



TG/336/1

ORIGINAL: English

DATE: 2020-12-17

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

Geneva

COREOPSIS

UPOV Code(s):

COREO

Coreopsis L.

*

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

Alternative names:^{*}

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Coreopsis L.</i>	Coreopsis, Tickseed	Coréopsis	Mädchenauge	Coreopsis

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 *Coreopsis* L..

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 young plants or seed.

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

Vegetatively propagated varieties: 10 plants

Seed propagated varieties: sufficient seed to produce 40 plants

In the case of seed, the seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority.

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*

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

3.1.2 The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test.

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.

3.3.2 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. The color chart and version used should be specified in the variety description.

3.4 *Test Design*

3.4.1 In the case of vegetatively propagated varieties, each test should be designed to result in a total of at least 10 plants.

3.4.2 In the case of seed-propagated varieties, each test should be designed to result in a total of at least 40 plants.

3.4.3 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 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 or Parts of Plants to be Examined

In the case of vegetatively propagated varieties, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 9 plants or parts taken from each of 9 plants and any other observation made on all plants in the test, disregarding any off-type plants.

In the case of seed-propagated varieties, unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 20 plants or parts taken from each of 20 plants and any other observation made on all plants in the test, disregarding any off-type plants.

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 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.

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** These Test Guidelines have been developed for the examination of self-pollinated seed-propagated and vegetatively propagated varieties. For varieties with other types of propagation the recommendation in the General Introduction and document TGP/13 "Guidance for new types and species". Section 4.5 Testing Uniformity should be followed.
- 4.2.3** For the assessment of uniformity of vegetatively propagated, 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.
- 4.2.4** For the assessment of uniformity of self-pollinated seed propagated varieties, a population standard of 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 40 plants, 2 off-types are 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 further examined by testing a new seed or plant stock to ensure that it exhibits the same characteristics as those shown by the initial 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) Divided leaf: width of terminal lobe (characteristic 13)
 - (b) Leaf: distribution of secondary color (characteristic 16)
 - (c) Flower head: type (characteristic 21)
 - (d) Ray floret: main color (characteristic 28) with the following groups:
 - Gr. 1: white
 - Gr. 2: yellow
 - Gr. 3: orange
 - Gr. 4: pink
 - Gr. 5: red
 - Gr. 6: purple
 - (e) Ray floret: secondary color (characteristic 31) with the following groups:
 - Gr. 1: white
 - Gr. 2: yellow
 - Gr. 3: orange
 - Gr. 4: pink
 - Gr. 5: red
 - Gr. 6: purple
 - (f) Ray floret: length of corolla tube (characteristic 38)
 - (g) Only varieties with flower head: type: single and semi-double: Disc: color before anthesis (characteristic 44)

- 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 All relevant states of expression are presented in the characteristic.
- 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

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1	2	3	4	5	6	7		
	Name of characteristics in English	Nom du caractère en français		Name des Merkmals auf Deutsch		Nombre del carácter en español		
	states of expression	types d'expression		Ausprägungsstufen		tipos de expresión		

- 1 Characteristic number
- 2 (*) Asterisked characteristic – see Chapter 6.1.2
- 3 Type of expression
 - QL Qualitative characteristic – see Chapter 6.3
 - QN Quantitative characteristic – see Chapter 6.3
 - PQ Pseudo-qualitative characteristic – see Chapter 6.3
- 4 Method of observation (and type of plot, if applicable)
 - MG, MS, VG, VS – see Chapter 4.1.5
- 5 (+) See Explanations on the Table of Characteristics in Chapter 8.2
- 6 (a)-(f) See Explanations on the Table of Characteristics in Chapter 8.1
- 7 Not applicable

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

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*)	QN	VG	(+)					
Plant: growth habit	Plant: growth habit	Plante : port	Pflanze: Wuchsform	Planta: hábito de crecimiento				
	upright	dressé	aufrecht	erecto	Garnet		1	
	semi-upright	demi-dressé	halbaufrecht	semierecto	VIZCOR 609		2	
	semi-spreading	demi-étalé	halbbreitwüchsig	semiextendido	URITW02		3	
	spreading	étalé	breitwüchsig	extendido	Mercury Rising		4	
2.	QN	MG/MS/VG						
Plant: height	Plant: height	Plante : hauteur	Pflanze: Höhe	Planta: altura				
	very short	très courte	sehr niedrig	muy baja			1	
	very short to short	très courte à courte	sehr niedrig bis niedrig	muy baja a baja			2	
	short	courte	niedrig	baja	Mercury Rising		3	
	short to medium	courte à moyenne	niedrig bis mittel	baja a media			4	
	medium	moyenne	mittel	media	Redshift		5	
	medium to tall	moyenne à haute	mittel bis hoch	media a alta			6	
	tall	haute	hoch	alta			7	
	tall to very tall	haute à très haute	hoch bis sehr hoch	alta a muy alta			8	
	very tall	très haute	sehr hoch	muy alta			9	
3.	QN	MG/MS/VG						
Plant: width	Plant: width	Plante : largeur	Pflanze: Breite	Planta: anchura				
	very narrow	très étroite	sehr schmal	muy estrecha			1	
	very narrow to narrow	très étroite à étroite	sehr schmal bis schmal	muy estrecha a estrecha			2	
	narrow	étroite	schmal	estrecha	CSGZ0002		3	
	narrow to medium	étroite à moyenne	schmal bis mittel	estrecha a media			4	
	medium	moyenne	mittel	media	Charlize		5	
	medium to broad	moyenne à large	mittel bis breit	media a ancha			6	
	broad	large	breit	ancha	Mercury Rising		7	
	broad to very broad	large à très large	breit bis sehr breit	ancha muy ancha			8	
	very broad	très large	sehr breit	muy ancha			9	
4. (*)	QN	VG	(+)					
Plant: density	Plant: density	Plante : densité	Pflanze: Dichte	Planta: densidad				
	very sparse	très faible	sehr locker	muy laxa			1	
	sparse	faible	locker	laxa			2	
	medium	moyenne	mittel	media	VIZCOR 609		3	
	dense	forte	dicht	densa			4	
	very dense	très forte	sehr dicht	muy densa	Uritwo02		5	

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
5. (*)	QL	VG	(+)	(a)				
	Leaf: type		Feuille : type		Blatt: Typ	Hoja: tipo		
	simple		simple		einfach	simple		1
	simple and divided		simple et découpé		einfach und gelappt	simple y dividido		2
	divided		découpé		gelappt	dividido		3
6. (*)	QN	MG/MS/VG		(a), (b)				
	Simple leaf: length		Feuille simple : longueur		Einfaches Blatt: Länge	Hoja simple: longitud		
	very short		très courte		sehr kurz	muy corta		1
	very short to short		très courte à courte		sehr kurz bis kurz	muy corta a corta		2
	short		courte		kurz	corta	Charlize	3
	short to medium		courte à moyenne		kurz bis mittel	corta a media		4
	medium		moyenne		mittel	media	Mercury Rising	5
	medium to long		moyenne à longue		mittel bis lang	media a larga		6
	long		longue		lang	larga	CSGZ0002	7
	long to very long		longue à très longue		lang bis sehr lang	larga a muy larga		8
	very long		très longue		sehr lang	muy larga		9
7. (*)	QN	MG/MS/VG		(a), (b)				
	Simple leaf: width		Feuille simple : largeur		Einfaches Blatt: Breite	Hoja simple: anchura		
	very narrow		très étroite		sehr schmal	muy estrecha		1
	very narrow to narrow		très étroite à étroite		sehr schmal bis schmal	muy estrecha a estrecha		2
	narrow		étroite		schmal	estrecha	Mercury Rising	3
	narrow to medium		étroite à moyenne		schmal bis mittel	estrecha a media		4
	medium		moyenne		mittel	media	Baluptgonz	5
	medium to broad		moyenne à large		mittel bis breit	media a ancha		6
	broad		large		breit	ancha	Charlize	7
	broad to very broad		large à très large		breit bis sehr breit	ancha muy ancha		8
	very broad		très large		sehr breit	muy ancha		9

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
8. (*)	QN	MG/MS/VG	(+)	(a), (b)				
Simple leaf: length/width ratio	Simple leaf: length/width ratio		Feuille simple : rapport longueur/largeur		Einfaches Blatt: Verhältnis Länge/Breite	Hoja simple: relación longitud/anchura		
	very low		très bas		sehr klein	muy baja	1	
	very low to low		très bas à bas		sehr klein bis klein	muy baja a baja	2	
	low		bas		klein	baja	Charlize	3
	low to medium		bas à moyen		klein bis mittel	baja a media	4	
	medium		moyen		mittel	media	5	
	medium to high		moyen à élevé		mittel bis groß	media a alta	6	
	high		élevé		groß	alta	Mercury Rising	7
	high to very high		élevé à très élevé		groß bis sehr groß	alta a muy alta	8	
	very high		très élevé		sehr groß	muy alta	9	
9.	QN	MG/MS/VG		(a), (b), (c)				
Divided leaf: length	Divided leaf: length		Feuille découpée : longueur		Gelapptes Blatt: Länge	Hoja dividida: longitud		
	very short		très courte		sehr kurz	muy corta	1	
	very short to short		très courte à courte		sehr kurz bis kurz	muy corta a corta	2	
	short		courte		kurz	corta	Buttermilk	3
	short to medium		courte à moyenne		kurz bis mittel	corta a media	4	
	medium		moyenne		mittel	media	VIZCOR 609	5
	medium to long		moyenne à longue		mittel bis lang	media a larga	6	
	long		longue		lang	larga	PRO538	7
	long to very long		longue à très longue		lang bis sehr lang	larga a muy larga	8	
	very long		très longue		sehr lang	muy larga	9	
10.	QN	MG/MS/VG		(a), (b), (c)				
Divided leaf: width	Divided leaf: width		Feuille découpée : largeur		Gelapptes Blatt: Breite	Hoja dividida: anchura		
	very narrow		très étroite		sehr schmal	muy estrecha	1	
	very narrow to narrow		très étroite à étroite		sehr schmal bis schmal	muy estrecha a estrecha	2	
	narrow		étroite		schmal	estrecha	Charlize	3
	narrow to medium		étroite à moyenne		schmal bis mittel	estrecha a media	4	
	medium		moyenne		mittel	media	Buttermilk	5
	medium to broad		moyenne à large		mittel bis breit	media a ancha	6	
	broad		large		breit	ancha	VIZCOR 609	7
	broad to very broad		large à très large		breit bis sehr breit	ancha muy ancha	8	
	very broad		très large		sehr breit	muy ancha	9	

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
11.	QN	MG/MS/VG	(+)	(a), (b)				
Divided leaf: length/width ratio	Feuille découpée : rapport longueur/largeur		Gelapptes Blatt: Verhältnis Länge/Breite		Hoja dividida: relación longitud/anchura			
	very low		très bas		sehr klein	muy baja	1	
	very low to low		très bas à bas		sehr klein bis klein	muy baja a baja	2	
	low		bas		klein	baja	3	
	low to medium		bas à moyen		klein bis mittel	baja a media	4	
	medium		moyen		mittel	media	5	
	medium to high		moyen à élevé		mittel bis groß	media a alta	6	
	high		élevé		groß	alta	7	
	high to very high		élevé à très élevé		groß bis sehr groß	alta a muy alta	8	
	very high		très élevé		sehr groß	muy alta	9	
12. (*)	QN	MG/MS/VG		(a), (b), (c)				
Divided leaf: length of terminal lobe	Feuille découpée : longueur du lobe terminal		Gelapptes Blatt: Länge des Terminallappens		Hoja dividida: longitud del lóbulo terminal			
	very short		très courte		sehr kurz	muy corta	1	
	very short to short		très courte à courte		sehr kurz bis kurz	muy corta a corta	2	
	short		courte		kurz	corta	Buttermilk	
	short to medium		courte à moyenne		kurz bis mittel	corta a media	4	
	medium		moyenne		mittel	media	Enchanted Eve	
	medium to long		moyenne à longue		mittel bis lang	media a larga	6	
	long		longue		lang	larga	Balupteam	
	long to very long		longue à très longue		lang bis sehr lang	larga a muy larga	8	
	very long		très longue		sehr lang	muy larga	9	
13. (*)	QN	MG/MS/VG		(a), (b), (c)				
Divided leaf: width of terminal lobe	Feuille découpée : largeur du lobe terminal		Gelapptes Blatt: Breite des Terminallappens		Hoja dividida: anchura del lóbulo terminal			
	very narrow		très étroite		sehr schmal	muy estrecha	1	
	very narrow to narrow		très étroite à étroite		sehr schmal bis schmal	muy estrecha a estrecha	2	
	narrow		étroite		schmal	estrecha	VIZCOR 609	
	narrow to medium		étroite à moyenne		schmal bis mittel	estrecha a media	4	
	medium		moyenne		mittel	media	Enchanted Eve	
	medium to broad		moyenne à large		mittel bis breit	media a ancha	6	
	broad		large		breit	ancha	Sophia	
	broad to very broad		large à très large		breit bis sehr breit	ancha muy ancha	8	
	very broad		très large		sehr breit	muy ancha	9	

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14. (*)	QN	MG/MS/VG	(+)	(a), (b)				
Divided leaf: length/width ratio of terminal lobe	Feuille découpée : rapport longueur/largeur du lobe terminal		Gelapptes Blatt: Verhältnis Länge/Breite des Terminallappens		Hoja dividida: relación longitud/anchura del lóbulo terminal			
	very low		très bas		sehr klein	muy baja		
	very low to low		très bas à bas		sehr klein bis klein	muy baja a baja		
	low		bas		klein	baja	PRO538	3
	low to medium		bas à moyen		klein bis mittel	baja a media		
	medium		moyen		mittel	media	Buttermilk	5
	medium to high		moyen à élevé		mittel bis groß	media a alta		
	high		élevé		groß	alta	URITW02	7
	high to very high		élevé à très élevé		groß bis sehr groß	alta a muy alta		
	very high		très élevé		sehr groß	muy alta		
15. (*)	PQ	VG	(+)	(a)				
Leaf: main color	Feuille : couleur principale		Blatt: Hauptfarbe		Hoja: color principal			
	yellow green		vert jaune		gelbgrün	verde amarillento		
	light green		vert clair		hellgrün	verde claro		
	medium green		vert moyen		mittelgrün	verde medio	Balupeteam	3
	dark green		vert foncé		dunkelgrün	verde oscuro	VIZCOR 609	4
16. (*)	PQ	VG	(+)	(a)				
Leaf: distribution of secondary color	Feuille : distribution de la couleur secondaire		Blatt: Verteilung der Sekundärfarbe		Hoja: distribución del color secundario			
	none		aucune		keine	ausente		
	on margin		au bord		am Rand	en el borde		
	marginal zone		zone marginale		im Randbereich	en la zona del borde	Tequila Sunrise	3
	irregular		irrégulière		unregelmäßig	irregular		
17. (*)	PQ	VG	(+)	(a)				
Leaf: secondary color	Feuille : couleur secondaire		Blatt: Sekundärfarbe		Hoja: color secundario			
	whitish		blanchâtre		weißlich	blanquecino		
	light yellow		jaune clair		hellgelb	amarillo claro	Tequila Sunrise	2
	medium yellow		jaune moyen		mittelgelb	amarillo medio		
	yellow green		vert jaune		gelbgrün	verde amarillento		

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
18.	QN	VG	(a)					
	Leaf: glossiness		Feuille : brillance		Blatt: Glanz	Hoja: brillo		
	absent or very weak		nulle ou très faible		fehlend oder sehr gering	ausente o muy débil	Sophia	1
	weak		faible		gering	débil		2
	medium		moyenne		mittel	medio	Buttermilk	3
	strong		forte		stark	fuerte	Tweety	4
	very strong		très forte		sehr stark	muy fuerte		5
19. (*)	QN	VG	(a)					
	Peduncle: length		Pédoncule : longueur		Blütenstiell: Länge	Pedúnculo: longitud		
	very short		très courte		sehr kurz	muy corta		1
	very short to short		très courte à courte		sehr kurz bis kurz	muy corta a corta		2
	short		courte		kurz	corta	Charlize	3
	short to medium		courte à moyenne		kurz bis mittel	corta a media		4
	medium		moyenne		mittel	media	Red Elf	5
	medium to long		moyenne à longue		mittel bis lang	media a larga		6
	long		longue		lang	larga	PRO538	7
	long to very long		longue à très longue		lang bis sehr lang	larga a muy larga		8
	very long		très longue		sehr lang	muy larga		9
20. (*)	QN	VG	(+)	(d)				
	Flower head: position relative to foliage		Capitule : position par rapport au feuillage		Blütenstand: Position im Verhältnis zum Laub	Capítulo: posición con respecto a follaje		
	below or same level		en dessous ou au même niveau		unterhalb oder auf gleicher Höhe	por debajo o al mismo nivel	VIZCOR 609	1
	slightly above		juste au-dessus		etwas oberhalb	ligeramente por encima	Enchanted Eve	2
	moderately above		modérément au-dessus		mäßig oberhalb	moderadamente por encima	PRO538	3
	far above		bien au-dessus		weit oberhalb	muy por encima		4
21. (*)	PQ	VG	(+)	(d)				
	Flower head: type		Capitule : type		Blütenstand: Typ	Capítulo: tipo		
	single		simple		einfach	simple	Cosmic Eye	1
	semi-double		semi-double		halbgefüllt	semidoble	Baluptowed	2
	double		double		gefüllt	doble	DCOREO16	3

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
22. (*)	QN	MG/MS/VG	(d)					
	Flower head: diameter		Capitule : diamètre		Blütenstand: Durchmesser	Capítulo: diámetro		
	very small		très petit		sehr klein	muy pequeño		1
	very small to small		très petit à petit		sehr klein bis klein	muy pequeño a pequeño		2
	small		petit		klein	pequeño	Tweety	3
	small to medium		petit à moyen		klein bis mittel	pequeño a medio		4
	medium		moyen		mittel	medio	Red Elf	5
	medium to large		moyen à grand		mittel bis groß	medio a grande		6
	large		grand		groß	grande	Baluptongz	7
	large to very large		grand à très grand		groß bis sehr groß	grande a muy grande		8
	very large		très grand		sehr groß	muy grande		9
23. (*)	QN	MG/MS/VG	(d)					
	<u>Only varieties with flower head: type: single or semi-double:</u> Flower head: number of ray florets		<u>Seulement les variétés avec capitule : type : simple ou semi-double :</u> Capitule : nombre de fleurs ligulées		Nur Sorten mit Blütenstand: Typ: einfach oder halbgefüllt: Blütenstand: Anzahl der Zungenblüten	Solo variedades con capítulo: tipo: simple o semidoble: Capítulo: número de flores liguladas		
	very few		très faible		sehr gering	muy bajo	Buttermilk	1
	few		faible		gering	bajo	Enchanted Eve	2
	medium		moyen		mittel	medio	Baluptowed	3
	many		élevé		groß	alto		4
	very many		très élevé		sehr groß	muy alto		5
24. (*)	QN	VG	(+)	(d), (e)				
	Ray floret: attitude of basal part		Fleur ligulée : port de la partie basale		Zungenblüte: Haltung des basalen Teils	Flor ligulada: porte de la parte basal		
	strongly ascending		fortement ascendant		stark nach oben	muy ascendente		1
	moderately ascending		modérément ascendant		mäßig nach oben	moderadamente ascendente		2
	weakly ascending		faiblement ascendant		leicht nach oben	ligeramente ascendente	Sophia	3
	horizontal		horizontal		waagerecht	horizontal	Enchanted Eve	4
	weakly descending		faiblement descendant		leicht nach unten	ligeramente descendente	URITW02	5
	moderately descending		modérément descendant		mäßig nach unten	moderadamente descendente	Pineapple Pie	6
	strongly descending		fortement descendant		stark nach unten	muy descendente		7

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
25. (*)	QN	MG/MS/VG	(d), (e)				
Ray floret: length	Fleur ligulée : longueur		Zungenblüte: Länge	Flor ligulada: longitud			
	very short	très courte	sehr kurz	muy corta			1
	very short to short	très courte à courte	sehr kurz bis kurz	muy corta a corta			2
	short	courte	kurz	corta	Solar Dance		3
	short to medium	courte à moyenne	kurz bis mittel	corta a media			4
	medium	moyenne	mittel	media	Red Elf		5
	medium to long	moyenne à longue	mittel bis lang	media a larga			6
	long	longue	lang	larga	Baluptgongz		7
	long to very long	longue à très longue	lang bis sehr lang	larga a muy larga			8
	very long	très longue	sehr lang	muy larga			9
26. (*)	QN	MG/MS/VG	(d), (e)				
Ray floret: width	Fleur ligulée : largeur		Zungenblüte: Breite	Flor ligulada: anchura			
	very narrow	très étroite	sehr schmal	muy estrecha			1
	very narrow to narrow	très étroite à étroite	sehr schmal bis schmal	muy estrecha a estrecha			2
	narrow	étroite	schmal	estrecha	VIZCOR 609		3
	narrow to medium	étroite à moyenne	schmal bis mittel	estrecha a media			4
	medium	moyenne	mittel	media	Redshift		5
	medium to broad	moyenne à large	mittel bis breit	media a ancha			6
	broad	large	breit	ancha	CSGZ0002		7
	broad to very broad	large à très large	breit bis sehr breit	ancha muy ancha			8
	very broad	très large	sehr breit	muy ancha			9
27. (*)	QN	MG/MS/VG	(+)	(d), (e)			
Ray floret: length/width ratio	Fleur ligulée : rapport longueur/largeur		Zungenblüte: Verhältnis Länge/Breite	Flor ligulada: relación longitud/anchura			
	very low	très bas	sehr klein	muy baja			1
	very low to low	très bas à bas	sehr klein bis klein	muy baja a baja			2
	low	bas	klein	baja	PRO538		3
	low to medium	bas à moyen	klein bis mittel	baja a media			4
	medium	moyen	mittel	media	Starlight		5
	medium to high	moyen à élevé	mittel bis groß	media a alta			6
	high	élevé	groß	alta	Tweety		7
	high to very high	élevé à très élevé	groß bis sehr groß	alta a muy alta			8
	very high	très élevé	sehr groß	muy alta			9

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota	
28. (*)	PQ	VG	(d), (e), (f)						
	Ray floret: main color		Fleur ligulée : couleur principale	Zungenblüte: Hauptfarbe	Flor ligulada: color principal				
	RHS colour chart (indicate reference number)		Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)				
29. (*)	PQ	VG	(+)	(d), (e), (f)					
	Ray floret: distribution of main color		Fleur ligulée : distribution de la couleur principale	Zungenblüte: Verteilung der Hauptfarbe	Flor ligulada: distribución del color principal				
	basal half		moitié basale	in basaler Hälfte	en la mitad basal			1	
	basal half and margins		moitié basale et bords	in basaler Hälfte und am Rand	en la mitad basal y los bordes			2	
	basal three quarters		trois quarts basaux	in basalen drei Vierteln	en los tres cuartos basales			3	
	basal three quarters and margins		trois quarts basaux et bords	in basalen drei Vierteln und am Rand	en los tres cuartos basales y los bordes			4	
	distal three quarters		trois quarts distaux	in distalen drei Vierteln	en los tres cuartos distales	Balupeteamed		5	
	distal half		moitié distale	in distaler Hälfte	en la mitad distal	Cosmic Eye		6	
	throughout		sur la totalité	überall	en la totalidad	Charlize		7	
30. (*)	PQ	VG	(+)	(d), (e), (f)					
	Ray floret: distribution of secondary color		Fleur ligulée : distribution de la couleur secondaire	Zungenblüte: Verteilung der Sekundärfarbe	Flor ligulada: distribución del color secundario				
	none		aucune	keine	ausente	Charlize		1	
	base		base	an Basis	en la base	Balupeteamed		2	
	base and margins		base et bords	an Basis und am Rand	en la base y los bordes			3	
	basal quarter		quart basal	im basalen Viertel	en el cuarto basal	Baluptowed		4	
	basal quarter and margins		quart basal et bords	im basalen Viertel und am Rand	en el cuarto basal y los bordes			5	
	basal half		moitié basale	in basaler Hälfte	en la mitad basal			6	
	basal half and margins		moitié basale et bords	in basaler Hälfte und am Rand	en la mitad basal y los bordes			7	
	basal three quarters		trois quarts basaux	in basalen drei Vierteln	en los tres cuartos basales			8	
	basal three quarters and margins		trois quarts basaux et bords	in basalen drei Vierteln und am Rand	en los tres cuartos basales y los bordes			9	
	distal three quarters		trois quarts distaux	in distalen drei Vierteln	en los tres cuartos distales			10	
	distal half		moitié distale	in distaler Hälfte	en la mitad distal			11	
	distal quarter		quart distal	im distalen Viertel	en el cuarto distal	Enchanted Eve		12	
	tip		extrémité	an Spitze	en la punta			13	
	margins		bords	am Rand	en los bordes			14	
	throughout		sur la totalité	überall	en la totalidad			15	

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
31. (*)	PQ	VG		(d), (e), (f)				
	Ray floret: secondary color		Fleur ligulée : couleur secondaire		Zungenblüte: Sekundärfarbe	Flor ligulada: color secundario		
	RHS Colour Chart (indicate reference number)		Code RHS des couleurs (indiquer le numéro de référence)		RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
32. (*)	PQ	VG	(+)	(d), (e), (f)				
	Ray floret: pattern of secondary color		Fleur ligulée : répartition de la couleur secondaire		Zungenblüte: Muster der Sekundärfarbe	Flor ligulada: pauta de distribución del color secundario		
	solid		uniforme		durchgefärbt	uniforme		1
	solid and flushed		uniforme et diffuse		durchgefärbt und verschwommen	uniforme y difuso		2
	flushed		diffuse		verschwommen	difuso		3
33. (*)	PQ	VG	(+)	(d), (e), (f)				
	Ray floret: distribution of tertiary color		Fleur ligulée : distribution de la couleur tertiaire		Zungenblüte: Verteilung der Tertiärfarbe	Flor ligulada: distribución del color terciario		
	none		aucune		keine	ausente		1
	base		base		an Basis	en la base		2
	base and margins		base et bords		an Basis und am Rand	en la base y los bordes		3
	basal quarter		quart basal		im basalen Viertel	en el cuarto basal		4
	basal quarter and margins		quart basal et bords		im basalen Viertel und am Rand	en el cuarto basal y los bordes		5
	basal half		moitié basale		in basaler Hälfte	en la mitad basal		6
	distal half		moitié distale		in distaler Hälfte	en la mitad distal		7
	distal quarter		quart distal		im distalen Viertel	en el cuarto distal		8
	tip		extrémité		an Spitze	en la punta		9
	margins		bords		am Rand	en los bordes		10
34.	PQ	VG		(d), (e), (f)				
	Ray floret: tertiary color		Fleur ligulée : couleur tertiaire		Zungenblüte: Tertiärfarbe	Flor ligulada: color terciario		
	RHS Colour Chart (indicate reference number)		Code RHS des couleurs (indiquer le numéro de référence)		RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
35. (*)	PQ	VG	(+)	(d), (e), (f)				
	Ray floret: pattern of tertiary color		Fleur ligulée : répartition de la couleur tertiaire		Zungenblüte: Muster der Tertiärfarbe	Flor ligulada: pauta de distribución del color terciario		
	solid		uniforme		durchgefärbt	uniforme		1
	solid and flushed		uniforme et diffuse		durchgefärbt und verschwommen	uniforme y difuso		2
	flushed		diffuse		verschwommen	difuso		3

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
36.	QL	VG	(+)					
	Ray floret: color of outer side compared to inner side		Fleur ligulée : couleur de la face externe par rapport à la face interne		Zungenblüte: Farbe der Außenseite im Vergleich zur Innenseite	Flor ligulada: color de la cara externa en comparación con la cara interna		
	similar		identique		ähnlich	semejante	1	
	markedly different		nettement différente		deutlich unterschiedlich	marcadamente diferente	2	
37.	PQ	VG						
	<u>Only varieties with Ray floret: color of outer side compared to inner side:</u> <u>markedly different:</u> Ray floret: color of outer side		<u>Seulement les variétés avec fleur ligulée : couleur de la face externe par rapport à la face interne :</u> <u>nettement différente:</u> Fleur ligulée : couleur de la face externe		Nur Sorten mit Zungenblüte: Farbe der Außenseite im Vergleich zur Innenseite: deutlich unterschiedlich: Zungenblüte: Farbe der Außenseite	<u>Solo variedades con flor ligulada: color de la cara externa en comparación con la cara interna: muy diferente:</u> Flor ligulada: color de la cara externa		
	RHS colour chart (indicate reference number)		Code RHS des couleurs (indiquer le numéro de référence)		RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
38. (*)	QN	VG	(+)	(d), (e)				
	Ray floret: length of corolla tube		Fleur ligulée : longueur du tube de la corolle		Zungenblüte: Länge der Kronröhre	Flor ligulada: longitud del tubo de la corola		
	absent or very short		absente ou très courte		fehlend oder sehr kurz	ausente o muy corta	Cosmic Eye	1
	short		courte		kurz	corta		2
	medium		moyenne		mittel	media	Jethro Tull	3
	long		longue		lang	larga		4
	very long		très longue		sehr lang	muy larga	DCOREO16	5
39. (*)	QN	VG	(+)	(d), (e)				
	Ray floret: longitudinal axis		Fleur ligulée : axe longitudinal		Zungenblüte: Längsachse	Flor ligulada: eje longitudinal		
	strongly incurving		fortement incurvé		stark aufgebogen	fuertemente incurvado	1	
	moderately incurving		modérément incurvé		mäßig aufgebogen	moderadamente incurvado	Ladybird	2
	weakly incurving		faiblement incurvé		leicht aufgebogen	débilmente incurvado	URITW02	3
	straight		droit		gerade	recto	Balup teamed	4
	weakly reflexing		faiblement courbé		leicht zurückgebogen	débilmente reflexo	Buttermilk	5
	moderately reflexing		modérément courbé		mäßig zurückgebogen	moderadamente reflexo		6
	strongly reflexing		fortement courbé		stark zurückgebogen	fuertemente reflexo		7

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
40. (*)	QN	VG	(+)	(d), (e)				
	Ray floret: profile in cross section		Fleur ligulée : profil en section transversale		Zungenblüte: Profil im Querschnitt	Flor ligulada: perfil de la sección transversal		
	strongly concave		fortement concave		stark konkav	fuertemente cóncavo	DCOREO16	1
	moderately concave		modérément concave		mäßig konkav	moderadamente cóncavo	Enchanted Eve	2
	weakly concave		faiblement concave		leicht konkav	débilmente cóncavo	URITW02	3
	flat		plat		gerade	plano	Cosmic Eye	4
	weakly convex		faiblement convexe		leicht konvex	débilmente convexo	PRO538	5
	moderately convex		modérément convexe		mäßig konvex	moderadamente convexo	VIZCOR 609	6
	strongly convex		fortement convexe		stark konvex	fuertemente convexo		7
41. (*)	QN	VG	(+)	(d), (e)				
	Ray floret: number of indentations at tip		Fleur ligulée : nombre de denticulations du sommet		Zungenblüte: Anzahl Randeinschnitte an der Spitze	Flor ligulada: número de indentaciones en la punta		
	absent or very few		nul ou très petit		fehlend oder sehr gering	ausente o muy bajo	Bengal Tiger	1
	few		petit		gering	bajo	Starlight	2
	medium		moyen		mittel	medio	Buttermilk	3
	many		élevé		hoch	alto	Enchanted Eve	4
	very many		très élevé		sehr hoch	muy alto	VIZCOR 609	5
42. (*)	QN	VG	(+)	(d), (e)				
	Ray floret: depth of indentations at tip		Fleur ligulée : profondeur des denticulations du sommet		Zungenblüte: Tiefe der Randeinschnitte an der Spitze	Flor ligulada: profundidad de indentaciones de la punta		
	very shallow		très peu profonde		sehr flach	muy poco profunda	Buttermilk	1
	shallow		peu profonde		flach	poco profunda	URIT02	2
	medium		moyenne		mittel	media	PRO538	3
	deep		profonde		tief	profunda	Enchanted Eve	4
	very deep		très profonde		sehr tief	muy profunda		5
43. (*)	QN	MG/MS/VG	(d)					
	<u>Only varieties with flower head:</u> <u>type: single or semi-double:</u> Disc: diameter		<u>Seulement les variétés avec capitule : type :</u> <u>simple ou semi-double :</u> Disque : diamètre		<u>Nur Sorten mit Blütenstand: Typ:</u> <u>einfach oder halbgefüllt; Scheibe: Durchmesser</u>	<u>Solo variedades con capítulo: tipo: simple o semidoble: Disco: diámetro</u>		
	very small		très petit		sehr klein	muy pequeño		1
	small		petit		klein	pequeño	Buttermilk	2
	medium		moyen		mittel	medio	CSGZ0002	3
	large		grand		groß	grande	Cosmic Eye	4
	very large		très grand		sehr groß	muy grande		5

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
44. (*)	PQ	VG	(d)				
Only varieties with flower head: type: single and semi-double; Disc: color before anthesis	Only varieties with flower head: type: single and semi-double; Disc: color before anthesis	Seulement les variétés avec capitule : type : simple et semi-double ; Disque : couleur avant anthèse	Nur Sorten mit Blütenstand: Typ: einfache oder halbgefüllt; Scheibe: Farbe vor der Blüte	Solo variedades con capítulo: tipo: simple y semidoble; Disco: color antes de la antesis			
	yellow green	vert jaune	gelbgrün	verde amarillento	PRO538	1	
	yellow	jaune	gelb	amarillo	CSGZ0002	2	
	orange	orange	orange	naranja	Enchanted Eve	3	
	reddish brown	brun rougeâtre	rötlichbraun	marrón rojizo	Buttermilk	4	
	blackish purple	pourpre noirâtre	schwärzlichpurpur	púrpura negruzco	Peach Sparkle	5	

8. Explanations on the Table of Characteristics

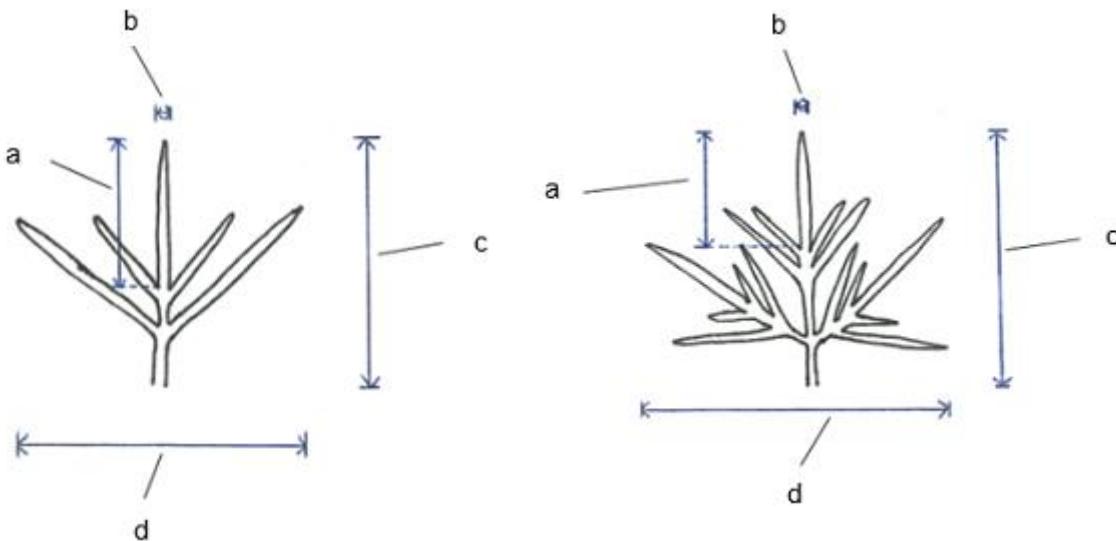
8.1 *Explanations covering several characteristics*

All characteristics should be observed at the time of full flowering.

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

- (a) Observations should be made on fully developed leaves from the middle part of the stem.
- (b) Observations should only be made in relation to the predominant leaf type according to Characteristic 5. Where no predominance is observed for Characteristic 5, i.e. both simple and divided leaf type occur in similar amounts, observations should be made on both types of leaf.

(c)



a = Length of terminal lobe

b = Width of terminal lobe

c = Leaf length

d = Leaf width

- (d) Observations should be made on fully open flowers just after anther dehiscence has started.
- (e) Observations should be made on the inner surface of the outer whorl of florets.
- (f) The main color is the color with the largest surface area. The color with the second largest area is the secondary color. The color with the third largest area is the tertiary color. In cases where the areas of the colors are too similar to reliably decide which color has the largest area, the darker color is considered to be the main color.

8.2 Explanations for individual characteristics

Ad. 1: Plant: growth habit



1
upright



2
semi-upright



3
semi-spreading



4
spreading

Ad. 4: Plant: density



2
sparse



3
medium



4
dense

Ad. 5: Leaf: type

Some varieties have both types of leaves. The predominant leaf type should be assessed. The state "simple and divided" should be used where there is no predominant type and the variety has a similar amount of both types of leaves.

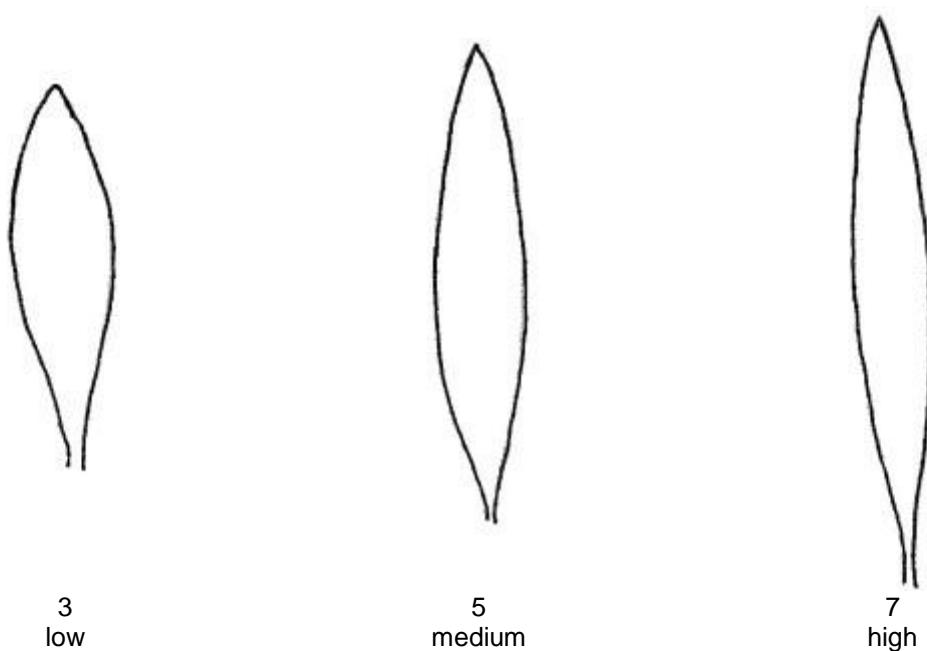


1
simple

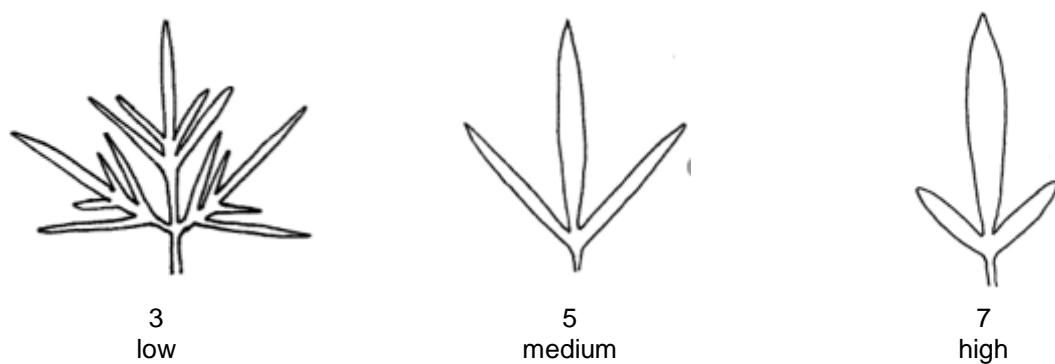


3
divided

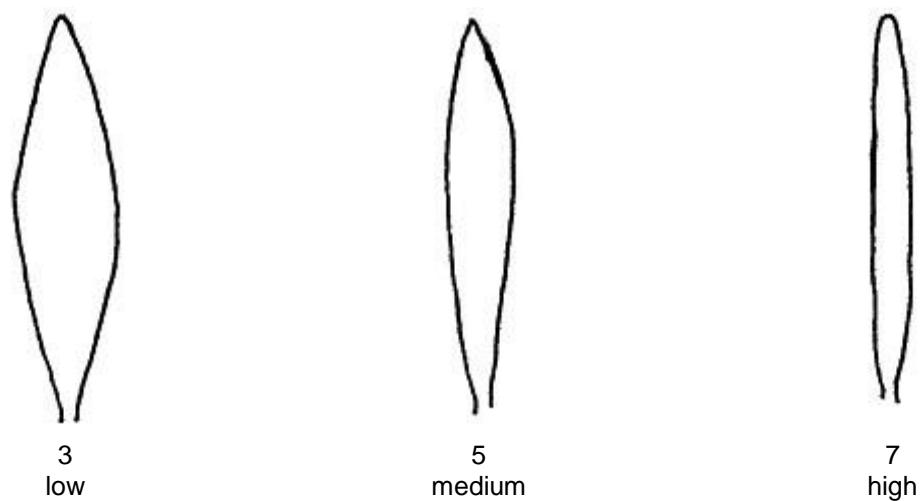
Ad. 8: Simple leaf: length/width ratio



Ad. 11: Divided leaf: length/width ratio

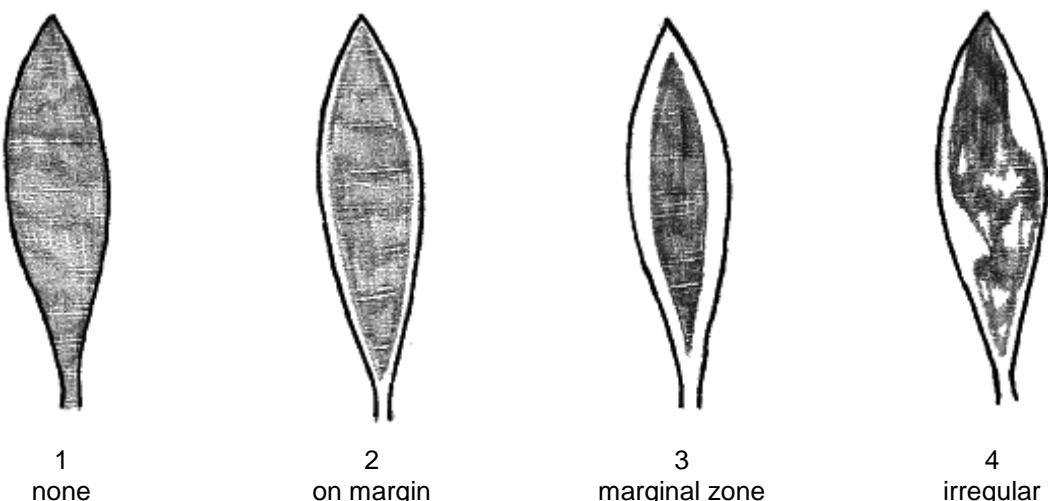


Ad. 14: Divided leaf: length/width ratio of terminal lobe



Ad. 16: Leaf: distribution of secondary color

The secondary color is the part on the diagram that is not shaded.



Ad. 20: Flower head: position relative to foliage

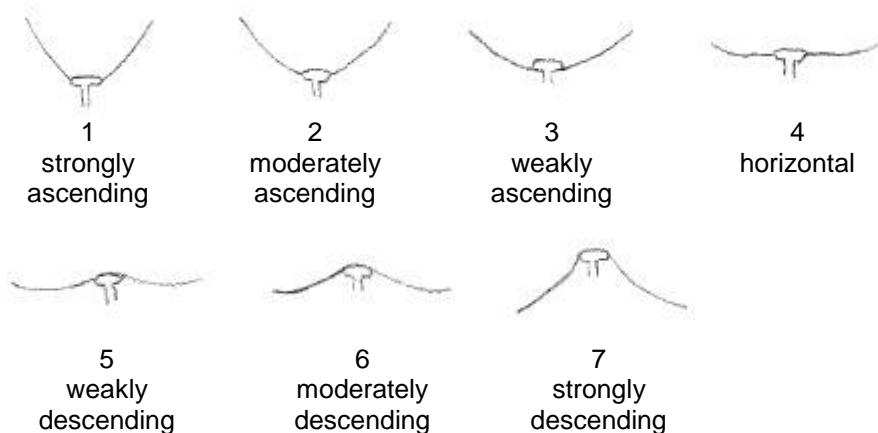


Ad. 21: Flower head: type

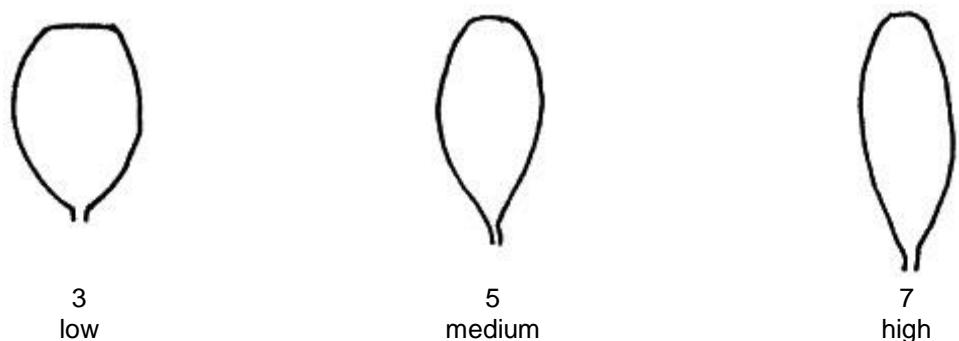
1. Only one row of ray florets
2. More than one row of ray florets, but a clearly defined disc present.
3. Multiple rows of ray florets with no clearly defined disc.



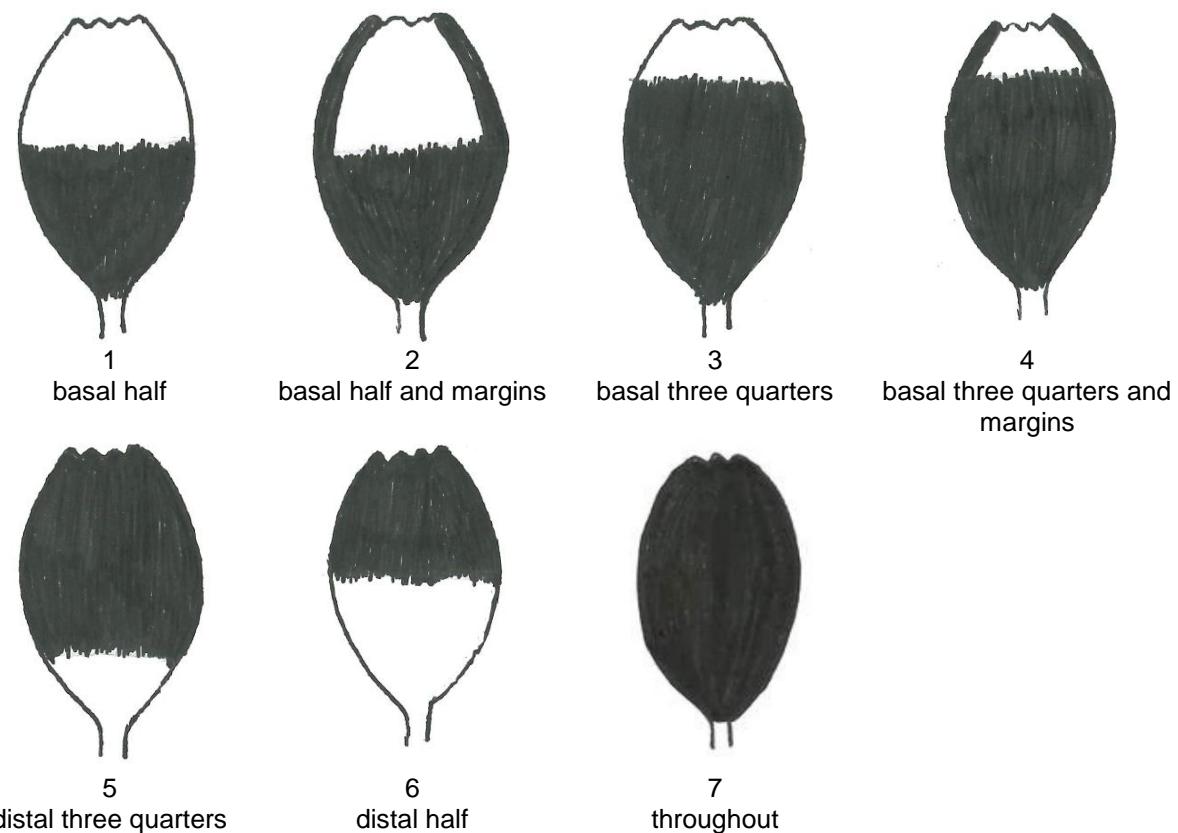
Ad. 24: Ray floret: attitude of basal part



Ad. 27: Ray floret: length/width ratio

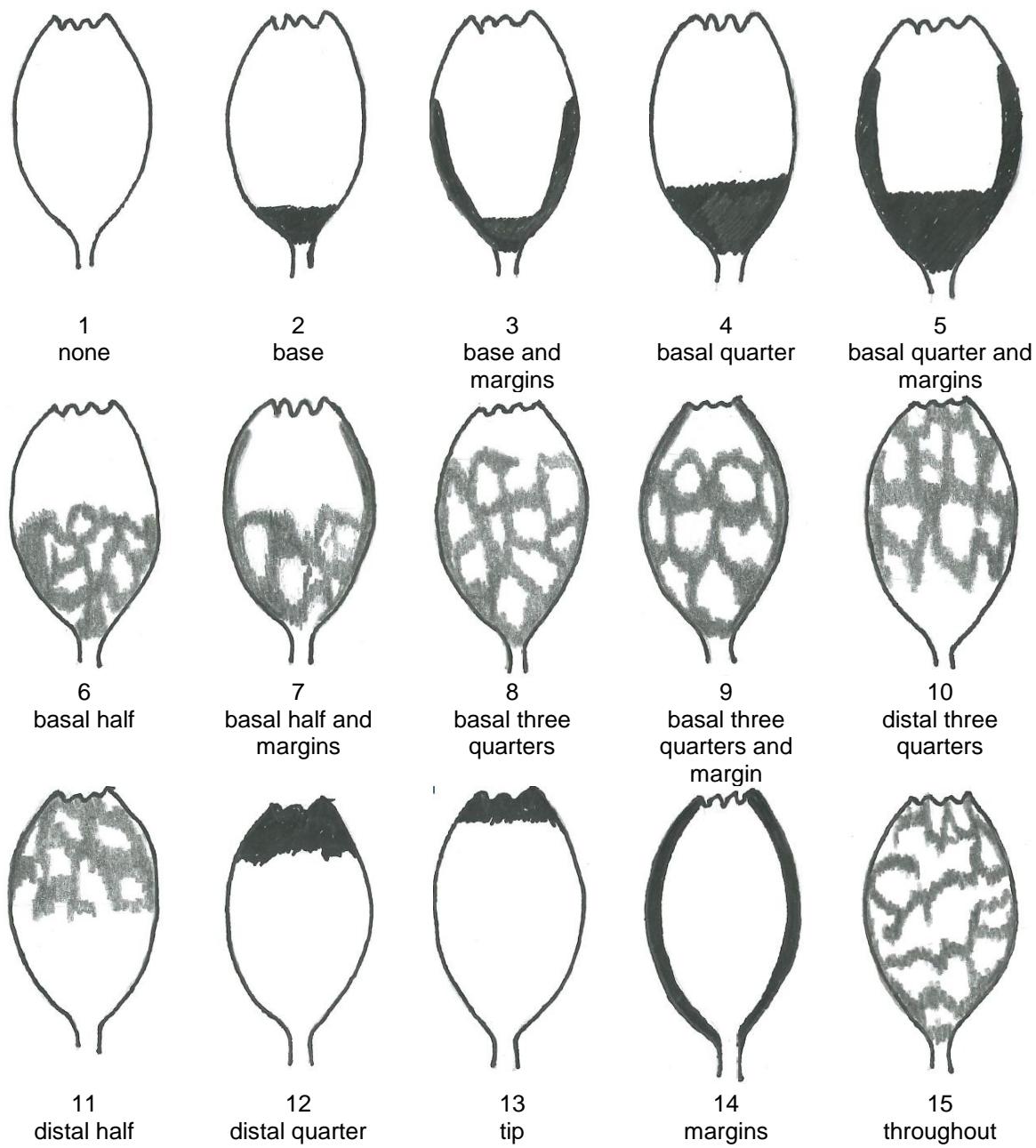


Ad. 29: Ray floret: distribution of main color

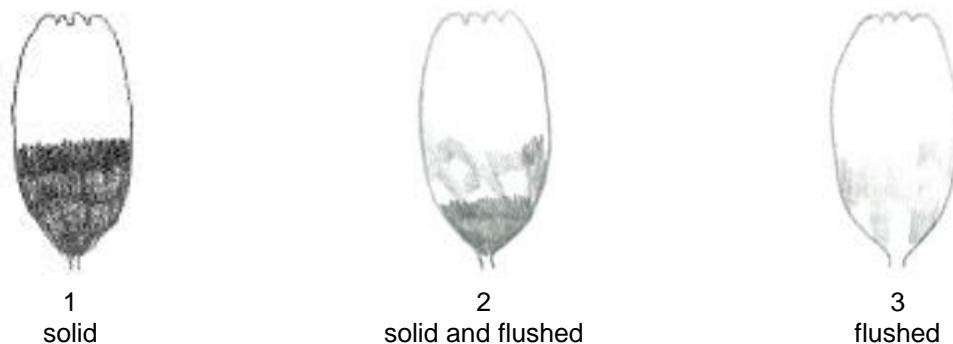


Ad. 30: Ray floret: distribution of secondary color

If the secondary color is not solid, it may be distributed on more than half of the ray floret and the total area is still less than the main color.

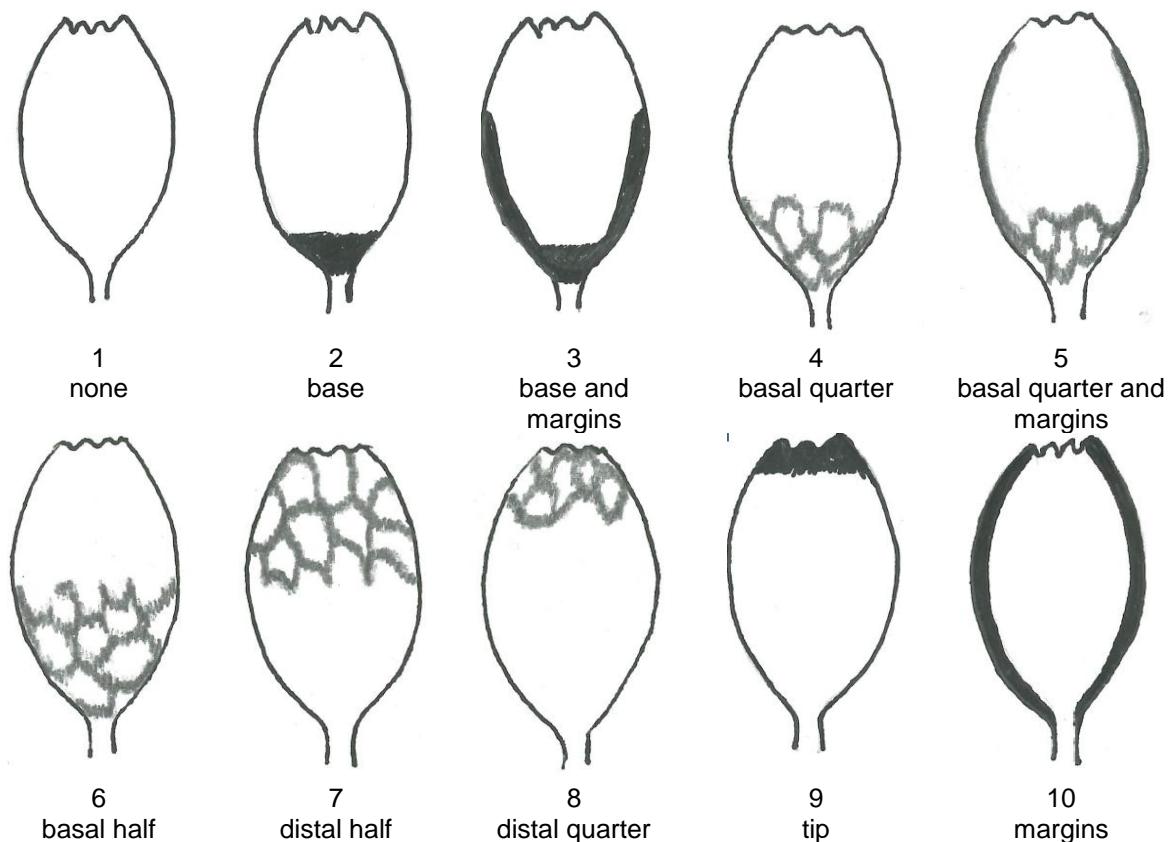


Ad. 32: Ray floret: pattern of secondary color



Ad. 33: Ray floret: distribution of tertiary color

If the tertiary color is not solid, it may be distributed in up to half of the ray floret and the total area is still less than the secondary color.



Ad. 35: Ray floret: pattern of tertiary color

See Ad. 32

Ad. 36: Ray floret: color of outer side compared to inner side

Markedly different means a different color, not a difference in intensity of one color.

Ad. 38: Ray floret: length of corolla tube



1
absent or very short



3
medium



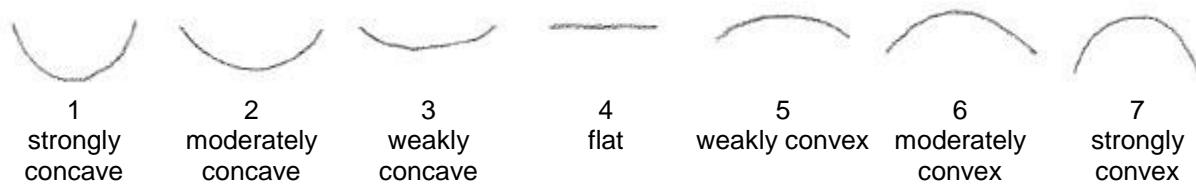
5
very long

Ad. 39: Ray floret: longitudinal axis

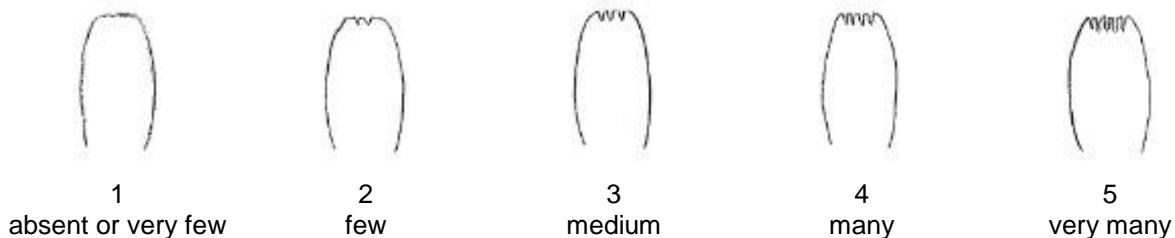


Ad. 40: Ray floret: profile in cross section

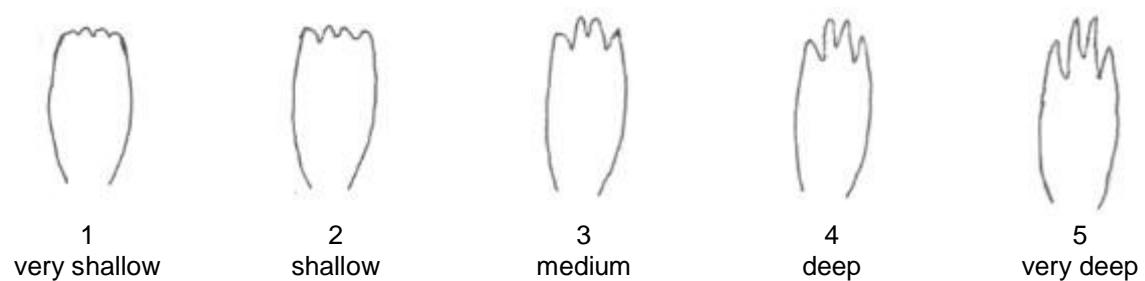
The cross section should be observed at the mid point along the floret.



Ad. 41: Ray floret: number of indentations at tip



Ad. 42: Ray floret: depth of indentations at tip



9. Literature

Rice, G. (ed.), 2006: Royal Horticultural Society Encyclopedia of Perennials. Dorling Kindersley Ltd.. London, GB pp. 133-135

Brickell, C. (ed.), 2016: Royal Horticultural Society A - Z Encyclopedia of Garden Plants. Dorling Kindersley Ltd.. London, GB pp. 283-284

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	Botanical name	Coreopsis L.
1.2	Common name	Coreopsis, Tickseed
1.3	Species:	
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)		
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>		
4.1.3 Discovery and development (please state where and when discovered and how developed)	[]	
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>		
4.1.4 Other (Please provide details)	[]	
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>		

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
4.2 Method of propagating the variety		
4.2.1 Seed-propagated varieties		
(a) Self-pollination	[]	
(b) Cross-pollination	[]	
(c) Hybrid	[]	
(d) Other (please provide details)	[]	
4.2.2 Vegetative propagation		
(a) Cuttings	[]	
(b) <i>In vitro</i> propagation	[]	
(c) Other (state method)	[]	
4.2.3 Other (Please provide details)	[]	
<div style="border: 1px solid black; height: 40px;"></div>		

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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: height (2)		
very short		1 []
very short to short		2 []
short	Mercury Rising	3 []
short to medium		4 []
medium	Redshift	5 []
medium to tall		6 []
tall		7 []
tall to very tall		8 []
very tall		9 []
5.2 Leaf: main color (15)		
yellow green		1 []
light green		2 []
medium green	Balupteam	3 []
dark green	VIZCOR 609	4 []
5.3 Leaf: distribution of secondary color (16)		
none		1 []
on margin		2 []
marginal zone	Tequila Sunrise	3 []
irregular		4 []
5.4 Flower head: type (21)		
single	Cosmic Eye	1 []
semi-double	Baluptowed	2 []
double	DCOREO16	3 []

TECHNICAL QUESTIONNAIRE		Page {x} of {y}	Reference Number:
Characteristics		Example Varieties	Note
5.5 (22)	Flower head: diameter		
very small			1 []
very small to small			2 []
small	Tweety		3 []
small to medium			4 []
medium	Red Elf		5 []
medium to large			6 []
large	Baluptgonz		7 []
large to very large			8 []
very large			9 []
5.6(i) (28)	Ray floret: main color	RHS colour chart (indicate reference number)	
5.6(ii) (28)	Ray floret: main color		
white			1 []
yellow	Balupteamed		2 []
orange	Sweet Marmalade		3 []
pink	URITW02		4 []
red	Mercury Rising		5 []
purple	Starstruck		6 []
5.7(i) (31)	Ray floret: secondary color	RHS Colour Chart (indicate reference number)	
5.7(ii) (31)	Ray floret: secondary color		
white			1 []
yellow	Enchanted Eve		2 []
orange			3 []
pink			4 []
red	Balupteamed		5 []
purple			6 []
5.8 (38)	Ray floret: length of corolla tube		
absent or very short	Cosmic Eye		1 []
short			2 []
medium	Jethro Tull		3 []
long			4 []
very long	DCOREO16		5 []

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
Characteristics	Example Varieties	Note
5.9 Only varieties with flower head: type: single and semi-double: (44) Disc: color before anthesis		
yellow green	PRO538	1 []
yellow	CSGZ0002	2 []
orange	Enchanted Eve	3 []
reddish brown	Buttermilk	4 []
blackish purple	Peach Sparkle	5 []

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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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
<i>Example</i>	<i>Flower head: diameter</i>	<i>small</i>	<i>medium</i>
Comments:			

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
<p>#7. Additional information which may help in the examination of the variety</p> <p>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?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(If yes, please provide details)</p> <p>7.2 Are there any special conditions for growing the variety or conducting the examination?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>(If yes, please provide details)</p> <p>7.3 Other information</p> <p>A representative color photograph of the variety displaying its main distinguishing feature(s), should accompany the Technical Questionnaire. The photograph will provide a visual illustration of the candidate variety which supplements the information provided in the Technical Questionnaire.</p> <p>The key points to consider when taking a photograph of the candidate variety are:</p> <ul style="list-style-type: none">• Indication of the date and geographic location• Correct labeling (breeder's reference)• Good quality printed photograph (minimum 10 cm x 15 cm) and/or sufficient resolution electronic format version (minimum 960 x 1280 pixels)" <p>Further guidance on providing photographs with the Technical Questionnaire is available in document TGP/7 "Development of Test Guidelines", Guidance Note 35 (http://www.upov.int/tgp/en/).</p> <p>[The link provided may be deleted by members of the Union when developing authorities' own test guidelines.]</p>		

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