

UPOV

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

GENEVA

DRAFT

## 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 forty-first session, to be held in Cuernavaca, Morelos State, Mexico,  
from September 27 to October 1, 2010*

Alternative Names: \*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Ribes rubrum L.</i> ; <i>Ribes sylvestris</i> (Lam.) Mert. et W.Koch; <i>Ribes vulgare</i> Lam.;; ( <i>Ribes niveum</i> non valid)	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](http://www.upov.int)), for the latest information.]

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
1. SUBJECT OF THESE TEST GUIDELINES.....	3
2. MATERIAL REQUIRED .....	3
3. METHOD OF EXAMINATION.....	3
3.1 Number of Growing Cycles .....	3
3.2 Testing Place .....	3
3.3 Conditions for Conducting the Examination.....	3
3.4 Test Design .....	4
3.5 Additional Tests .....	4
4. ASSESSMENT OF DISTINCTNESS, UNIFORMITY AND STABILITY .....	4
4.1 Distinctness .....	4
4.2 Uniformity.....	5
4.3 Stability .....	5
5. GROUPING OF VARIETIES AND ORGANIZATION OF THE GROWING TRIAL.....	6
6. INTRODUCTION TO THE TABLE OF CHARACTERISTICS .....	6
6.1 Categories of Characteristics.....	6
6.2 States of Expression and Corresponding Notes.....	6
6.3 Types of Expression.....	7
6.4 Example Varieties .....	7
6.5 Legend.....	8
7. TABLE OF CHARACTERISTICS/TABLEAU DES CARACTERES/MERKMALSTABELLE/TABLA DE CARACTERES.....	9
8. EXPLANATIONS ON THE TABLE OF CHARACTERISTICS .....	17
8.1 Explanations covering several characteristics .....	17
8.2 Explanations for individual characteristics .....	17
8.3 Synonyms of the example varieties.....	19
9. LITERATURE .....	20
10. TECHNICAL QUESTIONNAIRE .....	21

1. Subject of these Test Guidelines

These Test Guidelines apply to all varieties 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 on their own roots.

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. Method of Examination

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.

3.1.3 In particular, it is essential that the plants produce a satisfactory crop of fruit in each of the two growing cycles.

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 order to enable the assessment of growth habit characteristics, the plants should be grown as bushes.

### 3.4 *Test Design*

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

### 3.5 *Additional Tests*

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

## 4. Assessment of Distinctness, Uniformity and Stability

### 4.1 *Distinctness*

#### 4.1.1 General Recommendations

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

#### 4.1.2 Consistent Differences

The differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

#### 4.1.3 Clear Differences

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

#### 4.1.4 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, all observations for the purposes of distinctness should be made on 5 plants or parts taken from each of 3 plants, disregarding any off-type plants.

#### 4.1.5 Method of Observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the second column of the Table of

Characteristics (see document TGP/9 “Examining Distinctness”, Section 4 “Observation of characteristics”):

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

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

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

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

Type of observation: visual (V) or measurement (M)

“Visual” observation (V) is an observation made on the basis of the expert’s judgment. For the purposes of this document, “visual” observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, “G” provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness.”

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

## 4.2 *Uniformity*

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

4.2.2 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 further examined by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the initial material supplied.

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

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

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

5.3 The following have been agreed as useful grouping characteristics:

- (a) Fruit truss: length including stalk (characteristic 22)
- (b) Berry: size (characteristic 25)
- (c) Berry: color (characteristic 27)
- (d) Time of beginning of fruit ripening (characteristic 30)

5.4 Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction and document TGP/9 "Examining Distinctness".

## 6. Introduction to the Table of Characteristics

### 6.1 *Categories of Characteristics*

#### 6.1.1 Standard Test Guidelines Characteristics

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

#### 6.1.2 Asterisked Characteristics

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

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

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

6.2.2 In the case of qualitative and pseudo-qualitative characteristics (see Chapter 6.3), all relevant states of expression are presented in the characteristic. However, in the case of quantitative characteristics with 5 or more states, an abbreviated scale may be used to minimize the size of the Table of Characteristics. For example, in the case of a quantitative characteristic with 9 states, the presentation of states of expression in the Test Guidelines may be abbreviated as follows:

State	Note
small	3
medium	5
large	7

However, it should be noted that all of the following 9 states of expression exist to describe varieties and should be used as appropriate:

State	Note
very small	1
very small to small	2
small	3
small to medium	4
medium	5
medium to large	6
large	7
large to very large	8
very large	9

6.2.3 Further explanation of the presentation of states of expression and notes is provided in document TGP/7 "Development of Test Guidelines".

### 6.3 *Types of Expression*

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

### 6.4 *Example Varieties*

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

6.5 *Legend*

(\*) 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 4.1.5

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

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>1. VG Plant: vigor</b> (* (+)						
<b>QN (a)</b>	weak				Heros, Pink Dutch	3
	medium				Maarse's Prominent, Mulka, Rovada	5
	strong				Jonkheer van Tets, Rote Vierländer, Ruby Castle	7
<b>NL: 'Pink Dutch' is not known in NL.</b>						
<b>DE: 'Heros' is rather note 4 than note 3.</b>						
<b>2. VG Plant: density</b>						
<b>QN (a)</b>	sparse				Heros, Krenever, Losan	3
	medium				Random, Rote Vierländer, Rovada	5
	dense				Mulka, Rode Hollander, Rote Versailles, Tatan	7
<b>3. VG Plant: habit</b> (*						
<b>PQ (a)</b>	upright				Bad Gasteiner, Bar le Duc	1
	semi-upright				Random	2
	spreading				Frauendorfi, Heros, Jonkheer van Tets, Losan	3
<b>DE: to check whether 'Frauendorfi' is the original variety denomination.</b>						
<b>4. VG Plant: number of (* basal shoots</b>						
<b>QN (a)</b>	few				Heros, Krenever, Rolan	3
	medium				Rode Hollander, Rote Vierländer	5
	many				Detvan, Mulka	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>5.</b>	<b>VG</b>	<b>Bud: position in relation to shoot</b>				
<b>QN</b>	<b>(b)</b>	adpressed or slightly held out			Jonkheer van Tets, Natalia, Witan	1
		moderately held out			Heinemanns Rote Spätlese	2
		strongly held out			Traubenwunder, Tydeman's Seedling	3
<b>6.</b>	<b>VG</b>	<b>Bud: length</b>				
<b>QN</b>	<b>(b)</b>	short			Kimere, London Market, Rovada	3
		medium				5
		long			Augustus	7
<b>7.</b>	<b>VG</b>	<b>Bud: shape of apex</b>				
<b>QN</b>	<b>(b)</b>	narrow acute			Rode Hollander, Rosetta, Viking	1
		broad acute				2
		rounded				3
<b>8.</b>	<b>VG</b>	<b>Bud: anthocyanin coloration</b>				
<b>QN</b>	<b>(b)</b>	absent or very weak				1
		weak				3
		medium				5
		strong				7
<b>Suitable example varieties are requested.</b>						
<b>9.</b>	<b>VG</b>	<b>Bud: bloom</b>				
<b>(+)</b>						
<b>QN</b>	<b>(b)</b>	weak			Cascade, Frauendorfi	3
		medium			Jonkheer van Tets, Palants Sämling, Rode Hollander	5
		strong			Augustus, Detvan, Houghton Castle, Rovada	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>10. (*)</b>	<b>VG</b>	<b>Young shoot: intensity of anthocyanin coloration (leaf and stem)</b>				
<b>QN</b>	<b>(c)</b>	absent or very weak			Maarse's Prominent	1
		weak			Augustus, Houghton Castle, Roodneus	3
		medium			Präkanda	5
		strong			Hochrote Frühe	7
		very strong				9
<b>11. (*)</b>	<b>VG</b>	<b>Young leaf: intensity of green color</b>				
<b>QN</b>	<b>(d)</b>	light			Maarse's Prominent, Roodneus	3
		medium			Cascade	5
		dark			Red Lake	7
<b>12.</b>	<b>VG</b>	<b>Leaf: length</b>				
<b>QN</b>	<b>(e)</b>	short			Red Lake	3
		medium				5
		long			Rosetta, Traubenwunder	7
<b>13.</b>	<b>VG</b>	<b>Leaf: width</b>				
<b>QN</b>	<b>(e)</b>	narrow			Rosetta	3
		medium				5
		broad			Frauendorfi	7
<b>14. (*)</b>	<b>VG</b>	<b>Leaf: ratio length/width</b>				
<b>QN</b>	<b>(e)</b>	moderately compressed				3
		medium				5
		moderately elongated				7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>15.</b>	<b>VG</b>	<b>Leaf: intensity of green color of upper side</b>				
<b>QN</b>	<b>(e)</b>	light			Imperial Blanche	3
		medium			Jonkheer van Tets, Laxton's No.1	5
		dark			Augustus, Rode Hollander	7
<b>16.</b>	<b>VG</b>	<b>Leaf: thickness of petiole</b>				
<b>QN</b>	<b>(e)</b>	thin			Hosszufurtu, Kordes Rotes Wunder	3
<b>(+)</b>		medium			Witte Hollander	5
		thick			Detvan, Imperial blanche	7
<b>17.</b>	<b>VG</b>	<b>Inflorescence: number of flowers</b>				
<b>QN</b>	<b>(f)</b>	few			Primus, Traubenwunder, Victoria	3
		medium			Heros, Jonkheer van Tets	5
		many			Detvan, Heinemanns Rote Spätlese, Rovada	7
<b>18.</b>	<b>VG</b>	<b>Inflorescence: anthocyanin coloration of axis</b>				
<b>QN</b>	<b>(f)</b>	absent or very weak			Devínska Vel'koplodná, Heros	1
		weak			Frauendorfí, Laxton's No.1	3
		medium			Random	5
		strong			Argos Piros, Heinemanns Rote	7
		very strong				9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>19.</b>	<b>VG</b>	<b>Flower: size</b>				
<b>QN</b>	<b>(f)</b>	small			Maarse's Prominent	3
		medium			Cascade, Rotet, Rovada	5
		large			Loppersummer, Red Lake	7
<b>20.</b>	<b>VG</b>	<b>Flower: curvature of calyx</b>				
<b>(*)</b>						
<b>(+)</b>						
<b>QN</b>	<b>(f)</b>	very weak			Devínska Vel'koplodná, Heros	1
		weak			Houghton Castle, Jonkheer van Tets	3
		moderate			Frauendorfi, Mulka, Rote Vierländer	5
		strong			Rode Hollander	7
		very strong				9
<b>SK: To include the explanation or to leave the previous shape and to change the notes to 1,2,3,4,5</b>						
<b>21.</b>	<b>VG</b>	<b>Flower: anthocyanin coloration of calyx</b>				
<b>QN</b>	<b>(f)</b>	absent or very weak			Chenonceau, Devínska Vel'koplodná, Heros	1
		weak			Jonkheer van Tets, Minnesota 69, Rote Vierländer	3
		medium			Detvan, Mulka, Roodneus	5
		strong			Bad Gasteiner, Rode Hollander	7
		very strong				9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>22.</b>	<b>VG</b>	<b>Fruit truss: length including stalk</b>				
(*)						
(+)						
<b>QN</b>	<b>(g)</b>	very short				1
		short			Heinemanns Rote Spätlese, Weiße aus Jüterbog	3
		medium			Rondom	5
		long			Blanka, Frauendorfi, Heros, Jonkheer van Tets	7
		very long			Detvan, Traubenwunder	9
<b>23.</b>	<b>VG</b>	<b>Fruit truss: length of stalk</b>				
(*)						
<b>QN</b>	<b>(g)</b>	short			Heinemanns Rote Spätlese, Weiße aus Jüterbog	3
		medium			Losan, Rondom	5
		long			Argus Piros, Jonkheer van Tets, Traubenwunder	7
<b>24.</b>	<b>VG</b>	<b>Fruit truss: density</b>				
<b>QN</b>	<b>(g)</b>	sparse			Devínska Vel'koplodná,	3
		medium			Rogwood, Traubenwunder	5
		dense			Kimere, Kordes Rotes Wunder, Rosetta	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
<b>25.</b>	<b>VG Berry: size</b>					
(*)						
<b>QN</b>	<b>(g) very small</b>				Devínska Vel'koplodná, Mulka	1
	small				Houghton Castle, Laxton's Perfection	3
	medium				Augustus, Laxton's No.1, Rote Vierländer	5
	large				Heros, Jonkheer van Tets	7
	very large				Cascade,	9
<b>26.</b>	<b>VG Berry: shape</b>					
(+)						
<b>PQ</b>	<b>(g) oblate</b>				Laxton's No.1, Zitavia	1
	circular				Mulka	2
	pyriform				Rote Vierländer, Witte Hollander	3
<b>27.</b>	<b>VG Berry: color</b>					
(*)						
<b>PQ</b>	<b>(g) white</b>				Versailles Blanche	1
	whitish yellow				Blanka, Witte Parel	2
	pink				Hossfurtu, Rosa Sport	3
	medium red				Jonkheer van Tets, Victoria	4
	dark red				Laxton's Perfection, Stanza	5

**DE: To consider to include another state "light red"; further to delete the state "whitish yellow" as this is also "white" (as in state 1) but with the yellow coated seeds shining through the white peel. We then would propose the following example varieties: state 1 (white) to add to the existing one 'Bar le Duc', 'Zitavia', 'and Witte Hollander'; (new) state 2 (pink) to add 'Rosa Hollander'; for the new state 3 (light red) to have the example variety 'Praekanda' (German spelling 'Präkanda'); state 4 (medium red) to add 'Rondom', 'Rotet'; state 5 (dark red) to add 'Roodneus', 'Mulka' and 'Jobes 88'.**





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.
- (e) Unless otherwise stated, all observations on the 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*

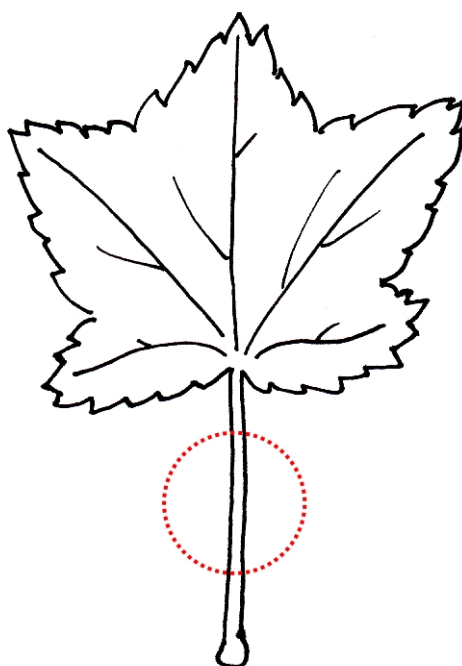
Ad. 1: Plant: vigor

The vigor of the plant should be considered as the overall abundance of vegetative growth.

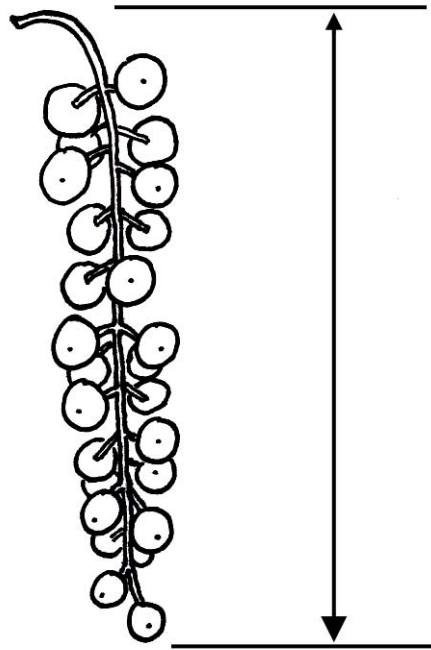
Ad. 9: Bud: bloom

Bloom is the waxy layer on the scales that can be removed by rubbing.

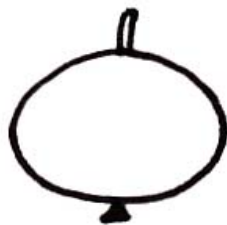
Ad. 16: Leaf: thickness of petiole



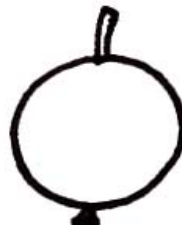
Ad. 22: Fruit truss: length including stalk



Ad. 26: Berry: shape



1  
oblate



2  
circular



3  
pyriform

Ad. 28: Time of bud burst

The time of bud burst is when 10% of the plants show bud burst.

Ad. 29: Time of beginning of flowering

The time of beginning of flowering is when 10% of the plants start flowering.

Ad. 30: Time of beginning of fruit ripening

The time of beginning of fruit ripening is when the fruit starts to be most easily removed from the plant.

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	Earliest of Fourlands, Erstling aus Vierlanden
Stanza	St. Anna-Beere
Versailles Blanche	Weiße Versailler
Witte Hollander	Weiße Holländische, White Dutch
Witte Parel	White Pearl

**To check whether 'Rode Hollander' really exists.**

**NL: not known in NL.**

9. Literature

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

Hoffman, M.H.A., 2005: List of names of woody plants. Praktijkonderzoek Plant & Omgeving BV. Boskoop, NL, 871 pp.

10. Technical Questionnaire

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
		Application date: (not to be filled in by the applicant)
<b>TECHNICAL QUESTIONNAIRE</b> to be completed in connection with an application for plant breeders' rights		
1. Subject of the Technical Questionnaire		
1.1 Botanical name	<input type="text" value="Ribes rubrum L.; Ribes sylvestre (Lam.) Mert. et W. Koch; Ribes vulgare Lam., (Ribes niveum non valid)"/>	
1.2 Common name	<input type="text" value="Red and White Currant"/>	
2. Applicant		
Name	<input type="text"/>	
Address	<input type="text"/>	
Telephone No.	<input type="text"/>	
Fax No.	<input type="text"/>	
E-mail address	<input type="text"/>	
Breeder (if different from applicant)	<input type="text"/>	
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)	<input type="text"/>	
Breeder's reference	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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#4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

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

(.....)	x	(.....)
female parent		male parent

(b) partially known cross [ ]  
(please state known parent variety(ies))

(.....)	x	(.....)
female parent		male parent

(c) unknown cross [ ]

4.1.2 Mutation [ ]  
(please state parent variety)

--

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

--

4.1.4 Other [ ]  
(please provide details)

--

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

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) cuttings [ ]

(b) in vitro propagation [ ]

(c) other (state method) [ ]

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4.2.2 Seed [ ]

4.2.3 Other [ ]

(please provide details)

--

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

Characteristics	Example Varieties	Note
<b>5.1 Fruit truss: length including stalk (22)</b>		
very short		1 [ ]
very short to short		2 [ ]
short	Heinemanns Rote Spätlese, Weiße aus Jüterbog	3 [ ]
short to medium		4 [ ]
medium	Rondon	5 [ ]
medium to long		6 [ ]
long	Blanka, Frauendorfi, Heros, Jonkheer van Tets	7 [ ]
long to very long		8 [ ]
very long	Detvan, Traubenwunder	9 [ ]
<b>5.2 Berry: size (25)</b>		
very small	Devínska Vel'koplodná, Mulka	1 [ ]
very small to small		2 [ ]
small	Houghthon Castle, Laxton's Perfection	3 [ ]
small to medium		4 [ ]
medium	Augustus, Laxton's No.1, Rote Vierländer	5 [ ]
medium to large		6 [ ]
large	Heros, Jonkheer van Tets	7 [ ]
large to very large		8 [ ]
very large	Cascade Krenever, Tatran	9 [ ]



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

Characteristics	Example Varieties	Note
<b>5.3 Berry: color</b> (27)		
white	Versailles Blanche	1[ ]
whitish yellow	Blanka, Witte Parel	2[ ]
pink	Hossfurtu, Rosa Sport	3[ ]
medium red	Jonkheer van Tets, Victoria	4[ ]
dark red	Laxton's Perfection, Stanza	5[ ]
<b>5.4 Time of beginning of fruit ripening</b> (30)		
very early	Jonkheer van Tets	1[ ]
very early to early		2[ ]
early	Heros, Red Lake	3[ ]
early to medium		4[ ]
medium	Detvan, Mulka	5[ ]
medium to late		6[ ]
late	Blanka, Krenever, Rode Hollander	7[ ]
late to very late		8[ ]
very late	Heinemanns Rote Spätlese, Tattran	9[ ]

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

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the <b>similar</b> variety(ies)	Describe the expression of the characteristic(s) for <b>your</b> candidate variety
<i>Example</i>	<i>Fruit: color</i>	<i>pink</i>	<i>medium red</i>

Comments:

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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#7. Additional information which may help in the examination of the variety

7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?

Yes [ ] No [ ]

(If yes, please provide details)

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

Yes [ ] No [ ]

(If yes, please provide details)

**7.3 Other information**

**A representative color image of the variety should accompany the Technical Questionnaire.**

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.

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# 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:
-------------------------	-----------------	-------------------

9. Information on plant material to be examined or submitted for examination.

9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.

9.2 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

- |   |         |        |
|---|---------|--------|
| (a) Microorganisms (e.g. virus, bacteria, phytoplasma)    | Yes [ ] | No [ ] |
| (b) Chemical treatment (e.g. growth retardant, pesticide) | Yes [ ] | No [ ] |
| (c) Tissue culture  | Yes [ ] | No [ ] |
| (d) Other factors   | Yes [ ] | No [ ] |

Please provide details for where you have indicated "yes".

.....

9.3 Has the plant material to be examined been tested for the presence of virus or other pathogens?

Yes [ ]

(please provide details as specified by the Authority)

No [ ]

10. I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Applicant's name

Signature

Date