



TWO/35/19

ORIGINAL: English

DATE: November 14, 2002

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS
GENEVA

TECHNICAL WORKING PARTY
FOR
ORNAMENTAL PLANTS AND FOREST TREES

Thirty-Fifth Session
Quito, November 18 to 22, 2002

WORKING PAPER ON DRAFT TEST GUIDELINES FOR POINSETTIA
(*EUPHORBIA PULCHERRIMA* WILLD. EX KL OTZSCH)

Prepared by experts from Denmark

The attached document TG/POINSE(proj.1) already incorporates the standard wording of document TGP/7.2, which was adopted by the Technical Committee at its thirty-eighth session in April 2002, and includes some additional standard wording from document TGP/7.1 Draft 1, also agreed at that session.

[Document TG/POINSE(proj.1) follows]



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<p>POINSETTIA *</p> <p><i>Euphorbia pulcherrima</i> Willd. Ex Klotzsch</p>
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GUIDELINES**FOR THE CONDUCT OF TESTS****FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

Alternative Names: *

Latin	English	French	German	Spanish
<i>Euphorbia pulcherrima</i> Willd. Ex Klotzsch.	Poinsettia			

ASSOCIATED DOCUMENTS

These guidelines should be read in conjunction with document TG/1/3, "General Introduction to the Examination of Distinctness, Uniformity and Stability and the Development of Harmonized Descriptions of New Varieties of Plants" (hereinafter referred to as the "General Introduction") and its associated "TGP" documents.

* These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.]

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1. SubjectoftheseGuidelines

1.1 These Test Guidelines apply to all varieties of *Euphorbia pulcherrima* Willd. Ex Klotzsch.ofthefamilyEuphorbiaceae.

2. MaterialRequired

2.1 The competent authorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.

2.2 The material is to be supplied in the form of rooted cuttings.

2.3 The minimum quantity of plant material, to be supplied by the applicant, should be:

10 rooted cuttings .

2.4 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease.

2.5 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

3. MethodofExamination

3.1 *DurationofTests*

The minimum duration of tests should normally be asinglegro wingcycle.

3.2 *TestingPlace*

The tests should normally be conducted at one place. If any characteristics of the variety, which are relevant for the examination of DUS, cannot be seen at that place, the variety may be tested at an additional place.

3.3 *ConditionsforConductingtheExamination*

3.3.1 The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

3.3.2 The tests should be conducted in a glasshouse with the following conditions:

Temperature: 19°C

Short day treatment: 14 hours per day

3.4 *Test Design*

3.4.1 The design of the tests should be such that plants or parts of plants may be removed for measurement or counting without prejudice to the observations which must be made up to the end of the growing cycle.

3.4.2 Each test should be designed to result in a total of at least 10 plants.

3.5 *Number of Plants/Parts of Plants to be Examined*

Unless otherwise indicated, all observations determined by measuring or counting should be made on 10 plants or part taken from each of 10 plants.

3.6 *Additional Tests*

Additional tests, for examining relevant characteristics, may be established.

4. Assessment of Distinctness, Uniformity and Stability

4.1 *Distinctness*

4.1.1 General Recommendations

It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding distinctness. However, the following points are provided for elaboration or emphasis in these Test Guidelines.

4.1.2 Consistent Differences

The minimum duration of tests recommended in section 3.1 reflects, in general, the need to ensure that any differences in a characteristic are sufficiently consistent.

4.1.3 Clear Differences

Determining whether a difference between two varieties is clear depends on many factors, and should consider, in particular, the type of expression of the characteristic being examined, i.e. whether it is expressed in a qualitative, quantitative, or pseudo-qualitative manner. Therefore, it is important that users of these Test Guidelines are familiar with the recommendations contained in the General Introduction prior to making decisions regarding distinctness.

4.2 *Uniformity*

4.2.1 It is of particular importance for users of these Test Guidelines to consult the General Introduction prior to making decisions regarding uniformity. However, the following points are provided for elaboration or emphasis in these Test Guidelines:

4.2.2 The acceptable number of off-type tolerated in a sample size of 10 plants is 1 on the basis of a population standard of 1% and an acceptance probability of 95%.

4.3 *Stability*

4.3.1 In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated that, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.

4.3.2 Where appropriate, or in cases of doubt, stability may be tested, either by growing a further generation, or by testing a new seed or plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

5. Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness is aided by the use of grouping characteristics.

5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with others such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trials so that similar varieties are grouped together.

5.3 The following have been regarded as useful grouping characteristics:

- (a) Plant: branching (characteristic 1)
- (b) Leaf blade: number of colors (characteristic 11)
- (c) Varieties with one-colored leaves only : Leaf blade: green color (characteristic 12)
- (d) Bract: number of colors of upper side (characteristic 34)
- (e) Bract: pattern of colors of upper side (characteristic 35)
- (f) Bract: color of upper side

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction.

6. Introduction to the Table of Characteristics

6.1 *Categories of Characteristics*

6.1.1 Standard Test Guidelines Characteristics

Standard Test Guidelines characteristics are those which are approved by UPOV for examination of DUS and from which members of the Union can select those suitable for their particular circumstances.

6.1.2 Asterisked Characteristics

Asterisked characteristics (denoted by *) are those included in the Test Guidelines which are important for the international harmonization of variety descriptions and should always be examined for DUS and included in the variety description by all members of the Union, except when the state of expression of a preceding characteristic or regional environmental conditions render this inappropriate.

6.2 *States of Expression and Corresponding Notes*

States of expression are given for each characteristic to define the characteristic and to harmonize descriptions. Each state of expression is allocated a corresponding numerical note for ease of recording of data and for the production and exchange of the description.

6.3 *Types of Expression*

An explanation of the types of expression of characteristics (qualitative, quantitative and pseudo-qualitative) is provided in the General Introduction.

6.4 *Example Varieties*

Where appropriate, example varieties are provided to clarify the states of expression of each characteristic.

6.5 *Legend*

(*) Asterisked characteristic –see Section 6.1.2

(QL) Qualitative characteristic –see Section 6.3

(QN) Quantitative characteristic –see Section 6.3

(PQ) Pseudo-Qualitative characteristic –see Section 6.3

(+) See Explanations on the Table of Characteristics in Chapter 8.

7. TableofCharacteristics/Tableaudecaractères/Merkmalstabelle/Tabladecaracteres

English	français	deutsch	español	ExampleVarieties Exemples Beispielssorten Variedadesejemplo	Note/ Nota
1. Plant:branching					
(*)					
absent					1
present					9
2. Plant:numberof					
(*) branches					
few					3
medium					5
many					7
3. Plant:height					
(*)					
short					3
medium					5
tall					7
4. Plant:width					
narrow					3
medium					5
broad					7
5. Stem:color					
(*)					
greenish					1
reddish					2
6. Stem:intensityof					
(*) color					
weak					3
medium					5
strong					7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
7. Leafblade:length					
(*)					
veryshort					1
short					3
medium					5
long					7
verylong					9
8. Leafblade:width					
(*)					
narrow					3
medium					5
broad					7
9. Leafblade:shape					
(*)					
elliptic					1
obovate					3
ovate					4
deltoid					5
10. Leafblade: shapeof					
(*) base					
truncate					1
rounded					2
wedge-shaped					3
11. Leafblade:number					
(*) of colors					
one					1
two					2
morethantwo					3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
12. <u>Varieties with one -</u>					
(*) <u>colored leaves only</u> : Leaf blade: green color					
very light					1
light					3
medium					5
dark					7
very dark					9
13. <u>Varieties with two -</u>					
(*) <u>or multicolored</u> <u>leaves only</u> : Leaf blade: main color					
light yellowish green					1
light green					2
medium green					3
greyish green					4
dark green					5
very dark green					6
14. <u>Varieties with bi - or</u>					
(*) <u>multicolored leaves</u> <u>only</u> : Leaf blade: secondary color					
white					1
yellowish white					2
light yellowish green					3
light green					4
medium green					5
greyish green					6
dark green					7
very dark green					8

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
15. <u>Varieties with bi -or</u>					
(*) <u>multicolored leaves</u>					
<u>only: Leafblade:</u>					
<u>distribution of</u>					
<u>secondary color</u>					
near main vein					1
near margin					2
16. <u>Varieties with</u>					
<u>multicolored leaves</u>					
<u>only: Leafblade:</u>					
<u>tertiary color</u>					
white					1
yellowish white					2
light yellowish green					3
light green					4
medium green					5
greyish green					6
dark green					7
very dark green					8
17. <u>Varieties with bi -or</u>					
(*) <u>multicolored leaves</u>					
<u>only: Leafblade:</u>					
<u>area of main color</u>					
<u>compared to area of</u>					
<u>other color(s)</u>					
very small					1
small					3
medium					5
large					7
very large					9

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
18. Leafblade:color of (*) mainvein on upper side					
whitish					1
yellowish					2
greenish					3
reddish					4
19. Leafblade:color of (*) mainvein on lower side					
whitish					1
yellowish					2
greenish					3
reddish					4
20. Leafblade:number (*) of lobes					
absent or very few					1
few					3
medium					5
many					7
very many					9
21. Leafblade: (*) maximum depth of sinus					
shallow					3
medium					5
deep					7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
22. Petiole:length					
(*)					
short					3
medium					5
long					7
23. Petiole:color of					
(*) upperside					
greenish					1
pinkish					2
reddish					3
24. Petiole:intensity of					
(*) color of upperside					
weak					3
medium					5
strong					7
25. Petiole:color of					
(*) lowerside					
yellowish					1
greenish					2
reddish					3
26. Petiole:intensity of					
(*) color of lowerside					
weak					3
medium					5
strong					7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
27. Transitionalleaves:					
(*) number of partly bract colored leaf blades					
absent or very few					1
few					3
medium					5
many					7
28. Transitionalleaves:					
(*) number of fully bract colored leaf blades					
few					3
medium					5
many					7
29. Bracts: number					
(*)					
few					3
medium					5
many					7
30. Transitionalleaves:					
distance between the highest and lowest transitional leaf blade					
short				Oslo	3
medium				Annette Hegg	5
long				Cardinal	7
31. Bract: length of					
(*) largest bract (petiole included)					
short					3
medium					5
long					7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
32. Bract:widthof (* largestbract					
narrow					3
medium					5
broad					7
33. Largestbract:shape (*					
obovate					1
lanceolate					2
elliptic					3
ovate					4
34. Bract:numberof (* colorsofupperside					
one					1
two					2
morethantwo					3
35. Bract:patternof colorsof upperside					
onecolored					1
marbled					2
spotted					3
36. <u>One-colored</u> (* <u>varietiesonly</u> : Bract:colorof upperside					
RHSColourChart (indicatereference number)					
.....					

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
---------	----------	---------	---------	--	---------------

37. **Marbledcolored**
(* **varietiesonly** :
**Bract:maincolor of
middlezone of
upperside**

RHSColourChart
(indicatereference
number)

.....

38. **Marbledcolored**
(* **varietiesonly** :
**Bract:secondary
color of middlezone
of upperside**

RHSColourChart
(indicatereference
number)

.....

39. **Marbledcolored**
(* **varietiesonly** :
**Bract:maincolor of
marginal zone of
upperside**

RHSColourChart
(indicatereference
number)

.....

40. **Spotted varieties**
(* **only**:**Bract:color of
maincolor of upper
side**

RHSColour Chart
(indicatereference
number)

.....

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
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41. Spotted varieties
(* **only: Bract: color of spots of upper side**

RHSColourChart
(indicatereference
number)

.....

42. One-colored
(* **varieties only : Bract: color of flower side of bracts**

RHSColourChart
(indicatereference
number)

.....

43. Marbled colored
(* **varieties only : Bract: main color of middle zone of flower side**

RHSColourChart
(indicatereference
number)

.....

44. Marbled colored
(* **varieties only : Bract: secondary color of middle zone of flower side**

RHSColourChart
(indicatereference
number)

.....

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<hr/>					
45. <u>Marbled colored</u>					
(*) <u>varieties only</u> :					
Bract: main color of marginal zone of lower side					
RHSColourChart (indicate reference number)					
.....					
<hr/>					
46. <u>Spotted varieties</u>					
(*) <u>only</u>: Bract: color of main color of flower side					
RHSColourChart (indicate reference number)					
.....					
<hr/>					
47. <u>Spotted varieties</u>					
(*) <u>only</u>: Bract: color of spots of flower side of bracts					
RHSColourChart (indicate reference number)					
.....					
<hr/>					
48. Bract: folding					
absent					1
present					9
<hr/>					
49. Bract: curving					
absent					1
present					9
<hr/>					
50. Bract: twisting					
absent					1
present					9
<hr/>					

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
51. Bract: intensity of rugosity between veins					
absent or very weak					1
weak					3
medium					5
strong					7
very strong					9
52. Cyme: width (*)					
narrow					3
medium					5
broad					7
53. Cyathium: size of glands (*)					
small					3
medium					5
large					7
54. Cyathium: color of glands (*)					
greenish yellow					1
yellow					2
orange					3
red					4

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
55. Cyathium:red colorationofmargin ofglands					
absentorverylight					1
light					3
medium					5
dark					7
verydark					9
56. Timeofopeningof firstthreecyathia					
early					3
medium					5
late					7

8. ExplanationsontheTableofCharacteristics

9. Literature

10. TechnicalQuestionnaire

TECHNICALQUESTIONNAIRE	Page{x}of{y}	ReferenceN umber:
		Applicationdate: (nottobefilledinbytheapplicant)
TECHNICALQUESTIONNAIRE tobecompletedinconnectionwithanapplicationforplantbreeders'rights		
1. SubjectoftheTechnicalQuestionnaire		
1.1	LatinName	<input type="text" value="Euphorbia pulcherrimaWilld.ExKlotzsch"/>
1.2	CommonName	<input type="text" value="POINSETTIA"/>
2. Applicant		
	Name	<input type="text"/>
	Address	<input type="text"/>
	TelephoneNo.	<input type="text"/>
	FaxNo.	<input type="text"/>
	E-mailaddress	<input type="text"/>
	Breeder(ifdifferentfromapplicant)	<input type="text"/>
3. Proposeddenomina tionandbreeder'sreference		
	Proposeddenomination (ifavailable)	<input type="text"/>
	Breeder'sreference	<input type="text"/>

TECHNICALQUESTIONNAIRE	Page{x}of{y}	ReferenceN umber:
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4. Informationonthebreedingschemeandpropagationofthevariety

4.1 BreedingScheme

4.1.1 Varietyresultingfrom:

- (a) controlledcross
(pleasestateparentvarieties)
- (b) partiallyunknowncross
(pleasestateknownparentvariety(ies))
- (c) totallyunknowncross

4.1.2 Mutation
(pleasestateparentvariety)

4.1.3 Discovery
(pleasestatewhere,whenandhowdeveloped)

4.1.4 Other
(pleaseprovidedetails)

4.2 MethodofPropagatingtheVariety

4.2.1 Cuttings

4.2.2 *In vitro*

4.2.3 Other(pleasespecify)

TECHNICALQUESTIONNAIRE	Page{x}of{y}	ReferenceN umber:
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5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).

Characteristics	Example Varieties	Note
5.1 Plant:branching (1)		
absent		1[]
present		9[]
5.2 Leafblade:numberofcolor s (11)		
one		1[]
two		2[]
morethantwo		3[]
5.3 <u>Varietieswithone -coloredleavesonly</u> :Leafblade:greencolor (12)		
verylight		1[]
light		3[]
medium		5[]
dark		7[]
verydark		9[]
5.4 Bract:numberofcolor sofupperside (34)		
one		1[]
two		2[]
morethantwo		3[]
5.5 Bract:patternofcolorsofupperside (35)		
onecolored		1[]
marbled		2[]
spotted		3[]

TECHNICALQUESTIONNAIRE	Page { x } of { y }	ReferenceN umber:
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Characteristics	ExampleVarieties	Note
5.6i. <u>One-coloredvarietiesonly</u>:Bract:colorofupperside (36) RHSColourChart (indicatorreferencenumber)	
5.6ii. <u>One-coloredvarietiesonly</u> :Bract:colorofupperside (36) white		[]
yellow		[]
pink		[]
red		[]
5.7i <u>Marbledcoloredvarietiesonly</u> :Bract:maincolorof (37) middlezoneofupperside RHSColourChart (indicatorreferencenumber)	
5.7ii <u>Marbledcoloredvarietiesonly</u> :Bract:maincolorof (37) middlezoneofupperside white		[]
yellow		[]
pink		[]
red		[]
5.8i <u>Marbledcoloredvarietiesonly</u> :Bract:secondarycolorof (38) middlezoneofupperside RHSColourChart (indicatorreferencenumber)	
5.8ii <u>Marbledcoloredvarietiesonly</u> :Bract:secondarycolorof (38) middlezoneofupperside white		[]
yellow		[]
pink		[]
red		[]

TECHNICALQUESTIONNAIRE	Page {x} of {y}	ReferenceNumber:
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	Characteristics	ExampleVarieties	Note
5.9i	<u>Marbledcoloredvarietiesonly</u> :Bract:maincolorof		
(39)	marginalzoneofupperside		
	RHSColourChart (indicatereferencenumber)	
5.9ii	<u>Marbledcoloredvarietiesonly</u> :Bract:maincolorof		
(39)	marginalzoneofupperside		
	white		<input type="checkbox"/>
	yellow		<input type="checkbox"/>
	pink		<input type="checkbox"/>
	red		<input type="checkbox"/>
5.10i	<u>Spottedvarietiesonly</u> :Bract:colorofmaincolorof		
(40)	upperside		
	RHSColourChart (indicatereferencenumber)	
5.10ii	<u>Spottedvarietiesonly</u> :Bract:colorofmaincolorof		
(40)	upperside		
	white		<input type="checkbox"/>
	yellow		<input type="checkbox"/>
	pink		<input type="checkbox"/>
	red		<input type="checkbox"/>
5.11i	<u>Spottedvarietiesonly</u> :Bract:colorofspots		
(41)	ofupperside		
	RHSColourChart (indicatereferencenumber)	
5.11ii	<u>Spottedvarietiesonly</u> :Bract:colorofspots		
(41)	ofupperside		
	white		<input type="checkbox"/>
	yellow		<input type="checkbox"/>
	pink		<input type="checkbox"/>
	red		<input type="checkbox"/>

7. Additional information which may help in the examination of the variety

7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?

Yes No

(If yes, please provide details)

7.2 Special conditions for the examination of the variety

7.2.1 Are there any special conditions for growing the variety or conducting the examination?

Yes No

7.2.2 If yes, please give details:

7.3 Other information

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 (b) is yes, please attach a copy of the authorization.

9. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Applicant's name

Signature

Date

[End of document]