



TG/24/6(proj.1)

ORIGINAL: English

DATE: 2006-08-03

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

GENEVA

**DRAFT****POINSETTIA**

UPOV Code: EUPHO\_PUL

*Euphorbia pulcherrima* Willd. ex Klotzsch**GUIDELINES****FOR THE CONDUCT OF TESTS****FOR DISTINCTNESS, UNIFORMITY AND STABILITY***prepared by an expert from Denmark*

*to be considered by the  
Technical Working Party for Ornamental Plants and Forest Trees  
at its thirty-ninth session, to be held in Fortaleza, Ceará State, Brazil,  
from August 28 to September 1, 2006*

Alternative Names:\*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Euphorbia pulcherrima</i> Willd. ex Klotzsch	Poinsettia	Poinsettia	Poinsettie, Weihnachtsstern	Flor de Pascua

The purpose of these guidelines ("Test Guidelines") is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

**ASSOCIATED DOCUMENTS**

These Test Guidelines should be read in conjunction with 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](http://www.upov.int)), for the latest information.]

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
1. SUBJECT OF THESE TEST GUIDELINES.....	3
2. MATERIAL REQUIRED .....	3
3. METHOD OF EXAMINATION.....	3
3.1 Number of Growing Cycles .....	3
3.2 Testing Place .....	3
3.3 Conditions for Conducting the Examination.....	3
3.4 Test Design .....	4
3.5 Number of Plants / Parts of Plants to be Examined.....	4
3.6 Additional Tests .....	4
4. ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY .....	4
4.1 Distinctness .....	4
4.2 Uniformity.....	5
4.3 Stability .....	5
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL.....	5
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS .....	5
6.1 Categories of Characteristics.....	5
6.2 States of Expression and Corresponding Notes.....	6
6.3 Types of Expression .....	6
6.4 Example Varieties .....	6
6.5 Legend.....	6
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTÈRES/MERKMALSTABELLE/TABLA DE CARACTERES.....	7
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS .....	18
9. LITERATURE.....	19
10. TECHNICAL QUESTIONNAIRE.....	20

## 1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Euphorbia pulcherrima* Willd. ex Klotzsch

## 2. Material Required

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. Method of Examination

### 3.1 *Number of Growing Cycles*

The minimum duration of tests should normally be a single growing cycle.

### 3.2 *Testing Place*

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 "Examining Distinctness".

### 3.3 *Conditions for Conducting the Examination*

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. The plants should receive a short day treatment. The day length during the short day treatment should be 10 hours.

3.3.2 The optimum stage of development for the assessment of the characteristics is at the time of opening of three cyathia.

3.3.3 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 tolerances set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background.

### 3.4 *Test Design*

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

3.4.2 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.

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

Unless otherwise indicated, all observations should be made on 10 plants or parts taken from each of 10 plants and any other observations made on all plants in the test.

### 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 differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

#### 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 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, 1 off-type is allowed.

## 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 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 are 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 other 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 trial so that similar varieties are grouped together.

5.3 The following have been agreed as useful grouping characteristics:

- (a) Stem: color (characteristic 5)
- (b) Leaf blade: number of colors (characteristic 11)
- (c) Bract: number of colors (characteristic 35)
- (d) Varieties with more than one color:  
Bract: color pattern of upper side (characteristic 36)
- (e) Varieties with one color only:  
Bract: color of upper side (characteristic 37)

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 Chapter 6.1.2

QL Qualitative characteristic – see Chapter 6.3

QN Quantitative characteristic – see Chapter 6.3

PQ Pseudo-Qualitative characteristic – see Chapter 6.3

(a), (b) See Explanations on the Table of Characteristics in Chapter 8.1.

(+) See Explanations on the Table of Characteristics in Chapter 8.2.

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

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>1. (*)</b>	<b>Plant: branching</b>	<b>Plante: ramifications</b>	<b>Pflanze: Verzweigung</b>			
<b>QL</b>	absent	absentes	fehlend			1
	present	présentes	vorhanden			9
<b>2. (*)</b>	<b>Plant: number of branches</b>	<b>Plante: nombre de ramifications</b>	<b>Planze: Anzahl der Verzweigungen</b>			
<b>QN</b>	few	petit	gering			3
	medium	moyen	mittel			5
	many	grand	gross			7
<b>3. (*)</b>	<b>Plant: height</b>	<b>Plante : hauteur</b>	<b>Pflanze: Höhe</b>			
<b>QN</b>	short	Basse	Neidrig			3
	medium	Moyenne	Mittel			5
	tall	haute	hoch			7
<b>4.</b>	<b>Plant: width</b>	<b>Plante : largeur</b>	<b>Pflanze: Breite</b>			
<b>QN</b>	narrow	étroite	schmal			3
	medium	moyenne	mittel			5
	broad	large	breit			7
<b>5. (*)</b>	<b>Stem: color</b>	<b>Tige : couleur</b>	<b>Stengel: Farbe</b>			
<b>QL</b>	greenish	Verdâtre	Grünlich			1
	reddish	Rougeâtre	rötlich			2
<b>6. (*)</b>	<b>Stem: intensity of color</b>					
<b>QN</b>	weak					3
	medium					5
	strong					7

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>7. (* (*)</b>	<b>Leaf blade: length</b>	<b>Limbe : longueur</b>	<b>Blattspreite: Länge</b>			
<b>QN (a)</b>	very short	très court	sehr kurz			1
	short	court	kurz			3
	medium	moyen	mittel			5
	long	long	lang			7
	very long	très long	sehr lang			9
<b>8. (* (*)</b>	<b>Leaf blade: width</b>	<b>Limbe : largeur</b>	<b>Blattspreite: Breite</b>			
<b>QN (a)</b>	narrow	étroit	schmal			3
	medium	moyen	mittel			5
	broad	large	breit			7
<b>9. (* (+)</b>	<b>Leaf blade: shape</b>	<b>Limbe : forme</b>	<b>Blattspreite: Form</b>			
<b>PQ (a)</b>	elliptic	elliptique	elliptisch			1
	obovate	obovale	verkehrt eiförmig			3
	ovate	ovale	eiförmig			4
	deltoid	triangulaire	breit drei			5
<b>10. (* (*)</b>	<b>Leaf blade: shape of base</b>	<b>Limbe : forme de la base</b>	<b>Blattspreite: Form der Basis</b>			
<b>PQ (a)</b>	truncate	droite	gerade			1
	rounded	arrondie	abgerundet			2
	wedge-shaped	cunéiforme	keilförmig			3
<b>11. (* (*)</b>	<b>Leaf blade: number of colors</b>					
<b>QN (a)</b>	one					1
	two					2
	more than two					3



	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>12. (*)</b>	<b><u>Varieties with one-colored leaves only:</u></b> <b>Leaf blade:</b>					
<b>QN (a)</b>	green color					1
	very light					3
	light					5
	medium					7
	dark					9
	very dark					
<b>13. (*)</b>	<b><u>Varieties with two- or multicolored leaves only:</u></b> Leaf blade: main color					
<b>PQ (a)</b>	light yellowish green					1
	light green					2
	medium green					3
	greyish green					4
	dark green					5
	very dark green					6
<b>14. (*)</b>	<b><u>Varieties with bi- or multicolored leaves only:</u></b> Leaf blade: Secondary color					
<b>PQ (a)</b>	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
<b>15, (*)</b>	<b>Varieties with bi- or multicolored leaves only: Leaf blade: distribution of secondary color</b>					
<b>QN</b>	(a) near main vein					1
	near margin					2
<b>16.</b>	<b><u>Varieties with multicolored leaves only: Leaf blade: tertiary color</u></b>					
<b>PQ</b>	(a) 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
<b>17. (*)</b>	<b><u>Varieties with bi- or multicolored leaves only: Leaf blade: area of main color compared to area of other color(s)</u></b>					
<b>QN</b>	(a) very small					1
	small					3
	medium					5
	large					7
	very large					9
<b>18. (*)</b>	<b>Leaf blade: color of main vein on <u>upper</u> side</b>	<b>Limbe : couleur des nervures de la face <u>supérieur</u></b>	<b>Blattspreite: Farbe der Adern auf der <u>Oberseite</u></b>			
<b>QL</b>	(a) greenish	verdâtre	grünlich			1
	reddish	rougeâtre	rötlich			2

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>19. (* (*)</b>	<b>Leaf blade: color of main vein on <u>lower</u> side</b>	<b>Limbe : couleur des nervures de la face <u>inférieure</u></b>	<b>Blattspreite: Farbe der Adern auf der <u>Unterseite</u></b>			
QL (a)	greenish	verdâtre	grünlich			1
	reddish	rougeâtre	rötlich			2
<b>20. (* (+)</b>	<b>Leaf blade: number of lobes</b>					
QN (a)	absent or very few					1
	few					3
	medium					5
	many					7
	very many					9
<b>21. (* (+)</b>	<b>Leaf blade: maximum depth of sinus</b>					
(QN) (a)	shallow					3
	medium					5
	deep					7
<b>22. (*</b>	<b>Petiole: length</b>	<b>Pétiole : longueur</b>	<b>Blattstiel: Länge</b>			
QN (b)	short	court	kurz			3
	medium	moyen	mittel			5
	long	long	lang			7
<b>23. (*</b>	<b>Petiole: color of <u>upper</u> side</b>	<b>Pétiole : couleur de la face <u>supérieure</u></b>	<b>Blattstiel: Farbe der <u>Oberseite</u></b>			
QL (b)	greenish	verdâtre	grünlich			1
	reddish	rougeâtre	rötlich			2
<b>25. (*</b>	<b>Petiole: color of <u>lower</u> side</b>	<b>Pétiole : couleur de la face <u>inférieure</u></b>	<b>Blattstiel: Farbe der <u>Unterseite</u></b>			
QL (b)	greenish	verdâtre	grünlich			1
	reddish	rougeâtre	rötlich			2

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>26.</b> <b>(*)</b>	<b>Petiole: intensity of color of <u>lower</u> side</b>					
<b>QN (b)</b>	weak					3
	medium					5
	strong					7
<b>27.</b> <b>(*)</b>	<b>Transitional leaves: number of partly bract colored leaf blade</b>					
<b>QN</b>	absent or very few					1
	few					3
	medium					5
	many					7
<b>28.</b> <b>(*)</b>	<b>Transitional leaves: number of fully bract colored leaf blade</b>					
<b>QN</b>	few					3
	medium					5
	many					7
<b>29.</b> <b>(*)</b>	<b>Transitional leaves: lobes</b>					
<b>QL</b>	absent					
	present					
<b>30.</b> <b>(*)</b>	<b>Transitional leaves: distance between the highest and lowest transitional leaf blade</b>					
	short	petite	gering		Oslo	3
	medium	moyenne	mittel		Annette Hegg	5
	long	grande	gross		Cardinal	7

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>31. (*)</b>	<b>Bracts: number</b>					
<b>QN</b>	few					3
	medium					5
	many					7
<b>32. (*)</b>	<b>Bract: length of largest bract (petiole included)</b>	<b>Bractée la plus grande : longueur (pétiole compris)</b>	<b>Grösstes Hochblatt: Länge (einschliesslich des Stiels)</b>			
<b>QN</b>	short	courte	kurz			3
	medium	moyenne	mittel			5
	long	longue	lang			7
<b>33. (*)</b>	<b>Bract: width of largest bract</b>	<b>Bractée la plus grande : largeur</b>	<b>Grösstes Hochblatt: Breite</b>			
<b>QN</b>	narrow	étroite	schmal			3
	medium	moyenne	mittel			5
	broad	large	breit			7
<b>34. (*)</b>	<b>Largest bract: shape</b>					
<b>PQ</b>	obovate					1
	oblanceolate					2
	lanceolate					3
	elliptic					4
	ovate					5
<b>35. (*)</b>	<b>Bract: number of colors of upper side</b>					
<b>PQ</b>	one					1
	two					2
	more than two					3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>36.</b>	<b><u>Varieties with more than one color:</u></b>					
	<b>Bract: color pattern of <u>upper</u> side</b>					
<b>PQ</b>	marbled					1
	spotted					2
<b>37.</b> <b>(*)</b>	<b><u>Varieties with one color only:</u></b>					
	<b>Bract: color of <u>upper</u> side</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					
<b>38.</b> <b>(*)</b>	<b><u>Marbled colored varieties only;</u></b>					
	<b>Bract: main color of middle Zone of <u>upper</u> side</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					
<b>39.</b> <b>(*)</b>	<b><u>Marbled colored varieties only;</u></b>					
	<b>Bract: secondary color of middle Zone of <u>upper</u> side</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					
<b>40.</b> <b>(*)</b>	<b><u>Marbled colored varieties only;</u></b>					
	<b>Bract: main color of marginal Zone of <u>upper</u> side</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					
<b>41.</b> <b>(*)</b>	<b><u>Spotted varieties only;</u></b>					
	<b>Bract: color of main color of <u>upper</u> side</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>42.</b> <b>(*)</b>	<b><u>Spotted varieties only</u>; Bract: color of spots of <u>upper</u> side of bracts</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					
<b>43.</b> <b>(*)</b>	<b><u>One colored varieties only</u>; Bract: color of <u>lower</u> side of bracts</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					
<b>44.</b> <b>(*)</b>	<b><u>Marbled colored varieties only</u>; Bract: main color of middle zone of <u>lower</u> side</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					
<b>45</b> <b>(*)</b>	<b><u>Marbled colored varieties only</u>; Bract: secondary color of middle zone of <u>lower</u> side</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					
<b>46.</b> <b>(*)</b>	<b><u>Marbled colored varieties only</u>; Bract: main color of marginal zone of <u>lower</u> side</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>47.</b> <b>(*)</b>	<b><u>Spotted varieties only</u>; Bract: color of main color of <u>lower side</u></b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					
<b>48.</b> <b>(*)</b>	<b><u>Spotted varieties only</u>; Bract: color of spots of <u>lower side</u> of bracts</b>					
<b>PQ</b>	RHS Colour Chart (indicate reference number)					
<b>49.</b>	<b>Bract: folding</b>	<b>Bractée : pliage</b>	<b>Hochblatt: Faltung</b>			
<b>QL</b>	absent	absent	fehlend			1
	present	présent	vorhanden			9
<b>50.</b>	<b>Bract: curving</b>	<b>Bractée : courbure</b>	<b>Hochblatt: Krümmung</b>			
<b>QL</b>	absent	absent	fehlend			1
	present	présent	vorhanden			9
<b>51.</b>	<b>Bract: twisting</b>	<b>Bractée : torsion</b>	<b>Hochblatt: Drehung</b>			
<b>QL</b>	absent	absent	fehlend			1
	present	présent	vorhanden			9
<b>52.</b> <b>(*)</b>	<b>Bract: intensity of rugosity between veins</b>	<b>Bractée : intensité de la coloqûre entre les nervures</b>	<b>Hochblatt: Stärke der Wölgung zwischen den Nerven</b>			
	absent or very weak					1
	weak	faible	gering			3
	medium	moyenne	mittel			5
	strong	forte	stark			7
	very strong					9



	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>53. (* )</b>	<b>Cyme: width</b>	<b>Cyme : largeur</b>	<b>Trugdolde: Breit</b>			
<b>QN</b>	narrow	étroite	schmal			3
	medium	moyenne	mittel			5
	broad	large	breit			7
<b>54. (* )</b>	<b>Cyathium: size of glands</b>	<b>Cyathium : taille des glandes</b>	<b>Cyathium: Grösse der Drüsen</b>			
	small	petites	schmal			3
	medium	moyennes	mittel			5
	large	grandes	gross			7
<b>55. (* )</b>	<b>Cyathium: color of glands</b>	<b>Cyathium : couleur des glandes</b>	<b>Cyathium: Farbe der Drüsen</b>			
	greenish yellow	jaune-vert	grüngelb			1
	yellow	jaunes	gelb			2
	orange	orange	orange			3
	red					4
<b>56.</b>	<b>Cyathium: red coloration of margin of glands</b>					
<b>QN</b>	absent or very light					1
	light					3
	medium					5
	dark					7
	very dark					9
<b>57.</b>	<b>Time of opening of first three cyathia</b>	<b>Époque d'ouverture des trois premiers cyathiums</b>	<b>Zeitpunkt der Oeffnung der ersten drei Cyathien</b>			
<b>QN</b>	early	précoce	früh			3
	medium	moyenne	mittel			5
	late	tardive	spät			7

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

- (a) Leaf: observations on the leaf should be made on a fully developed leaf from the upper part of the plant.
- (b) Petiole: observations on the petiole should be made on a fully developed leaf from the upper part of the plant.

8.2 *Explanations for individual characteristics*

Ad. 9: Leaf blade: shape

1	2	3	4
elliptic	obovate	ovate	deltoid

Ad. 20: Leaf blade: number of lobes

absent or very few	few	medium	many
1	3	5	7

Ad. 21: Leaf blade: maximum depth of lobes

shallow	medium	deep
3	5	7

9. Literature

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
<b>TECHNICAL QUESTIONNAIRE</b> to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1.1 Botanical name	<input type="text" value="Euphorbia pulcherrima Willd. ex Klotzsch"/>	
1.1.2 Common name	<input type="text" value="Poinsettia"/>	
2. Applicant		
Name	<input type="text"/>	
Address	<input type="text"/>	
Telephone No.	<input type="text"/>	
Fax No.	<input type="text"/>	
E-mail address	<input type="text"/>	
Breeder (if different from applicant)	<input type="text"/>	
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)	<input type="text"/>	
Breeder's reference	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
<p>#4. Information on the breeding scheme and propagation of the variety</p> <p>4.1 Breeding scheme</p> <p>Variety resulting from:</p> <p>4.1.1 Crossing</p> <p>(a) controlled cross [ ] (please state parent varieties)</p> <p>(b) partially known cross [ ] (please state known parent variety(ies))</p> <p>(c) unknown cross [ ]</p> <p>4.1.2 Mutation [ ] (please state parent variety)</p> <p>4.1.3 Discovery and development [ ] (please state where and when discovered and how developed)</p> <p>4.1.4 Other [ ] (please provide details)</p> <div style="border: 1px solid black; height: 44px; width: 436px;"></div> <p>4.2 Method of propagating the variety</p> <p>4.2.1 Vegetative propagation</p> <p>(a) cuttings [ ]</p> <p>(b) <i>in vitro</i> propagation [ ]</p> <p>(c) other (state method) [ ]</p> <p>4.2.2 Seed [ ]</p> <p>4.2.3 Other [ ] (please provide details)</p> <div style="border: 1px solid black; height: 44px; width: 437px;"></div>		

# Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
<p>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).</p>		
Characteristics	Example Varieties	Note
<p><b>5.1 Stem: color</b>  <b>(5)</b></p> <p>greenish</p> <p>reddish</p>		<p>1[ ]</p> <p>2[ ]</p>
<p><b>5.2 Leaf blade: number of colors</b>  <b>(11)</b></p> <p>one</p> <p>two</p> <p>more than two</p>		<p>1[ ]</p> <p>2[ ]</p> <p>3[ ]</p>
<p><b>5.3 Bracts: number of colors</b>  <b>(35)</b></p> <p>one</p> <p>two</p> <p>more than two</p>		<p>1[ ]</p> <p>2[ ]</p> <p>3[ ]</p>
<p><b>5.4 <u>Varieties with more than one color:</u> Bract: color pattern of <u>upper</u> side</b>  <b>(36)</b></p> <p>marbled</p> <p>spotted</p>		<p>1[ ]</p> <p>2[ ]</p>
<p><b>5.5i <u>Varieties with one color only:</u> Bract: color of <u>upper</u> side</b>  <b>(37)</b></p> <p>RHS Colour Chart (indicate reference number)</p>		<p>.....</p>

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
<p><b>5.5ii Varieties with one color only: Bract: color of <u>upper</u> side</b>  (37)</p> <p style="margin-left: 40px;">white .....  yellow  orange-red  red  purple  pink  other</p>			
<p>6. Similar varieties and differences from these varieties</p> <p><i>Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knowledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.</i></p>			
Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>(Example)</i>	<i>Bract: number of colors of upper side</i>	<i>one</i>	<i>two</i>
<p>Comments:</p>			

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:												
<p>9. Information on plant material to be examined or submitted for examination.</p> <p>9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.</p> <p>9.2 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 the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:</p> <table><tr><td>(a) Microorganisms (e.g. virus, bacteria, phytoplasma)</td><td>Yes [ ]</td><td>No [ ]</td></tr><tr><td>(b) Chemical treatment (e.g. growth retardant, pesticide)</td><td>Yes [ ]</td><td>No [ ]</td></tr><tr><td>(c) Tissue culture</td><td>Yes [ ]</td><td>No [ ]</td></tr><tr><td>(d) Other factors</td><td>Yes [ ]</td><td>No [ ]</td></tr></table> <p>Please provide details for where you have indicated "yes".</p> <p>.....</p>			(a) Microorganisms (e.g. virus, bacteria, phytoplasma)	Yes [ ]	No [ ]	(b) Chemical treatment (e.g. growth retardant, pesticide)	Yes [ ]	No [ ]	(c) Tissue culture	Yes [ ]	No [ ]	(d) Other factors	Yes [ ]	No [ ]
(a) Microorganisms (e.g. virus, bacteria, phytoplasma)	Yes [ ]	No [ ]												
(b) Chemical treatment (e.g. growth retardant, pesticide)	Yes [ ]	No [ ]												
(c) Tissue culture	Yes [ ]	No [ ]												
(d) Other factors	Yes [ ]	No [ ]												
<p>10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:</p> <table><tr><td>Applicant's name</td><td colspan="2"><input type="text"/></td></tr><tr><td>Signature</td><td><input type="text"/></td><td>Date <input type="text"/></td></tr></table>			Applicant's name	<input type="text"/>		Signature	<input type="text"/>	Date <input type="text"/>						
Applicant's name	<input type="text"/>													
Signature	<input type="text"/>	Date <input type="text"/>												

[End of document]