

(ii) to replace paragraph 7(iv), with the exception of the first two sentences, by the following: "This was basically because the analysis of this organization was made from the genebank point of view which did not correspond directly with that made in the framework of UPOV."

(iii) to insert at the end of the third sentence of paragraph 10, the words "for general use."

Report on the Nineteenth Session of the Technical Committee

5. The Chairman gave a short account of the last session of the Technical Committee, restricting himself to the main subjects discussed. The full report of the session is reproduced in document TC/XIX/5.

6. In connection with the report on the last session of the Technical Committee (especially paragraph 26), the Working Party recommended that, of the two copies of the lists of varieties under test sent to each of the member States, one copy should be filed centrally while the other copy should be broken down and distributed to experts working on the species concerned. The experts should maintain contact with the person receiving the lists on national level and ask for the parts covering their field of competence.

7. In relation to paragraph 52, some experts expressed their dissatisfaction at the conclusion reached by the Administrative and Legal Committee during its twelfth session, reading "attention was drawn to the necessity of inducing the Technical Working Parties concerned to include truly updated harmonized lists of characteristics in the Test Guidelines." This was considered to go beyond the decision taken by the Council during its last session. They emphasized the necessity of maintaining the present dual system of the Test Guidelines, i.e. the characteristics with asterisks to be used by all member States in all variety descriptions and the characteristics without asterisk to be used freely at the choice of each member State.

Test Guidelines for Broad Bean and Field Bean

8. Dr. M.-H. Thiele-Wittig reported on the results of the discussions in the Subgroup which had met on June 26, 1984, to finalize the draft Test Guidelines for Broad Bean and Field Bean (document TG/8/2(proj.)). Discussion was based on the proposal made by the Technical Working Party for Vegetables at its seventeenth session as reproduced in document TWV/XVII/19 Prov., paragraph 7, and on the documents TWV/XVII/5 and TWV/XVII/9. The Working Party finally agreed to the changes made by the Technical Working Party for Vegetables with the exception of the following:

(i) It agreed to use the vanillin test for the assessment of characteristic 1 (Seed: tannin) but disagreed with leaving the possibility of the characteristic being observed by the fluorescence test or by the vanillin test as the two tests would lead to different results (see document TWV/XVII/19 Prov., paragraph 7(iii)). It therefore proposed to recommend only the vanillin test.

(ii) It disagreed with the decision that characteristic 8 (Leaf: folding) would refer to the folding of the leaf and not the leaflet. It was of the opinion that folding referred to the folding of the leaflet.

(iii) The majority of the member States accepted the proposal, made by the Technical Working Party for Vegetables, to give asterisks to the characteristics 19 and 20, but at least one member State took the opposite position. The Working Party therefore agreed to bring the question before the Technical Committee and to ask for its decision.

(iv) It was of the opinion that for characteristic 27 (Seed: shape of median longitudinal section) drawings would be necessary as otherwise the wording of the individual states (elliptic, broad elliptic, circular, oblong, square, ovate) would not be clear enough by themselves.

(v) It disagreed with the wording of the first state of characteristic 29 (Seed: color of testa (immediately after harvest)), reading "beige/grey-white," and proposed the wording "yellowish grey." In addition, in the Explanations and Methods, a sentence should be added reading: "Seeds that are yellowish or green immediately after harvest will turn brown after aging if they contain tannin."

(vi) With some reservation from one member State, the member States agreed that characteristic 31 (Seed: black pigmentation of hilum) should have an asterisk and that varieties should be homogeneous in this characteristic."

Test Guidelines for Cocksfoot

9. The Working Party noted that three weeks before the present session a Subgroup had met in the Netherlands to discuss the comments received from ASSINSEL (document TWA/XIII/8) on the draft Test Guidelines for Cocksfoot. The only change made by the Working Party in document TG/31/4(proj.) was to delete the states 4 and 6 of characteristic 10 and to add the following example varieties "Barata (3), Baraula (5), Holstenkamp (7)."

10. As to the remarks from ASSINSEL, the Working Party confirmed that the UPOV draft Test Guidelines were not exhaustive and at national level the authorities were free to add additional characteristics if they considered them useful and acceptable for the testing of distinctness, homogeneity and stability. With respect to ASSINSEL's remarks concerning the request to give in the Technical Questionnaires information on the origin, maintenance and reproduction of the variety, the Working Party took a similar position to that taken by the Technical Working Party for Vegetables with respect to comparable remarks made by ASSINSEL in connection with the draft Test Guidelines for Curly Kale. It stated that under this item the applicant would be required to give all information which would facilitate the testing of the candidate variety and would help the testing authority to understand certain test results better or also to foresee any special treatment, e.g. F<sub>1</sub>-hybrids which may require a different testing procedure. Lack of important information of this kind could lead to a unnecessary prolongation of the tests which would be of disadvantage to the applicant.

Test Guidelines for Timothy

11. The Working Party noted that three weeks before the present session a Subgroup had met to discuss the comments from ASSINSEL (document TWA/XIII/8) on the draft Test Guidelines for Timothy. The Working Party finally made the following changes to document TG/34/4(proj.):

(i) In the Table of Characteristics, it deleted the remarks in respect of characteristic 2.

(ii) Changes made in the Explanations and Methods:

Ad. 2 to replace the first sentence of the first observation by the following wording: "when approximately 20% of the plants of the earliest heading variety have emerged"; to replace the words "1 month" in the second and third observation by "3-4 weeks"; to delete the words "had any inflorescence" in the last sentence and to add a sentence: "The descriptive states are calculated from these figures."

Ad. 7, 8 to delete the explanations in respect of the penultimate leaf

Test Guidelines for Meadow Fescue and Tall Fescue

12. The Working Party noted that three weeks before the present session a Subgroup had met in the Netherlands to discuss the comments from ASSINSEL (document TWA/XIII/8) and the United States of America (document TWA/XIII/5) on the draft Test Guidelines for Meadow Fescue and Tall Fescue. The only change made by the Working Party in document TG/39/4(proj.) was to replace in characteristic 2 the example variety "Aronde" by "Manade" and to add the example variety "Rebel (F.a.)" for state 7.

Test Guidelines for Swede

13. The Working Party noted the comments received on the draft Test Guidelines for Swede (document TWA/XIII/6) and made the following main changes in document TG/89/1(proj.):

(i) Changes made in the Table of Characteristics:

Characteristics

1 to have the third state read: "semi-drooping" and to be given drawings for explanations

- 3 to have the example varieties "Seefeldler (3), Heinkenborsteler (7)"
- 4 to correct the spelling of "Mella"
- 5 to read: "Leaf: number of major lobes" and to have the name of example variety "Suttons Western" corrected to "Suttons Western Perfection"
- 6, 13 to have the spelling of "Fama Daehnfeltd" corrected
- 7 to have the example varieties "Seefeldler (5), Mella (7)"
- 8 to be deleted
- 9 to correct the spelling of "Ruta Otofte"
- 10 to read: "Leaf: number of minor lobes between major lobes"
- 11 to replace the word "scales" by "minor lobes"
- 12 to replace the word "width" by "thickness," and to have the states "thin, medium, thick" and the example varieties "Vogesa (3), Marian (5), Heinkenborsteler (7)"
- 14 to have the example varieties "Angus, Scotia (3), Merrick (5), Champion (7)"
- 15 to have the example varieties "Niko (1), Mella (2), Marian (3)"
- 16, 17 to replace the example variety "Seegold" by "Seefeldler"
- 16, 18 to delete the example variety "Aubigny Green Top"
- 20 to insert new characteristics before characteristic 20, reading: "Root: dry matter content (when roots of early maturing varieties are fully developed and mature)" with the states "low (3), medium (5), high (7)" and the example varieties "Doon Major (3), Champion (5), Angus (7)"
- 21 to insert new characteristics after characteristic 21, reading: "Root: color of neck surface between leaf scars" with the states "uniform red or purple (1), green or purple mottled with green (2)" and the example varieties "Balmoral, Champion (1), Angus, Harrietfield (2)"

(ii) In the Explanations and Methods, under Ad. 4-11, the words "a lobe" were replaced by "a major lobe" and the words "a scale" were replaced by "a minor lobe"

14. The Working Party had a long discussion on whether to include reproductive characteristics in the draft Test Guidelines for Swede. These would require a second trial and it was not clear whether the additional efforts were justified. The characteristics were almost exclusively used in the United Kingdom, but fairly frequently, while other member States very rarely used them. They were expected to be very useful in future for distinguishing varieties which had a different agricultural value but could not be distinguished by other morphological characteristics. The Working Party finally agreed to postpone the inclusion of these characteristics to a later revision of the document to enable other member States to study them in the meantime. For this purpose, the list of these characteristics is reproduced in Annex II to this report.

15. The discussions on the inclusion of reproductive characteristics led to the general question of the criteria used by different member States to accept additional characteristics for the testing of distinctness, homogeneity and stability. During this discussion different opinions were expressed. Some experts were of the opinion that all characteristics considered useful for the testing of distinctness should be included in the UPOV Test Guidelines to make more States aware of the fact that those characteristics were already used and thus incite them to consider their inclusion in their own national test guidelines. Others felt that it was not necessary for a characteristic to be included in the UPOV Test Guidelines for it to be already used as a routine

characteristic in several member States. Others expressed the opinion that all characteristics used in any of the UPOV member States should be listed to avoid, as was the position at present, too many national differences in the lists of characteristics. Others wondered why, for example, fifty characteristics be tested if the testing of only twenty characteristics was sufficient to distinguish the majority of the varieties. The use, as was the case at present in some member States, of different lists of characteristics, depending on whether the variety was tested for distinction purposes for national listing or for plant variety protection was to be avoided.

16. During the discussions it became apparent that different approaches were taken in the individual member States with respect to the inclusion of further characteristics in the national Test Guidelines. Some member States had long lists of characteristics while others might do with a reduced number of characteristics. This meant that in the countries with long lists of characteristics there would be a greater possibility of distinguishing varieties, while, on the other hand, homogeneity would be required for more characteristics and thus more varieties would be rejected because of a lack of homogeneity. In those member States where a reduced number of characteristics was used, the varieties would have to be homogeneous for a lower number of characteristics and therefore the number of varieties rejected because of a lack of homogeneity would be smaller, while on the other hand more candidate varieties would be rejected because of lack of distinctness due to the reduced number of characteristics. As long as the varieties were protected and marketed in one member State only, there was no problem but if breeders applied for protection of varieties in more than one member State, more cases would arise where in one member State a variety would be rejected for lack of distinctness or homogeneity while the same variety was accepted in others.

#### List of Standard Books and Documents

17. The Working Party noted the information given in document TWV/XVII/7. Having discussed the purposes of this publication, it felt the list should include all titles really used in practice by the authorities in the member States which should be classified into three groups:

- (i) very general information
- (ii) specialized information (for examples books on botany, mathematics, statistics, chemistry or diseases) and
- (iii) species orientated information.

At a later stage it should be discussed whether all or part of that information should in future be included in individual Test Guidelines or in the General Introduction to the Test Guidelines. In order to supplement the information with this aim in mind, the Working Party requested the experts of the member States to send to the Office of UPOV before the end of September the information on standard books and documents used by their authority classified by the above-mentioned categories.

#### Reproducibility of Characteristics

18. The discussion was based on the information contained in document TWA/XII/3 Rev. The comparison of the data from the different member States showed rather numerous discrepancies, some of which were caused by the fact that the Test Guidelines established in 1981 had only been introduced somewhat recently by some of the member States and the information used for comparison purposes was not yet based on the latest revision of the Test Guidelines. Thus, for example, only five of the 20 characteristics showing an asterisk were really used by all UPOV member States. The Working Party confirmed its intention to stick to the decision that all characteristics with an asterisk should be used by all member States in all variety descriptions. To ensure that this would really happen, the Working Party agreed to ask the experts to inform the Working Party during its coming session whether all member States now in fact used at least all characteristics of the Test Guidelines for Wheat (document TG/3/8) containing an asterisk.

19. The comparison showed again the different approach taken by the member States. Some of them placed more emphasis upon homogeneity, others upon distinctness. Those placing more emphasis upon the testing of homogeneity justified their approach by the fact that, if the breeder had undertaken a genuine breeding effort, it was the duty of the competent authority to see to it that the variety was not kept off the market simply because the characteristics presently used did not allow its distinctness to be established. A breeder could make efforts to improve the homogeneity of his variety, but would have little possibility of improving the distinctness if certain characteristics were not considered acceptable by the national authorities. The countries placing more emphasis upon the question of distinctness pointed out that, when looking for characteristics for distinctness, a start had to be made with the most reliable characteristics, which were easily accessible and would not fluctuate. Approaches towards characteristics which were subject to some fluctuation had to stop at the point where the fluctuation got bigger and the possible for distinction was reduced. There was little use in including in the UPOV Test Guidelines purely descriptive characteristics which could not be used for establishing distinctness.

20. The latter remark led to the question already raised in other Committees and Working Parties as to whether the Test Guidelines were primarily drawn up for describing the varieties or whether they were basically intended for distinguishing those varieties. While some experts were of the opinion that they were primarily for distinguishing varieties, others confirmed the view that they were primarily intended for describing varieties. One supporting argument brought forward to defend the last mentioned opinion was that under the present system it might very well happen that according to the results of the testing for all characteristics mentioned in the UPOV Test Guidelines, two varieties would have a completely identical description, but within a given state of a characteristic they would nevertheless be so distinct as to justify the granting of two separate rights. On the other hand, two varieties with different descriptions might nevertheless not be sufficiently distinct from each other if the differences were in characteristics for which a difference of more than one state of expression is considered necessary for distinction. The Working Party asked the Technical Committee to clarify the situation and also to consider whether the title of the Test Guidelines needed amendment to make the aim clearer. The main use of the Test Guidelines for establishing distinctness--although their primary aim was for description purpose only--was that they served as a measure of preselection, screening the existing varieties and finding out those varieties which are most closely resembled the candidate variety under test. The real test of distinctness would then, however, be the pairwise comparison of the candidate variety with all those varieties most closely resembling it.

21. The Working Party noted further that the fluctuation within a characteristic was not the same throughout the 1 to 9 scale. Varieties with states of expression at the extremes (1 or 9) were in general more homogeneous, while towards the middle of the scale the fluctuation increased. If member States were to decide to increase the number of states of expression necessary to distinguish one variety from another, this would be taken into account. Despite this fact, the Working Party insisted that the steps within the scale of quantitative characteristics should be equal. The steps, as already agreed on an earlier occasion, should also be meaningful, for example they should not be lower than 1 LSD for measured characteristics.

22. The Working Party stressed that it was remarkable that despite the different approach and the differences in understanding in most cases, when the same plant material was tested the various authorities usually arrived, although for different reasons, at comparable answers. The greatest differences in the results were not caused by the differing approaches but by the differences in the reference collections maintained in the individual member States. Therefore, in the future, more emphasis would have to be placed upon the harmonizing of reference collections.

23. The Working Party noted that with respect to the testing of stability the situation was comparable to that of homogeneity. As long as not all member States examined the same characteristics, or even left examination to the breeder, varieties accepted by one member State would continue to run the risk of rejection by another member State due to lack of homogeneity or stability.

24. To remedy the rather undesirable situation with respect to wheat, the Working Party agreed that the individual experts would at home once more check their lists of characteristics for the testing of distinctness, homogeneity and stability of wheat in the light of the above-mentioned discussion and inform the new Chairman of the Working Party of their findings. Depending on the outcome of this check, the UPOV Test Guidelines for Wheat could require further revision.

25. Some experts in the Working Party warned that UPOV might soon fall behind developments if it did not start immediately with discussions on new developments in wheat breeding, especially with respect to chemical hybrids, dwarf varieties and Triticale. It would be wrong to leave the discussions to other institutes or other authorities as, for example, the certification authorities which might take decisions which the Plant Variety Protection Offices would find difficult to follow, or to wait until each member State had fixed its position before discussions took place in UPOV since States were as yet still flexible and could more easily agree on a common approach. The Working Party therefore finally agreed that its new Chairman would prepare a circular to collect information from the different member States and that on the basis of that information it would have to be decided whether a Subgroup would need to meet before the next session of the Working Party or whether the whole question could be discussed directly during the coming session of the Working Party. In addition it would consider inviting an expert from outside UPOV to the next session of the Working Party to report on new developments in wheat breeding.

#### Harmonized Methods for the Testing of Diseases, Common Nomenclature for Different Diseases and their Races

26. (a) Miss J. Rasmussen (Denmark) reported on the second meeting of the Subgroup on diseases on cereals, which had met at Cambridge, United Kingdom, from May 16 to 18, 1984, and gave explanations on the draft report which had been prepared at the request of the Technical Committee.

(b) The Working Party agreed to circulate the draft report to all member States, asking for comments in writing before September 1, 1984. Thereafter, the report would be presented to the Technical Committee during its next session. The Working Party noted that the Subgroup had completed its work as to mildew and rust diseases on cereals, and therefore had not felt an immediate need for a further meeting.

(c) During the discussions, a comparison was made between the nature of the characteristics used for resistance (vertical) of a variety with respect to a range of races of a parasite and for example the electrophoresis of gliadines. The French expert underlined that in the first case the measuring tool was represented by living beings which were open to evolution contrary to the laboratory method required for the electrophoresis.

#### Intergeneric Varieties

27. The Working Party noted the information given in the documents TWA/XII/7 and TWA/XIII/9. It noted that the question was of greatest importance for Triticale and for Lolium. While in the case of Lolium the limits between Lolium perenne and Lolium multiflorum might cease to exist in the future and Lolium might have to be taken as a whole, for Triticale the varieties at present were completely different from wheat, but the breeding aim was to create varieties which would come closer to wheat. Many hopes of breeders in the future of interspecific hybrids had not come true. For other species it might be more difficult to create in the future interspecific or intergeneric hybrids and it might be easier to transfer parts from one species to another. The Working Party agreed that efforts should be undertaken to avoid different procedures being established in different member States, as this had already happened with respect to Triticale where in one member State one special Triticale scheme had been established, in another a different Triticale scheme existed which included also the testing of ear rows while in a third State Triticale varieties were treated in the same way as wheat varieties. After discussing several possibilities for achieving harmonization and avoiding problems, the Working Party agreed on the following general rules for the treatment of intergeneric or interspecific varieties:

(i) If possible, the--intergeneric or interspecific--origin of the variety should be ignored and the variety should be handled as a normal variety belonging to one of the existing species; this approach would, however, depend on the possibilities of the competent authorities to disregard certain



(iii) If the approach under (i) and (ii) was not possible, it should be examined whether it was feasible to use a larger agglomerate on a higher level:

(a) to use a higher existing taxonomic level (e.g. a genus or a family) or

(b) to treat the variety as belonging to a new species.

(iv) It was agreed that the testing authority was not responsible for the nomenclature and that it was not its task to check to what species the variety belonged. It was up to the breeder to give reliable information with respect to that question.

(v) It was agreed that it was not possible to regulate all cases in advance. Special cases should be discussed inside the Working Party as soon as they arose in order to reach a harmonized approach.

(vi) In general, for all varieties a certain homogeneity requirement would have to be fulfilled. The fact that a given variety was a intergeneric or interspecific variety was by itself no sufficient reason to enlarge the tolerances for homogeneity.

As the Working Party had already agreed to discuss the question of Triticale during its coming session, the above-mentioned rules would be taken into account during those discussions.

#### Electrophoresis Test on Wheat

28. Mr. Seaton (United Kingdom) reported on the details of the project which was now being undertaken by six countries, namely Belgium, the Federal Republic of Germany, France, the Netherlands, Spain and the United Kingdom. 30 ears, from each of six wheat varieties, had been distributed by the United Kingdom to the participating countries in September 1983. The varieties would be tested in the field with respect to 14 selected morphological characteristics from the UPOV Test Guidelines as well as with respect to different electrophoresis methods. The test results of each country would be sent back to the United Kingdom by November 1984. The Working Party noted that the purpose of the project was to compare the electrophoresis methods used in different countries and as well to compare the correlation between the results obtained from the electrophoresis methods and those obtained from morphological characteristics. It decided that this year's trials should only be a first step and should be continued in the coming year with new plant material to be distributed before a final evaluation was made. The Working Party also realized the need to keep close contact with other organizations also studying the electrophoretic methods.

#### Items for the Technical Working Party on Automation and Computer Programs

29. Dr. M.-H. Thiele-Wittig gave a short account of the last session of the Technical Working Party on Automation and Computer Programs. The full report on that session is reproduced in document TWC/II/9 Prov. The Working Party had no further subjects to present to the Technical Working Party on Automation and Computer Programs. It expressed its satisfaction with the progress of the work with regard to the over-years analysis for the testing of distinctness. It agreed on the need to harmonize the grouping methods of control varieties between member States before the introduction of new statistical methods for the testing of homogeneity of cross-fertilized plants.

30. During the discussions it was considered whether a statistical study of the methods for the testing of stability might be needed. It appeared, however, that stability was tested by the same methods as distinctness, thus the same tolerances were used. The only difference was that the tests lasted only one year and the sample size was different. At present, there were also no tests undertaken to find out whether the variety was in equilibrium.

Standard Test Guidelines

31. The Working Party based its discussions on the proposal given in document TC/XIX/6. It also noted the comments as given in document TWV/XVII/11 as well as those of the Technical Working Party for Vegetables given in document TWV/XVII/19 Prov., paragraphs 13 to 14. The Working Party agreed with the need for revision of the whole layout as proposed by the Technical Working Party for Vegetables. In addition, as far as the application of the draft to generatively propagated crops was concerned, it expressed its preference for Alternative (b) as a new layout of the Technical Notes, however with the following changes: For the submission of seeds, Alternative (b) should be supplemented at the end of its last line by the words "where such standards have been established." and the last sentence of the Alternative (a) should be included; paragraph 3 should be deleted. The Working Party finally asked to have the possibility to see the proposal from the Technical Working Party for Vegetables before it was sent to the Technical Committee.

Test Guidelines for Cotton

32. Dr. M.-H. Thiele-Wittig reported on the results of the meeting of the Subgroup on June 26, 1984, on the establishment of Test Guidelines for Cotton on the basis of document TWA/XIII/4. On the basis of that report, the Working Party finally agreed on the following main changes in that document:

(i) Changes made in the Table of Characteristics:Characteristics

11, 14, 20, 21, 22, 26 and 28 to be deleted

- |            |   |
|------------|---|
| 1          | to delete the asterisk and to add drawings to be prepared by the experts from South Africa  |
| 4          | to add the example varieties "108F and Vered 71 (3), Cocker 208 and Cocker 210 (5)"   |
| 6          | to add the example varieties "108F (1), Locket 77 and Blanco 3363 (3), Mac Nair 220 and Pay Master 145 (5), Cocker 310 and Stoneville 825 (7)"  |
| 7          | to add the states "palmate, digitate, pinnate" and drawings to be prepared by experts from the Netherlands  |
| 10         | to add the additional example variety "Cocker 208 (9)"  |
| 13         | to delete the example variety "Pima"  |
| 15         | to delete the example variety "Pimatypes"   |
| 17         | to add the states "absent or very fine (1), fine (3), medium (5), coarse (7), very coarse (9)", and the example variety "Deltapine 61" for Note 3   |
| 19         | to add the states "weak (3), medium (5), strong (7)"  |
| 23         | to delete the example variety for Note 1 and to correct the example variety for Note 5 to read "Deltapine 61"   |
| 24         | to read: "Boll: content of lint"  |
| 25, 27, 29 | the experts from South Africa to supply example varieties and to add a reference to the methods of the American Society for Testing and Materials (A.S.T.M.) as indicated on pages 18 to 38 of document TWA/XIII/4  |
| 27         | to delete the state "very strong"   |
| 30         | the experts from South Africa to clarify the condition of the exact observation; after this characteristic a new characteristic to be inserted reading: "Boll: degree of opening" with the states "weak, medium, strong" and drawings to be prepared by experts from South Africa |

(ii) In the Technical Questionnaire, paragraph 5.1 was deleted as well as the proposed new characteristic (degree of opening of the boll).

(iii) As far as the example varieties are concerned, experts from Spain will provide names of their varieties to South Africa.

#### Test Guidelines for Groundnut

33. The Working Party noted the information given in document TWA/XII/9 and agreed that the document could be presented to the professional organizations for comments. Since for several of the characteristics, no example varieties had so far been given, the expert from Israel would be asked to give, if possible, more example varieties by the beginning of October.

#### Test Guidelines for Rice

34. The Working Party noted the report on the result of discussions in the Subgroup which had met on June 26, 1984. It finally agreed on the following changes proposed by the Subgroup to document TWA/XII/14:

(i) In paragraph 3 of the Technical Notes, the number "100" was replaced by "1,000"

(ii) Changes made in the Table of Characteristics:

#### Characteristics

1, 2, 13, 19 to be deleted

3 to add the example varieties "Starbonet (3), Blue Belle (5), Carlrose (7)"

4 after this characteristic a new characteristic to be inserted reading: "Penultimate leaf: pubescence of blade" to be observed at stage "40" and with the states "absent or very weak, weak, medium, strong, very strong"

5 to be placed after characteristic 6 and to read: "Flag leaf: curvature of blade" to be observed at stage "50" and with the states "absent or very weak, weak, medium, strong, very strong" and drawings to be provided by the expert from Spain

7 to add an asterisk

11 to replace the word "Grain" by "Spikelet"; after this characteristic, a new characteristic to be inserted reading: "Stem: thickness" to be observed at stage "65" and with the states "thin, medium, thick"

12 to add an asterisk and to read: "Stem: length (excluding panicle; excluding floating rice)"

16 to read "Panicle: degree of curvature of main axis" to be observed at stage "90" and with the states "absent or very weak, weak, medium, strong, very strong"

17 to be placed after characteristic 20 and to read "Spikelet: color of tip of lemma" to be observed at stage "80-90" and with the states "white, yellowish, brown, red, purple, black"

18 to read "Spikelet: hairiness on lemma" and to be observed at stage "60-80"

20 to read "Spikelet: length of hairs on lemma" with the stage "80" to be replaced by "60-80"

21 to read "Panicle: length of the longest awns"

22 to replace the word "grain" by "panicle"

- 23 to 29 to replace the stage "90" by "92"
- 25 to add an asterisk
- 28 to add drawings provided by the expert from Spain; after this characteristic, a new characteristic to be inserted reading "Decorticated grain: color" to be observed at stage "92" and with the states "white (1), light brown (2), variegated brown (3), dark brown (4), red (5), purple (6)"
- 29 to read "Polished grain: size of white core" with the states "absent or very small, small, medium, large, very large"
- 30 to be placed after 22 and to delete the brackets and their contents; after this characteristic, a new characteristic to be inserted reading: "Endosperm: type," to be recorded at stage "92" and with the states "non glutinous (1), glutinous (2)", the experts from Spain to supply the testing method

(iii) The Working Party asked the Spanish experts to supply by the beginning of October example varieties and to state which characteristics should receive an asterisk. The Japanese experts were asked to forward the above-mentioned information directly to the Spanish experts.

35. The Working Party regretted that only very little information had been supplied from the member States on the working paper on Test Guidelines for Rice. In addition, during the session there had been no specialist on rice present making the discussions difficult and unsatisfactory, with the result that the document was left incomplete, i.e. no example varieties were given and few asterisks were allocated to the characteristics. It was said that the absence of true experts on certain crops in the meetings and the insufficient and delayed response from the experts concerned was not a problem specific to rice. The same had already happened to some extent in recent sessions when Test Guidelines for other species were dealt with. Sometimes no observations were received even from States for which the species under discussion was a very important one. Thus some of the more recent Test Guidelines were more the result of the work of experts from a few member States, sometimes even only from one, than a document containing the best knowledge of experts from all UPOV member States or at least from those where the given species had some importance. The Working Party thought that the Technical Committee should look for solutions to improve such a situation in which there was a risk of adopting documents containing serious defects or shortcomings. With respect to the draft Test Guidelines for Rice, the Technical Committee would have to take a decision on how to proceed if example varieties could only be given for a very few characteristics.

#### Test Guidelines for Potato

36. The Working Party noted the information given in document TWA/XIII/7 and unanimously agreed to present the document to the professional organizations for comments. Beforehand, however, the wording would have to be adjusted to follow present UPOV practice.

#### Test Guidelines for Turnip

37. The Working Party noted the problem mentioned in document TWA/XIII/10 and asked the Subgroup to meet again and to prepare a new draft before the end of the year which would also allocate asterisks differently for Turnip and Turnip kape. The Office of UPOV would then also distribute this draft to the experts in the Technical Working Party for Vegetables.

#### Test Guidelines for Red Clover and White Clover

38. The Working Party noted that a Subgroup had prepared working papers for revised Test Guidelines for Red Clover and for White Clover. Unfortunately some information that was still missing prevented the presentation of these two documents to the Working Party during its present session. The Working

Party therefore agreed to request approval of those two documents by correspondence. If the documents could be completed before the end of October and no serious objections were received from the experts in the Working Party before the end of the present year, the documents could be sent to the professional organizations for comments.

#### Test Guidelines for Bent

39. The Working Party noted that there was little breeding activity in Bent and thus postponed revision of the Test Guidelines for Bent until 1986.

#### Test Guidelines for Kentucky Bluegrass

40. The Working Party noted that the experts from the Netherlands were at present studying several additional characteristics to the Test Guidelines for Kentucky Bluegrass. It agreed to postpone the revision of those Test Guidelines until the study was completed, i.e. until 1986.

#### Status of Test Guidelines

41. The Working Party agreed that the draft Test Guidelines for Cocksfoot (revision), for Timothy (revision), for Meadow Fescue and Tall Fescue (revision) and for Swede should be sent to the Editorial Committee and the Technical Committee for final adoption.

42. The Working Party agreed that the draft Test Guidelines for Broad Bean and Field Bean (revision) should be sent to the Technical Committee for final adoption if the Technical Working Party for Vegetables agreed to the comments made by the Working Party during the present session.

43. The working Party agreed that the draft Test Guidelines for Cotton, for Groundnut, for Rice (revision) and for Potato (revision) should be sent to the professional organizations for comments as soon as the questions still outstanding had been settled.

44. The Working Party agreed that the drafts for revised Test Guidelines for Red Clover and for White Clover prepared by the Subgroup should be sent to the professional organizations for comments if no serious objections were received by correspondence from the experts in the Working Party.

#### Future Program, Date and Place of Next Session

45. At the invitation of the experts from the Federal Republic of Germany, the Working Party agreed to hold its fourteenth session at Hanover, Federal Republic of Germany, from June 5 to 7, 1985, with Subgroup meetings on June 4, 1985, at the same place. The meeting would close on June 7 at noon. It is planned to discuss the following items at that session of the Working Party:

(i) Final discussion of draft Test Guidelines for:

- Cotton
- Groundnut
- Potato (revision)
- Rice (revision)
- Red Clover (revision)
- White Clover (revision)

(ii) Discussion of working papers on Test Guidelines for:

- Turnip (revision) (document TWA/XIII/10 and results of Subgroup meeting)
- Lucern (revision) (FR to prepare a working paper)
- Common Vetch (revision) (ES to prepare a working paper)

(iii) List of Standard Books and Documents

(iv) Reproducibility of characteristics

- (v) Electrophoresis test on wheat (evaluation of the result)
- (vi) Hybrid Varieties in Wheat
- (vii) Items for the Technical Working Party on Automation and Computer Programs
- (viii) Standard Test Guidelines
- (ix) Comparison of the UPOV Test Guidelines for Potato and the Descriptor List for Potato prepared by the IBPGR (NL to prepare a working paper)
- (x) The variety concept in rape (UPOV to receive information from all member States; two experts from FR and DE to be approached to prepare special papers)
- (xi) Reference Collections for the testing of homogeneity in grasses (NL to prepare a working paper)
- (xii) Minimum distances between varieties

#### Any Other Business

#### New Chairman

46. Noting that the term of office of the present chairman would be completed during 1984 at the end of the coming ordinary session of the Council, the Working Party suggested to the Consultative Committee that it propose to the Council Mr. J. Guiard (France) as Chairman of the Working Party for the coming three years.

#### Sanitary Status of Plant Material Sent in for Testing

47. The Working Party noted the information given in document TWV/XVII/13 on sanitary status of plant material sent in for examination. It agreed that for the establishing of Test Guidelines the question of material infected by diseases should be limited to those diseases which may affect the testing. Other questions, as for example import regulations in the case of tests carried out by one country for another, would have to be handled in connection with the setting-up of bilateral agreements.

#### Harmonization of Lists of Characteristics Established by Different Bodies

48. The Working Party noted that lists of characteristics were established by different bodies for different purposes with different characteristics (for example by the IBPGR or by the EEC Genebanks). Often these lists contained characteristics with the same or similar wording but completely different states, or with a reduced number of states. As it was presently possible that descriptions of varieties established according to different lists of characteristics would be collected in one single computer, the risk of confusion arose. The description of a variety according to one list of characteristics could unintentionally be compared with the description established according to another list of characteristics which in the end would give rise to numerous misunderstandings or mistakes. It would therefore be preferable that the different bodies establishing lists of characteristics for one and the same crop should meet to agree on a common wording as was already done for example in the case of the UPOV Test Guidelines for Vine. In that case, tripartite meetings took place between the International Vine and Wine Office (OIV), the International Board for Plant Genetic Resources (IBPGR) and UPOV, which resulted in the publication of the "Descriptor List for Grape Vine Varieties and Vitis Species" containing a list of all characteristics used by each of the three bodies, indicating for each characteristic the body that used it and giving its number in that body's list of characteristics. The Working Party was aware that this was a long-term aim and could not be achieved in the near future. However, a start should be made rather soon.

49. To make a start in its own field, the Working Party agreed to prepare a study on the similarity of the scales, taking potato as an example. The experts from the Netherlands will prepare a working paper for the next session of the Working Party. In addition, the Office of UPOV was asked to request from the IBPGR an updated list of descriptors already established or in preparation and to obtain copies of descriptors for at least those species for which UPOV plans to prepare new Test Guidelines or revise existing ones.

#### Minimum Distances Between Varieties

50. Unfortunately time did not permit to discuss the subject of Minimum Distances Between Varieties systematically on the basis of document CAJ/XIII/2. Nevertheless some of the questions arising from that subject were discussed and are reported upon in the present document in connection with other items.

#### Handling of Quantitative Characteristics Where Only Three Groups Could be Separated

51. The Working Party asked the Technical Committee to advise it how to handle quantitative characteristics where only three groups could be separated.

#### Visits

52. In the late afternoon of the second day of the session, the Working Party visited the breeding fields of Weibullsholm Plant Breeding Institute at Landskrona.

53. This report was adopted by the Technical Working Party for Agricultural Crops at its fourteenth session on June 5, 1985.

[Two Annexes follow]

TWA/XIII/11

## ANNEX I

LIST OF PARTICIPANTS  
AT THE TECHNICAL WORKING PARTY FOR AGRICULTURAL CROPS  
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[Annex II follows]

## LIST OF REPRODUCTIVE CHARACTERISTICS OF SWEDEN

Characteristics Caractères Merkmale	English	français	deutsch	Example Varieties Exemples Beispielssorten	Note
26. Flower color	lemon	citron	zitronenfarben		1
Fleur: couleur	orange	orange	orange		2
Blüte: Farbe					
27. Flower: maximum diameter (measured diagonally)	narrow	étroit	schmal		3
	medium	moyen	mittel		5
Fleur: diamètre maximum (mesuré en diagonale)	broad	large	breit		7
Blüte: maximaler Durchmesser (diagonal gemessen)					
28. Flower: length of broadest petal	short	court	kurz		3
	medium	moyen	mittel		5
Fleur: longueur du pétale le plus large	long	long	lang		7
Blüte: Länge des breitesten Blütenblatts					
29. Flower: width of broadest petal	narrow	étroit	schmal		3
	medium	moyen	mittel		5
Fleur: largeur du pétale le plus large	broad	large	breit		7
Blüte: Breite des breitesten Blütenblatts					
30. Flower: length of longest sepal	short	court	kurz		3
	medium	moyen	mittel		5
Fleur: longueur du sépale le plus long	long	long	lang		7
Blüte: Länge des längsten Kelchblatts					
31. Flower: width of broadest sepal	narrow	étroit	schmal		3
	medium	moyen	mittel		5
Fleur: largeur du sépale le plus large	broad	large	breit		7
Blüte: Breite des breitesten Kelchblatts					

Characteristics Caractères Merkmale	English	français	deutsch	Example Varieties Exemples Beispielssorten	Note
32. Pod: length of silique	short	courte	kurz		3
Gousse: longueur de la silique	medium	moyenne	mittel		5
Hülse: Länge der Schote	long	longue	lang		7
33. Pod: width of silique	narrow	étroite	schmal		3
Gousse: largeur de la silique	medium	moyenne	mittel		5
Hülse: Breite der Schote	broad	large	breit		7
34. Pod: length of silique beak	short	courte	kurz		3
	medium	moyenne	mittel		5
Gousse: longueur du bec de la silique	long	longue	lang		7
Hülse: Länge des Zahns (Schnabels?) der Schote					
35. Flowering stem: date of bolting	early	précoce	früh		3
	medium	moyenne	mittel		5
Tige florifère: époque de la montée	late	tardive	spät		7
Blühender Trieb: Zeitpunkt des Schossens					
36. Flowering stem: date of flowering (50% of plants with at least one open flower)	early	précoce	früh		3
	medium	moyenne	mittel		5
	late	tardive	spät		7
Tige florifère: époque de la floraison (50% des plantes avec au moins une fleur ouverte)					
Blühender Trieb: Zeitpunkt der Blüte (50% der Pflanzen mit wenigstens einer geöffneten Blüte)					
37. Flowering stem: height (at flowering)	low	basse	niedrig		3
	medium	moyenne	mittel		5
Tige florifère: hauteur (à l'époque de la floraison)	high	haute	hoch		7
Blühender Trieb: Höhe (zum Zeitpunkt der Blüte)					