

**TWO/33/14****ORIGINAL:** English**DATE:** May 31, 2000**INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS**

GENEVA

**TECHNICAL WORKING PARTY
FOR
ORNAMENTAL PLANTS AND FOREST TREES****Thirty-Third Session
Budapest, June 26 to 30, 2000****WORKING PAPER ON TEST GUIDELINES FOR WAXFLOWER
(*Chamelaucium* Desf.)***Document prepared by experts from Australia*

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I. Subject of these Guidelines

These Test Guidelines apply to all vegetatively propagated varieties of *Chamelaucium* Desf. of the family Myrtaceae and their hybrids.

II. Material Required

1. The competent authorities decide when, where and in what quantity and quality the plant material required for testing the variety is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must make sure that all customs formalities are complied with. As a minimum, the following quantity of plant material is recommended:

10 young plants.

2. The plant material supplied should be visibly healthy, not lacking in vigor or affected by any important pests or diseases.

3. The plant material must not have undergone any treatment unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

III. Conduct of Tests

1. A test should normally be conducted for one growing period. If distinctness and/or uniformity cannot be sufficiently established in one growing period, the test should be extended for a second growing period.

2. The tests should normally be conducted at one place. If any important characteristics of the variety cannot be seen at that place, the variety may be tested at an additional place.

3. The tests should be carried out in the glasshouse or in the field under conditions ensuring normal growth. The size of the plots should be such that plants or parts of plants may be removed for measurement and counting without prejudice to the observations, which must be made up to the end of the growing period. Each test should include a total of 10 plants. Separate plots for observation and for measuring can only be used if they have been subject to similar environmental conditions.

4. Additional tests for special purposes may be established.

IV. Methods and Observations

1. All observations determined by measurement, weighing or counting should be made on 10 plants or parts of plants taken from 10 plants, 18 to 24 months old.

2. For the assessment of uniformity a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 10 plants, the maximum number of off-types allowed would be 1.

3. All observations on the fully developed leaf should be made on mature, non-axillary leaves. The color should be observed on the upper side.
4. Unless otherwise indicated, all observations on the flower should be made at mid-maturity. All observations on the young flower should be made on the first day of opening. Mid-maturity is defined as 10 to 14 days after the flower first opens. All observations on the fully developed flower should be made 4 weeks after the first opening of the flower.
5. The petal color should be recorded after removing petals from the flower.
6. Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within the tolerance set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background.

V. Grouping of Varieties

1. The collection of varieties to be grown should be divided into groups to facilitate the assessment of distinctness. Characteristics which are suitable for grouping purposes are those which are known from experience not to vary, or to vary only slightly, within a variety. Their various states of expression should be fairly evenly distributed throughout the collection.
2. It is recommended that the competent authorities use the following characteristics for grouping varieties:
 - (a) Flower: diameter (characteristic 10)
 - (b) Petal: main color at mid maturity (characteristic 25)
 - (c) Time of beginning of flowering (characteristic 30)

VI. Characteristics and Symbols

1. To assess distinctness, uniformity and stability, the characteristics and their states as given in the Table of Characteristics should be used.
2. Notes (numbers), for the purposes of electronic data processing, are given opposite the states of expression for each characteristic.

3. Legend

(*) Characteristics that should be used on all varieties in every growing period over which examinations are made and always be included in the variety descriptions, except when the state of expression of a preceding characteristic or regional environmental conditions render this impossible.

(+) See Explanations on the Table of Characteristics in Chapter VIII.

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

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. Leaf: length					
short					3
medium					5
long					7
2. Leaf: thickness					
thin					3
medium				Lady Stephanie	5
thick				Pristine, Tickled Pink	7
3. Leaf: hook at apex					
absent					1
present				Niribi	9
4. Leaf: attitude					
erect					1
semi-erect					3
horizontal					5
5. Flowering branch: thickness (60 cm from apex, excluding pot varieties)					
thin					3
medium				Purple Pride	5
thick				Niribi	7
6. Flowering branch: angle of lateral					
small				Jasper	3
medium				Eric John	5
large					7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
7. Flowering branch: predominant location of flowers					
distal					1
along flowering branch					2
8. Inflorescence: (* number of flowers					
few					3
medium				Mullering Brook	5
many				Pearl Buttons, Purple Pride	7
9. Flower: type (*					
single					1
double				Double Devil	2
10. Flower: diameter (*					
small				Lady Jennifer	3
medium				Mullering Brook, White Spring	5
large				Niribi, Purple Pride	7
11. Bud: shape (before cap dehiscence)					
spheroid					1
ovoid					2
pyriform					3
12. Bud: horns					
none				Blondie	1
one				Madonna	2
two				Albany Pearl	3
13. Bud cap: texture					
shiny					1
papery					2

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14. <u>Varieties with shiny bud cap only:</u> Bud: main colour (before cap dehiscence)					
green					1
pink					2
orange					3
brown					4
red					5
purple					6
15. <u>Varieties with papery bud cap only:</u> Bud: main colour (before cap dehiscence)					
light brown					1
red					2
16. Bud: apical colour (after cap dehiscence)					
white					1
cream					2
yellow					3
pink					4
red					5
purple					6
17. Young flower: colour of waxy centre					
yellow green					1
light green					2
medium green					3
dark green					4
red brown					5

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
18. Fully developed flower: colour of waxy centre					
yellow green					1
light green					2
medium green					3
dark green					4
red brown					5
19. Calyx tube: longitudinal furrowing					
absent				Niribi, Purple Pride	1
present				Mullering Brook	9
20. Calyx tube: shape					
obconical				Purple Pride	1
flared				Niribi	2
21. Calyx tube: diameter (at widest part)					
small					3
medium				Purple Pride	5
large				Niribi	7
22. Calyx tube: colour of middle part					
yellow					1
green					2
brown					3
23. Calyx lobe: colour					
green					1
red					2
brown					3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
24. Young flower: main colour of petal (*)					
RHS Colour Chart (indicate reference number)					
25. Mid-maturity flower: main colour of petal (*)					
RHS Colour Chart (indicate reference number)					
26. Fully developed flower: main colour of petal (*)					
RHS Colour Chart (indicate reference number)					
27. Staminode: width at base (+)					
narrow				Purple Pride	3
medium				Niribi	5
broad					7
28. Flower : colour of collar					
white					1
pink					2
red					3
purple					4
29. Style : colour					
white					1
pink					2
red					3
purple					4

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<hr/>					
30. Time of beginning of flowering					
very early					1
early				Mullering Brook	3
medium				Pruple Pride	5
late				Pearl Buttons	7
very late				Oneg	9

VIII. Explanation on the Table of Characteristics

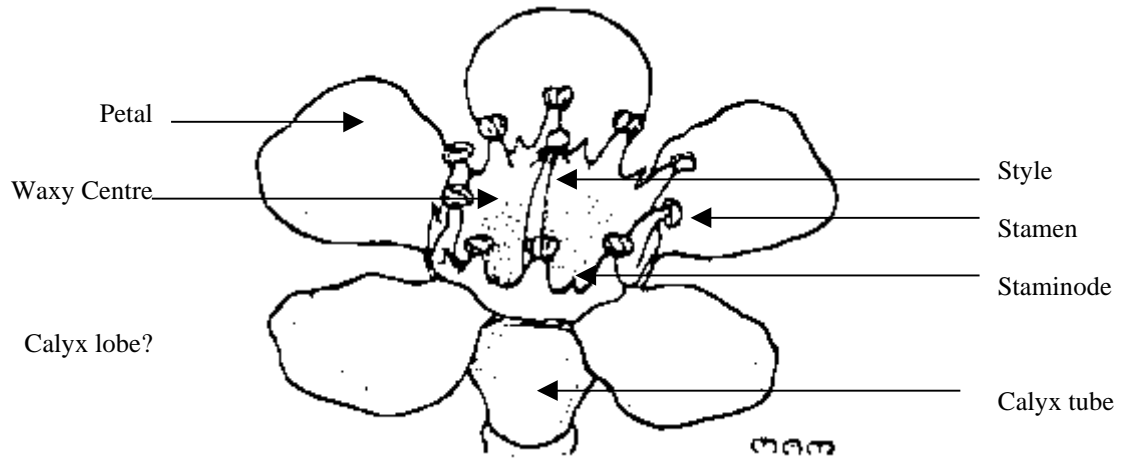


Diagram modified from illustration by Margaret Menadue (Marchant *et al*, 1987)

IX. Literature

Blackall, W.E. and Grieve, G.J. *How to Know Western Australian Wildflowers* Part IIIA.

Elliot, W.R. and Jones, D.L. (1989) *Encyclopedia of Australian Plants Suitable for Cultivation* Volume 3, Lothian Books.

Marchant, N.G., Wheeler, J.R., Rye, B.L., Bennett, E.M., Lander, N.S. and Macfarlane, T.D. (1987) *Flora of the Perth Region* Part One, Western Australian Herbarium, Department of Agriculture Western Australia.

Wrigley, J.W. and Fagg, M. (1988) *Australian Native Plants* Third Edition, Collins Publishers.

X. Technical Questionnaire

	Reference Number (not to be filled in by the applicant)
<p>TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights</p>	
1. Species	<p><i>Chamelaucium</i> Desf. WAXFLOWER</p>
2. Applicant (Name and address)	
3. Proposed denomination or breeder's reference	

4. Information on origin, maintenance and reproduction of the variety

4.1 Origin

(a) Seedling (indicate parent varieties)

..... []

(b) Mutation (indicate parent variety)

..... []

(c) Discovery (indicate where and when)

..... []

(d) Other (specify)

..... []

4.2 Method of reproduction

– cuttings []

– *in vitro* propagation []

– other []

4.3 Other information

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

Characteristics	Example Varieties	Note
5.1 Flower: diameter (10)		
small	Lady Jennifer	3[]
medium	Mullering Brook, White Spring	5[]
large	Niribi, Purple Pride	7[]
5.2 Mid-maturity flower: main colour of petal (25)		
white		1[]
yellow		2[]
pink		3[]
red		4[]
purple		5[]
5.3 Time of beginning of flowering (30)		
very early		1[]
early	Mullering Brook	3[]
medium	Purple Pride	5[]
late	Pearl Buttons	7[]
very late	Oneg	9[]

6. Similar varieties and differences from these varieties

Denomination of similar variety	Characteristic in which the similar variety is different ^{o)}	State of expression of similar variety	State of expression of candidate variety
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^{o)} In the case of identical states of expressions of both varieties, please indicate the size of the difference.

7. Additional information which may help to distinguish the variety

7.1 Resistance to pests and diseases

7.2 Special conditions for the examination of the variety

7.3 Other information

A representative color photo of the variety should be added to the Technical Questionnaire.

8. Authorization for release

- (a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes [] No []

- (b) Has such authorization been obtained?

Yes [] No []

If the answer to that question is yes, please attach a copy of such an authorization.

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