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Ces principes directeurs d'examen ont été remplacés par une version ultérieure. La version adoptée la plus récente des principes directeurs d'examen figure à l'adresse suivante : [http://www.upov.int/test\\_guidelines/fr/list.jsp](http://www.upov.int/test_guidelines/fr/list.jsp)

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Diese Prüfungsrichtlinien wurden durch eine neuere Fassung ersetzt. Die neueste angenommene Fassung von Prüfungsrichtlinien ist unter [http://www.upov.int/test\\_guidelines/en/list.jsp](http://www.upov.int/test_guidelines/en/list.jsp) zu finden.

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Las presentes directrices de examen han sido reemplazadas por una versión posterior. La versión de las directrices de examen de más reciente aprobación está disponible en [http://www.upov.int/test\\_guidelines/es/list.jsp](http://www.upov.int/test_guidelines/es/list.jsp).

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**UPOV**

TG/220/1

ORIGINAL: English

DATE: 2004-03-31

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

GENEVA

**VERBENA**

*(Verbena L.)*

**GUIDELINES**

**FOR THE CONDUCT OF TESTS**

**FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

Alternative Names: \*

<i>Latin</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Verbena L.</i>	Verbena, Vervain	Verveine	Verbene, Eisenkraut	Verbena

**ASSOCIATED DOCUMENTS**

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

\* These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website ([www.upov.int](http://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 *Verbena* L. of the family Verbenaceae.

## 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 plants of normal commercial standard, for vegetatively propagated varieties, or seed with a germination capacity of at least 50% for seed-propagated varieties.

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

- vegetatively propagated varieties: 20 plants;
- seed-propagated varieties: 5 g. seeds.

2.4 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. In cases where the seed is to be stored, the germination capacity should be as high as possible and should be stated by the applicant.

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

2.6 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 *Duration of Tests*

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

### 3.2 *Testing Place*

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

### 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. In particular, unless otherwise indicated, all observations should be made on fully grown, typical organs at the time of full flowering.

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.

### 3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 20 plants (vegetatively propagated varieties) or 100 plants (seed-propagated varieties).

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

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

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

### 3.6 *Additional Tests*

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

## 4. Assessment of Distinctness, Uniformity and Stability

### 4.1 *Distinctness*

#### 4.1.1 *General Recommendations*

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

#### 4.1.2 *Consistent Differences*

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

#### 4.1.3 *Clear Differences*

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

recommendations contained in the General Introduction prior to making decisions regarding distinctness.

#### 4.2 *Uniformity*

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

4.2.2 Vegetatively propagated varieties: 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 20 plants, 1 off-type is allowed.

4.2.3 Seed-propagated varieties: the assessment of uniformity of seed-propagated varieties 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 tested, either by growing a further generation, or by testing a new seed or plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

### 5. Grouping of Varieties and Organization of the Growing Trial

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

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

5.3 The following have been agreed as useful grouping characteristics:

- (a) Plant: growth habit (characteristic 1)
- (b) Leaf blade: division of blade (characteristic 7)
- (c) Leaf blade: type of division (characteristic 8)
- (d) Corolla: number of colors (characteristic 24)

- (e) Corolla: main color (characteristic 27) with the following groups:
- Gr. 1: white
  - Gr. 2: yellow
  - Gr. 3: green
  - Gr. 4: orange
  - Gr. 5: light pink
  - Gr. 6: pink
  - Gr. 7: red
  - Gr. 8: red purple
  - Gr. 9: blue purple
  - Gr. 10: light purple

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

## 6. Introduction to the Table of Characteristics

### 6.1 *Categories of Characteristics*

#### 6.1.1 Standard Test Guidelines Characteristics

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

#### 6.1.2 Asterisked Characteristics

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

### 6.2 *States of Expression and Corresponding Notes*

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

### 6.3 *Types of Expression*

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

### 6.4 *Example Varieties*

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

6.5 *Legend*

(\*) Asterisked characteristic – see Section 6.1.2

QL Qualitative characteristic – see Section 6.3

QN Quantitative characteristic – see Section 6.3

PQ Pseudo-qualitative characteristic – see Section 6.3

(a) See Explanations on the Table of Characteristics in Chapter 8, Section 8.1

(+) See Explanations on the Table of Characteristics in Chapter 8, Section 8.2



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

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>1. (* )</b>	<b>Plant: growth habit</b>	<b>Plante: port</b>	<b>Pflanze: Wuchsform</b>	<b>Planta: porte</b>		
<b>PQ</b>	upright	dressé	aufrecht	erecto	Sunvivapa	1
	semi-upright	demi-dressé	halbaufrecht	semierecto	Blancena, Sunmariba, Sunmaririho	2
	creeping	rampant	kriechend	trepador	Sunvop	3
<b>2. (* )</b>	<b>Plant: width just after the start of flowering</b>	<b>Plante: largeur au tout début de la floraison</b>	<b>Pflanze: Breite unmittelbar nach Blühbeginn</b>	<b>Planta: diámetro tras iniciarse la floración</b>		
<b>QN</b>	small	petite	schmal	pequeño	Kieversil	3
	medium	moyenne	mittel	medio	Sunver, Sunvop	5
	large	grande	breit	grande	Wynena	7
<b>3. (* )</b>	<b>Stem: anthocyanin coloration (on middle third of an actively growing stem)</b>	<b>Tige: pigmentation anthocyanique (au tiers supérieur d'une tige en pleine croissance)</b>	<b>Trieb: Anthocyanfärbung (am mittleren Drittel eines aktiv wachsenden Triebes)</b>	<b>Tallo: pigmentación antocianica (en el tercio medio de un tallo en pleno crecimiento)</b>		
<b>QL</b>	absent	absente	fehlend	ausente	Blancena, Sunmaririho	1
	present	présente	vorhanden	presente	Wynena	9
<b>4. (* )</b>	<b>Leaf blade: length</b>	<b>Limbe: longueur</b>	<b>Blattspreite: Länge</b>	<b>Limbo: longitud</b>		
<b>QN</b>	short	court	kurz	corto	Sunvop	3
	medium	moyen	mittel	medio	Sunmaribisu	5
	long	long	lang	largo	Scarlena	7
<b>5. (* )</b>	<b>Leaf blade: width</b>	<b>Limbe: largeur</b>	<b>Blattspreite: Breite</b>	<b>Limbo: anchura</b>		
<b>QN</b>	narrow	étroit	schmal	estrecho	Sunmaribisu	3
	medium	moyen	mittel	medio	Wynena	5
	broad	large	breit	ancho		7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>6. (* )</b>	<b>Leaf blade: shape</b>	<b>Limbe: forme</b>	<b>Blattspreite: Form</b>	<b>Limbo: forma</b>		
<b>PQ</b>	lanceolate	lancéolé	lanzettlich	lanceolado	Wesverdank	1
	narrow elliptic	elliptique étroit	schmal elliptisch	elíptico estrecho		2
	elliptic	elliptique	elliptisch	elíptico	Kieversil	3
	ovate	ovale	eiförmig	oval	Lan Pureye	4
	broad ovate	ové large	breit eiförmig	oval ancho		5
<b>7. (* )</b>	<b>Leaf blade: division</b>	<b>Limbe: division</b>	<b>Blattspreite: Gliederung</b>	<b>Limbo: división</b>		
<b>QL</b>	absent	absente	fehlend	ausente	Sunmaribisu	1
	present	présente	vorhanden	presente	Sunvop	9
<b>8. (* (+)</b>	<b>Leaf blade: type of division</b>	<b>Limbe: type de division</b>	<b>Blattspreite: Art der Gliederung</b>	<b>Limbo: tipo de división</b>		
<b>PQ</b>	lobed	lobé	gelappt	lobulada	Balazplum	1
	divided	divisé	eingeschnitten	dividida		2
	dissected	découpé	geschlitzt	partida	Sunvop	3
<b>9. (* (+)</b>	<b>Leaf blade: type of incisions of margin</b>	<b>Limbe: type d'incisions du bord</b>	<b>Blattspreite: Art der Randeinschnitte</b>	<b>Limbo: tipo de incisiones del borde</b>		
<b>PQ</b>	crenate	crénelé	gekerbt	crenadas	Balazlavi, Sunvivaripi	1
	dentate	dentelé	gezähnt	dentadas	Sunmarisu	2
	serrate	dentellé-crénelé	gesägt	serradas	Sunverb 07	3
<b>10. (* )</b>	<b>Leaf blade: color of upper side</b>	<b>Limbe: couleur de la face supérieure</b>	<b>Blattspreite: Farbe der Oberseite</b>	<b>Limbo: color del haz</b>		
<b>PQ</b>	yellow green	vert jaune	gelbgrün	verde amarillento		1
	light green	vert clair	hellgrün	verde claro	Sunmaririho	2
	medium green	vert moyen	mittelgrün	verde medio	Sunvop	3
	dark green	vert foncé	dunkelgrün	verde oscuro	Wynena	4
	grey green	vert gris	graugrün	verde grisáceo		5

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielsorten/ Variedades ejemplo	Note/ Nota
<b>11. (* (*)</b>	<b>Leaf blade: anthocyanin coloration on upper side</b>	<b>Limbe: pigmentation anthocyanique sur la face supérieure</b>	<b>Blattspreite: Anthocyanfärbung an der Oberseite</b>	<b>Limbo: pigmentación antociánica del haz</b>		
<b>QL</b>	absent	absente	fehlend	ausente	Wynena	1
	present	présente	vorhanden	presente	Sunmarisu	9
<b>12.</b>	<b>Leaf blade: intensity of anthocyanin coloration</b>	<b>Limbe: intensité de la pigmentation anthocyanique</b>	<b>Blattspreite: Intensität der Anthocyanfärbung</b>	<b>Limbo: intensidad de la pigmentación antociánica</b>		
<b>QN</b>	weak	faible	gering	débil		3
	medium	moyen	mittel	media		5
	strong	fort	stark	fuerte		7
<b>13. (* (*)</b>	<b>Petiole: length</b>	<b>Pétiole: longueur</b>	<b>Blattstiel: Länge</b>	<b>Pecíolo: longitud</b>		
<b>QN</b>	short	court	kurz	corto	Lan Pureye	3
	medium	moyen	mittel	medio	Scarlena	5
	long	long	lang	largo	Wynena	7
<b>14. (* (*)</b>	<b>Inflorescence: diameter</b>	<b>Inflorescence: diamètre</b>	<b>Blütenstand: Durchmesser</b>	<b>Inflorescencia: diámetro</b>		
<b>QN</b>	small	petit	klein	pequeño		3
	medium	moyen	mittel	medio	Blancena	5
	large	grand	groß	grande	Scarlena	7
<b>15. (* (*) (+)</b>	<b>Inflorescence: shape in profile</b>	<b>Inflorescence: forme de profil</b>	<b>Blütenstand: Form im Profil</b>	<b>Inflorescencia: forma de perfil</b>		
<b>PQ</b>	broad ovate	ovale large	breit eiförmig	oval ancha		1
	broad obovate	obovale large	breit verkehrt eiförmig	oboval ancha	Wynena	2
	cylindric	cylindrique	zylindrisch	cilíndrica	Sunmarisu	3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielsorten/ Variedades ejemplo	Note/ Nota
<b>16. (* (+)</b>	<b>Flower: arrangement of corolla lobes</b>	<b>Fleur: disposition des lobes de la corolle</b>	<b>Blüte: Anordnung der Kronlappen</b>	<b>Flor: disposición de los lóbulos de la corola</b>		
<b>QN</b>	free	disjoints	freistehend	libre	Scarlena	1
	touching	tangents	sich berührend	en contacto	Blancena, Sunmarisu	2
	overlapping	chevauchants	überlappend	solapada		3
<b>17. (*</b>	<b>Flower: diameter of corolla</b>	<b>Fleur: diamètre de la corolle</b>	<b>Blüte: Durchmesser der Krone</b>	<b>Flor: diámetro de la corola</b>		
<b>QN</b>	small	petit	klein	pequeño	Sunvop	3
	medium	moyen	mittel	medio	Blancena, Sunmarisu	5
	large	grand	groß	grande	Scarlena	7
<b>18. (*</b>	<b>Calyx: anthocyanin coloration</b>	<b>Calice: pigmentation anthocyanique</b>	<b>Kelch: Anthocyanfärbung</b>	<b>Cáliz: pigmentación antociánica</b>		
<b>QL</b>	absent	absente	fehlend	ausente	Kieversil, Lobena	1
	present	présente	vorhanden	presente	Scarlena	9
<b>19. (*</b>	<b>Calyx: distribution of anthocyanin coloration</b>	<b>Calice: répartition de la pigmentation anthocyanique</b>	<b>Kelch: Verteilung der Anthocyanfärbung</b>	<b>Cáliz: distribución de la pigmentación antociánica</b>		
<b>PQ</b>	at the base	à la base	an der Basis	en la base		1
	upper part	sur la partie supérieure	am oberen Teil	en la parte superior	Sunmarisa	2
	teeth only	sur les dents seulement	nur an der Zähnung	sólo en los dientes	Sunmaribisu	3
	entire calyx	sur tout le calice	am ganzen Kelch	en todo el cáliz		4
<b>20. (*</b>	<b>Corolla tube: length</b>	<b>Tube de la corolle: longueur</b>	<b>Kronröhre: Länge</b>	<b>Tubo de la corola: longitud</b>		
<b>QN</b>	short	court	kurz	corto	Balazpima	3
	medium	moyen	mittel	medio	Kieversil, Sunvop	5
	long	long	lang	largo	Sunmariba, Sunmariribu	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>21.</b> (*)	<b>Corolla tube: color of tip of protruding hairs</b>	<b>Tube de la corolle: couleur du sommet des poils saillants</b>	<b>Kronröhre: Farbe der Spitze der herausragenden Haare</b>	<b>Tubo de la corola: color del extremo de los pelos visibles</b>		
<b>PQ</b>	white	blanc	weiß	blanco	Balazpima	1
	light green yellow	vert jaune clair	hell grüngelb	amarillo verdoso claro	Sunmaribisu	2
	pink	rose	rosa	rosa		3
	red	rouge	rot	rojo		4
	purple	violet	purpurn	púrpura	Sunvivabupan	5
	grey purple	violet gris	graupurpurn	púrpura grisáceo	Balazplum	6
	light grey	gris clair	hellgrau	gris claro	Sunmariribu	7
<b>22.</b> (*)	<b>Corolla lobe: curvature of longitudinal axis</b>	<b>Lobe de la corolle: courbure de l'axe longitudinal</b>	<b>Kronlappen: Biegung der Längsachse</b>	<b>Lóbulo de la corola: curvatura del eje longitudinal</b>		
<b>QN</b>	incurved	incurvé	aufgebogen	curvado hacia arriba	Sunvat	1
	straight	droit	gerade	recto	Sunmaririho	2
	recurved	retombant	zurückgebogen	curvado hacia abajo	Wynena, Blancena	3
<b>23.</b> (*)	<b>Corolla lobe: undulation of margin</b>	<b>Lobe de la corolle: ondulation du bord</b>	<b>Kronlappen: Randwellung</b>	<b>Lóbulo de la corola: ondulación del borde</b>		
<b>QN</b>	weak	faible	gering	débil	Lan Pureye	3
	medium	moyenne	mittel	media	Balazplum, Balazdapi	5
	strong	forte	stark	fuerte		7
<b>24.</b> (*)	<b>(a) Corolla: number of colors</b>	<b>Corolle: nombre de couleurs</b>	<b>Krone: Anzahl Farben</b>	<b>Corola: número de colores</b>		
<b>QL</b>	one	une	eine	uno	Sunmaribisu	1
	two	deux	zwei	dos	Kieverstar	2
	more than two	plusieurs	mehr als zwei	más de dos		3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>25. (*)</b>	<b>(a) Corolla: color pattern</b>	<b>Corolle: répartition de la couleur</b>	<b>Krone: Verteilung der Farben</b>	<b>Corola: distribución del color</b>		
<b>PQ</b>	even	régulière	gleichmäßig	uniforme	Sunmaribisu	1
	shaded	dégradée	schattiert	sombreado	Kieverstar	2
	star-shaped	en étoile	sternförmig	estrellado		3
	speckled	tachetée	gefleckt	manchado		4
	speckled and striped	tachetée et striée	gefleckt und gestreift	manchado y rayado	Kieversil	5
<b>26. (*)</b>	<b>(a) <u>Shaded varieties only</u>: Corolla: distribution of color</b>	<b><u>Variétés dégradées seulement</u>: corolle: répartition de la couleur</b>	<b><u>Nur schattierte Sorten</u>: Krone: Verteilung der Farbe</b>	<b><u>Sólo para variedades sombreadas</u>: Corola: distribución del color</b>		
<b>QL</b>	lighter towards base	plus claire vers la base	heller zur Basis hin	más claro hacia la base		1
	lighter towards apex	plus claire vers le sommet	heller zur Spitze hin	más claro hacia el ápice		2
<b>27. (*)</b>	<b>(a) Corolla: main color</b>	<b>Corolle: couleur principale</b>	<b>Krone: Hauptfarbe</b>	<b>Corola: color principal</b>		
<b>PQ</b>	RHS Colour Chart	Code RHS des couleurs	RHS-Farbkarte	Carta de colores RHS		
<b>28. (*)</b>	<b>(a) Corolla: secondary color</b>	<b>Corolle: couleur secondaire</b>	<b>Krone: Sekundärfarbe</b>	<b>Corola: color secundario</b>		
<b>PQ</b>	RHS Colour Chart	Code RHS des couleurs	RHS-Farbkarte	Carta de colores RHS		
<b>29. (*)</b>	<b>Corolla: eye</b>	<b>Corolle: oeil</b>	<b>Krone: Auge</b>	<b>Corola: ojo</b>		
<b>QL</b>	absent	absent	fehlend	ausente	Sunmarisu	1
	present	présent	vorhanden	presente	Spikena	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>30.</b> <b>(*)</b>	<b>Corolla: diameter of eye</b>	<b>Corolle: diamètre de l'oeil</b>	<b>Krone: Durchmesser des Auges</b>	<b>Corola: diámetro del ojo</b>		
<b>QN</b>	small	petit	klein	pequeño	Sunmaririhó	3
	medium	moyen	mittel	medio	Spikena	5
	large	grand	groß	grande	Sumverb 09	7
<b>31.</b> <b>(*)</b>	<b>(a) Corolla: color of eye</b>	<b>Corolle: couleur de l'oeil</b>	<b>Krone: Farbe des Auges</b>	<b>Corola: color del ojo</b>		
<b>PQ</b>	whitish green	verdâtre blanc	weißlichgrün	verde blanquecino	Sunvivaripi	1
	green yellow	jaune vert	grüngelb	amarillo verdoso	Balazlavi, Vertis	2
	pink	rose	rosa	rosa	Balazpima	3
	red	rouge	rot	rojo	QuHa 237V	4
	purple	violet	purpurn	púrpura	Balazdapi	5
<b>32.</b> <b>(a)</b>	<b>Corolla: change of color with age</b>	<b>Corolle: changement de couleur avec le temps</b>	<b>Krone: Veränderung der Farbe mit dem Alter</b>	<b>Corola: cambio de color con el paso del tiempo</b>		
<b>QN</b>	strongly fading	fortement délavée	stark verblassend	fuertemente desvaído		1
	weakly fading	légèrement délavée	schwach verblassend	débilmente desvaído		2
	no change	aucun changement	keine Veränderung	sin cambios	Blancena, Lobena	3
	weakly intensifying	légère intensification	sich schwach verstärkend	débilmente intensificado		4
	strongly intensifying	forte intensification	sich stark verstärkend	fuertemente intensificado		5

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

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

- (a) All observations concerning the flower color should be made on the upper side of the flower.

8.2 *Explanations for individual characteristics*

Ad. 8: Leaf blade: type of division



1  
lobed



2  
divided



3  
dissected

Ad. 9: Leaf blade: type of incisions of margin



1  
crenate



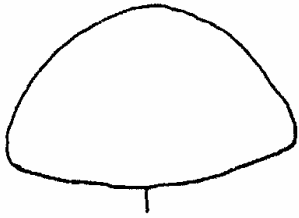
2  
dentate



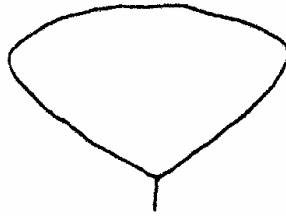
3  
serrate



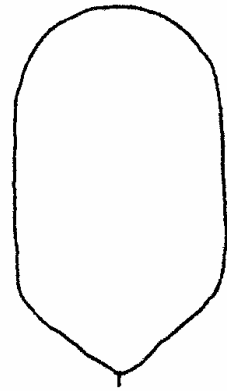
Ad. 15: Inflorescence: shape in profile



1  
broad ovate

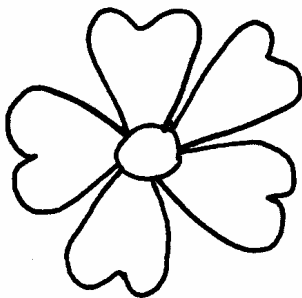


2  
broad obovate

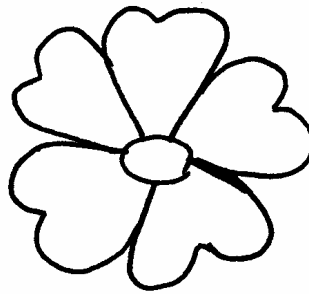


3  
cylindric

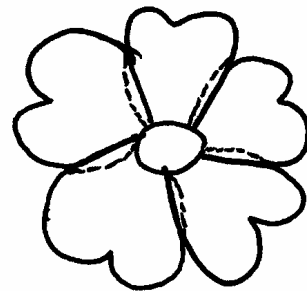
Ad. 16: Flower: arrangement of corolla lobes



1  
free



2  
touching



3  
overlapping

9. Literature

No specific literature.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
<b>TECHNICAL QUESTIONNAIRE</b> to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1 Latin Name	<input type="text" value="Verbena L."/>	
1.2 Common Name	<input type="text" value="VERBENA, VERVAIN"/>	
	Species/Group (please complete)	
	<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)
- (b) partially known cross  [ ]  
(please state known parent variety(ies))
- (c) unknown cross  [ ]

4.1.2 Mutation  [ ]  
(please state parent variety)

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

4.1.4 Other  [ ]  
(please provide details)

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

- (a) cuttings  [ ]
- (b) *in vitro* propagation  [ ]
- (c) other (state method)  [ ]

4.2.2 Seed  [ ]

4.2.3 Other  [ ]  
(please provide details)

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
<b>5.1 Plant: growth habit</b> (1)		
upright	Sunvivapa	1[ ]
semi-upright	Blancena, Sunmariba, Sunmaririho	2[ ]
creeping	Sunvop	3[ ]
<b>5.2 Leaf blade: division</b> (7)		
absent	Sunmaribisu	1[ ]
present	Sunvop	9[ ]
<b>5.3 Leaf blade: type of division</b> (8)		
lobed	Balazplum	1[ ]
divided		2[ ]
dissected	Sunvop	3[ ]
<b>5.4 Corolla: color pattern</b> (25)		
even	Sunmribisu	1[ ]
shaded	Kieverstar	2[ ]
star-shaped		3[ ]
speckled		4[ ]
speckled and striped	Kieversil	5[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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Characteristics	Example Varieties	Note
<b>5.5i Corolla: main color</b> (27)  RHS Colour Chart		
<b>5.5ii Corolla: main color</b> (27)  white  yellow  green  orange  light pink  pink  red  red purple  blue purple  light purple		1[ ]  2[ ]  3[ ]  4[ ]  5[ ]  6[ ]  7[ ]  8[ ]  9[ ]  10[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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6. Similar varieties and differences from these varieties

*Please use the table, and space provided for comments, below 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 <b>similar</b> variety(ies)	Describe the expression of the characteristic(s) for <b>your</b> candidate variety
<i>Example</i>	<i>Corolla: main color</i>	<i>light pink</i>	<i>pink</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 [ ] No [ ]</p> <p>(If yes, please provide details)</p> <p>7.2 Special conditions for the examination of the variety</p> <p>7.2.1 Are there any special conditions for growing the variety or conducting the examination?</p> <p>Yes [ ] No [ ]</p> <p>7.2.2 If yes, please give details:</p> <p>7.3 Other information</p>		
<p>8. Authorization for release</p> <p>(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?</p> <p>Yes [ ] No [ ]</p> <p>(b) Has such authorization been obtained?</p> <p>Yes [ ] No [ ]</p> <p>If the answer to (b) is yes, please attach a copy of the authorization.</p>		



TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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9. Information on plant material to be examined.

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 or pesticide) | Yes [ ] | No [ ] |
| (c) Tissue culture  | Yes [ ] | No [ ] |
| (d) Other factors   | Yes [ ] | No [ ] |

Please provide details of 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]