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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

BLACKCURRANT *

UPOV Code: RIBES_NIG

Ribes nigrum L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from New Zealand

*to be considered by the Technical Working Party for Fruit Crops at its
thirty-seventh session, to be held in Salvador, Bahia State, Brazil,
from August 21 to 25, 2006*

Alternative Names:*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Ribes nigrum</i> L.;	Blackcurrant;	Cassis	Schwarze	Grosellero negro;
<i>Ribes dikuscha</i> Fisch. ex Turcz.;	Black Currant		Johannisbeere	Casis
<i>Ribes ussuriense</i> Jancz.				

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 nigrum* (*Ribes dikuscha* Fisch. ex Turcz. and *Ribes ussuriense* Janch.), of the family *Saxifragaceae*, for fruit production.

DE: We do not think that hybrids with *R. uva-crispa* (=R.grossularia) should be included as these are referred to in the existing UPOV-Guidelines for Jostaberry (*R. x nidigrolaria*, *R. x culverwellii*)

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 hardwood cuttings (without roots), rooted hardwood cuttings or in the form of plants with at least three shoots.

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

10 hardwood cuttings (without roots),
5 rooted hardwood cuttings, or
5 plants with at least three shoots

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 vegetative bud burst, 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*

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

3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 10 plants.

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

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

Unless otherwise indicated, all observations should be made on 5 plants or parts taken from each of 5 plants. In the case of observations of parts taken from single plants, the number of parts to be taken from each of the plants should be 2.

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.

5.3 The following have been agreed as useful grouping characteristics:

- (a) One-year-old shoot: color of wood (characteristic 4)
- (b) Vegetative bud: position in relation to shoot (characteristic 5)
- (c) Vegetative bud: shape of apex (characteristic 7)
- (d) Young shoot: intensity of anthocyanin coloration (characteristic 10)
- (e) Time of fruit harvest (characteristic 28)

DE. (b), (c): we disagree, and propose to replace them by char. 22 (Fruit: size) and char. 24 (Fruit: color)

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

6. Introduction to the Table of Characteristics

6.1 *Categories of Characteristics*

6.1.1 Standard Test Guidelines Characteristics

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

6.1.2 Asterisked Characteristics

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

6.2 *States of Expression and Corresponding Notes*

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

6.3 *Types of Expression*

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

6.4 *Example Varieties*

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

6.5 *Legend*

(*) Asterisked characteristic – see 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

(a)-(d) 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/ Beispielsorten/ Variedades ejemplo	Note/ Nota
1. (*)	Plant: height					
QN	(a)	very short			Stuarts Green	1
		short			Strata	3
		medium			Ben Alder	5
		tall			Goliath	7
		very tall			Magnus	9
2. (*)	Plant: growth habit					
PQ	(a)	upright			Magnus, Westra	1
		semi-upright			Baldwin, Blackdown	2
		spreading			Wellington, Tenah	3
3.	Plant: number of basal shoots					
QN	(a)	few			Triton, Baldwin Hilltop	3
		medium			Ben Lomond	5
		many			Ben Nevis, Blacksmith	7
4. (*) (+)	One-year old shoot: color					
PQ	(a)	yellow brown				1
		red brown				2
		brown			Hatton Black	3
		greyish			Cotswold Cross	4

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota	
5. (*) (+)	Vegetative bud: position in relation to shoot						
QN	(a)				Triton	1	
					slightly held out	Hatton Black	2
					markedly held out	Baldwin	3
6. (*) (+)	Vegetative bud: length						
QN	(a)				DE Ben Alder	3	
					medium	Hatton Black	5
					long	Laxton's Tinker	7
7. (*) (+)	Vegetative bud: shape of apex						
PQ	(a)				acute	Baldwin	1
					obtuse	Wellington	2
					rounded	DE Goliath	3
8. (*)	Vegtative bud: anthocyanin coloration						
QN	(a)				absent or very weak		1
					weak	Wellington	3
					medium	Ben Lomond, Baldwin	5
					strong	Cotswold Cross, Mammoth	7
9.	Vegetative bud: bloom						
QN	(a)				weak	Roodknop	3
					medium	Westwick Choice	5
					strong	French	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
10	Young shoot: anthocyanin coloration					
(*)						
QN	(b)	absent or very weak			Goliath	1
		weak			Roodknop	3
		medium			Hatton Black	5
		strong			Wellington	7
		very strong			Silverageiters Zwarte	9
DE. Suggest delete						
11.	Leaf blade: length					
QN	(b)	short			Hatton Black, Magnus	3
		medium			Cotwold Cross, Baldwin	5
		long			Ben Sarek	7
12.	Leaf blade: width					
QN	(b)	narrow			Ben Nevis	3
		medium			Hatton Black, Goliath	5
		broad			Ojebyn	7
		very broad			Ben Sarek	9

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
13.	Leaf blade: base					
(+)						
QN	(b)	straight			DE French	1
		strongly open			DE Tor Cross	2
		moderately open				3
		slightly open to touching			DE. Wellington	4
		overlapping			DE. Baldwin Hiltop	5

CA. The order of states should be checked. DE. to change the order of states 2 and 3 with each other;

14.	Leaf blade: intensity of green color (upper side)					
QN	(b)	light			DE. Malvern Cross	3
		medium			Hatton Black	5
		dark			Laxton's Tinker, Magnus	7

15.	Leaf blade: glossiness (upper side)					
QN	(b)	absent				1
		present			Magnus	9

DE. as we do not know of any variety with absolutely no glossiness, we propose to have three states absent or weakly expressed' (note 1, example var. 'Blacksmith'), moderately expressed (2 – 'Titania'), and strongly expressed (3 – 'Jet')

16.	Petiole: intensity of anthocyanin coloration					
(*)						
QN	(b)	absent or very weak			Goliath	1
		weak			Laxton's Tinker	3
		medium			Baldwin	5
		strong			DE. Brodtorp	7

CA. The upper side should be specified

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
17.	Inflorescence: predominant number per bud					
QN	(c)	one or two			Magnus	1
		two to four			Hatton Black	2
		more than four				3
18.	Inflorescence: length					
(*)						
(+)						
QN	(c)	short			Cotswold Cross, Ben Sarek	1
		medium			Baldwin	2
		long			Wellington	3
19.	Inflorescence: number of flowers					
QN	(c)	few			Magnus, Ben Sarek	3
		medium			Ben Alders	5
		many			Wellington	7
DE. We propose to add a drawing, showing the various expressions we observe within our collection (see explanations), and to change the states of expression accordingly (which means: "type 1", "type 2", ..., "type 7")						
20.	Sepal: anthocyanin coloration					
(*)						
QN	(c)	absent or very weak				1
		weak			Hatton Black	3
		medium			Baldwin	5
		strong			Ceres	7
21.	Ovary: anthocyanin coloration					
(*)						
QN	(c)	absent or very weak			Cotswold Cross	1
		weak			Baldwin	3
		medium			Wellington	5
		strong			Laxton's Tinker	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
22.	Fruit: size					
	(+)					
QN	(d)	small			Sarolata, Goliath	3
		medium			Wellington, Baldwin	5
		large			Titania, (DE. Suggest delete Ben Nevis)	7
		very large			Ben Sarek, Ben Lomond	9
23.	Fruit: range of berry size on a truss					
	(+)					
QN	(d)	very small to small			Titania	1
		medium			Black Reward	2
		large to very large			Jet	3
24.	Fruit: color					
PQ	(d)	green			Stuart's Green	1
		brownish black			Westwick Choice	2
		black			Titania	3
25.	Fruit: glossiness					
		very weak			Golubka	1
QN	(d)	weak			Cotswold Cross	3
		medium			Titania	5
		strong			Ben Tirrin	7
26.	Time of beginning of vegetative budburst					
	(+)					
QN	(d)	early			Cotswold Cross	3
		medium			Laxton's Tinker	5
		late			Ben Sarek	7

	English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
27.	Time of beginning of flowering					
(+)						
QN	(d)	early			Kimberley	3
		medium			Tenah, Cotswold Cross	5
		late			Laxton's Tinker	7
		very late			Jet, Ben Sarek	9

DE. state 1 to add 'Brødtorp' as example var.; and to add to the existing example varieties 'Malvern Cross' for state 3, 'Goliath' for state 5, and 'Black Reward' for state 7; further to delete 'Ben Sarek' as example var. for state 9, as this one continuously was given a note 5 with us

28.	VG	Time of beginning of fruit harvest				
(*)						
(+)						
		very early			Kimberley	1
QN	(d)	early			Magnus	3
		medium			Goliath	5
		late			Ben Lomond, Hatton Black	7
		very late			Jet	9

DE. to add to the existing example varieties 'Boskoop Giant' for state 1, 'Tor Cross' for state 3, 'Baldwin Hilltop' for state 5, and 'Ben Alder' for state 7

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:

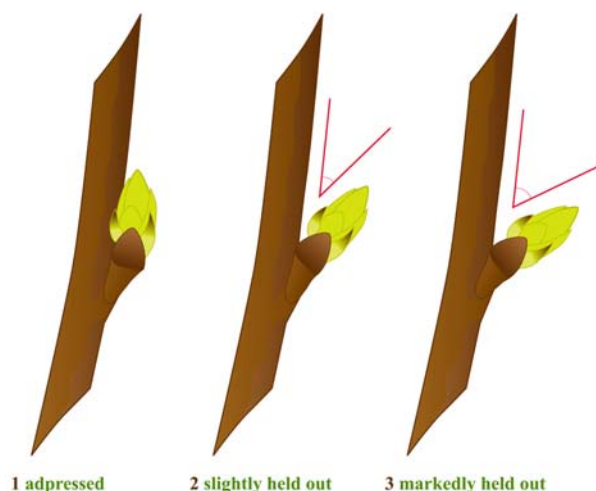
- (a) Plant, one-year-old shoot and vegetative bud: All observations should be made on dormant bushes in winter after at least one growing season. Vegetative bud: All observations should be made in the middle third of one year old shoots, before bud burst.
- (b) Young shoot, leaf blade, petiole: All observations should be made in early summer. For leaf blade and petiole, mature leaves from the middle third of one year old shoots from the outside of the bush.
- (c) Inflorescence, sepal, ovary: All observations should be made at full flowering.
- (d) Fruit: Unless otherwise stated, all observations are made on berries, just before harvest.

8.2 *Explanations for individual characteristics*

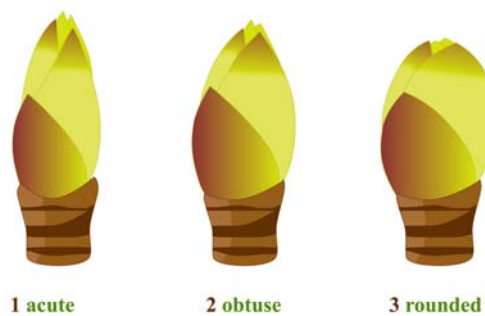
Ad. 4: One-year-old shoot: color

Observations should be made on the middle third of a shoot on the outside of the bush.

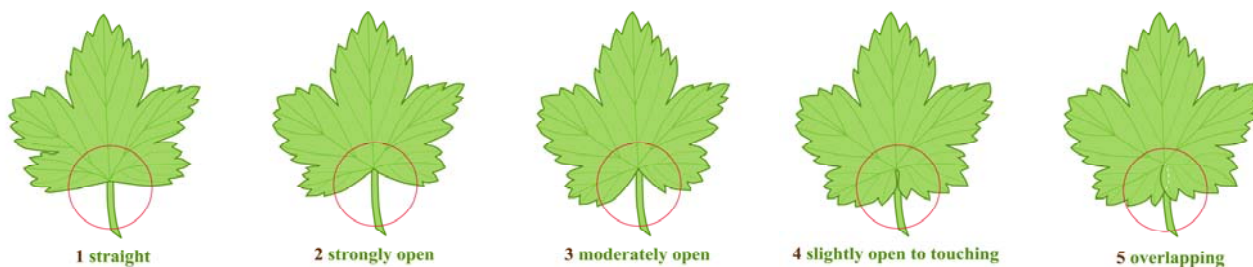
Ad. 5: Vegetative bud: position in relation to shoot.



Ad. 7: Vegetative bud: shape of apex







Ad. 13: Leaf blade: base


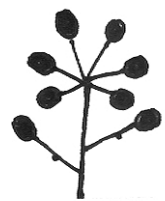



Ad. 18: Inflorescence: length

The total length includes the inflorescence and the peduncle.

DE proposal Ad. 19 Inflorescence: number of flowers

			
type 1 (single berry)	type 2 (raceme)	type 3 (raceme)	type 4 (panicle)

		
type 5 (panicle)	type 6	type 7

Ad. 22: Fruit: size

Fruit size is determined by the weight of 50 berries. Sufficient berries should be harvested from the 5 plants and combined in a single container. The 50 berry sample is then randomly taken from the combined sample.

Ad. 23: Fruit: range of berry size on a truss

The range of berry size is determined by observing the range of individual berry sizes present on a single fruiting truss (inflorescence).

Ad. 26: Time of beginning of vegetative bud burst

Time of beginning of vegetative bud burst is when the first green leaves on a bud are just visible.

Ad. 27: Time of beginning of flowering

Time of beginning of flowering is when 20% of flowers are fully open.

DE. to replace “20%” by “10%”

Ad. 28: Time of fruit harvest

Time of fruit harvest is when 90% of fruits have achieved full color.

9. Literature

Hedrick, U.P. 1925: The small fruits of New York. J.B. Lyon Company, Albany, US, 614 p.

Keipert, K. 1981: Beerenobst. Angebaute Arten und Wildfrüchte. Eugen Ulmer Verlag, Stuttgart, DE, 349 p.

Mühl, F. 1996: Beerenobst und Wildfrüchte. Obst- und Gartenbauverlag des Bayerischen Landesverbandes für Gartenbau und Landespflege, München, DE, 152 p.

Sorge, P. 1991: Beerenobstsorten. Melsungen, J. Neumann-Neudamm, 2nd edition, 259 p.

Todd, J.C. 1962: Black Currant Varieties: Their Classification and Identification, Technical Bulletin No. 11, Ministry of Agriculture, Fisheries and Food, Her Majesty's Stationary Office, London, United Kingdom

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	<input type="text" value="Ribes nigrum L. (Ribes dikuscha Fisch. ex Turcz. and Ribes ussuriense Janch.)"/>	
1.2 Common name	<input type="text" value="Blackcurrant, Black 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:
<p>#4. Information on the breeding scheme and propagation of the variety</p> <p>4.1 Breeding scheme</p> <p>Variety resulting from:</p> <p>4.1.1 Crossing</p> <p>(a) controlled cross [] (please state parent varieties)</p> <p>(b) partially known cross [] (please state known parent variety(ies))</p> <p>(c) unknown cross []</p> <p>4.1.2 Mutation [] (please state parent variety)</p> <p>4.1.3 Discovery and development [] (please state where and when discovered and how developed)</p> <p>4.1.4 Other [] (please provide details)</p> <p>4.2 Method of propagating the variety</p> <p>4.2.1 Vegetative propagation</p> <p>(a) cuttings []</p> <p>(b) <i>in vitro</i> propagation []</p> <p>(c) other (state method) []</p> <p>4.2.2 Other [] (please provide details)</p>		

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:	
<p>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).</p>			
Characteristics	Example Varieties	Note	
<p>5.1 Plant: growth habit (2)</p>			
upright	Magnus, Westra	1[]	
semi-upright	Baldwin, Blackdown	2[]	
spreading	Wellington, Tenah	3[]	
<p>5.2 One-year old shoot: color of wood (4)</p>			
yellow brown		1[]	
red brown		2[]	
brown	Hatton Black	3[]	
greyish	Cotswold Cross	4[]	
<p>5.3 Vegetative bud: position in relation to shoot (5)</p>			
adpressed	Triton	1[]	
slightly held out	Hatton Black	2[]	
markedly held out	Baldwin	3[]	
<p>5.4 Vegetative bud: shape of apex (7)</p>			
acute	Baldwin	1[]	
obtuse	Wellington	2[]	
rounded		3[]	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
Characteristics		Example Varieties	Note
5.5 Young shoot: intensity of anthocyanin coloration (10)			
absent or very weak		Goliath	1[]
weak		Roodknop	3[]
medium		Hatton Black	5[]
strong		Wellington	7[]
very strong		Silvergeiters Zwarte	9[]
5.6 Time of beginning of fruit harvest (28)			
very early		Kimberley	1[]
early		Magnus	3[]
medium		Goliath	5[]
late		Ben Lomond, Hatton Black	7[]
very late		Jet	9[]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
<p>6. Similar varieties and differences from these varieties</p> <p><i>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.</i></p>			
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
<i>Example</i>	<i>Plant: growth habit</i>	<i>semi upright</i>	<i>upright</i>
<p>Comments:</p>			

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
<p>#7. Additional information which may help in the examination of the variety</p> <p>7.1 In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety?</p> <p>Yes [] No []</p> <p>(If yes, please provide details)</p> <p>7.2 Are there any special conditions for growing the variety or conducting the examination?</p> <p>Yes [] No []</p> <p>(If yes, please provide details)</p> <p>7.3 Other information</p> <p>A representative color photograph of the variety should accompany the Technical Questionnaire.</p>		
<p>8. Authorization for release</p> <p>(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?</p> <p>Yes [] No []</p> <p>(b) Has such authorization been obtained?</p> <p>Yes [] No []</p> <p>If the answer to (b) is yes, please attach a copy of the authorization.</p>		

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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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	

[End of document]