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UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

ROSE

UPOV Code: ROSAA_

(*Rosa* L.)

[*]

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from the Netherlands

to be considered by the
Technical Working Party for Ornamental Plants and Forest Trees
at its thirty-seventh session,
to be held in Hanover, Germany, from July 12 to 16 , 2004

Alternative Names:[*]

Latin	*English*	*French*	*German*	*Spanish*
Rosa L.	Rose	Rosier	Rose	Rosal

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 guidelines ("Test 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), 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 (a) Cut-flower types: the material is to 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 grafted plants and/or budwood of the variety would be required.

(b) Garden rose and pot rose types: the material is to be supplied in the form of young plants growing on their own roots, or grafted on a rootstock .

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

Garden rose types, pot rose types, climbing roses and shrubs:

6 plants

2.4 In cases where grafted 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 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. In particular, unless otherwise stated, all observations should be made at the time of full flowering. For cut-flower types, the plants should not be observed in the first flush of 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 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: each test should be designed to result in a total of at least nine plants for varieties resulting from crossing, or 18 plants for varieties resulting from mutation.

3.4.3 Garden 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

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

4.2 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 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 sample sizes of 6, 9 and 18 plants, one 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 following have been agreed as useful grouping characteristics:

(a) Plant: growth type (characteristic 1) (G) and (P) only
(b) Flower: color group (main division) (characteristic 20)

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. The type of rose is indicated in brackets after the name of the example variety as follows:

(c) cut-flower
(g) garden type
(p) pot-rose type
(s) climbing roses and shrubs

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) To be examined for cut-flower type varieties only
(G) To be examined for garden type varieties only
(P) To be examined for pot type varieties only

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

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1.	**(G) (P)**	**Plant: growth type**					
PQ		miniature					1
		dwarf					2
		bed					3
		shrub					4
		climber					5
		ground cover					6
2. **(+)**	**(G) (P)**	**Plant: growth habit (climbers and ramblers excluding)**					
PQ		narrow bushy					1
		medium bushy					3
		broad bushy					5
		flat bushy					7
		creeping					9
3.	**(C)**	**Plant: height (during second flush)**					
QN		short					3
		medium					5
		tall					7
4.		**Young shoot: anthocyanin coloration**					
QL		absent					1
		present					9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
5.		**Young shoot: intensity of anthocyanin coloration**					
QN		very weak					1
		weak					3
		medium					5
		strong					7
		very strong					9
6.		**Stem: number of prickles (excluding very small and hair-like prickles)**					
QN		absent or very few					1
		few					3
		medium					5
		many					7
		very many					9
7.		**Prickles: predominant color (as for 6)**					
PQ	**(a)**	greenish					1
		yellowish					2
		reddish					3
		purplish					4
8.		**Leaf: size**					
QN	**(a)**	small					3
		medium					5
		large					7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
9.		**Leaf: intensity of green color**					
QN	**(a)**	light					3
		medium					5
		dark					7
10.	**(G) (P)**	**Leaf: anthocyanin coloration**					
QL	**(a)**	absent					1
		present					9
11.		**Leaf: glossiness of upper side**					
QN	**(a)**	absent or very weak					1
		weak					3
		medium					5
		strong					7
		very strong					9
12.		**Leaflet: undulation of margin**					
QN	**(a)**	absent or very weak					1
		weak					3
		medium					5
		strong					7
		very strong					9
13.		**Terminal leaflet: shape**					
PQ	**(a)**	narrow elliptic					1
		medium elliptic					2
		ovate					3
		circular					4

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
14. (+)	**(C)**	**Terminal leaflet: shape of base**					
PQ	**(a)**	acute					1
		obtuse					2
		rounded					3
		cordate					4
15.		**Terminal leaflet: shape of apex**					
PQ	**(a)**	acuminate					1
		acute					2
		obtuse					3
		rounded					4
16.		**Flowering shoot: number of flowering branches (from the bottom)**					
QN		one or very few					1
		few					3
		medium					5
		many					7
		very many					9
17.		**Flowering shoot: number of flowers per flowering branch**					
QN		very few					1
		few					3
		medium					5
		many					7
		very many					9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
18.		**Flower bud: shape in longitudinal section**					
PQ		elliptic					1
		ovate					2
		broad ovate					3
		obovate					4
		circular					5
19.	**(G) (P)**	**Flower: type**					
QL	**(b)**	single					1
		semi-double					2
		double					3
20. (+)		**Flower: color group (main division)**					
PQ	**(b)**	white or near white					1
		green					2
		yellow					3
		yellow blend					4
		orange					5
		orange blend					6
		pink					7
		pink blend					8
		red					9
		red blend					10
		red purple					11
		violet blend					12
		brown blend					13
		multicolored					14

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
21.		**Only varieties with semi-double and double flowers:** **Flower: number of petals**					
QN	**(b)**	very few					1
		few					3
		medium					5
		many					7
		very many					9
22.		**Only varieties with double flowers:** **Flower: density of petals**					
QN	**(b)**	loose					3
		medium					5
		dense					7
23.		**Flower: diameter**					
QN	**(b)**	very small					1
		small					3
		medium					5
		large					7
		very large					9
24. (+)		**Flower: view from above**					
PQ	**(b)**	round					1
		irregularly rounded					2
		star-shaped					3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
25. **(+)**	**(C)**	**Flower: side view of upper part**					
PQ	**(b)**	flat					1
		flattened convex					2
		convex					3
26. **(+)**	**(C)**	**Flower: side view of lower part**					
	(b)	concave					1
		flat					2
		flattened convex					3
		convex					4
27.		**Fragrance:**					
QN		absent or weak					1
		medium					2
		strong					3
28.		**Sepal: extensions**					
(+)		absent or very weak					1
QN		weak					3
		medium					5
		strong					7
		very strong					9
29. (+)		**Petals: opening of petals one-by-one**					
QL	**(b)**	absent					1
		present					9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
30.		**Petal: shape**					
PQ	**(b)**	elliptic					1
	(c)	transverse elliptic					2
		obovate					3
		obcordate					4
		rounded					5
31.		**Petal: incisions**					
QN	**(b)**	absent or very weak					1
	(c)	weak					3
		medium					5
		strong					7
		very strong					9
32.		**Petal: reflexing of margin**					
QN	**(b)**	absent or very weak					1
	(c)	weak					3
		medium					5
		strong					7
		very strong					9
33.		**Petal: undulation**					
QN	**(b)**	absent or very weak					1
	(c)	weak					3
		medium					5
		strong					7
		very strong					9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
34.	**(G)**	**Petal: size**					
QN	**(P)**	very small					1
	(b)	small					3
	(c)	medium					5
		large					7
		very large					9
35.	**(C)**	**Petal: length**					
QN	**(b)**	very short					1
	(c)	short					3
		medium					5
		long					7
		very long					9
36.	**(C)**	**Petal: width**					
QN	**(b)**	very narrow					1
	(c)	narrow					3
		medium					5
		broad					7
		very broad					9
37.		**Petal: number of colors on upper side (basal spot excluded)**					
QL	**(b)**	one					1
	(c)	two					2
		more than two					3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
38.		**Only varieties with one color on upper side of petal: Petal: color distribution**					
QN	**(b)**	lighter towards the base					1
	(c)	even					2
		lighter towards the top					3
39.		**Petal: main color on the upper side (main color is that with largest surface area)**					
PQ	**(b)**	RHS Colour Chart (indicate reference number)					
	(c)						
40.		**Only varieties with 2 or more colors on upper side of petal: Petal: secondary color**					
PQ	**(b)**	RHS Colour Chart					
	(c)	(indicate reference number)					

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
41.		**<u>Only varieties with more than 2 colors on upper side of petal</u>: Petal: tertiary color**					
PQ	**(b)**	white					1
	(c)	green					2
		light yellow					3
		yellow					4
		orange					5
		pink					6
		red					7
		purple red					8
		brown red					9
		purple					10
42. **(+)**		**<u>Only varieties with 2 or more colors on upper side of petal</u>: Petal: position of secondary color on the upper side**					
PQ	**(b)**	at the base					1
	(c)	at the tip					2
		at marginal zone					3
		as a flush					4
		as segments or stripes					5
		as speckles					6

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
43.		**<u>Only varieties with 2 or more colors on upper side of petal</u>: Petal: position of tertiary color on the upper side**					
PQ	**(b)**	at the base					1
	(c)	at the tip					2
		at marginal zone					3
		as a flush					4
		as segments or stripes					5
		as speckles					6
44.		**Petal: basal spot on the upper side**					
QL	**(b)**	absent					1
	(c)	present					9
45. (+)		**Petal: size of basal spot on upper side**					
QN	**(b)**	very small					1
	(c)	small					3
		medium					5
		large					7
		very large					9
46. (+)		**Petal: color of basal spot on upper side**					
PQ	**(b)**	white					1
	(c)	greenish					2
		light yellow					3
		yellow					4
		orange yellow					5
		orange					6

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

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
51. (+)	**(G)**	**Hip: color at mature stage**					
PQ		yellow					1
		orange					2
		red					3
		brown					4
		black					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 on the leaves (incl. leaflet) should be made on the middle third of the stem.

(b) Unless otherwise indicated, all observations on the flower should be made on just fully "opened" flower (at the time of anther dehiscence).

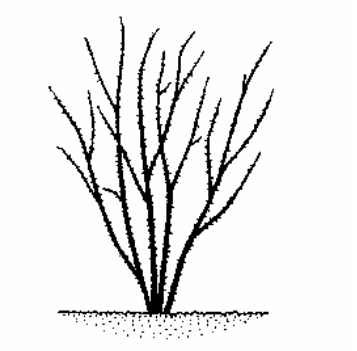
(e) All observations on the petal should be made:
Double flowers: on a petal from ca. 3rd outer whorl .
Semi double flowers: on a petal from the middle whorl.

8.2 Explanations for individual characteristics

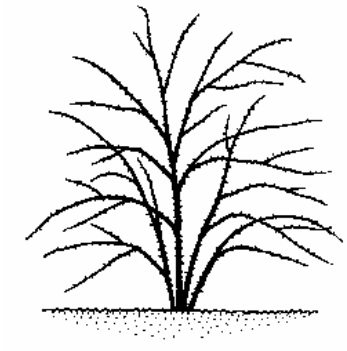
Ad. 1: Plant: growth type

Growth type	Height indication	Note
miniature	<15 cm	1
dwarf	15-40 cm	2
bed	40-150 cm	3
shrub	150-250 cm	4
climber	>250 cm	5
ground cover	30 cm and spreading	6

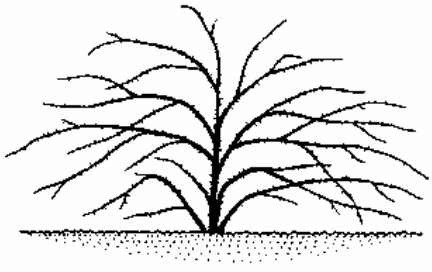
Ad. 2: Plant: growth habit



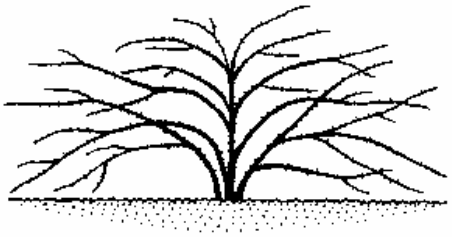
1
narrow bushy



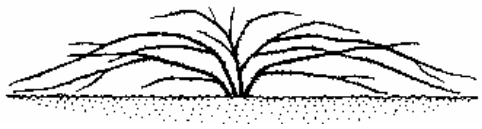
3
bushy



5
broad bushy



7
flat bushy



9
creeping

Ad. 4: Young shoot: anthocyanin coloration
Ad. 5: Young shoot: intensity of anthocyanin coloration

All observations on the young shoot should be made on the distal third of a ca. 20 cm long shoot. The leaves should be included in the observations.

Ad. 14: Terminal leaflet: shape of base

1
acute

2
obtuse

3
rounded

4
cordate

Ad. 16 and 17:
[drawing still to be developed]

Ad. 18: Flower bud: shape in longitudinal section

Observations on the flower bud should be made just before separation of sepals.

Ad 20: Flower:color group (main division)

4: yellow blend: including varieties which are primarily yellow, but show some tones of some other hues.

6: orange blend: including varieties which are primarily orange, but show some tones of some other hues.

8: pink blend: including varieties which are primarily pink, but show some tones of some other hues

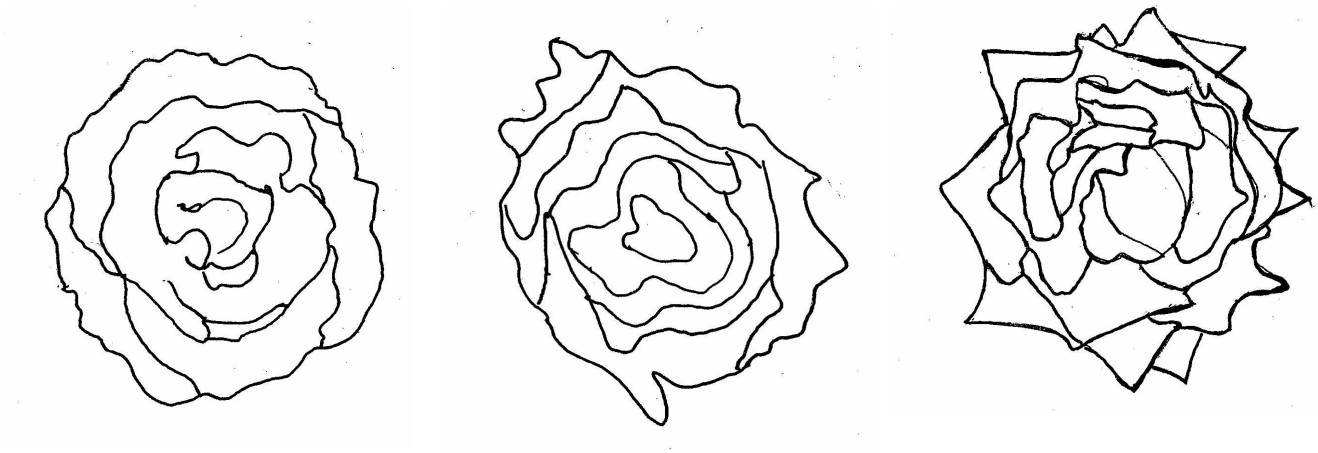
10: red blend: including varieties which are primarily red, but show some tones of some other hues.

12: violet blend: including varieties which are primarily violet but show some tones of some other hues (like mauve and/or lavender).

13: brown blend: including varieties which are primarily brown but show some tones of some other hues (like red)

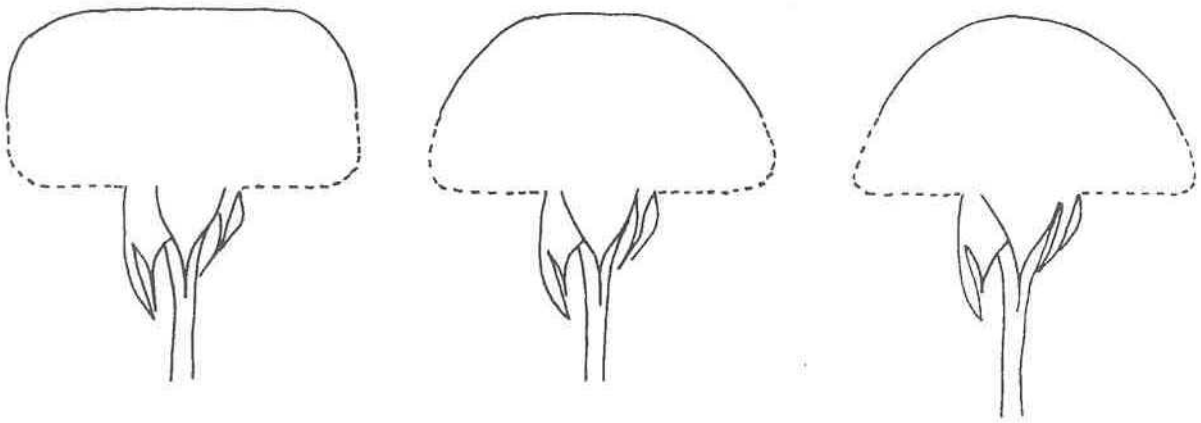
14: multicolored: varieties with more than one color in sharply defined contrasting zones on the same side of the petal (not blended) .

Ad.24: Flower: view from above:



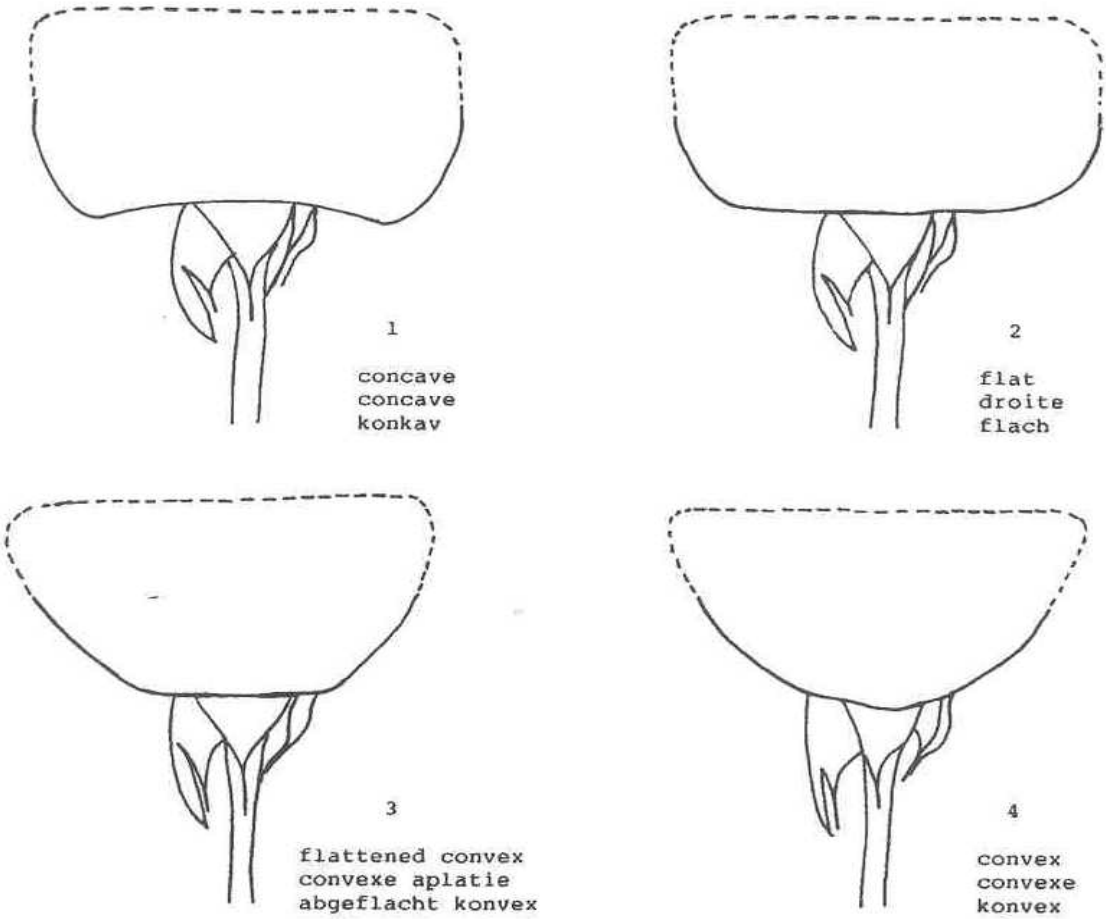
1	2	3
round	irregularly rounded	star-shaped

Ad.25 : Flower: side view of upper part (fully opened flower)

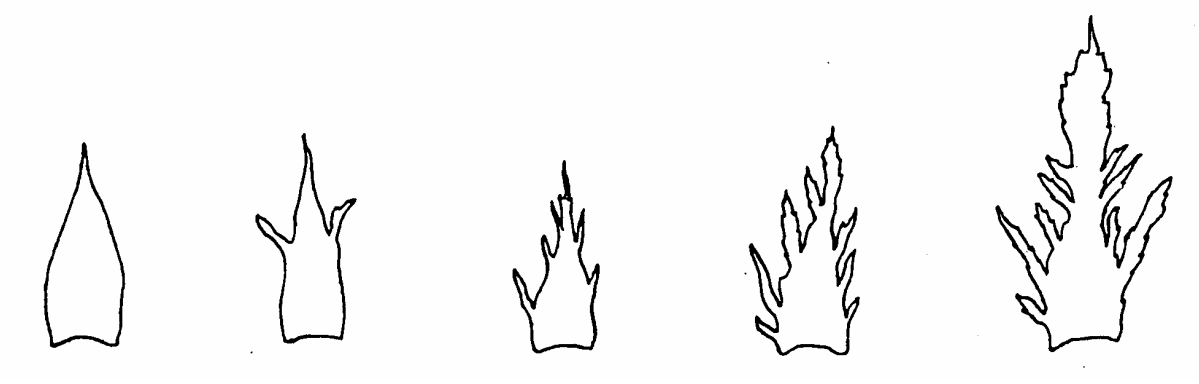


1	2	3
flat	flattened convex	convex

Ad. 26: Flower: side view of lower part



Ad. 28: Sepal: extensions



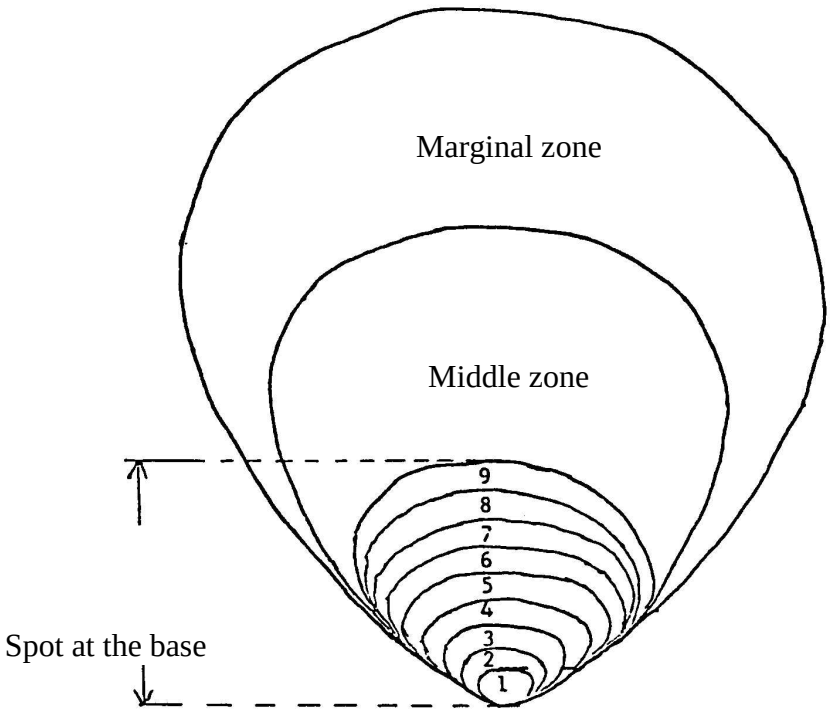
1	3	5	7	9
absent or very weak	weak	medium	strong	very strong

Ad. 29: Petals: opening of petals one-by one
[still to be developed]

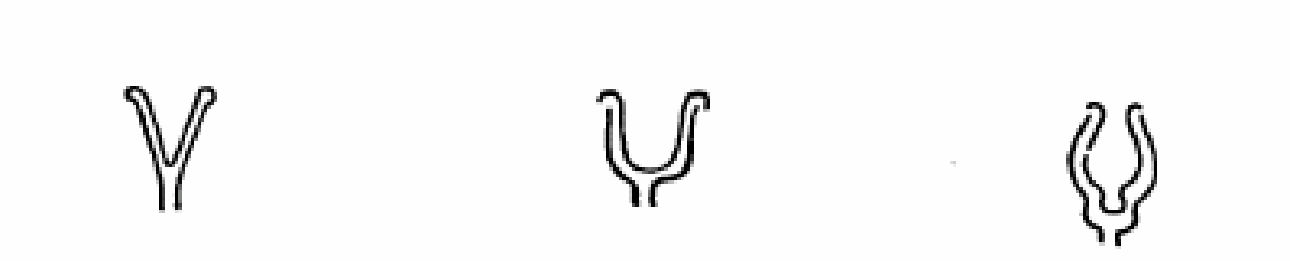
Ad. 42: Only varieties with 2 or more colors on upper side of petal: Petal: position of secondary color on the upper side

[to be provided]

Ad. 45: Petal: size of basal spot on the inner side



Ad. 50: Hip: shape of longitudinal section



1	2	3
funnel-shaped	pitcher-shaped	pear-shaped

Ad 51: Hip: color at mature stage

Varieties grown for hips only.

9. Literature:

American Rose Society Encyclopedia of Roses; authors: Charles Quest-Ritson and Brigit Quest-Ritson, American Rose Soc. ISBN 07894996755

Botanica's Roses-The Encyclopedia of Roses by: Managing Editor: Margaret Olds. 1998 © Random House Australia Pty.
ISBN 1566491762 – Raincost Books Vancouver BC Canada, 704pp

Classic Roses: An illustrated encyclopedia and growers manual of old roses, Shrub Roses and climbers, Peter Beales, September 1997, ISBN 0805055843, Timber Press

Combined Rose List 2004, The International Rose Directory, Peter Schneider, P.O. Box 677, Mantua, OH 44255 USA

Encyclopedia of Rose Science 3 Volume Set, ed. Prof. Andrew Roberts, dr. Thomas Debener and Prof. Serge Gudin, Academic Press Oct 2003, ISBN 0122276205

Modern roses X1, The World encyclopedia of Roses, Academic Press New York, 2000, ISBN 0-12-155053-2

The Illustrated Encyclopedia of roses, Moody, Mary and Peter Harkness (eds). 1992, Timber Press, Portland OR: Timber Press.

Rozenencyclopedie, Nico Vermeulen, Rebo Productions 2002, ISBN 9036613418

10. Technical Questionnaire

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

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

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

1. Subject of the Technical Questionnaire

1.1 Botanical name	*Rosa* L.
1.2 Common name	Rose

2. Applicant

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

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	
Breeder's reference	

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

[#]4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

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

(a) grafting [ ]
(please specify rootstock……..)

(b) cuttings [ ]

(c) *in vitro* propagation [ ]

(d) 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:

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	**Growth type**		
(1)	miniature (height <15 cm)		1[ ]
(G)	dwarf (height 15-40 cm)		2[ ]
(P)	bed (height 40-150 cm)		3[ ]
	shrub (height 150-250 cm)		4[ ]
	climber (height >250 cm)		5[ ]
	ground cover (height 30cm and spreading)		6[ ]

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

5.2 Flower: color group

(20)	white or near white	1[ ]
	green	2[ ]
	yellow	3[ ]
	yellow blend (including varieties which are primarily yellow, but show some tones of some other hues)	4[ ]
	orange	5[ ]
	orange blend (including varieties which are primarily orange, but show some tones of some other hues)	6[ ]
	pink	7[ ]
	pink blend (including varieties which are primarily pink, but show some tones of some other hues)	8[ ]
	red	9[ ]
	red blend (including varieties which are primarily red, but show some tones of some other hues)	10[ ]
	red purple	11[ ]
	violet blend (including varieties which are primarily violet but show some tones of some other hues (like mauve or lavender)	12[ ]
	brown blend (including varieties which are primarily brown but show some tones of some other hues (like red) (varieties primarily brown or tan in color)	13[ ]
	multicolored (varieties with more than one color in sharply defined contrasting zones on the same side of the petal which are primarily contrasting multicolored only (no blend colors)	14[ ]

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

6. Similar varieties and differences from these varieties

Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knowledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the **similar** variety(ies)	Describe the expression of the characteristic(s) for **your** candidate variety
Example	*Plant: height*	*e.g. short*	*tall*

Comments:

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

[#]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 [ ]

If yes, please give details:

7.3 Use:

(a) grown in the open:
- garden
- rootstock
- stem builder
- cut-berry production
- other
  (please indicate……)

(b) grown under glass or other protection
- cut-flower production
- pot rose

7.4 Other information

[#] 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:

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”.

……

9.3 A representative color photograph of the variety should accompany the Technical Questionnaire.

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

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]