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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

DRAFT

Zinnia

UPOV Code: ZINNI

Zinnia L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by (an) expert(s) from Mexico

to be considered by the

Technical Working Party for Ornamental Plants and Forest Trees
at its forty-eighth session
to be held in Cambridge, United Kingdom,
from 2015-09-14
to 2015-09-18

Alternative Names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Zinnia L.	Zinnia	Zinnia	Zinnia	Miguelito, Carolina

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), for the latest information.]

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of Zinnia L..

These Test guidelines apply to all varieties of Zinnia L. Zinnia angustifolia, Z. haageana, Z. elegans, Z peruviana, and their hybrids

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 seeds.

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

a sufficient quantity of seeds to produce 10 plants for F1 hybrids and 40 plants for open pollinated varieties

The seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority. In cases where the seed is to be stored, the germination capacity should be as high as possible and should be stated by the applicant.

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.

The applicant must indicate if the material comes from F1 hybrids or from open pollinated varieties

3. Method of Examination

3.1 Number of Growing Cycles

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

3.1.2 The minimum duration of tests should normally be a single growing cycle for F1 hybrids, and 2 growing cycles for cross-pollinated varieties.

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.

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.

3.4.3 Each test should be designed to result in a total of at least 10 plants for F1 hybrids and 40 plants for cross-pollinated varieties.

3.5 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.

4.1.4 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants 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, disregarding any off-type plants. In the case of observations of parts taken from single plants, the number of parts to be taken from each of the plants should be 10.

4.1.5 Method of Observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the second column of the Table of Characteristics (see document TGP/9 “Examining Distinctness”, Section 4 “Observation of characteristics”):

MG: single measurement of a group of plants or parts of plants
MS: measurement of a number of individual plants or parts of plants
VG: visual assessment by a single observation of a group of plants or parts of plants
VS: visual assessment by observation of individual plants or parts of plants

Type of observation: visual (V) or measurement (M)

“Visual” observation (V) is an observation made on the basis of the expert’s judgment. For the purposes of this document, “visual” observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, “G” provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness.

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

Unless otherwise indicated, for the purposes of distinctness all observations on single plants should be made on 9 plants for F1 hybrids and at least 20 for cross-polinated varieties or parts taken from each plant and any other observations made on all plants in the test, disregarding any off-type plants.

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 assessment of uniformity for -1 varieties should be according to the recommendations for cross-pollinated varieties in the General Introduction.

4.2.3 The assessment of uniformity for hybrid varieties depends on the type of hybrid and should be according to the recommendations for hybrid varieties in the General Introduction.

4.2.4 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.

4.2.5 For cross-polinated varieties, the assessement of uniformity should be according to the recommendations for cross-polinated varieties as appropiate, in the General Introduction.

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 further examined by testing a new seed stock to ensure that it exhibits the same characteristics as those shown by the initial material supplied.

4.3.3 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.

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) Plant: growth habit (characteristic 1)
(b) Plant: branching (characteristic 3)
(c) Stem: density of pubescence (characteristic 5)
(d) Leaf: length/width ratio (characteristic 8)
(e) Leaf: position of broadest part (characteristic 9)
(f) Leaf: profile in cross section (characteristic 10)
(g) Leaf: undulation of margin (characteristic 11)
(h) Leaf: anthocyanin coloration at base (characteristic 13)
(i) Flower head: peduncle length (characteristic 14)
(j) Flower head: type (characteristic 15)
(k) Ray floret: profile in cross section at mid point (characteristic 21)
(l) Ray floret: longitudinal axis (characteristic 22)
(m) Ray floret:strength of curvature (characteristic 24)
(n) Ray floret: shape of apex (characteristic 25)
(o) Ray floret: pattern of secondary color of inner side (characteristic 29)

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction and document TGP/9 “Examining Distinctness”.

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

6.2.1 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.

6.2.2 In the case of qualitative and pseudo-qualitative characteristics (see Chapter 6.3), all relevant states of expression are presented in the characteristic. However, in the case of quantitative characteristics with 5 or more states, an abbreviated scale may be used to minimize the size of the Table of Characteristics. For example, in the case of a quantitative characteristic with 9 states, the presentation of states of expression in the Test Guidelines may be abbreviated as follows:

State	Note
small	3
medium	5
large	7

However, it should be noted that all of the following 9 states of expression exist to describe varieties and should be used as appropriate:

State	Note
very small	1
very small to small	2
small	3
small to medium	4
medium	5
medium to large	6
large	7
large to very large	8
very large	9

6.2.3 Further explanation of the presentation of states of expression and notes is provided in document TGP/7 “Development of Test Guidelines”.

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

MG, MS, VG, VS – see Chapter 4.1.5

(a)-(e) See Explanations on the Table of Characteristics in Chapter 8.

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

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

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*) PQ VG (+) **Plant: growth habit**	**Plante: port**	**Pflanze: Wuchsform**	**Planta: porte**		
upright	dressé	aufrecht	erecta	Peppermint	1
semi-upright	demi-dressé	halbaufrecht	semierecta	Profussion	2
spreading	étalé	breitwüchsig	extendido	Solecito	3
2. (*) QN MS VG **Plant: height**	**Plante: hauteur**	**Pflanze: Höhe**	**Planta: altura**		
short	basse	niedrig	baja	Peppermint	3
medium	moyenne	mittel	media	Witworna	5
tall	haute	hoch	alta	Inca	7
3. (*) QN VG **Plant: branching**	**Plante : ramification**	**Pflanze: Verzweigung**	**Planta: ramificación**		
absent or very weak				Witworna	1
weak					2
medium				Peppermint	3
strong					4
very strong				Profussion	5
4. (*) QN VG **Stem: anthocyanin coloration on upper third**	**Tige : pigmentation anthocyanique au tiers supérieur**	**Stengel: Anthocyanfärbung im oberen Drittel**	**Tallo: pigmentación antociánica del tercio superior**		
absent or weak	nulle ou faible	fehlend oder gering	ausente o débil	Dreamland	1
weak				Lilliput	2
medium	moyenne	mittel	media	Profussion	3
strong	forte	stark	fuerte	Arcos	4

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
5. QN VG (+) **Stem: density of pubescence**					
absent or sparse				Zestr	1
medium				Uproar	2
dense				Short stuff	3
6. (*) QN MS VG (a) **Leaf: length**	**Feuille : longueur**	**Blatt: Länge**	**Hoja: longitud**		
short					3
medium					5
long					7
7. (*) QN MS VG (a) **Leaf:width**					
narrow				Starbright	3
medium				Yellow flame	5
long				Short stuff	6
8. (*) QN MS VG (+) (a) **Leaf: length/width ratio**					
low				Crystal yellow	3
medium					5
high				Dreamland rose	7
9. QN VG (a) **Leaf: position of broadest part**	**Feuille : position de la partie la plus large**	**Blatt: Position der breitesten Stelle**	**Hoja: posición de la parte más ancha**		
towards base				Dreamland rose	1
towards middle				Cherry ivory, Swizzle	2
towards apex				Oklahoma	3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
10. (*) QN VG (a) **Leaf: profile in cross section**					
flat					1
moderately concave					2
strongly concave					3
11. QN VG (a) **Leaf: undulation of margin**	**Feuille: ondulation du bord**	**Blatt: Wellung des Randes**	**Hoja: ondulación del margen**		
absent or weak	nulle ou faible	fehlend oder gering	ausente o débil		1
medium	moyenne	mittel	media		2
strong	forte	stark	fuerte		3
12. QN VG (a) **Leaf: intensity of green color**					
very light					1
light				Oklahoma	2
medium					3
dark				Starbright	4
very dark					5
13. (*) QN VG (a) **Leaf: anthocyanin coloration at base**					
absent or weak				Oklahoma	1
medium				Uproar rose	2
strong				state fair	3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14. QN MS VG **Flower head: peduncle length**					
short				Sahara	3
medium				Witworna	5
long				Uproar rose	7
15. (*) PQ VG (e) **Flower head: type**					
single				Star	1
semi-double				Yellow flame	2
double				Lilliput	3
16. QN VG **Flower head: number of ray florets**	**Capitule : nombre de fleurs ligulées**	**Blütenstand: Anzahl der Randblüten**	**Capítulo: número de flores liguladas**		
few					3
medium					5
many					7
17. QN MS VG **Flower head: diameter**	**Capitule : diamètre**	**Blütenstand: Durchmesser**	**Capítulo: diámetro**		
small				Lilliput	3
medium				Oklahoma	5
large				Inca	7
18. (*) QN MS VG (b) **Ray floret: length**	**Fleur ligulée: longueur**	**Randblüte: Länge**	**Flor ligulada: longitud**		
short	courte	kurz	corta	Lilliput	3
medium	moyenne	mittel	media	Peppermint stick, Profussion knee	5
long	longue	lang	larga	Inca	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
19. (*) QN MS VG (b) **Ray floret: width**	**Fleur ligulée: largeur**	**Zungenblüte: Breite**	**Flor ligulada: anchura**		
narrow	étroite	schmal	estrecha		3
medium	moyenne	mittel	media		5
broad	large	breit	ancha		7
20. (*) QN MS VG (b) (c) **Ray floret: length/width ratio**	**Fleur ligulée : rapport longueur/largeur**	**Randblüte: Verhältnis Länge/Breite**	**Flor ligulada: relación entre la longitud y la altura**		
low	faible	klein	baja		3
medium	moyen	mittel	media		5
high	élevé	groß	elevada		7
21. QN VG (+) (c) **Ray floret: profile in cross section at mid point**	**Fleuron: profil en section transversale au point médian**	**Zungenblüte: Profil im Querschnitt am Mittelpunkt**	**Lígula: perfil en sección transversal en el punto medio**		
strongly convex with margins touching	fortement convexe à bords tangents	stark konvex mit sich berührenden Rändern	fuertemente convexa con bordes que se tocan		
strongly concave with margins overlapping	fortement concave à bords chevauchants	stark konkav mit überlappenden Rändern	fuertemente cóncava con bordes superpuestos		1
strongly concave with margins touching	fortement concave à bords tangents	stark konkav mit sich berührenden Rändern	fuertemente cóncava con bordes que se tocan		2
moderately concave	moyennement concave	mittel konkav	moderadamente cóncava		4
weakly concave	faiblement concave	schwach konkav	débilmente cóncava		5
flat	plat	flach	plana		6
weakly convex	faiblement convexe	schwach konvex	débilmente convexa		7
moderately convex	moyennement convexe	mittel konvex	moderadamente convexa		8
strongly convex	fortement convexe	stark konvex	fuertemente convexa		9

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
22. QN VG (+) (c) **Ray floret: longitudinal axis**	**Fleuron: axe longitudinal**	**Zungenblüte: Längsachse**	**Lígula: eje longitudinal**		
incurving	incurvé	aufgebogen	curvado hacia arriba		1
straight	droit	gerade	recto		2
reflexing	recourbé	zurückgebogen	curvado hacia abajo		3
23. QN VG (c) **Ray floret: part of axis curved**	**Fleuron: partie de l'axe courbé**	**Zungenblüte: Teils der gebogenen Achse**	**Lígula: parte del eje que es curvado**		
distal quarter	quart distal	distales Viertel	cuarto distal		1
distal half	moitié distale	distale Hälfte	mitad distal		2
distal three quarters	trois quarts distaux	distale drei Viertel	tres cuartos, zona distal		3
24. QN VG (c) **Ray floret:strength of curvature**					
weak				Uproar rose	3
medium				Swizzle cherry ivory	5
strong				Inca	7
25. (*) PQ VG (+) (c) **Ray floret: shape of apex**					
mucronate					1
truncate					2
rounded					3
emarginated					4

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
26. (*) PQ VG (c) (d) **Ray floret: main color of inner side** RHS Colour Chart					
27. PQ VG (+) (d) **Ray floret: distribution of secondary color of inner side**					
none				Sahara	1
basal part				Swizzle	2
distal part					3
along midrib					4
throughout				Peppermint	5
28. PQ VG (d) **Ray floret: secondary color of inner side (if present)** RHS Colour Chart					
29. PQ VG **Ray floret: pattern of secondary color of inner side**					
solid					1
blotches					2
stripes					3
30. PQ VG (d) **Ray floret: tertiary color of inner side (if present)** RHS colour chart					

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
31. PQ VG **Ray floret pattern of tertiary color of inner side**					
solid					1
blotches					2
stripes					3
32. PQ VG (+) **Ray floret: distribution of tertiary color of inner side**					
basal					1
distal					2
striped					3
blotched				Peppermint	4
33. PQ VG **Flower head: color of disc (if present)** RHS Colour chart					

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 characteristics are recorded on typical leaves taken from the middle thirdof the stem, and are recorded on the whole leaf, looking at the upper surface.

(b) The characteristics of ray florets should be observed on the outer most rows of ray florets.

(c)

(d) The main color, is the color with the largest total surface area, the secondary color (if present) is the color with the second largest surface area; the tertiary color (if present) is that with the third largest total surface. In case of when none of the colors is clearly predominant, then the darkest color will be the main color.

(e) Single flower head has only one row of ray florets. Semi-double flower head: has more than one row of ray florets and a visible flower head disc. Double flower head: has no flower head disc, at any state of development.

8.2 Explanations for individual characteristics

Ad. 1: Plant: growth habit

1 - upright

2 - semi-upright

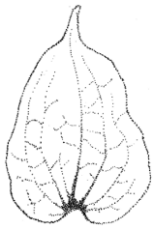
3 - spreading

Ad. 5: Stem: density of pubescence

2 - medium

3 - dense

Ad. 8: Leaf: length/width ratio

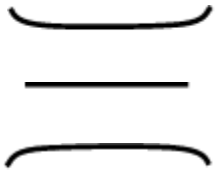


3 - low

5 - medium

7 - high

Ad. 21: Ray floret: profile in cross section at mid point



8 - moderately convex

Ad. 22: Ray floret: longitudinal axis

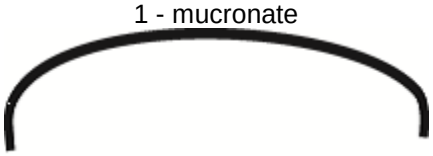
1
incurving

2
straight

3
refelxing

Ad. 25: Ray floret: shape of apex

1 - mucronate



2 - truncate

3 - rounded

4 - emarginated

Ad. 27: Ray floret: distribution of secondary color of inner side

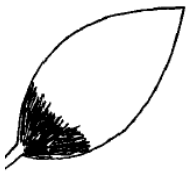
2 - basal part

3 - distal part

4 - along midrib

5 - throughout

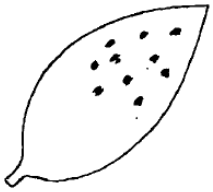
Ad. 32: Ray floret: distribution of tertiary color of inner side



1 - basal

2 - distal

3 - striped



4 - blotched

9. Literature

Calderón de Rzedowski, G. y J. Rzedowski. 2006. Flora Fanerogámica del Valle de México. Ed. Instituto de Ecología A.C. y Comisión Nacional para el Conocimiento y Uso de la Biodiversidad. México. 983 p.

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Torres A. M. 1963. Taxonomy of Zinnia. Brittonia 15: 1-25.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Application date: (not to be filled in by the applicant)

TECHNICAL QUESTIONNAIRE
to be completed in connection with an application for plant breeders' rights

1. Subject of the Technical Questionnaire			
1.1.1	Botanical Name	Zinnia L.	
1.1.2	Common Name	Zinnia	

2. Applicant

Name	
Address	
Telephone No.	
Fax No.	
E-mail address	
Breeder (if different from applicant)	

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	
Breeder's reference	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

(a) controlled cross [ ]
(please state parent varieties)

(……..……..…) x (……..……..…)
female parent male parent

(b) partially known cross [ ]
(please state known parent variety(ies))

(……..……..…) x (……..……..…)
female parent male parent

(c) unknown cross [ ]

4.1.2 Mutation [ ]
(please state parent variety)

4.1.3 Discovery and development [ ]
(please state where and when discovered and how developed)

4.1.4 Other [ ]
(please provide details)

4.2 Method of propagating the variety

4.2.1 Other [ ]

(please provide details)

.....
: :
: :
:.....:

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 (1)	**Plant: growth habit**		
	upright	Peppermint	1[ ]
	semi-upright	Profussion	2[ ]
	spreading	Solecito	3[ ]
5.2 (2)	**Plant: height**		
	short	Peppermint	3[ ]
	medium	Witworna	5[ ]
	tall	Inca	7[ ]
5.3 (15)	**Flower head: type**		
	single	Star	1[ ]
	semi-double	Yellow flame	2[ ]
	double	Lilliput	3[ ]
5.4 (24)	**Ray floret:strength of curvature**		
	weak	Uproar rose	3[ ]
	medium	Swizzle cherry ivory	5[ ]
	strong	Inca	7[ ]

6. Similar varieties and differences from these varieties

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.

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
Example			

Comments:

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

Yes [ ] No [ ]

(If yes, please provide 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.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

9. Information on plant material to be examined or submitted for examination

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.

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:

(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 [ ]

Please provide details for where you have indicated “yes”.

.....

10. 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]