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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS GENEVA



RED CURRANT, WHITE CURRANT

UPOV Code: RIBES_RUB

Ribes rubrum L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from Germany

to be considered by the Technical Working Party for Fruit Crops at its fortieth session, to be held in Angers, France, from September 21 to 25, 2009

Alternative Names:*

Botanical name	English	French	German	Spanish
Ribes rubrum L.; Ribes sylvestre (Lam.) Mert. et W.Koch; Ribes vulgare Lam.	Red Currant, Common currant, Garden currant, Red currant, White currant		Rote Johannisbeere, Weiße Johannisbeere	

The purpose of these guidelines ("Test Guidelines") is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

ASSOCIATED DOCUMENTS

These Test Guidelines should be read in conjunction with the General Introduction and its associated TGP documents.

^{*} These names were correct at the time of the introduction of these Test Guidelines but may be revised or updated. [Readers are advised to consult the UPOV Code, which can be found on the UPOV Website (www.upov.int), for the latest information.]

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1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties of *Ribes rubrum* L. and of varieties of hybrids between that species and other species as long as the latter varieties are similar to those of *Ribes rubrum* L.

2. Material Required

- 2.1 The competent authorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.
- 2.2 The material is to be supplied in the form of plants.
- 2.3 The minimum quantity of plant material, to be supplied by the applicant, should be:

5 plants (on own roots).

- 2.4 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease.
- 2.5 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

3. <u>Method of Examination</u>

- 3.1 Number of Growing Cycles
- 3.1.1 The minimum duration of tests should normally be two independent growing cycles.
- 3.1.2 The growing cycle is considered to be the duration of a single growing season, beginning with bud burst (flowering and/or vegetative), flowering and fruit harvest and concluding when the following dormant period ends with the swelling of new season buds.

3.2 Testing Place

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 "Examining Distinctness".

- 3.3 Conditions for Conducting the Examination
- 3.3.1 The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.
- 3.3.2 In particular, it is essential that the plants produce a satisfactory crop of fruit in each of the two growing cycles.

NL: to add explanation: "In order to enable the assessment of growth habit characteristics, the plants should be grown as bushes."

3.3.3 The recommended method of observing the characteristic is indicated by the following key in the second column of the Table of Characteristics:

MG: single measurement of a group of plants or parts of plants

MS: measurement of a number of individual plants or parts of plants

VG: visual assessment by a single observation of a group of plants or parts of plants

VS: visual assessment by observation of individual plants or parts of plants

3.4 Test Design

Each test should be designed to result in a total of at least 5 plants.

3.5 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, all observations should be made on 5 plants or parts taken from each of 5 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 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 a sample size of 5 plants, no off-types are allowed.

4.3 Stability

- 4.3.1 In practice, it is not usual to perform tests of stability that produce results as certain as those of the testing of distinctness and uniformity. However, experience has demonstrated that, for many types of variety, when a variety has been shown to be uniform, it can also be considered to be stable.
- 4.3.2 Where appropriate, or in cases of doubt, stability may be 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 are aided by the use of grouping characteristics.
- 5.2 Grouping characteristics are those in which the documented states of expression, even where produced at different locations, can be used, either individually or in combination with other such characteristics: (a) to select varieties of common knowledge that can be excluded from the growing trial used for examination of distinctness; and (b) to organize the growing trial so that similar varieties are grouped together.

The following have been agreed as useful grouping characteristics:

- (a) Fruit truss: length including stalk (characteristic 24)
- (b) Berry: size (characteristic 26)
- (c) Berry: color (characteristic 28)
- (d) Time of beginning of fruit ripening (characteristic 32)
- 5.3 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 Chapter 6.1.2
- QL: Qualitative characteristic see Chapter 6.3
- QN: Quantitative characteristic see Chapter 6.3
- PQ: Pseudo-qualitative characteristic see Chapter 6.3

MG, MS, VG, VS: see Chapter 3.3

- (a)-(g) See Explanations on the Table of Characteristics in Chapter 8.1
- (+) See Explanations on the Table of Characteristics in Chapter 8.2

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

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1. (*)	VG	Plant: vigor					
QN	(a)	weak				Heros	3
		medium				Maarse's Prominent	5
		strong				Earliest of Fourlands, Ruby Castle	7
			Pink Dutch' for state ore well known exan	e 3, 'Rovada' for sta nple varieties.	te 5, and 'Detvan' fo	r state 7.	
2.	<mark>VG</mark>	Plant: density					
QN	(a)	sparse				Heros	3
C						Rote Vierländer	5
<u> </u>		medium					
	add a	dense	/variety 'Lecan' and	!Kronovor! for state	3 'Dovada' for ctor	Mulka	7
	vadd e	dense	•	'Krenever' for state	e 3, 'Rovada' for stat	Mulka te 5, 'Rode Hollander' for sta	
PL: to		dense example varieties/	•	'Krenever' for state	e 3, 'Rovada' for stat		
3. (*)	VG	dense example varieties/ Plant: growth h	abit	'Krenever' for state	e 3, 'Rovada' for stat	te 5, 'Rode Hollander' for sta	ite 7.
PL: to 3. (*)	VG	dense example varieties/ Plant: growth h upright	abit	'Krenever' for state	e 3, 'Rovada' for sta	te 5, 'Rode Hollander' for sta	31
PL: to RO, S	VG (a) add e K: agi	dense example varieties/ Plant: growth h upright bushy-semi-uprig spreading example varieties ree to amended w	abit ght 'Frauendorfi' and '. ording for state 2.	'Krenever' for state Jonkheer van Tets' i	for state 3.	Bad Gasteiner Rondom Heros	31 52
PL: to RO, S	VG (a) add e K: agi	dense example varieties/ Plant: growth h upright bushy-semi-uprig spreading example varieties ree to amended w	abit 'Frauendorfi' and '. 'ording for state 2. known example var	Jonkheer van Tets' t	for state 3.	Bad Gasteiner Rondom Heros	31 52
PL: to 3. (*) PQ PL: to RO, S NL: st	VG (a) add e K: agr	dense example varieties/ Plant: growth h upright bushy-semi-uprig spreading example varieties ree to amended w to look for better Plant: number of	abit 'Frauendorfi' and '. 'ording for state 2. known example var	Jonkheer van Tets' t	for state 3.	Bad Gasteiner Rondom Heros	31 52
73. (*) PQ PL: to RO, S NL: st 4. (*)	VG (a) add e K: agr cate 1 (dense example varieties/ Plant: growth h upright bushy-semi-uprig spreading example varieties ree to amended w to look for better Plant: number of basal shoots	abit 'Frauendorfi' and '. 'ording for state 2. known example var	Jonkheer van Tets' t	for state 3.	Bad Gasteiner Rondom Heros	31 52 73

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
5.	VG	Vegetative bud: position in relation to shoot					
QN	<mark>(b)</mark>	adpressed or slightly held out					1
		moderately held out					2
		strongly held out					3
PL: to state 2	have , 'Tra	"Vegetative bud: the example varieties ubenwunder' and 'Ty add this characteris Vegetative bud:	s 'Jonkheer van ydeman's Seedl		Witan' for state 1, '	Heinemann's Rote Spätlese'	for
v.	VG	length					
QN	(b)	short					3
		medium					5
		long					<mark>7</mark>
		Vegetative bud:		ket', 'Rovada' and 'Ki	mere' for state 3.		
		shape of apex					
QN	(b)	narrow acute					1
		broad acute					<mark>2</mark>
		rounded					3
		"Vegetative bud: the example varieties		ler', 'Viking' and 'Ros	setta' for state 1.		
8.	VG	Vegetative bud: anthocyanin coloration					
QN	(b)	absent or very weak					1
		weak					3
		medium					<u>5</u>
		strong					<mark>7</mark>
NL: to	read	"Vegetative bud:	''.				

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note Nota
9. 6.	VG	Vegetative bud: bloom					
QN	(b)	weak				Cascade	3
		medium				Palants Sämling	5
		strong				Houghton Castle	7
	add e	e variety at all stages xample variety 'Frau Young shoot: anthocyanin coloration (leaf and stem)					
QN	(c)	absent or very weak				Maarse's Prominent	1
		weak				Houghton Castle	3
		medium				Präkanda	5
		strong				Hochrote Frühe	7
		very strong					9
NL: ex	ampl	e varieties for states 3	and 7 to be repl	aced by better kno	wn ones.		
11. 14.	VG	Young shoot: pubescen-ce					
QN	(c)	absent or very sparse					1
		<mark>sparse</mark>		to be deleted			3
		medium					5
		dense					7
		<mark>very dense</mark>					9
JI R	o sk	: agree to delete.					

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note Nota
12. 12. (*)	VG	Young leaf: green color	1				
QN	(d)	light				Maarse's Prominent	3
		medium				Cascade	5
		dark				Red Lake	7
		e variety for state 5 read '' Young leaf:		better known one. color''.			
13.	VG	Leaf: length					
QN	(e)	short					3
		medium					<u>5</u>
		long					7
		long the example variet	y 'Red Lake' for s	tate 3, 'Rosetta' and	'Traubenwunder' f	or state 7; to read "Fully dev	7
PL: to eaf:	'	long the example variet	y 'Red Lake' for s	tate 3, 'Rosetta' and	'Traubenwunder' f	or state 7; to read "Fully dev	7
PL: to eaf:	'' VG	the example variety Leaf: width	y 'Red Lake' for s	tate 3, 'Rosetta' and	'Traubenwunder' f	or state 7; to read ''Fully dev	<mark>7</mark> veloped
PL: to eaf:	'' VG	the example variety Leaf: width narrow	y 'Red Lake' for s	tate 3, 'Rosetta' and	'Traubenwunder' f	or state 7; to read ''Fully dev	7 veloped
PL: to eaf: 14. QN	VG (e)	the example variety. Leaf: width narrow medium broad				or state 7; to read "Fully dev	7 veloped 3 5
PL: to eaf: 14. QN	VG (e)	the example variety. Leaf: width narrow medium broad the example variety	y 'Rosetta' for sta				7 veloped 3 5
PL: to eaf: 14. QN PL: to	VG (e) have	the example variety Leaf: width narrow medium broad the example variety Leaf: length/widt	y 'Rosetta' for sta				7 veloped 3 5
PL: to eaf: 14. QN PL: to	VG (e) have	the example variety Leaf: width narrow medium broad the example variety Leaf: length/width ratio	y 'Rosetta' for sta				7 veloped 3 5
PL: to eaf: 14. QN PL: to	VG (e) have	the example variety. Leaf: width narrow medium broad the example variety Leaf: length/width ratio small	y 'Rosetta' for sta				7 veloped 3 5 7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
16. 15.	VG	Fully developed leaf: size					
QN	(e)	<mark>very small</mark>					1
		<mark>small</mark>		to be deleted			3
		medium					5
		large					7
		very large					9
NL, SF	K: agr	ee to delete.					
17. 16.	VG	Fully developed leaf: intensity of green color of upposide	per				
QN	(e)	light				Imperial Blanche	3
		medium				Laxton's No.1	5
		dark				Rode Hollander	7
NL: to	read	"Leaf:"; exa	mple variety for sta	ate 3 to be replaced	by better known on	ie.	
18. 17.	VG	Fully developed leaf: thickness of petiole					
QN	(e)	thin				Mulka	3
		medium				Heros	5
		thick				Bad Gasteiner	7
					by better known on mperial Blanche' for		
19. <mark>7.</mark>	<mark>VG</mark>	Inflorescence: number of flower	s				
QN	(f)	few				Victoria	3
		medium				Heros	5
		many				Heinemann's Rote Spätlese	7
			3 to be replaced by imus' and 'Traube		3, 'Detvan' for state	7.	

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
20. <mark>&.</mark>	VG	Inflorescence: anthocyanin coloration of axis					
QN	(f)	absent or very weak				Heros	1
		weak				Laxton's No.1	3
		medium				Rondom	5
		strong				Heinemann's Rote	7
		very strong					9
L: to	add e	xample varieties 'De	vinska Velkoploo	dna' for state 1, 'Fra	uendorfer' for state	e 3, 'Argos Piros' for state 7.	
21. <mark>9.</mark>	VG	Flower: size					
QN	(f)	small				Maarse's Prominent	3
		medium				Cascade	5
		large				Red Lake	7
		e variety for state 5 to xample varieties 'Ro			or state 7.		
	VG	Flower: shape of					
22. 10. (*) (+)	VG	Flower: shape of calyx					
22. 10. (*)						Heros	1
22. 10. (*) (+)		calyx				Heros Houghton Castle	1 3
22. 10. (*) (+)		calyx flat saucered					
22. 10. (*) (+)		calyx flat saucered saucered				Houghton Castle	3

NL: example variety for state 3 to be replaced by better known one. PL: to add example varieties 'Devinska Velkoplodna' for state 1, 'Jonkheer van Tets' for state 3, 'Frauendorfi' and 'Earliest of Fourlands' for state 5, 'Rovada' for state 7.

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
23. 11.	VG	Flower: anthocyanin coloration of calyx					
QN	(f)	absent or very weak				Heros	1
		weak				Minnesota 69	3
		medium				Mulka	5
		strong				Bad Gasteiner	7
		very strong					9
PL: to	add e			•		ourlands' for state 3, 'D	etvan'

24. 18. (*)	VG	Fruit truss: length including stalk		
QN	(g)	very short		1
		short	Weiße aus Jüterbog	3
		medium	Rondom	5
		long	Heros	7
		very long	Traubenwunder	9

PL: to add example varieties 'Heinemann's Rote Spätlese' for state 3, 'Frauendorfi' and 'Blanka' for state 7 and 'Detvan' for state 9.

25. 19.	VG	Fruit truss: length of stalk		
QN	(g)	short	Weiße aus Jüterbog	3
		medium	Rondom	5
		long	Traubenwunder	7

PL: to add example variety 'Heinemann's Rote Spätlese' for state 3, 'Losan' for state 5, 'Argus Piros' and 'Jonkheer van Tets' for state 7.

PL: to add a new characteristic ''Fruit: density – sparse (3) ['Devinska', 'Velkoplodna'], medium (5) ['Rogwood', 'Traubenwunder'], dense (7) ['Kimere', 'Rosetta' and 'Kordes Rotes Wunder'].

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
26. 20. (*)	VG	Berry: size					
QN	(g)	very small				Mulka	1
		small				Hougthon Castle	3
		medium				Laxton's No.1	5
		large				Heros	7
		very large				Cascade	9
	kampl	e varieties for stat	te 3 and 9 to be repl	aced by better know			
		Berry: shape	te 3 and 9 to be repl	accu by better know			
NL: ex 27.			te 3 and 9 to be repl	aced by better know			
27. 21.*			te 3 and 9 to be repl	aced by better know		Laxton's No.1	1
27. 21.*	VG	Berry: shape	te 3 and 9 to be repl	aced by better know		Laxton's No.1 Mulka	1 2
	VG	Berry: shape		aced by better know			
NL: ex- 27. 21.* QN PL: to	VG (g) add e	Berry: shape flat round-obloid round-globose pear shaped-pyrif	· · · · · · · · · · · · · · · · · · ·	Witte Hollander' for		Mulka	2
NL: ex- 27. 21.* QN PL: to	VG (g) add e	Berry: shape flat round-obloid round-globose pear shaped-pyrif xample variety 'Z	· · · · · · · · · · · · · · · · · · ·	<u> </u>		Mulka	2
27. 21.* QN PL: to SK: ag 28.	VG (g) add e	Berry: shape flat round-obloid round-globose pear shaped-pyrif xample variety 'Z amended states.	· · · · · · · · · · · · · · · · · · ·	<u> </u>		Mulka	2
27. 21. 21. 21. 21. 22. 28. 22. (*)	VG (g) add egree to	Berry: shape flat round-obloid round-globose pear shaped-pyrif xample variety 'Zo amended states. Berry: color	· · · · · · · · · · · · · · · · · · ·	<u> </u>		Mulka Rote Vierländer	3
27. 21. 21. 21. 21. 22. 28. 22. (*)	VG (g) add egree to	Berry: shape flat round-obloid round-globose pear shaped-pyrif xample variety 'Z amended states. Berry: color white	· · · · · · · · · · · · · · · · · · ·	<u> </u>		Mulka Rote Vierländer Versailles Blanche	2 3
27. 21. 21. 21. 21. 21. 22. 28. 22. (*)	VG (g) add egree to	Berry: shape flat round-obloid round-globose pear shaped-pyrif xample variety 'Z amended states. Berry: color white whitish yellow	· · · · · · · · · · · · · · · · · · ·	<u> </u>		Mulka Rote Vierländer Versailles Blanche Witte Parel	2 3 1 2

NL: to replace 'Weiße Versailler' by 'Versailles Blanche', example varieties for state 4 to be replaced by better known one. PL: to add example variety 'Blanka' for state 2, 'Hosszufurtu' for state 3, 'Laxton's Perfection' for state 5. SK: agree to add state 5

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
29. 23.	VG/ MG	Berry: firmness					
QN	(g)	soft				Laxton's No.1	3
		medium				Rote Vierländer	5
		firm				Rondom	7
30. 5	MG	Time of bud bur	rst				
QN	(b)	early				Rondom	3
		medium				Rote Vierländer	5
		late				Kaukasische	7
			7 to be replaced by arieties 'Detvan' for		'erfection' and 'Frau	uendorfi' for state 7.	
31. 24. (*)	MG	Time of beginning of flowering	ng				
QN	(f)	very early				Turnier	1
		early				Heros	3
		medium				Rote Vierländer	5
		late				Victoria	7
		very late				Mulka	9

NL: example variety for states 1 and 7 to be replaced by better known one. PL: to add example variety/varieties 'Hosszufurti' for state 1, 'Jonkheer van Tets' for state 3, 'Losan' for state 5, 'Rondom' and 'Rode Hollander' for state 7.

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
32. 25. (*)	MG	Time of <mark>beginning of</mark> fruit ripening					
QN	(g)	very early				Jonkheer Van Tets	1
		early				Heros	3
		medium				Mulka	5
		late				Rode Hollander	7
		very late				Heinemann's Rote Spätlese	9

PL: to add example variety/varieties 'Red Lake' for state 3, 'Detvan' for state 5, 'Blanka' and 'Krenever' for state 7, 'Tatran' for state 9.

RO, SK: agree to amended wording.

8. Explanations on the Table of Characteristics

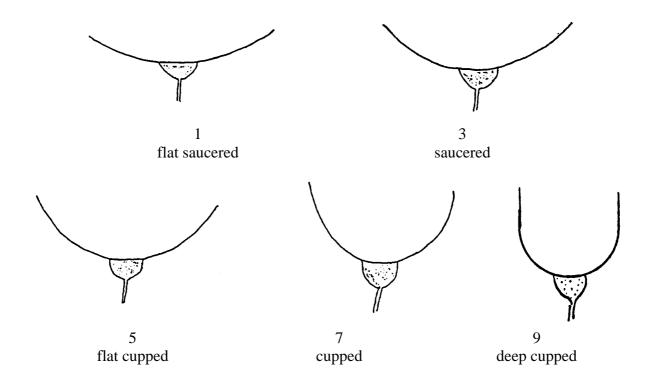
8.1 Explanations covering several characteristics

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 plant should be made on unpruned bushes in the dormant season.
- (b) All observations on the bud should be made at the time when they begin to swell
- (c) All observations on the young shoot should be made on shoots approximately 30 cm long.
- (d) All observations on the young leaf should be made when the leaflets are about 1.5 cm wide.
- (e) All observations on the mature leaf should be made at the stage of fully developed leaves at fruit maturity on the upper third of typical one-year-old shoots
- (f) All observations on the inflorescence and the flower should be made at the time of full flowering.
- (g) All observations on the fruit truss and the berry should be made at the time when the fruit is ready to be picked.

8.2 Explanations for individual characteristics

Ad. 22: Flower: shape of calyx



8.3 Synonyms of the example varieties

Example varieties	Synonym(s)
Imperial Blanche	Imperial White, Weiße Kaiserliche
Rode Hollander	Red Dutch, Rote Holländische
Rote Vierländer	Erstling aus Vierlanden
Stanza	St. Anna-Beere
Versailles Blanche	Weiße Versailler
Witte Hollander	Weiße Holländische, White Dutch
Witte Parel	White Pearl

9. <u>Literature</u>

Keipert, K., 1981: Beerenobst, Ulmer Verlag, Stuttgart, DE, (349 pp.)

NL: to add new literature Hoffman, M.H.A., 2005: List of names of woody plants. Praktijkonderzoek Plant & Omgeving BV, Boskoop, NL, (871 pp.)

10. <u>Technical Questionnaire</u>

TECI	HNICAL 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							
		Ribes rubrum L.; Ribes s V. Koch; Ribes vulgare	<i>sylvestre</i> (Lam.) Mert. et Lam.					
	1.2 Common name	Red and White Currant						
2.	Applicant							
	_							
	Name							
	Address							
	Telephone No.							
	Fax No.							
	E-mail address							
	Breeder (if different from app	olicant)						
		,						
3.	Proposed denomination and l	preeder'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									
	Vari	ariety resulting from:									
		4.1.1	4.1.1 Crossing								
			(a)	(a) controlled cross [] (please state parent varieties)							
			(b) partially known cross (please state known parent varie				[y(ies] s))			
			(c)	unknown cross			[1			
		4.1.2	2 Mutation (please state parent variety)				[]			
		4.1.3	3 Discovery and development (please state where and when disco			overe	_] nd how develo	ped)		
		4.1.4 (please	4 Other [] ease provide details)]				
	4.2	Metho	od of p	propagating the variety							
		4.2.1	Veg	etative propagation							
			(a) c	uttings]]					
			(b) ii	n vitro propagation	[]					
			(c) o	ther (state method)	[]					
		4.2.2	Seed	I	[]					
		4.2.3	Othe (ple	er ease 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 (<mark>24</mark>)	Fruit truss: length including stalk		
	very short		1[]
	short	Weiße aus Jüterbog	3[]
	medium	Rondom	5[]
	long	Heros	7[]
	very long	Traubenwunder	9[]
5.2 (<mark>26</mark>)	Berry: size		
	very small	Mulka	1[]
	small	Houghton Castle	3[]
	medium	Laxton's No. 1	5[]
	large	Heros	7[]
	very large	Cascade	9[]
5.3 (<mark>28</mark>)	Berry: color		
	white	Versailles Blanche	1[]
	whitish yellow	Witte Parel	2[]
	pink	Rosa Sport	3[]
	red	Victoria	4[]
	dark red	Stanza	5[]
5.4 (<mark>32</mark>)	Time of beginning of fruit ripening		
	very early	Jonkheer van Tets	1[]
	early	Heros	3[]
	medium	Mulka	5[]
	late	Rode Hollander	7[]
	very late	Heinemann's Rote Spätlese	9[]

TECHNICAL QUESTI	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	Characteri which your variety diffe similar var	candidate rs from the	of the cha	the expression aracteristic(s) he similar lety(ies)	Describe the expression of the characteristic(s) for your candidate variety		
Example	Example Fruit: color		pink		red		
Comments:							

TEC	HNIC	AL QUE	ESTIONNAIRE	Page {x} o	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 ye	es, please	e provide details)				
7.2	Are	there any	special condition	ns for growin	ng the vari	ety or conducting the examination?	
	Yes	[]		No []			
	(If ye	es, please	e provide details)				
7.3	Othe	er inform	ation				
	eprese stionna		color photograp	ph of the	variety	should accompany the Technical	
8.	Auth	orizatio	n 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 suc	ch authorization b	een obtaine	d?		
		Yes	[]	No	[]		
	If the answer to (b) is yes, please attach a copy of the authorization.						

[#] Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TEC	HNICA	AL QUESTIONNAIRE	Page $\{x\}$ of $\{y\}$	Reference Number:			
9.	Infor	mation on plant material to	o be examined or subn	nitted for examinatio	n.		
effec	2.1 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 ree, etc.						
reque treatr	ession est such nent m	plant material should not of the characteristics of h treatment. If the plant in nust be given. In this resp material to be examined h	the variety, unless the material has undergone ect, please indicate be	ne competent author e such treatment, ful	rities allow or l details of the		
	(a)	Microorganisms (e.g. viru	us, bacteria, phytoplas	ma) Yes [] No []		
	(b)	Chemical treatment (e.g.	icide) Yes [] No []			
	(c)	Tissue culture	Yes [] No []			
	(d)	Other factors		Yes [] No []		
	Pleas	e provide details for where	e you have indicated "	yes".			
9.3 patho	Has togens?	the plant material to be e	examined been tested	for the presence of	virus or other		
	Yes	[]					
	(1	please provide details as s	pecified by the Author	ity)			
	No	[]					
10. form	I here	eby declare that, to the brect:	est of my knowledge	, the information pr	rovided in this		
	Appli	cant's name					
	Signa	ture		Date			

[End of document]