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

GENEVA

**TECHNICAL WORKING PARTY  
FOR  
ORNAMENTAL PLANTS AND FOREST TREES****Twenty-second Session****Hanover, Federal Republic of Germany, May 29 to June 1, 1989**

REPORT

adopted by the  
Technical Working Party for Ornamental Plants and Forest Trees

Opening of the Session

1. The twenty-second session of the Technical Working Party for Ornamental Plants and Forest Trees (hereinafter referred to as "the Working Party") was held in Hanover, Federal Republic of Germany, from May 29 to June 1, 1989. The list of participants appears in the Annex to this report.

2. Dr. D. Böringer, Director of the Bundessortenamt, welcomed the participants to his office in Hanover. The session was opened by Mr. C.J. Barendrecht (Netherlands), Chairman of the Working Party.

Adoption of the Agenda

3. The Working Party unanimously adopted the agenda for its twenty-second session as reproduced in document TWO/XXII/1, after having agreed to add three new items to the agenda, (i) New Technologies, (ii) States of expression in Test Guidelines and (iii) Micropropagation, and after having postponed its discussions on item 5(i) (Chrysanthemum), item 10 (Improving efficiency in variety testing) and item 13(viii) (Pyracantha) to its next session.

Short Reports on Special Developments in Plant Variety Protection in Ornamental Plants and Forest Trees

4. The Working Party received short reports from some of the experts on further recent developments in their countries. It noted with special interest the information from Australia that the Plant Variety Protection System has been operational since about one year, based in the ornamental field on breeders' tests and overseas tests. From the United Kingdom it noted many new developments in chrysanthemum breeding and applications in several species for which so far no applications had been received. From the Federal Republic of Germany it noted the enlargement to 102 families of the list of species within which protection can be obtained. Several member States studied the possibilities of maintaining example varieties or other varieties through tissue culture.

Important Decisions Taken During Recent Sessions of the Technical Working Party and of the Technical Committee

5. Dr. M.-H. Thiele-Wittig gave a brief report on the last session of the Technical Committee, referring for further details to the full report reproduced in document TC/XXIV/6.

Final Discussion on Draft Test GuidelinesTest Guidelines for Gerbera (Revision)

6. The Working Party noted documents TWO/XXII/6 and TWO/XXII/7 containing comments from AIPH and from The Netherlands on the draft for revised Test Guidelines for Gerbera as reproduced in document TG/77/4(proj.). It made the following main changes in document TG/77/4(proj.):

(i) Table of Characteristics:Characteristics

16, 17, 40, 46, 49, 59 to be deleted

10 to 13, 38, 54 to receive an asterisk (\*)

34, 57 to have the asterisk (\*) deleted

7 to have the states "very acute, acute, right angle, obtuse, rounded"

12 to have the following example varieties for Note 7: "Fredigor, Hildegard" and for Note 9: "Hanny"

13 to have the following example varieties for state 9: "Uranus, Hanny"

14 to read: "Peduncle: bracts below involucre"

19 to receive drawings for explanation and to apply to "Semi-double or double varieties only"

20 to apply to "Semi-double or double varieties only"

- 24 to read: "Flower head: reflexing of distal part of bracts" with the states "absent (1), present (9)"
- 30 to have the example variety "GRB 719" deleted
- 39 to have the addition "selfcolored varieties excluded" and to have the state 1 (uniform) deleted
- 45 to have the word "top" replaced by "tip"
- 47 to have the words "color of" replaced by "hue of"
- 48 to have the example variety "Ines" for Note 6
- 51 to read after the first colon: "Black disc (before opening of disc florets)" with the states "absent, present", the first half of the example varieties to be attributed to Note 1, the others to Note 9
- 52 to apply to "Single or semi-double varieties only" and to have the word "flower" replaced by "florets"
- 53 to have the words "male flowers" replaced by "bisexual florets"

(ii) Literature: The experts from The Netherlands to indicate titles.

#### Test Guidelines for Lachenalia

7. The Working Party noted the comments, received from an expert in Australia and distributed during the session, on the Draft Test Guidelines for Lachenalia as reproduced in document TG/126/1(proj.). It made the following main changes in document TG/126/1(proj.):

(i) Subject of these Test Guidelines: To have an addition reading: ", but primarily to the varieties of the aloides group and its hybrids."

(ii) Conduct of Tests: In paragraph 3, after the third word, the word "normally" to be included, the information on "Bulb size" to be changed to: "Bulb: second season bulbs," the planting depth to be "2 to 4 cm," the planting density "1 bulb per pot of .. cm in diameter," (the expert from ZA to indicate the exact number of cm) flower forcing and bulb storage to be combined to read: "Bulb storage: At 5°C maximum, followed by 20° to 25°C for 12 weeks to initiate flowering."

(iii) Methods and Observations: In paragraph 6 the first sentence to apply to color observations, a second sentence to be included thereafter to read: "All other observations on the flower should be made at the middle of the open flowers."

(iv) Grouping of Varieties: The last characteristic to be replaced by characteristics 34 and 37.

(v) Table of Characteristics:

#### Characteristics

5 after this characteristic a new characteristic to be included reading: "Leaf: color" with the states "light green (Romelia (1)), dark green (Roinge (2)), blue green (Bontrok (3))"

- 7 to have the additional example varieties "Eliza, Rodelein (1)"
- 15 to be placed after characteristic 7 and to have the additional example varieties "Elegant, Leipoldt (9)"
- 24 to receive an asterisk; after this characteristic a new characteristic to be inserted reading: "Flower: length of pedicel" with the states "short (Romargo (3)), medium (Bontrok, Louis (5)), long (Rosabeth (7))"
- 32 to be deleted
- 33 to have the states replaced by the indication of the RHS Colour Chart Number
- 34, 37 to have the first state read "similar"
- 35 to have the addition "if clearly different to other part"
- 38, 39 to have the word "clearly" deleted
- 39 to have the states replaced by the indication of the RHS Colour Chart
- 41 to be placed after characteristic 42
- 45 to read: "Duration of flowering" with the example varieties "Rodelein, Roinge (5)" and "Romelia, Rosabeth (7)"

(vi) Literature: To receive some corrections in spelling.

(vii) Technical Questionnaire: In paragraph 5 the characteristic 32 to be replaced by characteristics 33 and 37.

#### Test Guidelines for Leucadendron

8. The Working Party noted that no comments had been received in writing on the Draft Test Guidelines for Leucadendron as reproduced in document TG/127/1(proj.). It therefore only made the following main changes in that document:

(i) Conduct of Tests: To have in paragraph 3 the words "which should be divided between two or more replicates" deleted.

(ii) Methods and Observations:

#### Paragraphs

- 3 to have the word "preferably" included after the comma
- 5, 6, 7 to have the word "stem" replaced by "branch" and the word "inflorescence" by "flower head"
- 6, 7 to receive the addition "of that variety" after "flowering season"
- 9 to be deleted

(iii) Table of Characteristics:Characteristics

- 5 to read: "Plant: density of foliage"
- 18 to receive an asterisk and to have the word "predominant" included after the colon
- 30 after this characteristic a new characteristic to be included reading: "Flower head: number of floret masses" with the states "one, more than one"
- 32 to have the word "strength" replaced by "intensity"
- 34 to 47 to change "Involucral leaf" into "Inner involucral leaf"
- 34, 48 to have the first state read: "similar" and characteristic 34 to be placed after characteristic 47
- 42 to read: "Inner involucral leaf, inrolling of margin at apex" with the states "absent, present (Candles)"
- 43 to be placed after characteristic 47
- 43, 55, 57, 58 to have the additional state "yellow green" before "yellow"
- 49, 56 to be deleted
- 54 to have the word "width" replaced by "diameter"
- 55 to apply to female floret mass
- 57, 58 to apply to male floret mass
- 60 to read: "Floret mass: size of basal bract" with the states "small, medium, large"
- 64 to have the word "coloration" replaced by "color change"
- 66 to be placed after characteristic 64 and to have the addition "if color change present"

The example variety "Candles" to be added to the following characteristics and their states of expression: 1-2, 9-1, 15-1, 19-1, 22-1, 24-2, 28-1, 35-3, 39-1, 40-1, 41-1, 44-1, 46-1, 48-2, 51-7, 55-1, 59-9

(iv) Explanations on the Table of Characteristics: The order of the drawings in "Ad 14 + 39" to be inverted and in "Ad 31-62" the words "flower head (commercial "flower")" to replace "commercial "flower"".

(v) Technical Questionnaire: Paragraph 5.6 to be deleted.

Test Guidelines for Leucospermum

9. The Working Party noted that no comments had been received in writing on the Draft Test Guidelines for Leucospermum as reproduced in document TG/128/1(proj.). It therefore only made the following main changes in that document:

(i) Conduct of Tests: To have the words "which should be divided between two or more replicates," in paragraph 3, deleted.

(ii) Methods and Observations:

Paragraphs

3 to have the word "preferably" included after the comma

5 to 8 to have the word "inflorescence" replaced by "flower head" and to have the words "of that variety" included after "flower season"

5 to have the addition "or a cluster of flower heads"

9 to be deleted

(iii) Table of Characteristics:

Characteristics

4 to read: "Plant: density of foliage"

16 to have the first state read: "more or less straight"

38, 39 to have the words "fully developed" included before "flower heads"

57, 58, 59, 60 to have the words "distal end of perianth" replaced by "apex of bud"

59 to have the additional state "purplish (6)"

61 to have the words "middle part of perianth" replaced by "perianth below apex of bud" and to have the additional state "greenish (1)"

The example variety "Sunrise" to be added to the following characteristics and states: 20-1, 24-3, 31-1, 45-2, 46-9, 59-6, 62-3, 65-9, 71-3

Test Guidelines for Protea

10. The Working Party noted that no comments had been received in writing on the Draft Test Guidelines for Protea as reproduced in document TG/129/1(proj.). It therefore only made the following main changes in that document:

(i) Methods and Observations:

Paragraphs

3 to have the word "preferably" included after the comma

- 5 to 8 to have the word "inflorescence" replaced by "flower head" and to have the words "of that variety" included after "flowering season"
- 9 to have the word "bracts" put into the singular
- 10 to be put into Section VIII (Explanations to the Table of Characteristics) after "Ad 63", to be headed "Ad 67" and to read: "The involucre density index should be determined by the following formula: number of inner involucre bracts (characteristic 50) multiplied by the mean width of the involucre bracts divided by the diameter of flower heads (characteristic 37)
- 11 to be deleted

(ii) Table of Characteristics:

Characteristics

- 4 to read: "Plant: density of foliage"
- 8 to be placed after characteristic 4 and to have the first word replaced by "Plant"
- 14 the example varieties to be placed to Note 3
- 48, 49 to have the state "yellow" changed to "yellowish"
- 48 to have the words "of dry margin" replaced by "below dry margin"

The following example varieties to be added to the following characteristics and states:

Satin Pink: 16-2, 22-2, 23-1, 41-5, 45-2, 73-10

Red Baron: 15-7, 25-3

Andrea: 16-4, 23-9, 59-9, 62-9

Brenda: 15-5, 63-1, 73-4

(iii) Explanations to the Table of Characteristics: The wording in the explanations to Ad 28 to read: "top third of flowering branch for leaf observation" and in the left part of Ad 42 + 51 the wording to read: "observations on outer involucre bract just below middle third of flower head".

Use of Pictures in Variety Applications

11. The Working Party discussed the different attitudes with respect to the request to have applications for breeders' rights for ornamental varieties supplemented by a representative color picture of the variety. It was noted that this was compulsory in Australia, Israel, Italy, Japan, The Netherlands and the United States of America, while further States were considering its introduction. In several countries, plant material is normally only requested for a given time of the year. Requesting a color picture at the date of application, would ensure that the variety existed at that time and that the breeder has not changed it in the meantime. Some experts stated, however, that a mistake by the breeder in his variety description would not lead to rejection of the application, as the plant material was decisive. The Working Party concluded its discussions by expressing its preference for the introduction of the request for a color photo in all member States. In the long term this should be made obligatory. As far as possible, standards for the photo might also be set up.

Minimum Distances

12 Dr. Thiele-Wittig reported on the history of the holding of different workshops on minimum distances. Dr. Laidig (DE) reported on the results of part of the evaluation of the data supplied by the different Working Parties. In most cases the minimum distances agreed with the LSD values; in some cases, however, they were lower, a fact that should not happen. The Technical Working Party on Automation and Computer Programs is studying the question of calculating long range LSD data from existing data of past years which may be used as a guide for minimum distances. The Working Party noted that in addition to the difficulty of deciding on the minimum distance within a characteristic, there is a problem in that too many characteristics exist. It was hoped that if, in agreement with breeders and growers, certain characteristics were declared not apt for distinguishing, this decision would also be accepted by the courts.

Items for the Technical Working Party on Automation and Computer Programs (TWC)

13. The Working Party had no items to propose to the Technical Working Party on Automation and Computer Programs. It continued to encourage its members to participate in meetings of that Working Party whenever they took place in their country.

14. Dr. Laidig (DE, Chairman of the TWC) reported that the TWC would continue analyzing the data received from the different Working Parties on two selected species each. It would also need to gain more knowledge on how to handle visual observations.

15. The Working Party also discussed on that occasion the distribution of lists of varieties under test. It confirmed their usefulness. To avoid each authority having to establish its own combination of individual lists, a trial was started in which three experts collected information on a given species from the other member States, and prepared a combined table for the species in question, to be made available on request to other authorities. Mr. Bar Tel (IL) will prepare such a list for Gerbera, Mrs. Wijnheijmer (NL) for Carnation and Mr. Spellerberg (DE) for Roses. The information should be sent to the afore-mentioned experts by January 1, 1990.

Color Observations

16. The Working Party noted the report of the experts from the Federal Republic of Germany on the progress made in the empirical grouping of the RHS Colour Chart with the aim of facilitating the screening of varieties by computer. It noted similar work going on in the United Kingdom and The Netherlands. It agreed that an attempt should be made to reach a comparable system in which for one RHS number the same other RHS numbers should be compared. For that purpose, a short description of the German program and the list of a total of 98 color groups would be distributed and a Subgroup of experts from the United Kingdom, The Netherlands and the Federal Republic of Germany would meet in March or April 1990 to exchange further information.

17. The Working Party also noted that the expert from the Federal Republic of Germany would report during the Workshop on Elatior Begonia and Pelargonium on Friday, June 2, 1989, on the joint trials with the registration group of the Permanent Judgement Committee (VKC) of the Royal Society for Horticulture and Plant Science (KMTP) of The Netherlands on the use of a chromameter for the measuring of colors.

Revision of the UPOV Model for a Report on Technical Examination

18. The Working Party noted documents TC/XXIV/4 and TC/XXIV/6, paragraphs 72 to 74, giving a report of the discussions held during the last session of the Technical Committee, as well as document TC/XXV/6 containing the comments and proposals received in the meantime from the experts of the member States. In going through the document model form by model form it made the following remarks:

(i) General Comments: It agreed to comments (iii) to (viii)

(ii) Report on Technical Examination: It agreed to the following comments: 1, 5(i), 6, 8(i), 9 + 10(i), 9 + 10(iv). In the description form under Part A, the grouping characteristics should be repeated.

(iii) Interim Report on the Examination of a Variety: It agreed to the following comments: 1, 2, 3 + 4(ii), 5(i), 6(ii), 8(i), 9(ii).

(iv) Request for Examination Results: It agreed to the following comments: 1(i), 2, 3, 6 + 7(ii), 8, 10, and 9(ii), as long as it would not lead to 9(iii). There should be an addition reading: "The costs are expected to amount to [ ] the UPOV administrative fee, [ ] the full examination fee.

Cooperation with Breeders in the Testing of Varieties

19. Lack of time did not permit the Working Party to deal with this subject.

New Technologies

20. The Working Party noted document TC/XXIV/6, paragraphs 38 and 39, containing the results of the discussions on that subject during the last session of the Technical Committee, as well as document TC/XXV/4 containing information received by the Office of the Union as a result of the discussions held by the Technical Committee and in response to circulars issued pursuant to those discussions. The Working Party asked that the information be updated, especially with respect to Annex II. Any information should be sent to the Office of UPOV before the session of the Technical Committee at the beginning of October.

21. The Working Party had an exchange of the possibilities of new technology in the ornamental species. According to the experience of the experts, very few possibilities were seen. In order to clarify the situation, the experts from The Netherlands will prepare a list of general remarks and all arguments speaking for and against the application of electrophoresis, image analysis and DNA probe for distinctness purposes. The list will be sent to the Office of UPOV by July 15, 1989, for circulation to the Working Party for further additions and comments which should be sent to the experts from The Netherlands before September 15, 1989.

States of Expression in Test Guidelines

22. The Working Party noted document TC/XXIV/6, paragraph 61, and document TC/XXIII/5. The Working Party repeated its view taken during its last session, that the possibilities of expression should not be limited too much and that

it would be difficult to agree on general proposals. It nevertheless went through document TC/XXIII/5 and finally agreed, subject to the above-mentioned reservations, to the following proposals or examples, depending on the situation in question: 5(i) to (v), Ex.7.1 to 7.3, Ex.9.1 to 9.5, Ex.10, Ex.11.2 to 11.6, Ex.12.1 to 12.7, Ex.12.9, Ex.13.2, Ex.14.1 to 14.3, Ex.15.1 to 15.3. It disagreed with Ex.12.8, Ex.13.1 and Ex.16.1 to 16.7. It had certain reservations on Ex.8.1 and had a long discussion on Ex.11.1. The states "flat(1)" and "convex(2)" might be very useful for some varieties where the expression can be clearly attributed to one of the two states. There were, however, always cases where the expression varied or was somewhere in between or it was impossible to attribute it to one of the states. The question was what to do in such cases?

23. The Working Party finally suggested to the Technical Committee that it investigate whether for cases such as the last mentioned, the introduction of the state "0" should be foreseen, which would indicate that it was not possible to take a clear decision on one or the other state.

#### Discussion on Working Papers on Test Guidelines

##### Test Guidelines for Carnation (Revision)

24. The Working Party had no further comments to make to those reported upon during its last session. It noted, however, that new breeding work resulting in new types of varieties might rather soon require a further revision. It asked the Office of UPOV to prepare a new version of the draft Test Guidelines for presentation to the professional organizations for comments. Before being sent to the organizations, it should, however, be circulated to the Working Party. Any possible comments on that draft should be sent to the chairman.

##### Test Guidelines for Chinkerinchee

25. The Working Party noted that no comments had been received on document TWO/XXI/2 and made only the following main changes in that document:

(i) Subject of these Guidelines: The spelling of the common English name to be "Chincherinchee".

(ii) Conduct of Tests: To have in paragraph 3 the growing conditions indicated, adopting those of Lachenalia for the growing time, the soil, the bulb size, the planting depth. The planting density to be "10cm apart", the day temperature 20 to 30°C, the night temperature 0 to 10°C.

(iii) Methods and Observations: To have paragraph 8 deleted.

(iv) Table of Characteristics:

##### Characteristics

1 to have the Notes "3, 5, 7" and to have the example varieties referring to a whole commercial species deleted both here and throughout the document

3 the last state to read "broad"

- 5 to have an additional state "circular" after "flattened"; after this characteristic a new characteristic to be included reading: "Leaf: recurving of margin" with the states "absent, present (Rothea)"
- 6 after this characteristic a new characteristic to be inserted reading: "Inflorescence: length" with the states "short, medium, long"
- 8 to read: "Inflorescence: type of bract"
- 9 to 11 to start all with "Inflorescence"
- 10 to have the states "filiform, narrow ovate"
- 11 to have the states "white, green"
- 14 to have the first state read: "saucer-shaped"
- 17 to read: "Flower: markings on tepal"
- 18 to read: "Flower: position of markings on tepal" with the states "at tip, at base, along midrib"; characteristics 17 + 18 to be placed after characteristic 21
- 24 to receive an asterisk
- 25 after this characteristic a new characteristic to be inserted reading: "Flower: length of style" with the states "short, medium, long"
- 26, 27 to have the word "scent" replaced by "fragrance"
- 28 to have the example varieties "Roes (1), Rozelda (3)"
- 29 to have the example varieties "Roes (1)"
- 30 to have the example varieties "Rozelda (3), Roetz (2)"
- 31 to be deleted
- 32 to have the months deleted

#### Test Guidelines for Dieffenbachia

26. The Working Party noted that no comments had been received on document TWO/XXI/7 and made only the following main changes in that document:

(i) Subject of these Test Guidelines: The Latin name on the front page to read: "Dieffenbachia Schott". The botanical names on page 3 to be checked for their authors. In the second sentence after the word "mutations" the following words to be inserted: "of or hybrids".

(ii) Material Required: The quantity of plant material recommended to be: "20 young potted plants of normal commercial standard supplied 12 to 15 weeks after propagation by cutting, excluding plants coming directly from micropropagation."

(iii) Conduct of Tests: The growing conditions in paragraph 3 to be amended as follows:

Multiplication: the word "perlite" in (ii) and the whole of (iv) to be deleted

Fertilization: the word "acid" to be replaced by "calcifuge"

Luminosity: to be deleted

Pest Control: to be deleted

The second and third sentence of the last subparagraph should be placed after paragraph 1 of Chapter IV and read: "For the testing of stability, 10 of the supplied plants should be selected at random and cut back to induce the growth of basal shoots. The shoots should be grown under conditions ensuring normal growth until they reach commercial standard. The other 10 supplied plants should be kept for the purpose of comparison".

In the fourth sentence, the minimum number of plants should be "10."

(iv) Methods and Observations: In paragraph 1 the words "and stability" should be deleted, in paragraph 2 the figures should be "10", paragraph 3 should be deleted and the last part of paragraph 5 should read: "on the third, fourth or fifth leaf from the apex."

(v) Table of Characteristics:

Characteristics

- 1 to have the states "elongated, compact" and to have the example "variety" "Amoena" in this characteristic and throughout the document amended to "D. amoena"
- 2 to have the first state read: "short"
- 3 to read: "Plant: capacity to form basal shoots"
- 4 to have the word "stability" replaced by "change" and to have the states "weak, medium, strong"; this characteristic and characteristic 3 to be placed at the end of the Table of Characteristics
- 6, 10 to have the second state read: "more than one"
- 7, 11 to have the word "dominant" replaced by "main" and to have the following order of states: "5, 4, 3, 2, 6, 7, 8, 1"
- 8 to have the word "distinct" replaced by "different"
- 9 to read: "Leaf: ratio length of petiole/length of blade" with the states "small, medium, large"
- 11 to have the following order of states: "4, 3, 2, 1, 5, 6, 7"
- 12 to have the following order of states: "6, 3, 2, 1, 4, 5" and to have the word "main" deleted and the word "distinct" replaced by "different"
- 9 to 14 to be placed after the characteristics on the blade

- 14 to read: "Petiole: distribution of secondary color" with the states "at base, along whole length"
- 15 to the end to apply to the leaf blade
- 15 to read: "Leaf blade: length" with the states "short, medium, long" and new example varieties
- 16 to have the state 3 read: "narrow elliptic" and to be placed before state 1
- 18 to read: "Leaf blade: length of apex" with the states "short, medium, long"
- 19, 20 to have the words "on upper side" put at the end of the characteristic
- 21 to read: "Leaf blade: variegation" with the states "absent, present"
- 22 to read: "Leaf blade: ground color" and to receive explanations
- 23 to have the text of the different types and the order changed to read "1: only edged, 2: only maculate, 3: maculate + edged, 4: banded only along secondary veins, 5: banded only along main vein, 6: banded along secondary veins and main vein" and to have as a change of the order throughout the document the "type 2" replaced by "type 3" and vice versa
- 24, 25 to have the word "edge" amended to "edging"
- 26 to read after leaf blade: "border of edging" with the states "not clearly defined, clearly defined"
- 27, 28 to be deleted
- 29 to have the word "macule" changed into "maculation"
- 30 to read after leaf blade "size of macules" with the states "more or less the same, varying"
- 31 to have the word "macule" put into the plural
- 32-37, 40-45, 48-53 to have the words "color on" deleted
- 38, 46, 54, 63 to be split into the "dominant color" with the states "absent, present" and the "dominant green shade" and to have the order of the states changed into "white, light, medium, dark, greyish, yellow"; the order of the characteristics 32 to 37, 40 to 45, 48 to 53 and 57 to 62 to follow the same change of order as the states
- 39-46 to have the word "size" amended into "sized"
- 55 to be split into "presence" with the states "absent, present" and "size" with the states "small, medium, large"
- 56 to be deleted
- 57-63 to have the words "color in variegation" replaced by "band"

- 64 to read after leaf blade "border of band" with the states " not clearly defined, clearly defined"
- 66 to read after leaf blade "spots within band"
- 67 to have the word "streaks" replaced by "bands"
- 68 to apply also to type 6 and to have the words "in relation" replaced by "compared"
- 69 to read after leaf blade "border between band and pericarpic area" with the states "not clearly defined, clearly defined"
- 70 to be deleted

#### Test Guidelines for Hydrangea

27. The Working Party noted documents TWO/XXI/8 and TWO/XXII/4 and made the following main changes in document TWO/XXII/4:

(i) Material Required: The material to be "5 potted plants, at least 8 months old with at least 3 branches."

(ii) Conduct of Tests: The information in paragraph 3 under "Cuttings" and "Plant Protection" to be deleted and that under "Fertilization" amended to read: "Avoid too much acidity in soil which might be caused by aluminium ions and fertilization too rich in potassium."

(iii) Table of Characteristics:

#### Characteristics

- 2 to apply to "natural" height with the states "short, medium, tall"
- 4 to have the example variety "Sanguina" deleted
- 9 to be placed after characteristic 3
- 10, 12, 15 to have no explanations
- 14 to be deleted
- 19 to have the word "flowers" put into the singular
- 20 to have the last state read: "conical"
- 21 after this characteristic a new characteristic to be included reading: "Large calyx: color (excluding H. macrophylla)" with the RHS Colour Chart number to be indicated
- 24 to have the restriction deleted
- 25, 26 to have the word "sepals" put into the singular
- 26 to have the example variety "Steina 104 (Syn. Claudia)" deleted

(iv) Technical Questionnaire: To have the explanations to characteristic 17 repeated under 5.1.

#### Test Guidelines for Norway Spruce

28. The Working Party noted documents TWO/XVII/5, TWO/XIX/12, TWO/XIX/22, as well as proposals for changes prepared by the experts from the Federal Republic of Germany, distributed during the session. It finally made the following main changes in document TWO/XIX/12:

(i) Subject of these Guidelines: These Test Guidelines apply to all vegetatively propagated varieties of *Picea abies* A. Dietr., Norway Spruce/*Epicea Commun/Gemeine Fichte*, and thus cover forest varieties as well as ornamental varieties.

(ii) Material Required: The material to be "5 plants (4 years old unless the competent authorities make an exception). In the case of grafted plants, the rootstock has to be indicated."

(iii) Conduct of Tests: To include a total of "5 plants."

(iv) Methods and Observations:

#### Paragraphs

- 2 the figure "6" to be replaced by "5" and the wording "according the influence ..., leading .." to be replaced by "affected by the influence ..., which would lead .."
- 6 the word "last" to be replaced by "previous"; after this paragraph to have an additional paragraph reading: "All observations on the bud should be made on the middle bud."

(v) Table of Characteristics:

#### Characteristics

- 1 to read: "Plant: growth habit", to have an additional state "drooping" before "prostrate", to have the example variety "Elegans" replaced by "Nana Compacta" and "Procumbens" by "Inversa"
- 2, 11, 14 to receive figure for explanation as indicated in document TWO/XIX/22
- 3, 4 to read: "Plant: height" with the states from "very short" to "very tall" and to have the example variety "Aurea" deleted
- 5, 7 to be deleted
- 8 to have the word "last" replaced by "previous"
- 9, 10 to have the word "Branch" replaced by "Lateral shoot"
- 9 to have the states "very small (<20), small (+ 35), medium (+ 55), large (+ 75), very large (>90)"

- 10 to receive new drawings to be prepared by experts from DE
- 11 the bracket to read "in middle of lateral shoot of previous year's whorl"
- 12 to be deleted
- 14 to have the word "central" replaced by "middle"
- 16 to be placed after 13 and to have the reference to characteristic 7 replaced by the wording referred to and all later references to 7 to be replaced by references to this characteristic
- 17 to be deleted
- 18 to have the first state read: "globulose"; after this characteristic a new characteristic to be included reading: "Bud: length" with the states from "very short" to "very long"
- 19 to have the first and last states deleted and to have the Notes "3, 5, 7"
- 21 to read: "Beginning of terminal bud burst"
- 22, 23 to be deleted

(vi) Literature: To receive the information: "Krüssmann, G., 1983: "Handbuch der Nadelgehölze," Verlag Paul Parey, Berlin, Hamburg, DE"

#### Test Guidelines for Rose (Revision)

29. The Working Party noted documents TG/11/4, TWO/XX/16 and TWO/XXII/2, the last one containing a report of the subgroup meeting held on October 5 and 6, 1988, at Rethmar, Hanover, Federal Republic of Germany. The Working Party made the following main changes to document TG/11/4:

(i) Technical Notes: The Technical Notes to be adapted to the new wording. Furthermore, the following changes to be made:

#### Paragraphs

- 1 the plant material to be: "6 plants (one year old) with at least three shoots, preferably not produced by micropropagation. If nevertheless produced by micropropagation, this has to be indicated. The applicant has to state whether the plants are on their own roots or grafted, in which case he has to indicate the rootstock."
- 4 to have also characteristic 1 and the growth types indicated for grouping
- 6 to read: "The test requires in general one growing period but an establishment year might be needed in addition."
- 9 to have an additional sentence reading: "The terminal flower should be excluded from observations."

(ii) Table of Characteristics:

Characteristics

- 1 to have the states "narrow bushy (Korpriva), bushy (Meipoque), broad bushy (Fairy Prince), flat bushy (Meicousol), creeping (Korimiro)"
- 2 to have the example varieties "Kolima" and "Rubella" inverted
- 3 to have the Notes from 1 to 5 and the in between states "brown to reddish brown (2), reddish brown to purple (4)"
- 4 after this characteristic to have two new characteristics inserted reading: "Plant: height (excluding climbing varieties)" with the states "short, medium, tall" and "Plant: width (excluding creeping varieties" with the states "narrow, medium, broad"
- 5 to be deleted
- 7, 8 the first state to read: "absent or very few"
- 9 to have the example varieties for Note 1: "Aica-Sera, Meiblam, Meijet," for Note 3: "Starina, Marimba" and for Note 9: "New Daily Mail, Tanacry"
- 10 to have the example varieties: "Dorus Rykers (1), Meitoflapo (3), Eye paint (5), Meicoublan (7), Korylt (9)"
- 15 to have the word "maximum" deleted
- 16 to be deleted
- 17 to have the additional example variety "Savamark (2)"
- 21 to have the states "round (3), broad-ovate (5), ovate (7)" and the word "shape" added after the colon
- 24 to have the bracketed content deleted
- 25 to have the example varieties "Macrescy (1), Tsigane (3)"
- 26 to have the example varieties "Tanklewi (1), Meifold (2), Lapjam (3)"
- 27 to have an additional state "concave" before "flat" and the example varieties "Meipincol (1), Tanklewi (2), Pekpus (3), Macnewye (4)"
- 28 to have the asterisk deleted
- 32, 46 to 49 to be deleted
- 45 to read: "Outer stamen: predominant color of middle third of filament"
- 50 to have the bracketed addition "at petal fall" and the additional states and example varieties "very small (Korweirim), very large (Korpalud, Gal)"
- 51, 52 to have the asterisk deleted

- 51 to have the words "Seed vessel" replaced by "Hip"
- 52 to have the example varieties "Korpinorod (3), Korgund (5), The Fairy (7), Korimro (9)"

(iii) Explanations and Methods: Characteristics 1, 26, 27 to receive new drawings. The Flower Color Group to be checked on whether the new version is used by the breeders and the Plant Growth Type to receive the additional type 5 (ground cover rose).

(iv) Technical Questionnaire: Paragraph 5.3 to be deleted, paragraph 5.5 to receive the addition "ground cover rose" and paragraph 7.2(i) to receive the addition "- as rootstock."

#### Test Guidelines for Spathiphyllum

30. The Working Party noted document TWO/XXII/3 and made the following main changes in that document:

(i) Conduct of Tests: To have the planting density replaced by "Plants per m<sup>2</sup>: 20 plants" and the light changed into "heavy shading."

(ii) Methods and Observations: To have paragraph 4 deleted.

(iii) Table of Characteristics:

#### Characteristics

- 1 to have the word "-side" deleted
- 2 to 4 to be placed after the characteristics on the leaf blade
- 4 to have the order of states reversed
- 6 to have the word "maximum" deleted
- 8 to have the word "rugosity" replaced by "bulging"
- 9 to read: "Peduncle: length to base of spathe"
- 10 to have the word "height" replaced by "length" with the states to read "short, medium, tall"
- 13 to be placed after characteristic 13 and to read: "Spathe: length of fused part" and to have this part shown on the drawing
- 15 to read: "Spathe: area of green color extending from tip on inner side" with the states from "absent or very small" to "very large"
- 16 to read as characteristic 15 with the only difference of "outer" side
- 20 to read: "Spathe: attitude of stalk of spadix compared to that of fused part of spathe" with the states "not in line, in line"
- 23 to be deleted.

The experts from Denmark will be asked to supply example varieties.

Status of Test Guidelines

31. The Working Party agreed that the draft Test Guidelines for Gerbera (Revision), for Lachenalia and for Protea should be sent to the Technical Committee for final adoption. The draft Test Guidelines for Leucadendron and for Leucospermum would require further study by the Working Party.

32. The Working Party agreed that the draft Test Guidelines for Carnation (Revision), for Chinchinchee, for Chrysanthemum (Revision), for Dieffenbachia, for Hydrangea, for Norway Spruce, for Rose (Revision) and for Spathiphyllum should be sent to the professional organizations for comments after the information still required had been included.

33. Lack of time did not permit the Working Party to discuss the working papers on further species (Lily, Weigela) mentioned under item 13 of the Draft Agenda.

Future Program, Date and Place of Next Session

34. At the invitation of the expert from Japan, the Working Party agreed to hold its twenty-third session in Japan from September 18 to 24, 1990. It is planned that the following items will be discussed during the coming session of the Working Party:

(i) Short reports on special developments in plant variety protection for ornamental plants and forest trees;

(ii) Important decisions taken during the preceding sessions of the Technical Working Party and of the Technical Committee;

(iii) Final discussion on draft Test Guidelines for:

- Carnation (Revision)
- Chinchinchee
- Chrysanthemum (Revision)
- Dieffenbachia
- Hydrangea
- Leucadendron
- Leucospermum
- Norway Spruce
- Rose (Revision)
- Spathiphyllum

(iv) Items for the Technical Working Party on Automation and Computer Programs

(v) Color observations

(vi) New methods, techniques and equipment in the examination of varieties

(vii) Micropropagation

(viii) Cooperation with breeders in the testing of varieties

(ix) Minimum distances between varieties

(x) Discussion on working papers on Test Guidelines:

- Aster (IL to prepare a working paper by the end of 1989)
- Iris (IL to prepare a working paper by the end of March 1990)
- Lily (Revision) (TG/59/3 + TWO/XXII/5)
- Pyracantha (FR to prepare a working paper)
- Rhododendron (Revision) (TG/42/3 + DE to prepare a working paper by the end of February 1990)
- Weigela (TWO/XIX/20, TWO/XX/14)

Visits

35. During the afternoon of May 29, 1989, the Working Party visited the installations, glasshouses and trial fields of the Bundessortenamt at its Headquarters in Hanover. In the afternoon of June 1 and the morning of June 2, the experts attended the Workshop on the examination of varieties of Elatior Begonia and Pelargonium, held at the headquarters of the Federal Varieties Office in Hanover.

36. This report has been adopted by correspondence.

## ANNEX

LIST OF PARTICIPANTS AT THE TWENTY-SECOND SESSION OF THE  
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