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PORTULACA

UPOV Code(s):

PORTU_GRA;
 PORTU_OLE;
 ORTU_UMB

Portulaca grandiflora Hook.;
Portulaca oleracea L.;
Portulaca umbraticola Kunth

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

*prepared by experts from Germany
 to be considered by the
 Technical Committee
 at its fifty-fifth session, to be held in Geneva,
 from 2019-10-28 to 2019-10-29*

Disclaimer: this document does not represent UPOV policies or guidance

Alternative names:*

Botanical name	English	French	German	Spanish
<i>Portulaca grandiflora</i> Hook.				
<i>Portulaca oleracea</i> L.	Portulaca	Pourpier	Portulak	Verdolaga
<i>Portulaca umbraticola</i> Kunth				

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

- 1.1 These Test Guidelines apply to all varieties of *Portulaca grandiflora* Hook., *Portulaca oleracea* L. and *Portulaca umbraticola* Kunth.
- 1.2 Guidance on the use of Test Guidelines for interspecific hybrids that are not explicitly covered by Test Guidelines is provided in document TGP/13 "Guidance for New Types and Species".
- 1.3 In the case of vegetable varieties, in particular, it may be necessary to use additional characteristics or additional states of expression to those included in the Table of Characteristics in order to examine Distinctness, Uniformity and Stability.

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

vegetatively propagated varieties: 15 rooted cuttings
seed-propagated varieties: a sufficient quantity of 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*

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.
- 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 15 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 10 plants or parts taken from each of 10 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 vegetatively propagated and cross-pollinated seed-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 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 15 plants, 1 off-type is allowed.

4.2.4 The assessment of uniformity for seed-propagated should be according to the recommendations for cross-pollinated varieties 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 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) Shoot: attitude (characteristic 2)
 - (b) Flower: type (characteristic 11)
 - (c) Flower: diameter (characteristic 13)
 - (d) Petal: main color (characteristic 17) with the following groups:
 - Gr. 1: white
 - Gr. 2: yellow
 - Gr. 3: yellow orange
 - Gr. 4: orange
 - Gr. 5: pink
 - Gr. 6: red
 - Gr. 7: purple
 - Gr. 8: violet
 - (e) Petal: secondary color (characteristic 18) with the following groups:
 - Gr. 1: white
 - Gr. 2: yellow
 - Gr. 3: orange
 - Gr. 4: orange brown
 - Gr. 5: pink
 - Gr. 6: red
 - Gr. 7: purple
 - Gr. 8: violet
 - (f) Petal: distribution of secondary color (characteristic 19)
- 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

	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)-(c) 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: number of shoots		Plante : nombre de ramifications	Pflanze: Anzahl Triebe	Planta: número de tallos		
	few		petit	gering	bajo	LAZPRT 1502	3
	medium		moyen	mittel	medio	Cindy	5
	many		grand	groß	alto	LAZZDU 0807	7
2. (*)	QN	VG	(+)				
	Shoot: attitude		Ramification : port	Trieb: Haltung	Tallo: porte		
	upright		dressé	aufrecht	erguido	Sunseeker Orange	1
	semi-upright		demi-dressé	halbaufrecht	semierguido	Pazzaz Deep Pink	3
	horizontal		horizontal	waagrecht	horizontal		5
	semi-trailing		semi-retombant	halbhängend	semirrastrero	LAZPRT 1703	7
	trailing		retombant	hängend	rastrero	LAZPRT 1502	9
3.	QN	MS/VG					
	Shoot: length		Ramification : longueur	Trieb: Länge	Tallo: longitud		
	short		courte	kurz	corto	Sunseeker Orange	3
	medium		moyenne	mittel	medio		5
	long		longue	lang	largo	LAZPRT 1502	7
4. (*)	PQ	VG					
	Shoot: color		Ramification : couleur	Trieb: Farbe	Tallo: color		
	light green		vert clair	hellgrün	verde claro	Cindy	1
	medium green		vert moyen	mittelgrün	verde medio		2
	dark green		vert foncé	dunkelgrün	verde oscuro		3
	light reddish brown		brun rougeâtre clair	hellrötlichbraun	marrón rojizo claro		4
	medium reddish brown		brun rougeâtre moyen	mittlrötlichbraun	marrón rojizo medio	Sunseeker Orange	5
	dark reddish brown		brun rougeâtre foncé	dunkelrötlichbraun	marrón rojizo oscuro	LAZZDU 1112	6
5.	QN	MS/VG	(a)				
	Leaf: length		Feuille : longueur	Blatt: Länge	Hoja: longitud		
	short		courte	kurz	corta		3
	medium		moyenne	mittel	media	LAZZDU 1112	5
	long		longue	lang	larga	LAZPRT 1507	7

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
6.	(*)	QN	MS/VG	(a)			
		Leaf: width	Feuille : largeur	Blatt: Breite	Hoja: anchura		
		very narrow	très étroite	sehr schmal	muy estrecha	Sunseeker Orange	1
		narrow	étroite	schmal	estrecha		3
		medium	moyenne	mittel	media	LAZPRT 1507	5
		broad	large	breit	ancha	LAZPRT 1502	7
		very broad	très large	sehr breit	muy ancha		9
7.	(*)	QL	VG	(a)			
		Leaf: variegation	Feuille : panachure	Blatt: Panaschierung	Hoja: variegación		
		absent	absente	fehlend	ausente	LAZPRT 1507	1
		present	présente	vorhanden	presente	Flare Cherry	9
8.		QN	VG	(a)			
		Leaf: intensity of green color	Feuille : intensité de la couleur verte	Blatt: Intensität der Grünfärbung	Hoja: intensidad del color verde		
		light	claire	hell	claro		1
		medium	moyenne	mittel	medio	LAZZDU 1112	2
		dark	foncée	dunkel	oscuro	Pazzaz Deep Pink	3
9.	(*)	QN	VG	(+)	(a)		
		Leaf: width of reddish brown coloration on margin	Feuille : largeur de la pigmentation brun rougeâtre du bord	Blatt: Breite der rötlichbraunen Färbung am Rand	Hoja: anchura de la coloración marrón rojizo del borde		
		absent or very narrow	absente ou très étroite	fehlend oder sehr schmal	ausente o muy estrecha		1
		narrow	étroite	schmal	estrecha		2
		medium	moyenne	mittel	media		3
		broad	large	breit	ancha		4
		very broad	très étroite	sehr breit	muy ancha		5
10.		QN	VG	(a)			
		Leaf: intensity of reddish brown coloration on margin	Feuille : intensité de la pigmentation brun rougeâtre du bord	Blatt: Intensität der rötlichbraunen Färbung am Rand	Hoja: intensidad de la coloración marrón rojizo del borde		
		absent or very weak	absente ou très faible	fehlend oder gering	ausente o muy leve	DPAZORFLAR	1
		weak	faible	gering	leve	LAZPRT 1502	2
		medium	moyenne	mittel	media	LAZPRT 1507	3
		strong	forte	stark	intensa	Pazzaz Deep Pink	4
		very strong	très forte	sehr stark	muy intensa		5

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
11. (*)	QL	VG	(+)	(b)				
	Flower: type		Fleur : type		Blüte: Typ	Flor: tipo		
	single		simple		einfach	simple	LAZZDU 1112	1
	double		double		gefüllt	doble	Sunseeker Orange	2
	with petaloid staminodes		avec des staminodes pétaloïdes		mit Nebenkronenstaminodien	con estaminodios petaloïdes	Cindy	3
12.	QN	VG	(+)	(b)				
	<u>Only varieties with Flower: type: single:</u> Flower: shape in lateral view		<u>Seulement les variétés avec Fleur : type : simple :</u> Fleur : forme en vue latérale		<u>Nur Sorten mit Blüte: Typ: einfach:</u> Blüte: Form in Seitenansicht	<u>Solo variedades con Flor: tipo: simple:</u> Flor: forma en vista lateral		
	flat or slightly concave		plate ou légèrement concave		flach oder leicht konkav	plana o ligeramente cóncava		1
	moderately concave		modérément concave		mäßig konkav	medianamente cóncava		2
	strongly concave		fortement concave		stark konkav	muy cóncava		3
13. (*)	QN	MS/VG		(b)				
	Flower: diameter		Fleur : diamètre		Blüte: Durchmesser	Flor: diámetro		
	small		petit		klein	pequeño	LAZPRT 1502	3
	medium		moyen		mittel	medio	Pazzaz Deep Pink	5
	large		grand		groß	grande	KLEPO 12820	7
14. (*)	QN	VG	(+)	(b)				
	<u>Only varieties with Flower: type: single:</u> Flower: overlapping of petals		<u>Seulement les variétés avec Fleur : type : simple :</u> Fleur : chevauchement des pétales		<u>Nur Sorten mit Blüte: Typ: einfach:</u> Blüte: überlappende Blütenblätter	<u>Solo variedades con Flor: tipo: simple:</u> Flor: solapamiento de los pétalos		
	absent or weak		absent ou faible		fehlend oder gering	nulo o leve		1
	medium		moyen		mittel	medio		2
	strong		fort		stark	marcado		3
15.	QN	VG	(+)	(b)				
	<u>Only varieties with Flower: type: single:</u> Flower: conspicuousness of color at base		<u>Seulement les variétés avec Fleur : type : simple:</u> Fleur : netteté de la couleur à la base		<u>Nur Sorten mit Blüte: Typ: einfach:</u> Blüte: Ausprägung der Farbe an der Basis	<u>Solo variedades con Flor: tipo: simple:</u> Flor: visibilidad del color de la base		
	absent or very weak		absente ou très faible		fehlend oder gering	ausente o muy débil	LAZZDU 1112	1
	weak		faible		gering	debil		2
	medium		moyenne		mittel	media	DPAZORFLAR	3
	strong		forte		stark	fuerte		4
	very strong		très forte		sehr stark	muy fuerte	LAZPRT 1707	5

	English		français		deutsch		español		Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
16.	PQ	VG	(b)							
	Only varieties with Flower: type: single: Flower: color at base		Seulement les variétés avec Fleur : type : simple: Fleur : couleur à la base		Nur Sorten mit Blüte: Typ: einfach : Blüte: Farbe an der Basis		Solo variedades con Flor: tipo: simple: Flor: color de la base			
	yellowish		jaunâtre		gelblich		amarillento			1
	yellowish with dark margin		jaunâtre avec bord foncé		gelblich mit dunklem Rand		amarillento con borde oscuro			2
	reddish		rougeâtre		rötlich		rojizo			3
	brownish		brunâtre		bräunlich		amarronado			4
17. (*)	PQ	VG	(+)	(c)						
	Petal: main color		Pétale : couleur principale		Blütenblatt: Hauptfarbe		Pétalo: 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)			
18. (*)	PQ	VG	(+)	(c)						
	Petal: secondary color		Pétale : couleur secondaire		Blütenstand: Sekundärfarbe		Pétalo: 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)			
19. (*)	PQ	VG	(+)	(c)						
	Petal: distribution of secondary color		Pétale : répartition de la couleur secondaire		Blütenblatt: Verteilung der Sekundärfarbe		Pétalo: distribución del color secundario			
	mainly at apex		principalement à l'extrémité		überwiegend an der Spitze		principalmente en el ápice			1
	at upper third		au tiers supérieur		im oberen Drittel		en el tercio superior			2
	irregular along marginal zone		irrégulière le long de la zone marginale		unregelmäßig entlang der Randzone		irregular en la zona del borde			3
	on lateral marginal zone		sur la zone marginale latérale		an der seitlichen Randzone		en las zonas laterales del borde			4
	central		au centre		in der Mitte		central			5
	throughout		partout		überall		en la totalidad			6
20.	PQ	VG	(+)	(c)						
	Petal: tertiary color		Pétale : couleur tertiaire		Blütenblatt: Tertiärfarbe		Pétalo: 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)			

	English		français		deutsch		español		Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
21.	QN	MS/VG	(c)							
	Petal: length		Pétale : longueur		Blatt: Länge		Pétalo: longitud			
	short		court		kurz		corto		LAZPRT 1607	3
	medium		moyen		mittel		medio		Pazzaz Deep Pink	5
	long		long		lang		largo		KLEPO 12820	7
22.	QN	MS/VG	(c)							
	Petal: width		Pétale : largeur		Blütenblatt: Breite		Pétalo: anchura			
	narrow		étroit		schmal		estrecho		LAZPRT 1502	3
	medium		moyen		mittel		medio		Pazzaz Deep Pink	5
	broad		large		breit		ancho		KLEPO 12820	7
23. (*)	QN	VG	(+)	(c)						
	Petal: emargination		Pétale : échancrure		Blütenblatt: Kerbung		Pétalo: emarginación			
	absent or shallow		absente ou peu profonde		fehlend oder flach		nula o poco profunda			1
	medium		moyenne		mittel		medianamente profunda			2
	deep		profonde		tief		profunda			3
24. (*)	PQ	VG	(+)							
	<u>Only varieties with Flower: type: with petaloid staminodes:</u> Petaloid staminodes: color of outer staminodes		<u>Seulement les variétés avec Fleur : type : avec des staminodes pétaloïdes:</u> Staminodes pétaloïdes : couleur des staminodes externes		<u>Nur Sorten mit Blüte: Typ: mit Nebenkronen-staminodien:</u> Nebenkronenstaminodien: Farbe der äußeren Staminodien		<u>Solo variedades con Flor: tipo: con estaminodios petaloïdes:</u> Estaminodios petaloïdes: color de los estaminodios externos			
	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)			
25.	PQ	VG	(+)							
	<u>Only varieties with Flower: type: with petaloid staminodes:</u> Petal staminodes: color of inner staminodes		<u>Seulement les variétés avec Fleur : type : avec des staminodes pétaloïdes :</u> Staminodes pétaloïdes : couleur des staminodes internes		<u>Nur Sorten mit Blüte: Typ: mit Nebenkronen-staminodien:</u> Nebenkronenstaminodien: Farbe der inneren Staminodien		<u>Solo variedades con Flor: tipo: con estaminodios petaloïdes:</u> Estaminodios petaloïdes: color de los estaminodios internos			
	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)			

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

Unless otherwise indicated, observations should be made one month after first flowering.

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

- (a) Observations on the leaf should be made on the upper side of fully developed leaves from the middle part of a plant.
- (b) Observations on the flower should be made on the inner side of a fully open flower.
- (c) Observations on the petal should be made on the inner side. Unless otherwise indicated observations on the petal of double flowers should be made on the outermost whorl of petals.

8.2 *Explanations for individual characteristics*

Ad. 2: Shoot: attitude



1
upright



3
semi-upright



5
horizontal



7
semi-trailing



9
trailing

Ad. 9: Leaf: width of reddish brown coloration on margin



1
absent or very narrow



3
medium



4
broad

Ad. 11: Flower: type

A single flower has 4 to 6 petals and no petaloid staminodes. A double flower has more than 6 petals and no petaloid staminodes. For flowers with petaloid staminodes the number of petals is irrelevant.



1
single



2
double



3
with petaloid staminodes

Ad. 12: Only varieties with Flower: type: single: Flower: shape in lateral view



1
flat or slightly concave



2
moderately concave



3
strongly concave

Ad. 14: Only varieties with Flower: type: single: Flower: overlapping of petals



1
absent or weak



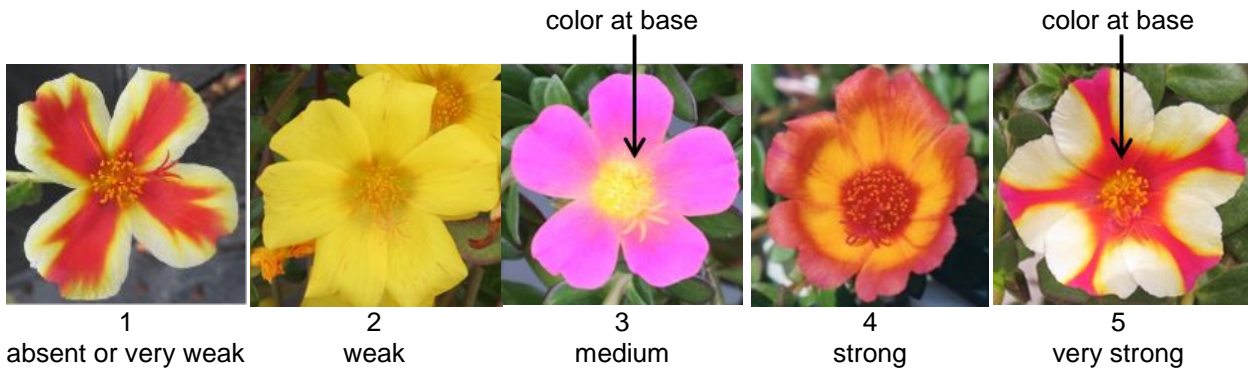
2
medium



3
strong

Ad. 15: Only varieties with Flower: type: single: Flower: conspicuousness of color at base

The conspicuousness is determined by the color contrast and the width of the contrasting ring. The innermost center of the flower is not observed.



Ad. 17: Petal: main color

The main color is the color with the largest surface area excluding the color at base. In cases where the areas of the main and the secondary color are too similar to reliably decide which color has the larger area, the darker color is considered to be the main color. The tertiary color is the color with the third largest area. In cases where the areas of the secondary and the tertiary color are too similar to decide which has the smaller area, the lighter color is considered to be the tertiary color.

Ad. 18: Petal: secondary color

See Ad. 17.

Ad. 19: Petal: distribution of secondary color

In Portulaca varieties with bi- or multi-colored flowers the proportion of the main and the secondary color can change due to environmental conditions. Those flowers which have the predominant distribution should be described.

Arrow points to the secondary color:



1
mainly at apex



2
at upper third



3
irregular along marginal zone



4
on lateral marginal zone



5
central



6
throughout

Ad. 20: Petal: tertiary color

See Ad. 17.

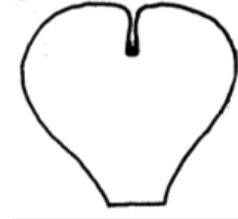
Ad. 23: Petal: emargination



1
absent or shallow

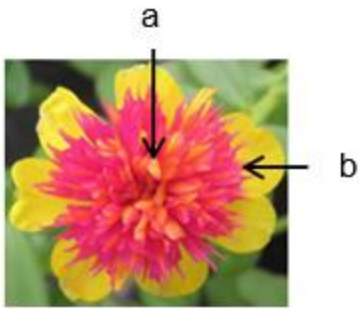


2
medium



3
deep

Ad. 24: Only varieties with Flower: type: with petaloid staminodes: Petaloid staminodes: color of outer staminodes



a = Inner staminodes
b = Outer staminodes

Ad. 25: Only varieties with Flower: type: with petaloid staminodes: Petal staminodes: color of inner staminodes

See Ad. 24

9. Literature

No specific literature.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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	Application date: (not to be filled in by the applicant)
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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	<input type="text" value="Portulaca grandiflora Hook."/> []
1.1.2 Common name	<input type="text"/>
1.2.1 Botanical name	<input type="text" value="Portulaca oleracea L."/> []
1.2.2 Common name	<input type="text" value="Portulaca"/>
1.3.1 Botanical name	<input type="text" value="Portulaca umbraticola Kunth"/> []
1.3.2 Common name	<input type="text"/>
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:
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#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)

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:
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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)	[]
	<input type="text"/>	

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

Characteristics	Example Varieties	Note
5.1 Shoot: attitude (2)		
upright	Sunseeker Orange	1 []
upright to semi-upright		2 []
semi-upright	Pazzaz Deep Pink	3 []
semi-upright to horizontal		4 []
horizontal		5 []
horizontal to semi-trailing		6 []
semi-trailing	LAZPRT 1703	7 []
semi-trailing to trailing		8 []
trailing	LAZPRT 1502	9 []
5.2 Flower: type (11)		
single	LAZZDU 1112	1 []
double	Sunseeker Orange	2 []
with petaloid staminodes	Cindy	3 []
5.3 Flower: diameter (13)		
very small		1 []
very small to small		2 []
small	LAZPRT 1502	3 []
small to medium		4 []
medium	Pazzaz Deep Pink	5 []
medium to large		6 []
large	KLEPO 12820	7 []
large to very large		8 []
very large		9 []

Characteristics	Example Varieties	Note
5.4(i) Petal: main color (17) RHS Colour Chart (indicate reference number)		
5.4(ii) Petal: main color (17) white yellow yellow orange orange pink red purple violet other color (indicate)		1 [] 2 [] 3 [] 4 [] 5 [] 6 [] 7 [] 8 [] 9 []
5.5(i) Petal: secondary color (18) RHS Colour Chart (indicate reference number)		
5.5(ii) Petal: secondary color (18) white yellow orange orange brown red purple violet other color (indicate)		1 [] 2 [] 3 [] 4 [] 5 [] 6 [] 7 [] 8 []
5.6 Petal: distribution of secondary color (19) mainly at apex at upper third irregular along marginal zone on lateral marginal zone central throughout		1 [] 2 [] 3 [] 4 [] 5 [] 6 []

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: diameter</i>	<i>small</i>	<i>medium</i>
Comments:			

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

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.

The key points to consider when taking a photograph of the candidate variety are:

- 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)

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/>).

[The link provided may be deleted by members of the Union when developing authorities' own test guidelines.]

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]