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

GENEVA

DRAFT

ROSE

*(Rosa L.)*

\*

## GUIDELINES

## FOR THE CONDUCT OF TESTS

## FOR DISTINCTNESS, UNIFORMITY AND STABILITY

*to be considered by the  
Technical Working Party for Ornamental Plants and Forest Trees  
at its thirty-sixth session,  
to be held in Niagara Falls, Canada, from September 22 to 26, 2003*

Alternative Names: \*

<i>Latin</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Rosa L.</i>	Rose	Rosier	Rose	Rosal

## 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 *Rosa* L. of the family *Rosaceae*.

## 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 Cut-flower types: for cut-flower types the material is to be supplied in the form of should be supplied in the form of young plants of commercial standard with their own roots unless the variety does not grow on its own roots, in which case plants and/or budwood of the variety would also be required.

Garden rose types: for garden rose types, climbing roses and shrubs, the material is to be supplied in the form of young plants, grafted on a frost-hardy rootstock or on their own roots.

Pot rose types: for pot rose types the material is to be supplied in the form of young plants, grafted on a rootstock or on their own roots.

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

### Cut-flower types:

- varieties resulting from crossing: 9 plants
- varieties resulting from mutation: 18 plants

For garden rose types, pot rose types, climbing roses and shrubs: 6 plants

2.4 In cases where plants are supplied, the applicant should state the rootstock which has been used.

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 *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. For cut-flower types the plants should not be observed in the first flush of flowering. In particular, unless otherwise stated, all observations should be made at the time of full flowering.

3.3.2 The following growing conditions are recommended for:

Cut-flower types:

- Planting time: at the beginning of February (Northern hemisphere)
- Soil: cocoafibre and ca. 3 liters of clay granulate for drainage
- Size of container: 9 liters
- Number of plants per container: 3
- Temperature: day ca. 22 °C; night ca. 18 °C
- Light: no artificial lights, shading cloth: 450-550 watt/m<sup>2</sup>
- Air Humidity: ca. 65%-80%

Garden rose types:

- Planting time: from October until the end of March (Northern hemisphere), directly at arrival of the sample
- Planting: in the open, 50x100 cm
- Soil: preferably clay, pH 5.5-6

Pot rose types:

- Planting time: at the beginning of March (Northern hemisphere)
- Substrate: well drained fertilized soil
- Size of container: 3 litre pots
- Number of plants per pot: 1 plant
- Temperature: min 18°C; max 22°C
- Light conditions: no artificial light, use of shading cloth

3.3.3 Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within the tolerances set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background.

### 3.4 *Test Design*

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

3.4.2 Cut-flower types: in the case of cut-flower types each test should be designed to result in a total of at least 9 plants in case the variety is made by crossing, or 18 plants in case the variety is a mutation.

3.4.3 Garden and pot rose types: in the case of garden rose types and pot rose types each test should be designed to result in a total of 6 plants.

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

Cut-flower types: for cut-flower types all observations determined by measuring or counting should be made on 5 plants or parts taken from each of 5 plants. Unless otherwise indicated, all observations on a single plants should be made on at least 8 plants at the time of full flowering. Garden rose types and pot rose types: with garden rose types and pot rose types, all observations on single plants should be made on 6 plants.

### 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:

#### 4.4.2 Cut-flower types

##### 4.4.2.1 Varieties resulting from Crossing.

For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95 % should be applied. In the case of a sample size of 9 plants, 1 off-type is allowed.

##### 4.4.2.2 Varieties resulting from Mutation

For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95 % should be applied. In the case of a sample size of 18 plants, 1 off-type is allowed.

#### 4.4.2.3 Garden rose and pot rose types

For the assessment of uniformity, a population standard of 1% and an acceptance probability of at least 95 % should be applied. In the case of a sample size of 6 plants, 1 off-type is allowed.

### 4.3 *Stability*

4.3.1 In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated that, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.

4.3.2 Where appropriate, or in cases of doubt, stability may be tested, either by growing a further generation, or by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

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

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness 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 determination of the color group is based on the color of the inner side of an exactly fully opened flower. The following have been agreed as useful grouping characteristics:

Flower: color group	1	white or near white	korcilmo	1
	-	green		2
	2, 3	yellow	korflapei	3
	4	yellow blend (includes varieties that are primarily yellow, but yet show some tones of other hues)	olijboni	4
	5, 6	orange	prevano	5
	6, 7	orange blend	schretulp	6

	(includes varieties that are primarily orange, but yet show some tones of other hues)		
8, 9	pink	interlis	7
10	pink blend		8
	(includes varieties that are primarily pink, but yet show some tones of other hues)		
11, 12, 13	red		9
14	red blend	tanjack	10
	(includes varieties that are primarily red, but yet show some tones of other hues)		
15	mauve	ruilav	11
	(varieties primarily lavender and purple)		
16	russet	meicofum	12
	(varieties primarily brown or tan in color)		
-	contrasty multicolored		13

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) – (e) 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

(C) Cut-flower types only

(G) Garden types only.

(P) Pot types only.

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>(G)</b>	<b>Plant: growth type</b>				
						1
					dwarf	
					bed	2
					shrub	3
					ground cover	4
					climber	5
<b>2.</b>	<b>(G)</b> <b>(P)</b>	<b>Plant: growth habit</b>				
<b>(+)</b>					narrow bushy	1
<b>PQ</b>					bushy	3
					broad bushy	5
					flat bushy	7
					creeping	9
<b>3.</b>	<b>(C)</b>	<b>Plant: height (during second flush)</b>				
<b>QN</b>					short	3
					medium	5
					tall	7
<b>4.</b>		<b>Young shoot: anthocyanin coloration</b>				
<b>QL</b>	<b>(a)</b>				absent	1
					present	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>5.</b>	<b>Young shoot: intensity of anthocyanin coloration</b>					
<b>QN</b>	<b>(a)</b>	very weak				1
		weak				3
		medium				5
		strong				7
		very strong				9
<b>6.</b>	<b>Prickles</b>					
<b>QL</b>		absent				1
		present				9
<b>7.</b>	<b>Prickles: number (very small and hair-like prickles excluded)</b>					
<b>?</b>		very few				1
		few				2
		medium				3
		many				4
		very many				5
<b>8.</b>	<b><u>Varieties with large conspicuous prickles only:</u> Prickle: predominant color</b>					
<b>PQ</b>		greenish				1
		yellowish				2
		reddish				3
		purplish				4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>9.</b>	<b>Leaf: length</b>					
<b>QN</b>	<b>(b)</b>	short				3
		medium				5
		long				7
<b>10.</b>	<b>Leaf: width</b>					
<b>QN</b>	<b>(b)</b>	narrow				3
		medium				5
		broad				7
<b>11.</b>	<b>Leaf: intensity of green color</b>					
<b>QN</b>	<b>(b)</b>	light				3
		medium				5
		dark				7
<b>12.</b>	<b>Leaf: anthocyanin coloration</b>					
<b>QL</b>	<b>(b)</b>	absent				1
		present				9
<b>13.</b>	<b>Leaf: glossiness of upper side</b>					
<b>QN</b>	<b>(b)</b>	absent or very weak				1
		weak				3
		medium				5
		strong				7
		very strong				9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>14.</b>	<b>Leaflet: undulation of margin</b>					
<b>QN</b>	<b>(b)</b>	absent or very weak				1
		weak				3
		medium				5
		strong				7
		very strong				9
<b>15.</b>	<b>Terminal leaflet: shape</b>					
<b>PQ</b>	<b>(b)</b>	narrow elliptic				1
		elliptic				2
		ovate				3
		circular				4
<b>16.</b>	<b>(C)</b>	<b>Terminal leaflet: shape of base</b>				
<b>(+)</b>	<b>(b)</b>	wedge-shaped				1
<b>PQ</b>		obtuse				2
		rounded				3
		cordate				4
<b>17.</b>	<b>Terminal leaflet: shape of apex</b>					
<b>PQ</b>	<b>(b)</b>	acuminate				1
		acute				2
		obtuse				3
		rounded				4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>18.</b>	<b>Flowering shoot: number of flowers</b>					
<b>QN</b>	<b>(d)</b>	one or very few				1
		few				3
		medium				5
		many				7
		very many				9
<b>19.</b>	<b>Flower bud: shape in longitudinal section</b>					
<b>PQ</b>	<b>(e)</b>	elliptic				1
		ovate				2
		broad ovate				3
		obovate				4
		circular				5
<b>20.</b>	<b>(G) (P)</b>	<b>Flower: type</b>				
<b>QL</b>		single				1
		semi-double				2
		double				3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>21.</b>	<b>Flower: color group (main division)</b>					
<b>PQ</b>	<b>(d)</b>	white or near white				1
		green				2
		yellow				3
		yellow blend (includes varieties that are primarily yellow, but yet show some tones of some other hues)				4
		orange				5
		orange blend (includes varieties that are primarily orange, but yet show some tones of some other hues)				6
		pink				7
		pink blend (includes varieties that are primarily pink, but yet show some tones of some other hues)				8
		red				9
		red blend (includes varieties that are primarily red, but yet show some tones of some other hues)				10
		mauve (varieties primarily lavender and purple)				11
		russet (varieties primarily brown or tan in color)				12
		contrasty multicolored				13

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>22.</b>	<b><u>Semi-double and double flowers</u></b> <b><u>only: Flower:</u></b> <b><u>number of petals</u></b>					
<b>QN</b>	<b>(d)</b>	very few				1
		few				3
		medium				5
		many				7
		very many				9
<b>23.</b>	<b>Flower: diameter</b>					
<b>QN</b>	<b>(d)</b>	very small				1
		small				3
		medium				5
		large				7
		very large				9
<b>24.</b>	<b>Flower: view from above</b>					
<b>(+)</b>	<b>(d)</b>	round				1
<b>PQ</b>		irregularly rounded				2
		star-shaped				3
<b>25.</b>	<b>Flower: side view</b>					
<b>(+)</b>	<b>(d)</b>	Still to be developed				
<b>26.</b>	<b>Fragrance:</b>					
<b>QN</b>		absent or very weak				1
		medium				2
		strong				3



	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>27.</b>	<b>Sepal: extensions</b>					
(+)	(d)	absent or very weak				1
QN		weak				3
		medium				5
		strong				7
		very strong				9
<b>28.</b>	<b>Petals: opening of petals one by one</b>					
QL		absent				1
		present				9
<b>29.</b>	<b>Petal: shape</b>					
PQ	(c)	elliptic				1
	(d)	transverse elliptic				2
		obovate				3
		obcordate				4
		rounded				5
<b>30.</b>	<b>Petal: incisions</b>					
QN	(c)	absent or very weak				1
	(d)	weak				3
		medium				5
		strong				7
		very strong				9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>31.</b>	<b>Petal: reflexing of margin</b>					
<b>QN</b>	<b>(c)</b>	absent or very weak				1
	<b>(d)</b>	weak				3
		medium				5
		strong				7
		very strong				9
<b>32.</b>	<b>Petal: undulation</b>					
<b>QN</b>	<b>(c)</b>	absent or very weak				1
	<b>(d)</b>	weak				3
		medium				5
		strong				7
		very strong				9
<b>33.</b>	<b>(G)</b>	<b>Petal: size</b>				
<b>QN</b>	<b>(P)</b>	very small				1
	<b>(c)</b>	small				3
	<b>(d)</b>	medium				5
		large				7
		very large				9
<b>34.</b>	<b>(C)</b>	<b>Petal: length</b>				
<b>QN</b>	<b>(c)</b>	very short				1
	<b>(d)</b>	short				3
		medium				5
		long				7
		very long				9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>35.</b>	<b>(C)</b>					
<b>QN</b>	<b>(c)</b>					1
	<b>(d)</b>					3
						5
						7
						9
<b>36.</b>						
<b>QL</b>	<b>(c)</b>					1
	<b>(d)</b>					2
						3
<b>37.</b>						
	<b>(c)</b>					1
	<b>(d)</b>					2
						3
<b>38.</b>						
<b>PQ</b>	<b>(c)</b>					
	<b>(d)</b>					

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>39.</b>	<b><u>Varieties with 2 or more colors on inner side:</u> Petal: secondary color (secondary color is with second biggest surface area)</b>					
<b>PQ</b>	<b>(c)</b>	white				1
	<b>(d)</b>	green				2
		light yellow				3
		yellow				4
		orange				5
		pink				6
		red				7
		brown-red				8
		purple				9
<b>40.</b>	<b><u>Varieties with more than 2 colors on inner side:</u> Petal:tertiary color</b>					
<b>PQ</b>	<b>(c)</b>	white				1
	<b>(d)</b>	green				2
		light yellow				3
		yellow				4
		orange				5
		pink				6
		red				7
		brown-red				8
		purple				9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>41.</b>	<b><u>Multi-colored varieties only:</u> Petal: position of secondary color on the inner side</b>					
(+)	(c)	at the base				1
<b>PQ</b>	(d)	at the top				2
		at marginal zone				3
		as a flush				4
		as segments or stripes				5
		as speckles				6
<b>42.</b>	<b>Petal: basal spot on the inner side</b>					
<b>QL</b>	(c)	absent				1
	(d)	present				9
<b>43.</b>	<b>Petal: size of basal spot on the inner side</b>					
(+)	(c)	very small				1
<b>QN</b>	(d)	small				3
		medium				5
		large				7
		very large				9
<b>44.</b>	<b>Petal: color of basal spot on the inner side</b>					
(+)	(c)	white				1
<b>PQ</b>	(d)	greenish				2
		light yellow				3
		yellow				4
		orange				5

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>45.</b>	<b>If clearly different from inner side only: Petal: main color on the outer side</b>					
<b>PQ</b>	<b>(c)</b>	RHS Colour Chart				
	<b>(d)</b>	(indicate reference number)				
<b>46.</b>	<b>Outer stamen: predominant color of filament</b>					
<b>PQ</b>	<b>(d)</b>	white				1
		green				2
		light yellow				3
		yellow				4
		orange				5
		pink				6
		red				7
		brown-red				8
		purple				9
<b>47.</b>	<b>(G)</b>	<b>Seed vessel: size (at petal fall)</b>				
<b>QN</b>		very small				1
		small				3
		medium				5
		large				7
		very large				9
<b>48.</b>	<b>(G)</b>	<b>Hip: shape of longitudinal section</b>				
<b>(+)</b>						
<b>PQ</b>		funnel-shaped				1
		pitcher-shaped				2
		pear-shaped				3

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>49.</b>	<b>(G)</b>	<b><u>Varieties grown for hips only:</u> Hip: color at mature stage</b>				
<b>PQ</b>	yellow					1
	orange					2
	red					3
	brown					4
	black					5
<b>50.</b>	<b>(G)</b>	<b>Time of beginning of flowering</b>				
<b>QN</b>	very early					1
	early					3
	medium					5
	late					7
	very late					9
<b>51.</b>	<b>(G)</b>	<b>Flowering: habit</b>				
<b>QL</b>	once flowering					1
	twice flowering					2
	almost continuous flowering					3

## 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 on the young shoot should be made on the distal third of a ca. 20 cm long shoot.
- (b) All observations on the leaves (incl. leaflet) should be made on the middle third of the stem.
- (c) All observations on the petal should be made on a petal from ca. 3<sup>rd</sup> whorl of the outer side.
- (d) Unless otherwise indicated, all observations on the flower should be made on an exactly fully opened flower.
- (e) Unless otherwise indicated all observations on the flower bud should be made just before separation of sepals.

### 8.2 *Explanations for individual characteristics*

#### Ad. 2: Plant: growth habit



1  
narrow bushy



3  
bushy



5  
broad bushy



7  
flat bushy



9  
creeping



Ad. 16: Terminal leaflet: shape of base



1  
wedge-shaped



2



3  
rounded



4  
cordate

Ad. 24: Flower: view from above: to be developed

Ad. 25: Flower: side view: to be developed

Ad. 27: Sepal: extensions



1  
absent or  
very weak



3  
weak



5  
medium

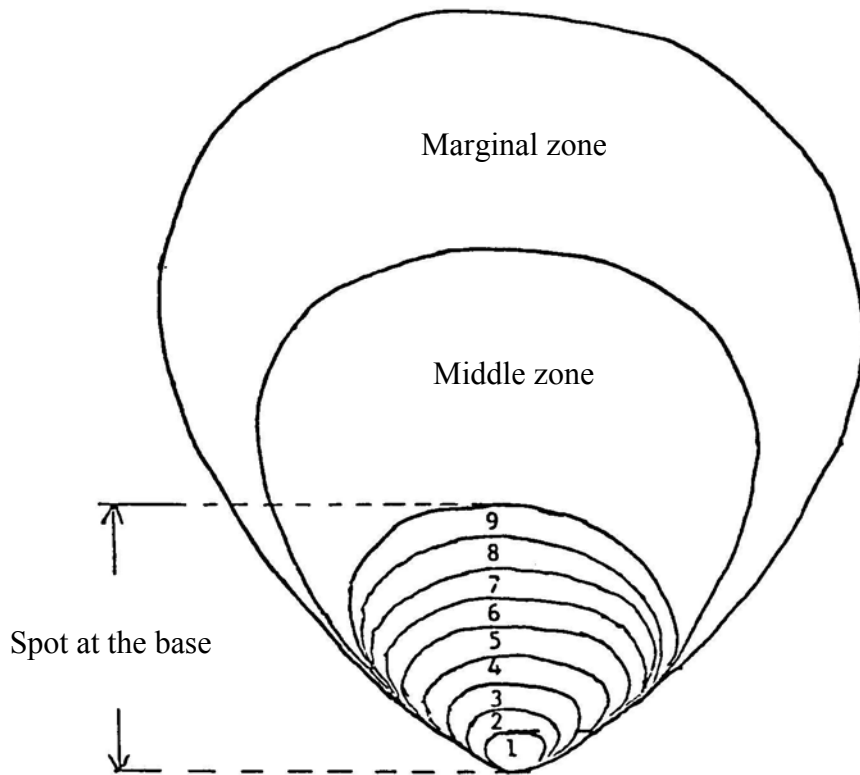


7  
strong

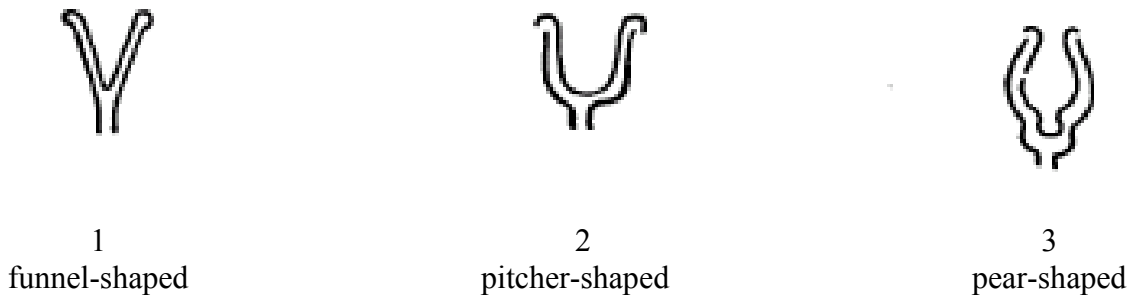


9  
very strong

Ad. 43: Petal: size of basal spot on the inner side



Ad. 48: Hip: shape of longitudinal section



9. Literature

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	<i>Latin Name</i>	<input type="text" value="Rosa L."/>
1.2	Common Name	<input type="text" value="Rose"/>
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) totally unknown cross [ ]

4.1.2 Mutation [ ]  
(please state parent variety)

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

4.1.4 Other [ ]  
(please provide details)]

4.2 Method of propagating the variety

- (a) cuttings [ ]
- (b) *in vitro* propagation [ ]
- (c) other (please provide details) [ ]

5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).

Characteristics	Example Varieties	Note
<b>5.1 Growth type</b>		
(1) dwarf		1 [ ]
(G) bed		2 [ ]
shrub		3 [ ]
ground cover		4 [ ]
climber		5 [ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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<b>5.2 Flower: color group</b>		
(21)	white or near white	1[ ]
	green	2[ ]
	yellow	3[ ]
	yellow blend (includes varieties that are primarily yellow, but yet show some tones of some other hues)	4[ ]
	orange	5[ ]
	orange blend (includes varieties that are primarily orange, but yet show some tones of some other hues)	6[ ]
	pink	7[ ]
	pink blend (includes varieties that are primarily pink, but yet show some tones of some other hues)	8[ ]
	red	9[ ]
	red blend (includes varieties that are primarily red, but yet show some tones of some other hues)	10[ ]
	mauve (varieties primarily lavender and purple)	11[ ]
	russet (varieties primarily brown or tan in color)	12[ ]
	contrasty multicolored	13[ ]

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>Plant: height</i>		
		<i>e.g. short</i>	<i>tall</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 Special conditions for the examination of the variety

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

Yes [ ] No [ ]

7.2.2 If yes, please give details:

Use:

- Grown in the open
- Grown under glass or otherwise sheltered

7.2.2.1 In the open:

- patio
- hanging basket
- rootstock
- cut-berry production

7.2.2.2 Under glass or otherwise sheltered:

- cut-flower production
- pot rose

7.3 Other information

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.

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".

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