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Vitis L.

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

*prepared by an expert from Italy**to be considered by**the Technical Committee at its fifty-ninth session
to be held in Geneva on October 23 and 24, 2023**Disclaimer: this document does not represent UPOV policies or guidance*

Alternative names:*

<i>Botanical name</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Vitis</i> L.	Grapevine	Vigne	Rebe	Vid

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 *Vitis* L., covering table grapes, wine grapes, and rootstocks.

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
(a) plants on their own roots, only in the case of a variety not being sensitive to *Daktulosphaira vitifoliae* Fitch;
(b) rooted grafts with scions grafted on a rootstock to be specified by the competent Authority.

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

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 two independent growing cycles may be observed from a single planting, examined in two separate growing cycles.

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

3.1.4 The testing of a variety may be concluded when the competent authority can determine with certainty the outcome of the test.

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 The optimum stage of development for the assessment of each characteristic is indicated by a number in the Table of Characteristics. The stages of development denoted by each number are described in Chapter 8.3

3.4 *Test Design*

3.4.1 Each test should be designed to result in a total of at least 5 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 *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 or Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 3 plants or parts of plants taken from each of 3 plants and any other observations made on all plants in the test, 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 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 These Test Guidelines have been developed for the examination of vegetatively propagated varieties. For varieties with other types of propagation, the recommendations in the General Introduction and document TGP/13 "Guidance for new types and species" Section 4.5 "Testing Uniformity" should be followed.

4.2.3 For the assessment of uniformity of vegetatively propagated varieties, 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) Young shoot: openness of tip (characteristic 2)
- (b) Young leaf: color of upper side of blade (characteristic 6)
- (c) Young leaf: density of prostrate hairs between main veins on lower side of blade (characteristic 7)
- (d) Flower: sexual organs (characteristic 16)
- (e) Mature leaf: number of lobes (characteristic 20)
- (f) Time of beginning of berry ripening (characteristic 30)
- (g) Bunch: density (characteristic 33)
- (h) Berry: shape (characteristic 37)
- (i) Berry: color of skin (characteristic 39)
- (j) Berry: anthocyanin coloration of flesh (characteristic 40)
- (k) Berry: particular flavor (characteristic 42)
- (l) Berry: presence of seeds (characteristic 43)

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 All relevant states of expression are presented in the characteristic.

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.

For the example varieties – other than rootstocks – the color of the berry of the example varieties is indicated in the table in Chapter 8.4, following the standardized code used within the European Union for the classification of vine varieties:

B = white,
 G = grey,
 N = black,
 Rg = red,
 Rs = rose.

That table also provides synonyms of certain example varieties.

6.5 Legend

		English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
1	2	3	4	5	6	7	
		Name of characteristics in English	Nom du caractère en français	Name des Merkmals auf Deutsch	Nombre del carácter en español		
		states of expression	types d'expression	Ausprägungsstufen	tipos de expresión		

- 1 Characteristic number
- 2 (*) Asterisked characteristic – see Chapter 6.1.2
- 3 Type of expression
 QL Qualitative characteristic – see Chapter 6.3
 QN Quantitative characteristic – see Chapter 6.3
 PQ Pseudo-qualitative characteristic – see Chapter 6.3
- 4 Method of observation (and type of plot, if applicable)
 MG, MS, VG, VS – see Chapter 4.1.5
- 5 (+) See Explanations on the Table of Characteristics in Chapter 8.2
- 6 (a)-(b) See Explanations on the Table of Characteristics in Chapter 8.1
- 7 Growth stage key See Explanations on the Table of Characteristics in Chapter 8.3
- O-... characteristic with the corresponding OIV code number (second edition, 2009). The presence of an asterisk near the OIV code indicates different states of expressions.”
- B-... characteristic with the corresponding code number of Bioversity International (second edition, 1997). The presence of an asterisk near the Bioversity International code indicates different states of expressions.

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

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. (*)	QN	MG/VG	(+)	07-09 / O-301 / B-7.1.1			
	Time of bud burst	Époque de débourrement	Zeitpunkt des Knospenaufbruchs	Época de desborre			
	very early	très précoce	sehr früh	muy temprana	Nero		1
	very early to early	très précoce à précoce	sehr früh bis früh	muy temprana a temprana	Sugraone		2
	early	précoce	früh	temprana	Chardonnay, Kyoho		3
	early to medium	précoce à moyenne	früh bis mittel	temprana a media	Rkatsiteli		4
	medium	moyenne	mittel	media	Garnacha tinta, Sultanina		5
	medium to late	moyenne à tardive	mittel bis spät	media a tardía	Red globe		6
	late	tardive	spät	tardía	Mourvèdre		7
	late to very late	tardive à très tardive	spät bis sehr spät	tardía a muy tardía	King Husainy		8
	very late	très tardive	sehr spät	muy tardía	Garganega		9
2. (*)	QN	VG	(+)	53-69 / O-001 / B-6.1.1			
	Young shoot: openness of tip	Jeune rameau : ouverture de l'extrémité	Junger Trieb: Öffnung der Spitze	Pámpano: apertura de la punta			
	closed	fermée	geschlossen	cerrada	Gloire de Montpellier		1
	slightly open	légèrement ouverte	leicht offen	ligeramente abierta	3309 Couderc		2
	half open	demi-ouverte	halb offen	semi abierta	Kober 5 BB		3
	wide open	largement ouverte	weit offen	muy abierta	Cina		4
	fully open	complètement ouvert	vollständig offen	completamente abierta	Flame seedless, Pinot noir		5
3. (*)	QN	VG	(+)	53-69 / O-004 / B-6.1.3			
	Young shoot: density of <u>prostrate</u> hairs on tip	Jeune rameau : densité des poils <u>couchés</u> de l'extrémité	Junger Trieb: Dichte der <u>Woll</u>behaarung an der Spitze	Pámpano: densidad de pelos <u>postrados</u> en la punta			
	absent or very sparse	absente ou très lâche à lâche	fehlend oder sehr locker	ausente o muy laxa	3309 Couderc , Afus ali, Sultanina		1
	very sparse to sparse	très lâche	sehr locker bis locker	muy laxa a laxa	Ansonica		2
	sparse	lâche	locker	laxa	Chasselas blanc		3
	sparse to medium	lâche à moyenne	locker bis mittel	laxa a media	Chardonnay		4
	medium	moyenne	mittel	media	Italia, Pinot noir		5
	medium to dense	moyenne à dense	mittel bis dicht	media a densa	Korinthiaki		6
	dense	dense	dicht	densa	Furmint, Kyoho		7
	dense to very dense	dense à très dense	dicht bis sehr dicht	densa a muy densa	Clairette		8
	very dense	très dense	sehr dicht	muy densa	Meunier		9

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
4.	QN	VG	(+)	53-69 / O-005 / B-6.1.4			
	Young shoot: density of <u>erect</u> hairs on tip	Jeune rameau : densité des poils <u>dressés</u> de l'extrémité	Junger Trieb: Dichte der <u>Borsten</u>behaarung an der Spitze	Pámpano: densidad de pelos <u>erectos</u> en la punta			
	absent or very sparse	absente ou très lâche	fehlend oder sehr locker	ausente o muy laxa	Du Lot, Flame seedless	1	
	sparse	lâche	locker	laxa	3309 Couderc	2	
	medium	moyenne	mittel	media	3306 Couderc	3	
	dense	dense	dicht	densa	Gloire de Montpellier	4	
	very dense	très dense	sehr dicht	muy densa	1616 Couderc	5	
5. (*)	QN	VG	(+)	53-69 / O-003 / B-6.1.2			
	Young shoot: anthocyanin coloration of prostrate hairs on tip	Jeune rameau : pigmentation anthocyanique des poils couchés de l'extrémité	Junger Trieb: Anthocyanfärbung der Wollbehaarung an der Spitze	Pámpano: pigmentación antociánica de los pelos postrados de la punta			
	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Autumn royal seedless, Furmint	1	
	very week to weak	très faible à faible	sehr gering bis gering	muy débil a débil	Chardonnay	2	
	weak	faible	gering	débil	Riesling weiss	3	
	weak to medium	faible à moyenne	gering bis mittel	débil a media	Cabernet franc	4	
	medium	moyenne	mittel	media	Barbera	5	
	medium to strong	moyenne à forte	mittel bis stark	media a fuerte	Dalkauer	6	
	strong	forte	stark	fuerte	Cabernet-Sauvignon	7	
	strong to very strong	forte à très forte	stark bis sehr stark	fuerte a muy fuerte	Cina	8	
	very strong	très forte	sehr stark	muy fuerte	Dabouki	9	
6. (*)	PQ	VG	(+)	53-69 / O-051* / B-6.1.16*			
	Young leaf: color of upper side of blade	Jeune feuille : couleur de la face supérieure du limbe	Junges Blatt: Farbe der Oberseite der Spreite	Hoja joven: color del haz del limbo			
	yellow green	vert jaune	gelbgrün	verde amarillento	Furmint, Sultanina	1	
	green	vert	grün	verde	Silvaner gruen	2	
	green with reddish brown speckles	vert avec taches brun rougeâtre	grün mit rötlichbraunen Sprenkeln	verde con motas marrón rojizo	Riesling weiss, Sugraone	3	
	light brownish red	rouge brunâtre clair	hellbräunlichrot	rojo marrónáceo claro	Kober 5 BB	4	
	medium brownish red	rouge brunâtre moyen	mittelbräunlichrot	rojo marrónáceo medio	Chasselas blanc, Crimson seedless	5	
	dark brownish red	rouge brunâtre foncé	dunkelbräunlichrot	rojo marrónáceo oscuro	Deckrot	6	

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
7. (*)	QN	VG	(+)	53-69 / O-053 / B-6.1.17			
	Young leaf: density of prostrate hairs between main veins on lower side of blade	Jeune feuille : densité de poils couchés entre les nervures principales de la face inférieure du limbe	Junges Blatt: Dichte der Wollbehaarung zwischen den Hauptadern auf der Unterseite der Spreite	Hoja joven: densidad de los pelos postrados entre las nervaduras principales del envés del limbo			
	absent or very sparse	absente ou très lâche	fehlend oder sehr locker	ausente o muy laxa	Du Lot, Garnacha tinta	1	
	very sparse to sparse	très lâche à lâche	sehr locker bis locker	muy laxa a laxa	Müller Thurgau	2	
	sparse	lâche	locker	laxa	Muscat à petits grains blancs, Sugraone	3	
	sparse to medium	lâche à moyenne	locker bis mittel	laxa a media	Chardonnay, Muscat of Alexandria	4	
	medium	moyenne	mittel	media	Merlot, Riesling weiss	5	
	medium to dense	moyenne à dense	mittel bis dicht	media a densa	Cabernet franc	6	
	dense	dense	dicht	densa	Furmint	7	
	dense to very dense	dense à très dense	dicht bis sehr dicht	densa a muy densa	Clairette	8	
	very dense	très dense	sehr dicht	muy densa	Meunier	9	
8.	QN	VG	(+)	53-69 / O-056 / B-6.1.20			
	Young leaf: density of erect hairs on main veins on lower side of blade	Jeune feuille : densité des poils dressés sur les nervures principales de la face inférieure du limbe	Junges Blatt: Dichte der Borstenbehaarung auf den Hauptadern auf der Unterseite der Spreite	Hoja joven: densidad de pelos erectos sobre las nervaduras principales del envés del limbo			
	absent or very sparse	absente ou très lâche	fehlend oder sehr locker	ausente o muy laxa	Du Lot, Flame seedless	1	
	sparse	lâche	locker	laxa	3309 Couderc	2	
	medium	moyenne	mittel	media	Kober 125 AA	3	
	dense	dense	dicht	densa	Teleki 8 B	4	
	very dense	très dense	sehr dicht	muy densa	Gloire de Montpellier	5	
9.	QN	VG	(+)	57-69 / O-006 / B-6.1.5			
	Shoot: attitude	Rameau : port	Trieb: Haltung	Sarmiento: porte			
	erect	dressé	aufrecht	erecto	Garnacha tinta	1	
	semi-erect	demi-dressé	halbaufrecht	semierecto	Muscat Ottonel	2	
	horizontal	horizontal	waagrecht	horizontal	Barbera	3	
	semi-drooping	semi-pendant	halbüberhängend	semicolgante	Aramon noir	4	
	drooping	pendant	überhängend	colgante	Dabouki	5	

	English		français		deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
10.	PQ	VG	(+)	(a)	60-69 / O-007 / B-6.1.6			
	Shoot: color of <u>dorsal</u> side of <u>internodes</u>		Rameau : couleur de la face <u>dorsale</u> des <u>entre-nœuds</u>		Trieb: Farbe der <u>Rückenseite</u> der <u>Internodien</u>	Sarmiento: color de la cara <u>dorsal</u> de los <u>entrenudos</u>		
	green		vert		grün	verde	Sauvignon blanc, Sultanina	1
	green and red		vert et rouge		grün und rot	verde y rojo	Carignan, Sugraone	2
	red		rouge		rot	rojo	Kober 5 BB, Riesling weiss	3
11. (*)	PQ	VG	(+)	(a)	60-69 / O-008 / B-6.1.7			
	Shoot: color of <u>ventral</u> side of <u>internodes</u>		Rameau : couleur de la face <u>ventrale</u> des <u>entre-nœuds</u>		Trieb: Farbe der <u>Bauchseite</u> der <u>Internodien</u>	Sarmiento: color de la cara <u>ventral</u> de los <u>entrenudos</u>		
	green		vert		grün	verde	Flame seedless, Sauvignon blanc	1
	green and red		vert et rouge		grün und rot	verde y rojo	Carignan	2
	red		rouge		rot	rojo	Mourvèdre	3
12.	PQ	VG	(+)	(a)	60-69 / O-009 / B-6.1.8			
	Shoot: color of <u>dorsal</u> side of <u>nodes</u>		Rameau : couleur de la face <u>dorsale</u> des <u>nœuds</u>		Trieb: Farbe der <u>Rückenseite</u> der <u>Nodien</u>	Sarmiento: color de la cara <u>dorsal</u> de los <u>nudos</u>		
	green		vert		grün	verde	Sauvignon blanc, Sultanina	1
	green and red		vert et rouge		grün und rot	verde y rojo	Barbera, Sugraone	2
	red		rouge		rot	rojo	Kober 5 BB	3
13.	PQ	VG	(+)	(a)	60-69 / O-010 / B-6.1.9			
	Shoot: color of <u>ventral</u> side of <u>nodes</u>		Rameau : couleur de la face <u>ventrale</u> des <u>nœuds</u>		Trieb: Farbe der <u>Bauchseite</u> der <u>Nodien</u>	Sarmiento: color de la cara <u>ventral</u> de los <u>nudos</u>		
	green		vert		grün	verde	Sauvignon blanc, Sultanina	1
	green and red		vert et rouge		grün und rot	verde y rojo	Palomino fino	2
	red		rouge		rot	rojo	Dabouki	3
14.	QN	VG		(a)	60-69 / O-012 / B-6.1.11*			
	Shoot: density of <u>erect</u> hairs on internodes		Rameau : densité des poils <u>dressés</u> sur les <u>entre-nœuds</u>		Trieb: Dichte der <u>Borsten</u>behaarung auf den Internodien	Sarmiento: densidad de los pelos <u>erectos</u> sobre los entrenudos		
	absent or very sparse		absente ou très lâche		fehlend oder sehr locker	ausente o muy laxa	3309 Couderc, Flame seedless	1
	sparse		lâche		locker	laxa	161-49 Couderc	2
	medium		moyenne		mittel	media	Teleki 8 B	3
	dense		dense		dicht	densa	Fercal, Kober 125 AA	4
	very dense		très dense		sehr dicht	muy densa	Cina	5

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
15.	QN	VG	(a)	60-69 / O-014 / B-6.1.13		
	Shoot: density of prostrate hairs on internodes	Rameau : densité des poils couchés sur les entre-nœuds	Trieb: Dichte der Wollbehaarung auf den Internodien	Sarmiento: densidad de los pelos postrados sobre los entrenudos		
	absent or very sparse	absente ou très lâche	fehlend oder sehr locker	ausente o muy laxa	Flame seedless, Garnacha tinta	1
	absent to sparse	très lâche à lâche	fehlend bis locker	muy laxa a laxa		2
	sparse	lâche	locker	laxa	Alphonse Lavallée	3
	sparse to medium	lâche à moyenne	locker bis mittel	laxa a media		4
	medium	moyenne	mittel	media	Clairette	5
	medium to dense	moyenne à dense	mittel bis dicht	media a densa		6
	dense	dense	dicht	densa	Viura	7
	dense to very dense	dense à très dense	dicht bis sehr dicht	densa a muy densa		8
	very dense	très dense	sehr dicht	muy densa	Meunier	9
16. (*)	QL	VG	(+)	61-68 / O-151 / B-6.2.1*		
	Flower: sexual organs	Fleur : organes sexuels	Blüte: Geschlechtsorgane	Flor: órganos sexuales		
	fully developed stamens and no gynoecium	étamines complètement développées et pas de gynécée	vollentwickelte Staubblätter und kein Stempel	estambres completamente desarrollados y gineceo ausente	Du Lot	1
	fully developed stamens and reduced gynoecium	étamines complètement développées et un gynécée réduit	vollentwickelte Staubblätter und reduzierter Stempel	estambres completamente desarrollados y gineceo reducido	3309 Couderc	2
	fully developed stamens and fully developed gynoecium	étamines complètement développées et un gynécée complètement développé	vollentwickelte Staubblätter und vollentwickelter Stempel	estambres y gineceo completamente desarrollados	Chasselas blanc, Flame seedless	3
	reflexed stamens and fully developed gynoecium	étamines réfléchies et un gynécée complètement développé	zurückgebogene Staubblätter und vollentwickelter Stempel	estambres reflejos y gineceo completamente desarrollado	Kober 5 BB, Moscatel rosado	4

	English		français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
17. (*)	QN	VG	(b)	75-81 / O-065 / B-6.1.21			
	Mature leaf: size of blade	Feuille adulte : taille du limbe	Ausgewachsenes Blatt: Größe der Spreite	Hoja madura: tamaño del limbo			
	very small	très petite	sehr klein	muy pequeño	99 Richter		1
	very small to small	très petite à petite	sehr klein bis klein	muy pequeño a pequeño	1103 Paulsen		2
	small	petite	klein	pequeño	Gamay		3
	small to medium	petite à moyenne	klein bis mittel	pequeño a medio	Muscat à petits grains blancs		4
	medium	moyenne	mittel	medio	Cabernet-Sauvignon, Flame seedless		5
	medium to large	moyenne à grande	mittel bis groß	medio a grande	Sugraone		6
	large	grande	groß	grande	Carignan, Crimson seedless		7
	large to very large	grande à très grande	groß bis sehr groß	grande a muy grande	Sultanina		8
	very large	très grande	sehr groß	muy grande	Alphonse Lavallée, Viura		9
18. (*)	PQ	VG	(+) (b)	75-81 / O-067 / B-6.1.22			
	Mature leaf: shape of blade	Feuille adulte : forme du limbe	Ausgewachsenes Blatt: Form der Spreite	Hoja madura: forma del limbo			
	cordate	cordiforme	herzförmig	cordada	Petit Verdot		1
	wedge-shaped	cunéiforme	keilförmig	cuneiforme	Autumn royal seedless, Gloire de Montpellier		2
	pentagonal	pentagonale	fünfeckig	pentagonal	Chasselas blanc, Sultanina		3
	circular	circulaire	kreisförmig	circular	Clairette, Flame seedless		4
	kidney-shaped	reniforme	nierenförmig	reniforme	Du Lot		5
19.	QN	VG	(b)	75-81 / O-075 / B-6.1.26			
	Mature leaf: blistering of upper side of blade	Feuille adulte : cloûre de la face supérieure du limbe	Ausgewachsenes Blatt: Blasigkeit auf der Oberseite der Spreite	Hoja madura: abullonado del haz del limbo			
	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Du Lot, Kyoho		1
	very weak to weak	très faible à faible	sehr gering bis gering	muy débil a débil	Welschriesling		2
	weak	faible	gering	débil	Chasselas blanc, Crimson seedless		3
	weak to medium	faible à moyenne	gering bis mittel	débil a media	Schiava grossa		4
	medium	moyenne	mittel	media	Argentina, Müller Thurgau		5
	medium to strong	moyenne à forte	mittel bis stark	media a fuerte	Semillon		6
	strong	forte	stark	fuerte	Merlot		7
	strong to very strong	forte à très forte	stark bis sehr stark	fuerte a muy fuerte	Rotberger		8
	very strong	très forte	sehr stark	muy fuerte	Alvarelhao, Gewürztraminer		9

	English		français		deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
20. (*)	QN	VG	(+)	(b)	75-81 / O-068 / B-6.1.23			
	Mature leaf: number of lobes	Feuille adulte : nombre de lobes	Ausgewachsenes Blatt: Anzahl Lappen	Hoja madura: número de lóbulos				
	one	un	einer	uno	Du Lot		1	
	three	trois	drei	tres	Chenin blanc, Isabella		2	
	five	cinq	fünf	cinco	Chasselas blanc, Sugraone		3	
	seven	sept	sieben	siete	Autumn royal seedless, Cabernet-Sauvignon		4	
	more than seven	plus de sept	mehr als sieben	más de siete	Centennial seedless, Vilana, Xynisteri		5	
21.	QN	VG	(+)	(b)	75-81 / O-094 / B-6.1.34			
	Mature leaf: depth of upper lateral sinuses	Feuille adulte : profondeur des sinus latéraux supérieurs	Ausgewachsenes Blatt: Tiefe der oberen Seitenbuchten	Hoja madura: profundidad de los senos laterales superiores				
	absent or very shallow	absente ou très peu profonde	fehlend oder sehr flach	ausente o muy poco profunda	Gloire de Montpellier		1	
	very shallow to shallow	très peu profonde à peu profonde	sehr flach bis flach	muy poco profunda a poco profunda	Seyval blanc		2	
	shallow	peu profonde	flach	poco profunda	Gamay, Sugraone		3	
	shallow to medium	peu profonde à moyenne	flach bis mittel	poco profunda a media	Cabertin		4	
	medium	moyenne	mittel	media	Flame seedless, Merlot, Red globe		5	
	medium to deep	moyenne à profonde	mittel bis tief	media a profunda	Johanniter		6	
	deep	profonde	tief	profunda	Centennial seedless, Malvasia Dubrovacka		7	
	deep to very deep	profonde à très profonde	tief bis sehr tief	profunda a muy profunda			8	
	very deep	très profonde	sehr tief	muy profunda	Chasselas cioutat		9	
22.	QN	VG	(+)	(b)	75-81 / O-082 / B-6.1.33			
	<u>Only varieties with number of lobes more than one: mature leaf: arrangement of lobes of upper lateral sinuses</u>	<u>Seulement variétés avec nombre de lobes supérieur à un : feuille adulte : disposition des lobes des sinus latéraux supérieurs</u>	<u>Nur Sorten mit Anzahl Lappen: mehr als einer: Ausgewachsenes Blatt: Anordnung der Lappen der oberen Seitenbuchten</u>	<u>Solo variedades con número de lóbulos: superior a uno: hoja madura: disposición de los lóbulos de los senos laterales superiores</u>				
	open	ouverte	offen	abierta	Cot, Sultanina		1	
	closed	fermée	geschlossen	cerrada	Chasselas blanc		2	
	slightly overlapped	légèrement chevauchent	leicht überlappt	ligeramente superpuesta	Autumn royal seedless, Cabernet-Sauvignon		3	
	strongly overlapped	fortement chevauchent	stark überlappt	fuertemente superpuesta	Clairette, Flame seedless		4	

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
23. (*)	QN	VG	(+)	(b)	75-81 / O-79 / B-6.1.30			
	Mature leaf: arrangement of lobes of petiole sinus	Feuille adulte : disposition des lobes du sinus pétiolaire	Ausgewachsenes Blatt: Anordnung der Lappen der Stielbucht	Hoja madura: disposición de los lóbulos en el seno peciolar				
	very open	très ouverte	sehr offen	muy abierta	Du Lot			1
	very open to half open	très ouverte à demi-ouverte	sehr offen bis halb offen	muy abierta a abierta a mitad	Autumn royal seedless, Gloire de Montpellier			2
	half open	demi-ouverte	halb offen	abierta a mitad	Aramon noir, Red globe			3
	half open to closed	demi-ouvert à fermée	halb offen bis geschlossen	abierta a mitad a cerrada	Flame seedless, Sauvignon blanc			4
	closed	fermée	geschlossen	cerrada	Chasselas blanc, Crimson seedless			5
	closed to half overlapped	fermée à demi-chevauchante	geschlossen bis halbüberlappt	cerrada a semisuperpuesta	Cabernet franc			6
	half overlapped	demi-chevauchante	halbüberlappt	semisuperpuesta	Riesling weiss, Ruby seedless			7
	half overlapped to very overlapped	demi-chevauchante a très chevauchante	halbüberlappt bis stark halbüberlappt	semisuperpuesta a muy superpuesta	Agiorgitiko, Marsanne			8
	very overlapped	très chevauchante	stark halbüberlappt	muy superpuesta	Clairette			9
24. (*)	QN	VG	(+)	(b)	75-81 / O- -- / B-6.1.28			
	Mature leaf: length of teeth	Feuille adulte : longueur des dents	Ausgewachsenes Blatt: Länge der Zähne	Hoja madura: longitud de los dientes				
	very short	très courte	sehr kurz	muy corta	Dog Ridge			1
	very short to short	très courte à courte	sehr kurz bis kurz	muy corta a corta	Isabella			2
	short	courte	kurz	corta	Pinot noir			3
	short to medium	courte à moyenne	kurz bis mittel	corta a media	Gewürztraminer			4
	medium	moyenne	mittel	media	Crimson seedless, Merlot			5
	medium to long	moyenne à longue	mittel bis lang	media a larga	Dornfelder			6
	long	longue	lang	larga	Autumn royal seedless, Carignan			7
	long to very long	longue à très longue	lang bis sehr lang	larga a muy larga				8
	very long	très longue	sehr lang	muy larga	Ahmeur bou Ahmeur, Centennial seedless, Dabouki			9

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
25. (*)	QN	VG	(+)	(b)	75-81 / O-078 / B-6.1.29			
	Mature leaf: ratio length/width of teeth	Feuille adulte : rapport longueur/largeur des dents	Ausgewachsenes Blatt: Verhältnis Länge/Breite der Zähne	Hoja madura: relación longitud/anchura de los dientes				
	very low	très bas	sehr klein	muy baja	Marsanne		1	
	very low to low	très bas à bas	sehr klein bis klein	muy baja a baja	Isabella		2	
	low	bas	klein	baja	Silvaner gruen		3	
	low to medium	bas à moyen	klein bis mittel	baja a media	Riesling weiss		4	
	medium	moyen	mittel	media	Chasselas blanc, Crimson seedless		5	
	medium to high	moyen à élevé	mittel bis groß	media a alta	Muscat à petits grains blancs		6	
	high	élevé	groß	alta	Autumn royal seedless, Muscat of Alexandria		7	
	high to very high	élevé à très élevé	groß bis sehr groß	alta a muy alta			8	
	very high	très élevé	sehr groß	muy alta	Centennial seedless, Sangiovese		9	
26. (*)	PQ	VG	(+)	(b)	75-81 / O-076* / B-6.1.27*			
	Mature leaf: shape of teeth	Feuille adulte : forme des dents	Ausgewachsenes Blatt: Form der Zähne	Hoja madura: forma de dientes				
	both sides concave	à côtés concaves	beiderseits konkav	ambos lados cóncavos	Autumn royal seedless, Petit Verdot		1	
	both sides straight	à côtés rectilignes	beiderseits gerade	ambos lados rectilíneos	Muscat à petits grains blancs		2	
	both sides convex	à côtés convexes	beiderseits konvex	ambos lados convexos	Chenin blanc		3	
	one side concave, one side convex	un côté concave, un côté convexe	eine Seite konkav, eine Seite konvex	un lado cóncavo, un lado convexo	Aramon noir		4	
	mixture of both sides straight and both sides convex	mélange de deux côtés rectilignes et deux côtés convexes	Mischung aus beiderseits gerade und beiderseits konvex	mezcla de ambos lados rectilíneos y ambos lados convexos	Cabernet franc, Sagraone		5	
	mixture of both sides straight and one side concave, one side convex	mélange de deux côtés rectilignes et d'un côté concave, d'un côté convexe	Mischung aus beiderseits gerade und eine Seite konkav, eine Seite konvex	mezcla de ambos lados rectilíneos y un lado cóncavo, un lado convexo	Alphonse Lavallée, Centennial seedless, Cinsaut		6	

	English		français		deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
27. (*)	QN	VG	(+)	(b)	75-81 / O- -- / B-6.1.24			
	Mature leaf: proportion of main veins on upper side of blade with anthocyanin coloration	Feuille adulte : proportion des nervures principales de la face supérieure du limbe avec une pigmentation anthocyanique	Ausgewachsenes Blatt: Anteil der Hauptadern auf der Oberseite der Spreite mit Anthocyanfärbung	Hoja madura: proporción de nervaduras principales en el haz del limbo con pigmentación antocianica				
	absent or very low	absente ou très faible	fehlend oder sehr gering	ausente o muy baja	Garnacha tinta, Sultanina	1		
	very low to low	très faible à faible	sehr gering bis gering	muy baja a baja	Chardonnay	2		
	low	faible	gering	baja	Muscat of Alexandria, Semillon	3		
	low to medium	faible à Moyenne	gering bis mittel	baja a media	Riesling weiss	4		
	medium	Moyenne	mittel	media	Chenin blanc, Flame seedless	5		
	medium to high	moyenne à élevée	mittel bis hoch	media a alta	Cabertin	6		
	high	élevée	hoch	alta	Dolcetto	7		
	high to very high	élevée à très élevée	hoch bis sehr hoch	alta a muy alta	Palas	8		
	very high	très élevée	sehr hoch	sehr hoch	Cabernet Mitos	9		
28. (*)	QN	VG	(b)	75-81 / O-084 / B-6.1.35				
	Mature leaf: density of prostrate hairs between main veins on lower side of blade	Feuille adulte : densité des poils couchés entre les nervures principales de la face inférieure du limbe	Ausgewachsenes Blatt: Dichte der Wollbehaarung zwischen den Hauptadern auf der Unterseite der Spreite	Hoja madura: densidad de los pelos postrados entre las nervaduras principales del envés				
	absent or very sparse	absente ou très lâche	fehlend oder sehr locker	ausente o muy laxa	Chasselas blanc	1		
	very sparse to sparse	très lâche à lâche	sehr locker bis locker	muy laxa a laxa	Chardonnay, Pinot noir, Riesling weiss	2		
	sparse	lâche	locker	laxa	Italia	3		
	sparse to medium	lâche à moyenne	locker bis mittel	laxa a media	Syrah, Trebbiano toscano	4		
	medium	moyenne	mittel	media	Cabernet-Sauvignon	5		
	medium to dense	moyenne à dense	mittel bis dicht	media a densa	Barbera	6		
	dense	dense	dicht	densa	Clairette	7		
	dense to very dense	dense à très dense	dicht bis sehr dicht	densa a muy densa		8		
	very dense	très dense	sehr dicht	muy densa	Isabella	9		

	English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
29. (*)	QN	VG	(b)	75-81 / O-087 / B-6.1.38		
	Mature leaf: density of erect hairs on main veins on lower side of blade	Feuille adulte : densité des poils dressés sur les nervures principales de la face inférieure du limbe	Ausgewachsenes Blatt: Dichte der Borstenbehaarung auf den Hauptadern auf der Unterseite der Spreite	Hoja madura: densidad de pelos erectos en las nervaduras principales del envés		
	absent or very sparse	absente ou très lâche	fehlend oder sehr locker	ausente o muy laxa	Du Lot	1
	sparse	lâche	locker	laxa	Perle de Csaba	2
	medium	moyenne	mittel	media	Riesling weiss	3
	dense	dense	dicht	densa	Kober 125 AA, Tempranillo	4
	very dense	très dense	sehr dicht	muy densa	Börner	5
30. (*)	QN	MG/VG	(+)	81 / O-303 / B-7.1.4		
	Time of beginning of berry ripening	Époque de début de véraison	Zeitpunkt des Beginns der Beerenreife	Época del comienzo del envero		
	very early	très précoce	sehr früh	muy temprana	Perle de Csaba	1
	very early to early	très précoce à précoce	sehr früh bis früh	muy temprana a temprana	Flame seedless, Sugraone	2
	early	précoce	früh	temprana	Centennial seedless, Kyoho, Pinot noir	3
	early to medium	précoce à moyenne	früh bis mittel	temprana a media	Moscatuel	4
	medium	moyenne	mittel	media	Riesling weiss, Sultanina	5
	medium to late	moyenne à tardive	mittel bis spät	media a tardía	Autumn royal seedless	6
	late	tardive	spät	tardía	Alphonse Lavallée, Carignan, Ruby seedless	7
	late to very late	tardive à très tardive	spät bis sehr spät	tardía a muy tardía	Ahmeur bou Ahmeur, Italia	8
	very late	très tardive	sehr spät	muy tardía	Aledo, Isabella	9
31. (*)	QN	MG/VG	(+)	89 / O-202 / B-7.1.5		
	Bunch: length	Grappe : longueur	Traube: Länge	Racimo: longitud		
	very short	très courte	sehr kurz	muy corta	Kober 5 BB	1
	very short to short	très courte à courte	sehr kurz bis kurz	muy corta a corta	Gewürztraminer	2
	short	courte	kurz	corta	Riesling weiss	3
	short to medium	courte à moyenne	kurz bis mittel	corta a media	Muscat à petits grains blancs	4
	medium	moyenne	mittel	media	Müller Thurgau	5
	medium to long	moyenne à longue	mittel bis lang	media a larga	Sugraone	6
	long	longue	lang	larga	Autumn royal seedless, Trebbiano toscano	7
	long to very long	longue à très longue	lang bis sehr lang	larga a muy larga	Muscat Hamburg, Sultanina	8
	very long	très longue	sehr lang	muy larga	Nehelescol, Red globe	9

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
32.	QN	MG/VG	(+)	89 / O-203 / B- --			
	Bunch: width	Grappe : largeur	Traube: Breite	Racimo: anchura			
	very narrow	très étroite	sehr schmal	muy estrecha	161-49 Couderc		1
	very narrow to narrow	très étroite à étroite	sehr schmal bis schmal	muy estrecha a estrecha	Silvaner gruen		2
	narrow	étroite	schmal	estrecha	Riesling weiss		3
	narrow to medium	étroite à moyenne	schmal bis mittel	estrecha a media	Barbera		4
	medium	moyenne	mittel	media	Garnacha tinta		5
	medium to wide	moyenne à large	mittel bis breit	media a ancha	Muscat of Alexandria		6
	wide	large	breit	ancha	Cardinal, Red globe		7
	wide to very wide	large à très large	breit bis sehr breit	ancha a muy ancha			8
	very wide	très large	sehr breit	muy ancha	Sultanina		9
33. (*)	QN	VG	(+)	89 / O-204 / B-6.2.3			
	Bunch: density	Grappe : densité	Traube: Dichte	Racimo: densidad			
	very sparse	très lâche	sehr locker	muy laxa	Nehelescol		1
	very sparse to sparse	très lâche à lâche	sehr locker bis locker	muy laxa a laxa	Supernova		2
	sparse	lâche	locker	laxa	Cardinal, Red globe		3
	sparse to medium	lâche à moyenne	locker bis mittel	laxa a media	Moscatuel		4
	medium	moyenne	mittel	media	Chasselas blanc, Flame seedless, Sugraone		5
	medium to dense	moyenne à dense	mittel bis dicht	media a densa	Perlette, Silvaner gruen		6
	dense	dense	dicht	densa	Sauvignon blanc, Sultanina		7
	dense to very dense	dense à très dense	dicht bis sehr dicht	densa a muy densa	Carignan		8
	very dense	très dense	sehr dicht	muy densa	Chenin blanc, Meunier		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
34. (*)	QN	MG/VG	(+)	89 / O-206 / B-6.2.4		
	Bunch: length of peduncle of primary bunch	Grappe : longueur du pédoncule de la grappe principale	Traube: Länge des Stieles der Haupttraube	Racimo: longitud del pedúnculo del racimo primario		
	very short	très courte	sehr kurz	muy corta	Silvaner gruen	1
	very short to short	très courte à courte	sehr kurz bis kurz	muy corta a corta	Chenin blanc	2
	short	courte	kurz	corta	Crimson seedless, Sauvignon blanc	3
	short to medium	courte à moyenne	kurz bis mittel	corta a media	Portugieser blau	4
	medium	moyenne	mittel	media	Cabernet franc, Sugaone	5
	medium to long	moyenne à longue	mittel bis lang	media a larga	Cabertin	6
	long	longue	lang	larga	Alphonse Lavallée, Barbera, Kyoho, Red globe	7
	long to very long	longue à très longue	lang bis sehr lang	larga a muy larga	Stephanie	8
	very long	très longue	sehr lang	muy larga	Freisa	9
35. (*)	QN	MS/VG	(+)	89 / O-220* / B- --		
	Berry: length	Baie : longueur	Beere: Länge	Baya: longitud		
	very short	très courte	sehr kurz	muy corta	Korinthiaki	1
	very short to short	très courte à courte	sehr kurz bis kurz	muy corta a corta		2
	short	courte	kurz	corta	Riesling weiss	3
	short to medium	courte à moyenne	kurz bis mittel	corta a media		4
	medium	moyenne	mittel	media	Portugieser blau, Sultanina	5
	medium to long	moyenne à longue	mittel bis lang	media a larga		6
	long	longue	lang	larga	Sugaone	7
	long to very long	longue à très longue	lang bis sehr lang	larga a muy larga		8
	very long	très longue	sehr lang	muy larga	Kyoho	9
	very long to extremely long	très longue à extrêmement longue	sehr lang bis extrem lang	muy larga a extremadamente larga		10
	extremely long	extrêmement longue	extrem lang	extremadamente larga	Itumnine	11

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
36. (*)	QN	MS/VG	(+)	89 / OIV-221 / B- --			
	Berry: width	Baie : largeur	Beere: Breite	Baya: anchura			
	very narrow	très étroite	sehr schmal	muy estrecha	Korinthiaki		1
	very narrow to narrow	très étroite à étroite	sehr schmal bis schmal	muy estrecha a estrecha			2
	narrow	étroite	schmal	estrecha	Riesling weiss, Sultanina		3
	narrow to medium	étroite à moyenne	schmal bis mittel	estrecha a media			4
	medium	moyenne	mittel	media	Portugieser blau		5
	medium to broad	moyenne à large	mittel bis breit	media a ancha			6
	broad	large	breit	ancha	Muscat of Alexandria		7
	broad to very broad	large à très large	breit bis sehr breit	ancha a muy ancha			8
	very broad	très large	sehr breit	muy ancha	Alphonse Lavallée, Kyoho		9
37. (*)	PQ	VG	(+)	89 / O- 223* / B-6.2.6*			
	Berry: shape	Baie : forme	Beere: Form	Baya: forma			
	obloid	obloïde	abgeplattet kugelförmig	obloïde	Flame seedless, Tompa Mihaly		1
	globose	globuleuse	kugelförmig	globosa	Chasselas blanc		2
	broad ellipsoid	elliptique large	breit ellipsoid	elipsoïde ancha	Müller Thurgau, Red globe		3
	narrow ellipsoid	elliptique étroite	schmale ellipsoid	elipsoïde estrecha	Italia, Sultanina		4
	cylindric	cylindrique	zylindrisch	cilíndrica	Afus ali, Sabalkanskoi		5
	obtuse ovoid	troncovoïde	stumpf eiförmig	ovoïde obtusa	Ahmeur bou Ahmeur		6
	ovoid	ovoïde	eiertig	ovoïde	Dabouki		7
	obovoid	obovoïde	verkehrt eiertig	obovoïde	Muscat of Alexandria		8
	horn-shaped	en corne	hornförmig	en forma de cuerno	Cornichon blanc, Santa Paula		9
	finger-shaped	digitiforme	fingerförmig	en forma de dedo	Black finger		10
	waisted obovoid	obovoïde étranglée	verkehrt eiertig tailliert	obovoïde entallada	Itumeighteen		11
38.	QL	VG	(+)	89			
	Berry: presence of a dimple	Baie : présence de dépression	Beere: Vorhandensein einer Vertiefung	Baya: presencia de una depresión			
	absent	absente	fehlend	ausente	Afus ali, Crimson seedless		1
	present	présente	vorhanden	presente	Ahmeur bou Ahmeur		9

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
39. (*)	PQ	VG	(+)	89 / O- 225* / B-6.2.8*			
	Berry: color of skin	Baie : couleur de la pulpe	Beere: Farbe der Haut	Baya: color de la epidermis			
	green	vert	grün	verde	Afus ali		1
	yellow green	vert jaune	gelbgrün	verde amarillento	Chasselas blanc, Sugraone		2
	yellow	jaune	gelb	amarillo	Moscato giallo		3
	yellow pink	rose jaune	gelbrosa	rosa amarillento	Sauvitage, Villaris		4
	pink	rose	rosa	rosa	Chasselas rose		5
	red	rouge	rot	rojo	Flame seedless		6
	grey red	rouge gris	graurot	rojo grisáceo	Pinot gris		7
	dark red violet	rouge foncé violet	dunkelrotviolett	violeta rojizo oscuro	Cardinal, Crimson seedless		8
	blue black	noir bleu	blauschwarz	negro azulado	Autumn royal seedless, Kyoho, Pinot noir		9
40. (*)	QN	VG		89 / O-231 / B-6.2.9			
	Berry: anthocyanin coloration of flesh	Baie : pigmentation anthocyanique de la pulpe	Beere: Anthocyanfärbung des Fruchtfleisches	Baya: pigmentación antocianica de la carne			
	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Pinot noir, Red globe		1
	weak	faible	gering	débil	Autumn royal seedless, Gamay de Bouze		2
	medium	moyenne	mittel	media	Gamay de Chaudenay		3
	strong	forte	stark	fuerte	Alicante Bouschet		4
	very strong	très forte	sehr stark	muy fuerte	Cabernet Mitos		5
41.	QN	MG/VG		89 / O-235 / B-6.2.11			
	Berry: firmness of flesh	Baie : fermeté de la pulpe	Beere: Festigkeit des Fruchtfleisches	Baya: firmeza de la pulpa			
	soft	molle	weich	blanda	Pinot noir		1
	medium	moyenne	mittel	media	Italia		2
	firm	ferme	fest	firme	Crimson seedless, Sugraone		3

	English		français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
42. (*)	PQ	VG	(+)	89 / O-236 / B-6.2.12*			
	Berry: particular flavor	Baie : particularité de la saveur	Beere: besonderer Geschmack	Baya: sabor particular			
	none	aucune	keiner	ninguno	Garnacha tinta, Merlot, Sugaone, Sultanina		1
	muscat	goût muscaté	Muskatgeschmack	sabor a moscatel	Early muscat, Muscat of Alexandria		2
	foxy	goût foxé	Foxgeschmack	sabor avulpinado	Isabella, Kyoho		3
	herbaceous	goût herbacé	krautiger Geschmack	sabor herbáceo	Cabernet-Sauvignon		4
	caramel	goût caramel	Karamellgeschmack	sabor a caramelo	IFG Seven		5
	other	autre	anderer	otro	Red globe, Riesling weiss, Sauvignon blanc		6
43. (*)	QL	VG	(+)	89 / O-241 / B-6.2.7			
	Berry: presence of seeds	Baie : présence de pépins	Beere: Vorhandensein von Samen	Baya: presencia de pepitas			
	none	aucune	keine	ninguna	Korinthiaki		1
	rudimentary	rudimentaire	rudimentär	rudimentaria	Sultanina		2
	complete	complète	vollständig	completa	Cardinal, Kyoho, Riesling weiss		3
44.	PQ	VG		91-99			
	Woody shoot: color	Sarment : couleur	Rebholz: Farbe	Sarmiento leñoso: color			
	light brown	brun clair	hellbraun	marrón claro	Garnacha tinta		1
	orange brown	brun orange	orangebraun	marrón anaranjado	Portugieser blau		2
	dark brown	brun foncé	dunkelbraun	marrón oscuro	Chasselas blanc, Sultanina		3
	reddish brown	brun rougeâtre	rötlichbraun	marrón rojizo	3309 Couderc		4
	reddish violet	violet rougeâtre	rötlichviolett	violeta rojizo	Cinsaut, Semillon		5

8. Explanations on the Table of Characteristics

8.1 *Explanations covering several characteristics*

Characteristics containing the following key in the Table of Characteristics should be examined as indicated below:

- (a) Observations should be made at the middle third of the shoot.
- (b) Observations should be made on mature leaves at the middle third of the shoot just above the raceme.

8.2 *Explanations for individual characteristics*

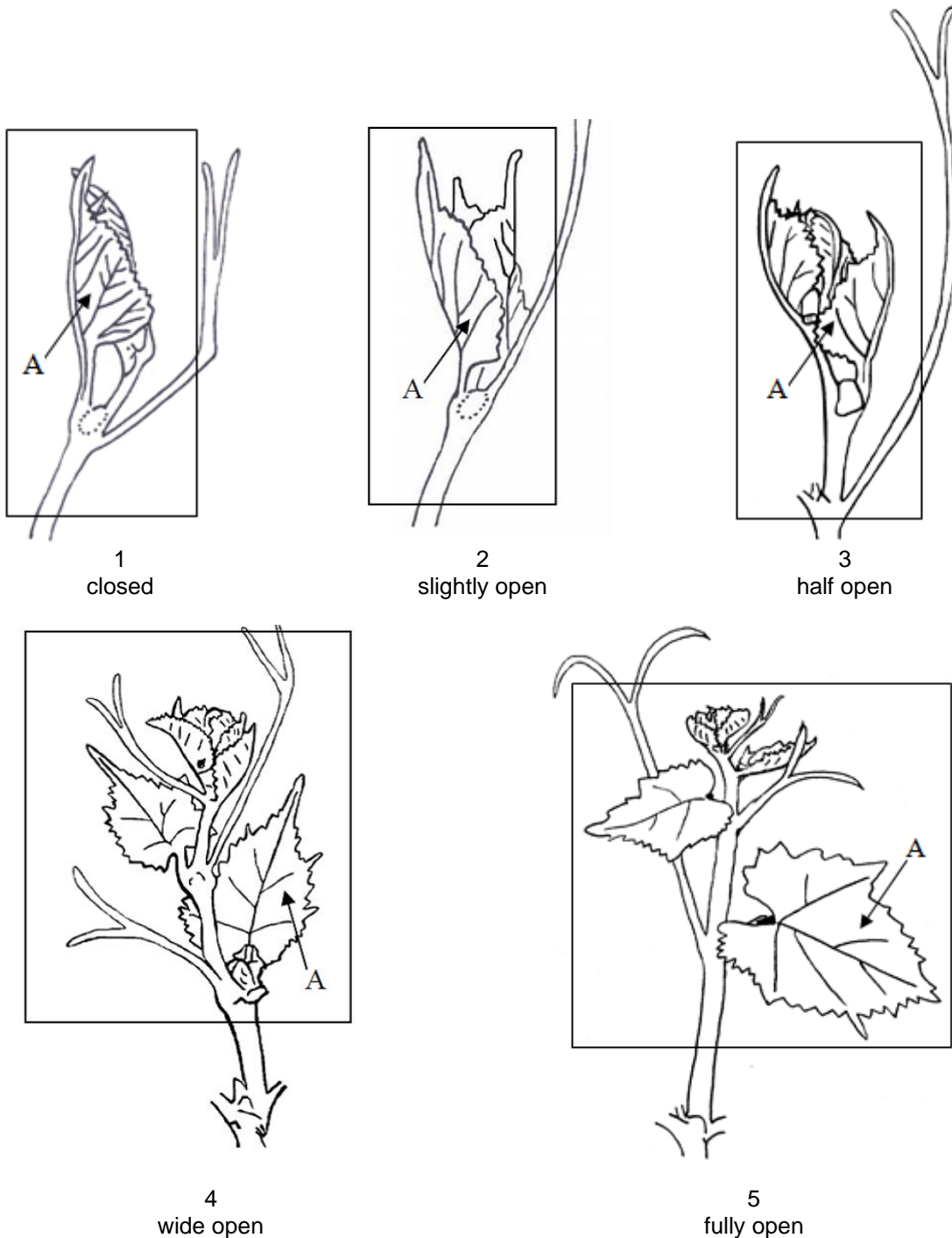
Ad. 1: Time of bud burst

The time of bud burst is when 50% of the plants are at the bud burst stage. A plant is at bud burst stage when 50% of the buds are at least at growth stage 07.

Pruning can influence the time of bud burst, therefore, all material should undergo the same pruning management.

Ad. 2: Young shoot: openness of tip

The openness of tip results from the attitude of the young leaves. The leaves indicated with 'A' have about the same physiological age. Openness of tip is correlated with elongation of the shoot tip. To observe the part of young shoot in squares.



Ad. 3: Young shoot: density of prostrate hairs on tip

See Ad. 2

Wide open or fully open tips (characteristic 2) to be observed with inclusion of first 2 distal unfolded leaves. Leaves of closed, slightly open or half open tips to be unfolded to enable observations on corresponding part of tip.

Ad. 4: Young shoot: density of erect hairs on tip

See Ad. 2 and 3.

Ad. 5: Young shoot: anthocyanin coloration of prostrate hairs on tip

See Ad. 2 and 3

Ad. 6: Young leaf: color of upper side of blade

Observation on first 2 distal unfolded leaves in case of closed, slightly open or half open tips (characteristic 2). Observation on fourth distal unfolded leaf in case of wide open or fully open tips.

The states green with reddish brown speckles (3); light brownish red (4); medium brownish red (5); and dark brownish red (6) correspond to an increasing amount of anthocyanin coloration.

Ad. 7: Young leaf: density of prostrate hairs between main veins on lower side of blade

Observation on second distal unfolded leaf in case of closed, slightly open or half open tips (characteristic 2). Observation on fourth distal unfolded leaf in case of wide open or fully open tips.

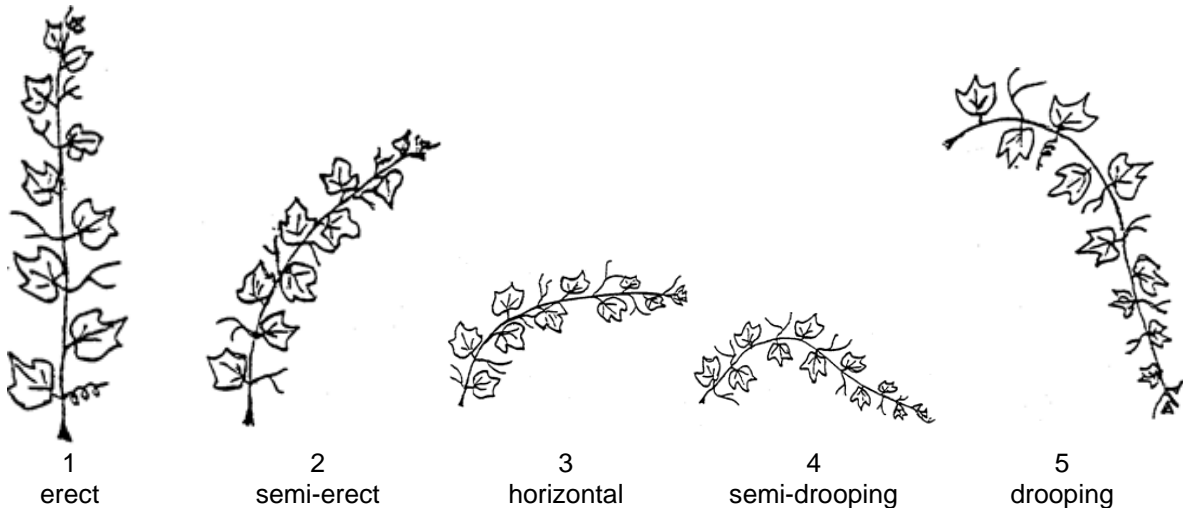
Ad. 8: Young leaf: density of erect hairs on main veins on lower side of blade

See Ad. 7

Ad. 9: Shoot: attitude

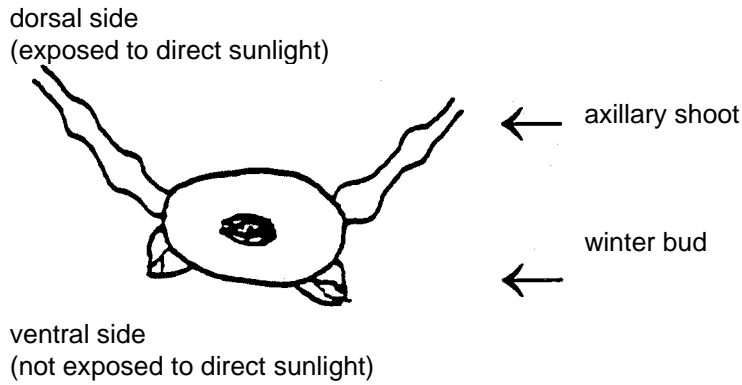
Observations should be made before tying.

Observation of this characteristic should be made on plants before tying. Observation is difficult in windy locations where the shoots have to be tied early.



Ad. 10: Shoot: color of dorsal side of internodes

Cross section of shoot



The states: green (1); green and red (2); and red (3) correspond to the proportion of anthocyanin coloration: absent or low (1); medium (2); and high (3).

Ad. 11: Shoot: color of ventral side of internodes

See Ad. 10

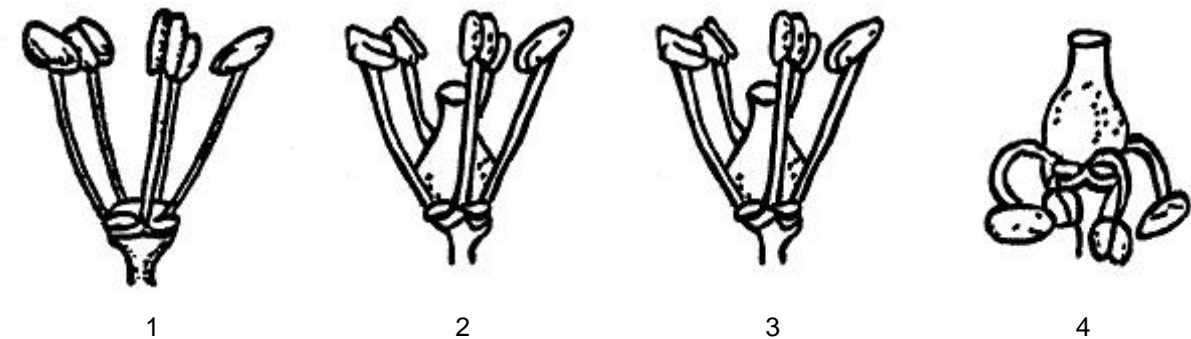
Ad. 12: Shoot: color of dorsal side of nodes

See Ad. 10

Ad. 13: Shoot: color of ventral side of nodes

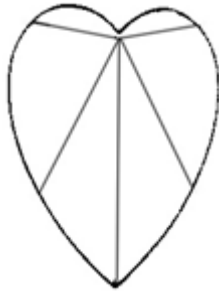
See Ad. 10

Ad. 16: Flower: sexual organs



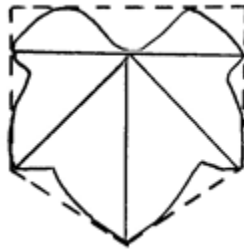
1 fully developed stamens and no gynoecium
2 fully developed stamens and reduced gynoecium
3 fully developed stamens and fully developed gynoecium
4 reflexed stamens and fully developed gynoecium

Ad. 18: Mature leaf: shape of blade



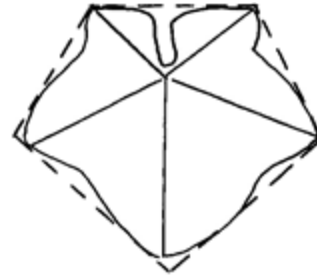
(rounded lateral outline)

1
cordate



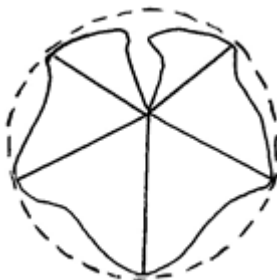
(forms a pentagon with parallel sides)

2
wedge-shaped



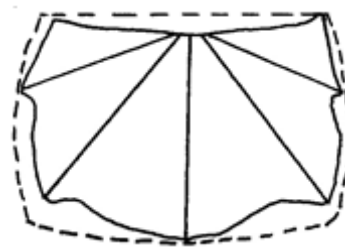
(forms a pentagon with broadest part towards the base)

3
pentagonal



(forms a pentagon with broadest part towards the apex)

4
circular



(broader than long)

5
kidney-shaped

Ad. 20: Mature leaf: number of lobes

A lobe is that part of the leaf which lies between two leaf sinuses. A leaf sinus results from a clear interruption of teeth on the leaf margin. A leaf showing no lateral sinus is considered to consist of one lobe.

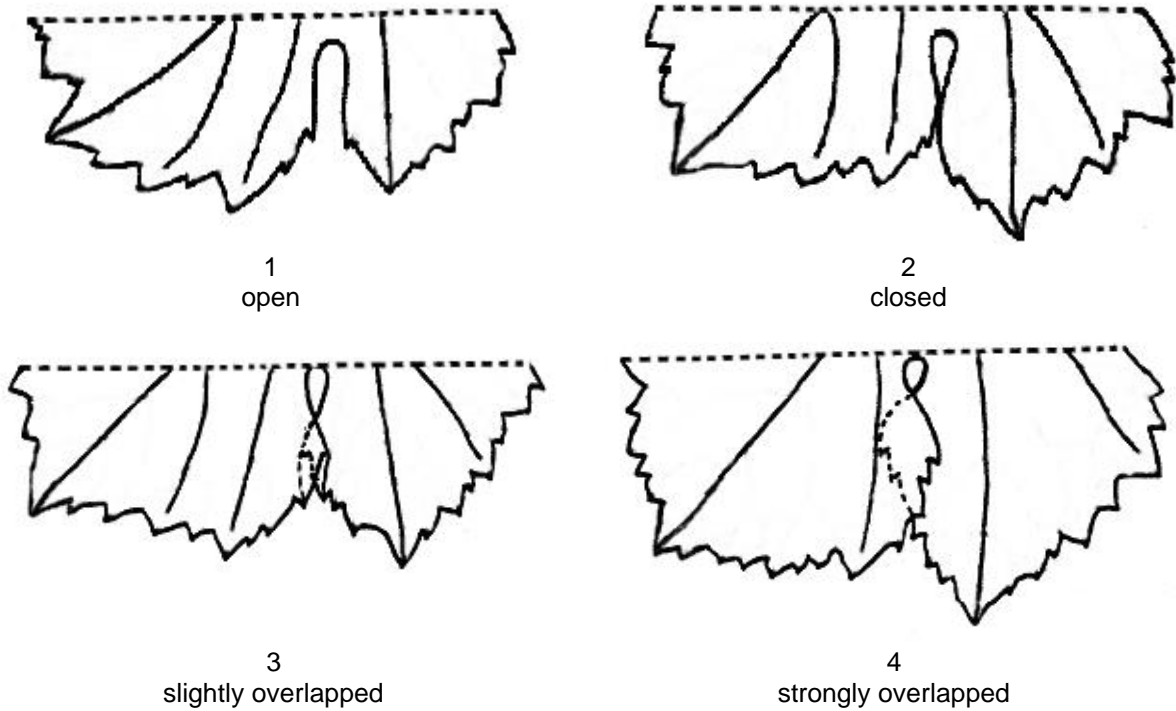
Within the same plant leaves with different number of lobes can appear. The predominant number of lobes has to be observed.

Ad. 21: Mature leaf: depth of upper lateral sinuses

A sinus results from a clear interruption of teeth on the leaf margin. The upper lateral sinuses are situated between the middle vein and the next lateral main vein.

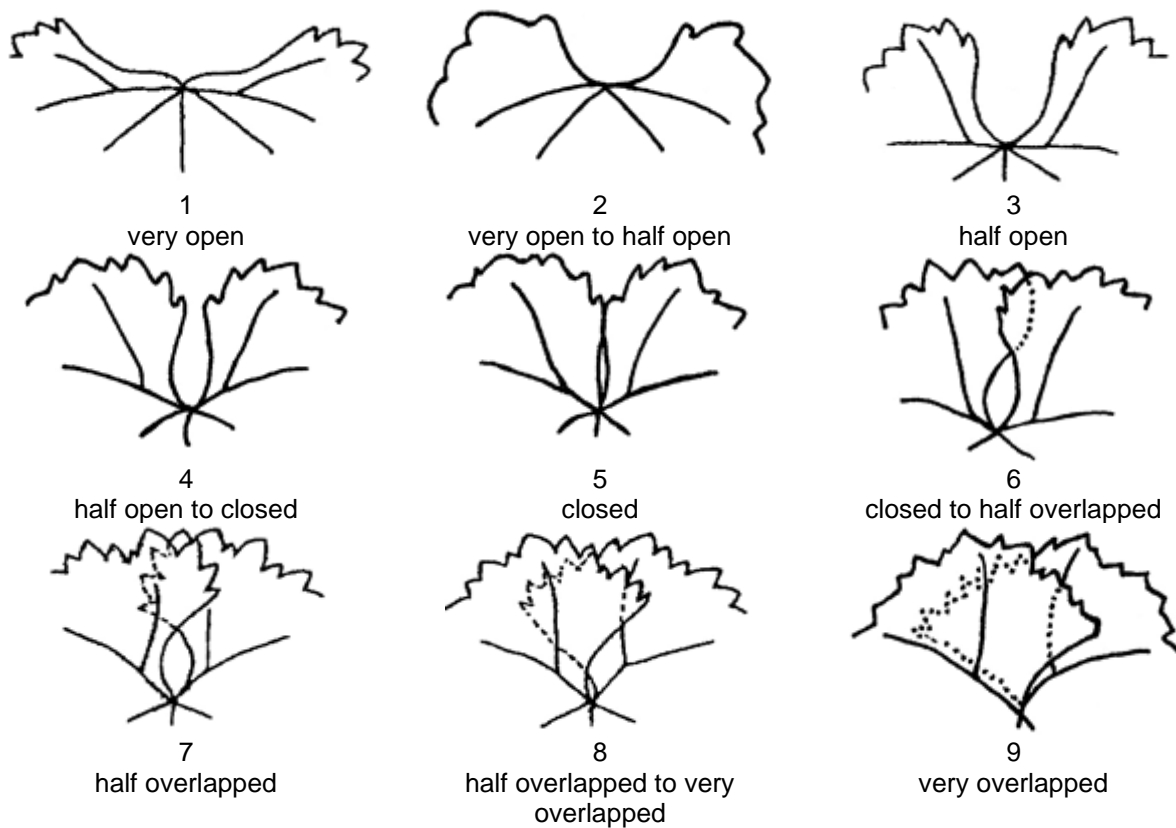
Ad. 22: Only varieties with number of lobes more than one: mature leaf: arrangement of lobes of upper lateral sinuses

See explanation Ad. 20 and Ad. 21.



Ad. 23: Mature leaf: arrangement of lobes of petiole sinus

Leaves must be flattened for notation. Within the same plant leaves with different arrangements of lobes of petiole sinus can appear. The predominant arrangement of lobes has to be observed.



Ad. 24: Mature leaf: length of teeth

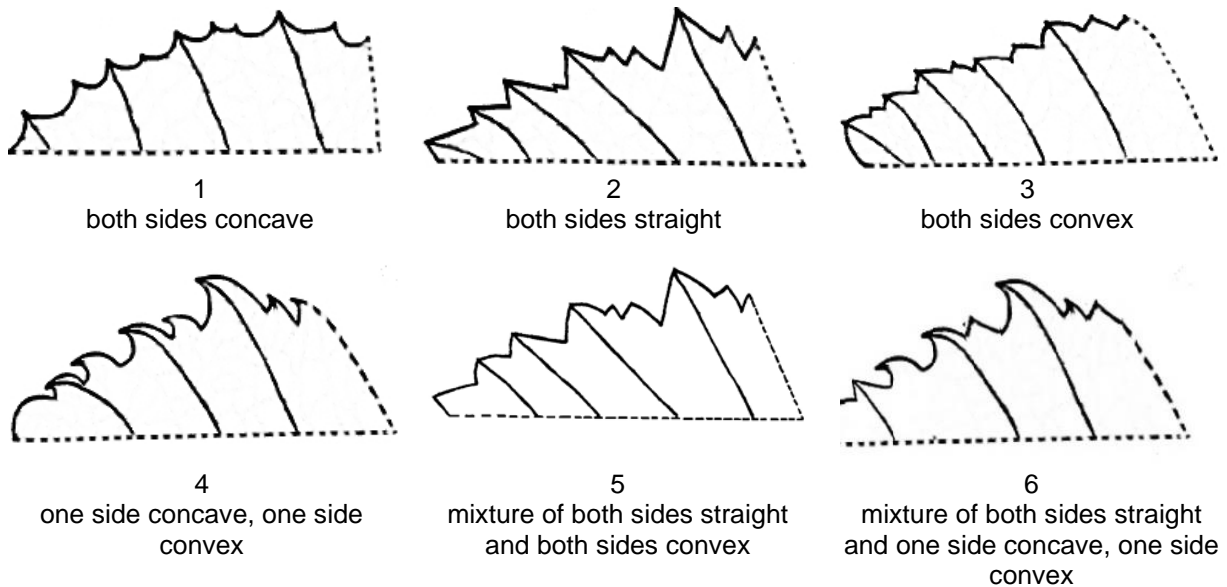
All observations should be made between lateral main veins on the teeth of secondary veins.

Ad. 25: Mature leaf: ratio length/width of teeth

See Ad. 24

Ad. 26: Mature leaf: shape of teeth

See Ad. 24



Ad. 27: Mature leaf: proportion of main veins on upper side of blade with anthocyanin coloration

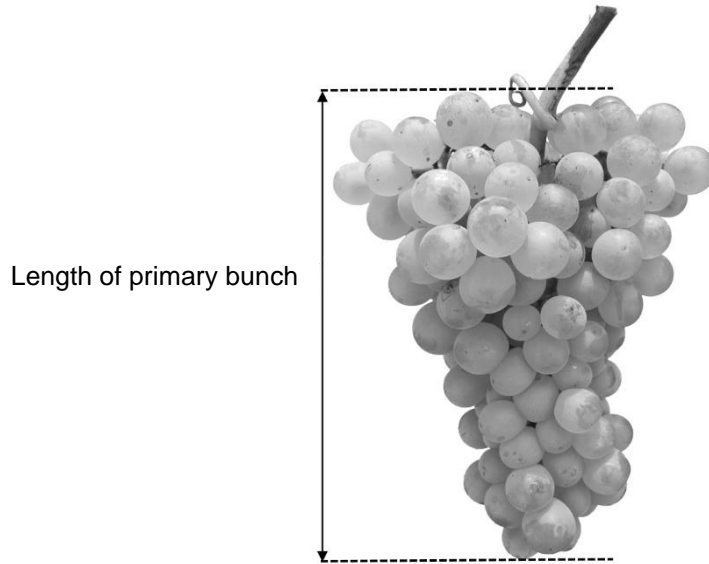
The characteristic should be observed as the proportion of the total length of main veins with anthocyanin coloration. Interruptions in the anthocyanin coloration should not be included in that proportion.

Ad. 30: Time of beginning of berry ripening

To be observed when about 50% of the berries on 50% of the plants start to become soft. Berries will be deformed when lightly pressed between fingers.

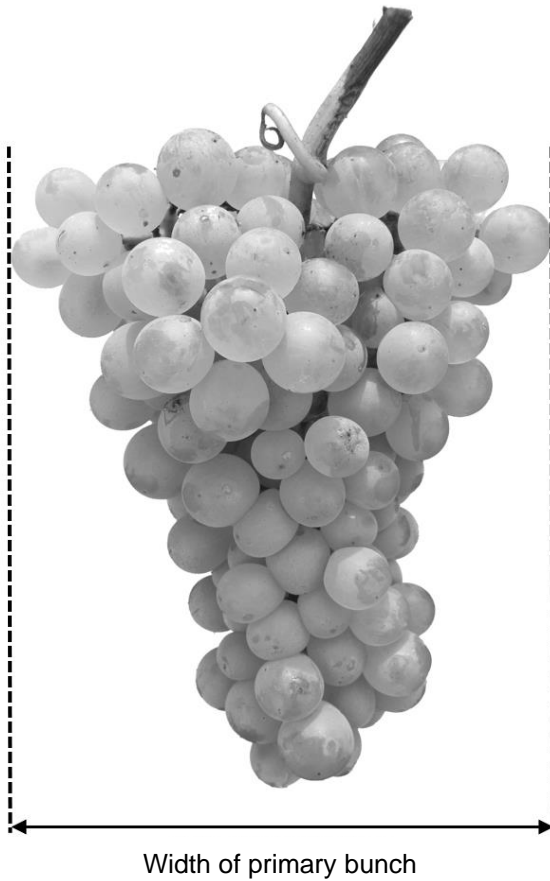
Ad. 31: Bunch: length

Observations should be made excluding the peduncle. To be observed the distance from the uppermost to the lowest berry of the primary bunch.



Ad. 32: Bunch: width

To be observed at the maximum distance between the lateral berries of the primary bunch.

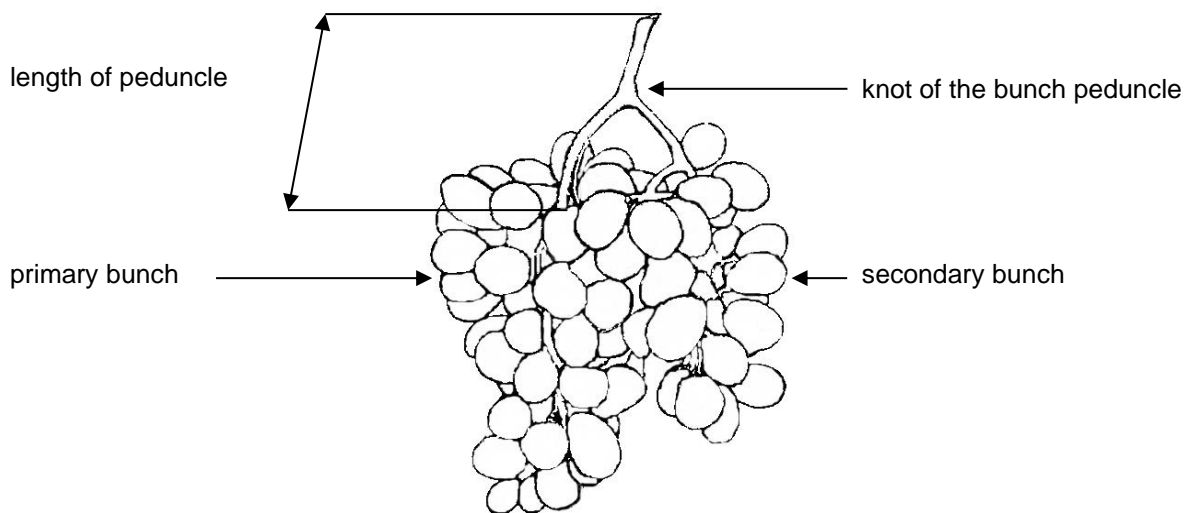


Ad. 33: Bunch: density

- 1 = many berries do not touch each other, most pedicels visible
- 2 = berries in some grouped formations, many pedicels visible
- 3 = many berries in grouped formations, some pedicels visible
- 4 = most berries touching each other, very few pedicels visible
- 5 = densely distributed berries, pedicels not visible, berries movable
- 6 = densely distributed berries, pedicels not visible, some berries movable
- 7 = berries not readily movable
- 8 = many berries pressed out of shape
- 9 = berries pressed out of shape

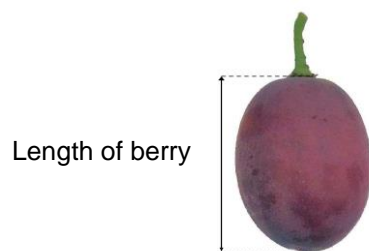
Ad. 34: Bunch: length of peduncle of primary bunch

The distance from insertion point of peduncle on shoot to 1st ramification of primary bunch should be measured. Above the 1st ramification there is a knot like thickening on the peduncle from which a secondary bunch or a tendril may arise which should not be confused with the 1st ramification.



Ad. 35: Berry: length

Observations should be made on berries taken from different bunches of each plant.



Ad. 36: Berry: width

Observations should be made on berries taken from different bunches of each plant.

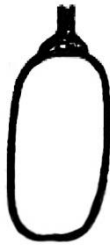


Width of berry

Ad. 37: Berry: shape

		ratio height/diameter				
		low	medium	high		
broadest part	→ above middle		 8 obovoid			 11 waisted obovoid
	← at middle	 1 obloid	 2 globose	 3 broad ellipsoid	 4 narrow ellipsoid	 5 cylindric
	← below middle			 6 broad ovoid	 7 narrow ovoid	 9 horn-shaped 10 finger-shaped

Ad. 38: Berry: presence of a dimple



1
absent



2
present

Ad. 39: Berry: color of skin

Observations should be made on berries of different bunches after removing the bloom.

This characteristic might be light dependent. Observation should be made only on those berries exposed directly to the sun.

Ad. 42: Berry: particular flavor

The state of expression "other" includes any other flavor not clearly referred to in the other states.

Ad. 43: Berry: presence of seeds

1 = no formation of seeds (parthenocarpic, type Corinthe)

2 = seeds with soft seed coat, embryo or endosperm not completely developed (stenospermocarpic)

3 = seeds fully developed

8.3 *Encoding and Description of the Phenological Stages of Grapevine According to the Extended BBCH Scale¹*

BBCH-Code	Description
Principal growth stage	Sprouting/Bud development
0	
00	Dormancy: winter buds pointed to rounded, light or dark brown according to cultivar; bud scales more or less closed according to cultivar
01	Beginning of bud swelling: buds begin to expand inside the bud scales
03	End of bud swelling: buds swollen, but not green
05	“Wool stage”: brown wool clearly visible
07	Beginning of bud burst: green shoot tips just visible
09	Bud burst: green shoot tips clearly visible
Principal growth stage	Leaf development
1	
11	First leaf unfolded and spread away from shoot
12	2 nd leaves unfolded
13	3 rd leaves unfolded
1-	Stages continuous till ...
19	9 or more leaves unfolded
Principal growth stage	Inflorescence emerge
5	
53	Inflorescences clearly visible
55	Inflorescences swelling, flowers closely pressed together
57	Inflorescences fully developed, flowers separating
Principal growth stage	Flowering
6	
60	First flowerhoods detached from the receptacle
61	Beginning of flowering: 10% of flowerhoods fallen
62	20% of flowerhoods fallen
63	Early flowering: 30% of flowerhoods fallen
64	40% of flowerhoods fallen
65	Full flowering: 50% of flowerhoods fallen
66	60% of flowerhoods fallen
67	70% of flowerhoods fallen
68	80% of flowerhood fallen
69	End of flowering
Principal growth stage	Development of fruits
7	
71	Fruit set: young fruits begin to swell, remains of flowers lost
73	Berries goat-sized, bunches begin to hang
75	Berries pea-sized, bunches hang
77	Berries beginning to touch
79	Majority of berries touching
Principal growth stage	Ripening of berries
8	
81	Beginning of ripening: berries begin to develop variety-specific color
83	Berries developing color
85	Softening of berries
89	Berries ripe for harvest
Principal growth stage	Senescence
9	
91	After harvest; end of wood maturation
92	Beginning of leaf discolouration
93	Beginning of leaf-fall
95	50% of leaves fallen
97	End of leaf-fall
99	Harvested product

¹ The code has been jointly developed by *Biologische Bundesanstalt für Land und Forstwirtschaft (BB)*, *Bundessor-tenamt (BSA)* and *Industrieverband Agrar (IVA)* in cooperation with *Staatliche Lehr und Forschungsanstalt für Landwirtschaft, Wein und Gartenbau (SLFA)*, Section Plant Pathology, Neustadt/Weinstraße. Published in Lorenz et al., 1994, and in Meier, 1997 (see Literature).

8.4 *Synonyms and skin color of berry for example varieties*

Example Varieties	Skin color of berry *	Synonyms
1103 Paulsen		
161-49 Couderc	N	
1616 Couderc	N	
3306 Couderc		
3309 Couderc		
99 Richter		
Afus ali	B	
Agiorgitiko	N	
Ahmeur bou Ahmeur	Rs	Flame tokai
Aledo	B	
Alicante Bouschet	N	Garnacha Tintorera
Alphonse Lavallée	N	Ribier
Alvarelhão	N	
Ansonica	B	
Aramon noir	N	
Argentina	Rs	
Autumn royal seedless	N	
Barbera	N	
Black finger	N	
Börner		
Cabernet franc	N	
Cabernet Mitos	N	
Cabernet-Sauvignon	N	Cabernet Sauvignon
Cabertin	N	
Cardinal	Rg	
Carignan	N	Carignano, Cariñena, Mazuela
Centennial seedless	B	
Chardonnay	B	
Chasselas blanc	B	Weisser Gutedel
Chasselas cioutat	B	
Chasselas rose	Rs	Roter Gutedel
Chenin blanc	B	
Cina		
Cinsaut	N	
Clairette	B	
Cornichon blanc	B	
Cot	N	Malbec
Crimson seedless	Rg	
Dabouki	B	
Dalkauer	B	
Deckrot	N	
Dog Ridge	N	
Dolcetto	N	
Dornfelder	N	
Du Lot		Rupestris du Lot
Early muscat	B	
Fercal	N	
Flame seedless	Rg	
Freisa	N	
Furmint	B	
Gamay	N	
Gamay de Bouze	N	
Gamay de Chaudenay	N	
Garganega	B	
Garnacha tinta	N	Grenache noir
Gewurztraminer	Rs	
Gloire de Montpellier		Riparia Gloire de Montpellier
IFG Seven	B	
Isabella	N	
Italia	B	
Itumnine	Rg	
Johanniter	B	
King husainy	B	
Kober 125 AA	N	
Kober 5 BB	N	
Korinthiaki	N	Black Corinth, Corinto nero, Corinthe noir, Corinto negrorinth, Corinto nero, Corinthe noir, Corinto negro

Kyoho	N	
Malvasia dubrovacka	B	Malvasia di Sardegna, Malvasia aromatica, Malvasia candida
Marsanne	B	
Merlot	N	
Meunier	N	Müllerrebe, Pinot meunier
Moscatel rosado	Rs	
Moscato giallo	B	
Mourvèdre	N	Monastrell
Müller Thurgau	B	Rivaner
Muscat à petits grains blancs	B	Gelber Muskateller, Moscatel de grano menudo, Moschato aspro, Muscat blanc
Muscat Hamburg	N	
Muscat of Alexandria	B	Hanepoot, Zibibbo, Moscatel de Alejandría, Moscatel de Málaga, Moscatel romano
Muscat Ottonel	B	
Moscatuel	Rs	
Nehelescol	B	
Nero	N	
Palas	N	
Palomino fino	B	
Perle de Csaba	B	Csaba gyöngye
Perlette	B	
Petit verdot	N	
Pinot gris	G	Grauburgunder, Pinot grigio, Ruländer
Pinot noir	N	Blauer Spätburgunder, Pinot nero, Rulandské sedé
Portugieser blau	N	Blauer Portugieser, Portugais bleu, Modry Portugal
Red globe	Rg	
Riesling weiss	B	Riesling renano, Rheinriesling, Weisser Riesling, Ryzlink rýnský
Rkatsiteli	B	
Rotberger	N	
Ruby seedless	Rg	
Sabalkanskoi	Rg	
Sangiovese	N	
Santa Paula	B	
Sauvignon blanc	B	
Sauvitage	Rs	
Schiava grossa	N	
Semillon	B	
Seyval blanc	B	
Silvaner gruen	B	
Stephanie	B	
Sugraone	B	
Sultanina	B	Sultanine, Thompson seedless
Supernova	Rs	
Syrah	N	
Teleki 8 B		
Tempranillo	N	
Tompa Mihaly	B	Chasselas Michel Tompa, Tompa
Trebbiano toscano	B	Ugni blanc
Vilana	B	
Villaris	Rs	
Viura	B	Macabeo, Macabeu
Welschriesling	B	
Xynisteri	B	

* The color of the berry is indicated according to the standardized code used within the European Union for the classification of vine varieties:

B = white
G = grey
N = black
Rg = red
Rs = rose

9. Literature

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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="Vitis L."/>
1.2	Species (please specify):	<input type="text"/>
1.3	Common name	<input type="text" value="Grapevine"/>
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"/>

#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 variety)
(.....) x (.....)
female parent male parent

(b) partially known cross []
(please state known parent variety(ies))
(.....) x (.....)
female parent male parent

(c) unknown cross []

(d) []

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)	Graftings (please specify rootstock:)	[]
(c)	<i>In vitro</i> propagation	[]
(d)	Other (state method)	[]
	<input type="text"/>	
4.2.2	Other (Please provide details)	[]
	<input type="text"/>	

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
5.1 Young shoot: openness of tip (2)		
closed	Gloire de Montpellier	1 []
slightly open	3309 Couderc	2 []
half open	Kober 5 BB	3 []
wide open	Cina	4 []
fully open	Flame seedless, Pinot noir	5 []
5.2 Young leaf: color of upper side of blade (6)		
yellow green	Furmint, Sultanina	1 []
green	Silvaner gruen	2 []
green with reddish brown speckles	Riesling weiss, Sugraone	3 []
light brownish red	Kober 5 BB	4 []
medium brownish red	Chasselas blanc, Crimson seedless	5 []
dark brownish red	Deckrot	6 []
5.3 Young leaf: density of prostrate hairs between main veins on lower side of blade (7)		
absent or very sparse	Du Lot, Garnacha tinta	1 []
very sparse to sparse	Müller Thurgau	2 []
sparse	Muscat à petits grains blancs, Sugraone	3 []
sparse to medium	Chardonnay, Muscat of Alexandria	4 []
medium	Merlot, Riesling weiss	5 []
medium to dense	Cabernet franc	6 []
dense	Furmint	7 []
dense to very dense	Clairette	8 []
very dense	Meunier	9 []
5.4 Flower: sexual organs (16)		
fully developed stamens and no gynoecium	Du Lot	1 []
fully developed stamens and reduced gynoecium	3309 Couderc	2 []
fully developed stamens and fully developed gynoecium	Chasselas blanc, Flame seedless	3 []
reflexed stamens and fully developed gynoecium	Kober 5 BB, Moscatel rosado	4 []

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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Characteristics	Example Varieties	Note
5.5 Mature leaf: number of lobes (20)		
one	Du Lot	1 []
three	Chenin blanc, Isabella	2 []
five	Chasselas blanc, Sugraone	3 []
seven	Autumn royal seedless, Cabernet-Sauvignon	4 []
more than seven	Centennial seedless, Vilana, Xynisteri	5 []
5.6 Time of beginning of berry ripening (30)		
very early	Perle de Csaba	1 []
very early to early	Flame seedless, Sugraone	2 []
early	Centennial seedless, Kyoho, Pinot noir	3 []
early to medium	Moscatuel	4 []
medium	Riesling weiss, Sultanina	5 []
medium to late	Autumn royal seedless	6 []
late	Alphonse Lavallée, Carignan, Ruby seedless	7 []
late to very late	Ahmeur bou Ahmeur, Italia	8 []
very late	Aledo, Isabella	9 []
5.7 Bunch: density (33)		
very sparse	Nehelescol	1 []
very sparse to sparse	Supernova	2 []
sparse	Cardinal, Red globe	3 []
sparse to medium	Moscatuel	4 []
medium	Chasselas blanc, Flame seedless, Sugraone	5 []
medium to dense	Perlette, Silvaner gruen	6 []
dense	Sauvignon blanc, Sultanina	7 []
dense to very dense	Carignan	8 []
very dense	Chenin blanc, Meunier	9 []

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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Characteristics	Example Varieties	Note
5.8 Berry: shape (37)		
obloid	Flame seedless, Tompa Mihaly	1 []
globose	Chasselas blanc	2 []
broad ellipsoid	Müller Thurgau, Red globe	3 []
narrow ellipsoid	Italia, Sultanina	4 []
cylindric	Afus ali, Sabalkanskoi	5 []
obtuse ovoid	Ahmeur bou Ahmeur	6 []
ovoid	Dabouki	7 []
obovoid	Muscat of Alexandria	8 []
horn-shaped	Cornichon blanc, Santa Paula	9 []
finger-shaped	Black finger	10 []
waisted obovoid	Itumeighteen	11 []
5.9 Berry: color of skin (39)		
green	Afus ali	1 []
yellow green	Chasselas blanc, Sugraone	2 []
yellow	Moscato giallo	3 []
yellow pink	Sauvitage, Villaris	4 []
pink	Chasselas rose	5 []
red	Flame seedless	6 []
grey red	Pinot gris	7 []
dark red violet	Cardinal, Crimson seedless	8 []
blue black	Autumn royal seedless, Kyoho, Pinot noir	9 []
5.10 Berry: anthocyanin coloration of flesh (40)		
absent or very weak	Pinot noir, Red globe	1 []
weak	Autumn royal seedless, Gamay de Bouze	2 []
medium	Gamay de Chaudenay	3 []
strong	Alicante Bouschet	4 []
very strong	Cabernet Mitos	5 []
5.11 Berry: particular flavor (42)		
none	Garnacha tinta, Merlot, Sugraone, Sultanina	1 []
muscat	Early muscat, Muscat of Alexandria	2 []
foxy	Isabella, Kyoho	3 []
herbaceous	Cabernet-Sauvignon	4 []
caramel	IFG Seven	5 []
other	Red globe, Riesling weiss, Sauvignon blanc	6 []

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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Characteristics	Example Varieties	Note
5.12 Berry: presence of seeds (43)		
none	Korinthiaki	1 []
rudimentary	Sultanina	2 []
complete	Cardinal, Kyoho, Riesling weiss	3 []

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 similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>Example</i>	<i>Berry: shape</i>	<i>globose</i>	<i>broad ellipsoid</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 photograph of the variety displaying its main distinguishing feature(s), should accompany the Technical Questionnaire. The photograph will provide a visual illustration of the candidate variety which supplements the information provided in the Technical Questionnaire.

The key points to consider when taking a photograph of the candidate variety are:

- Indication of the date and geographic location
- Correct labeling (breeder's reference)
- Good quality printed photograph (minimum 10 cm x 15 cm) and/or sufficient resolution electronic format version (minimum 960 x 1280 pixels)

Further guidance on providing photographs with the Technical Questionnaire is available in document TGP/7 "Development of Test Guidelines", Guidance Note 35 (<http://www.upov.int/tgp/en/>).

[The link provided may be deleted by members of the Union when developing authorities' own test guidelines.]

Only if the variety is not sensitive to *Daktulosphaira vitifoliae* Fitch the material to be supplied should be in form of plants on their own roots. Additional information on the sensitivity of the variety to this phytophagus should be provided to the Authority.

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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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 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]