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UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

OLIVE

UPOV Code: OLEAA_EUR

Olea europea L.

[*]

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by an expert from South Africa

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

Alternative Names:[*]

Botanical name	*English*	*French*	*German*	*Spanish*
Olea europea L..	Olive (vegetative propagated fruit varieties)			

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 *Olea europaea* L.

2. Material Required

2.1 The competent authorities decide on the quantity and quality of the plant material required for testing the variety and when and where it is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must ensure that all customs formalities and phytosanitary requirements are complied with.

2.2 The material is to be supplied in the form of one-year-old trees preferably on their own roots.

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

5 trees.

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

The minimum duration of tests should normally be two independent growing cycles.

3.2 Testing Place

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

3.3 Conditions for Conducting the Examination

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

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

MG: single measurement of a group of plants or parts of plants
MS: measurement of a number of individual plants or parts of plants
VG: visual assessment by a single observation of a group of plants or parts of plants
VS: visual assessment by observation of individual plants or parts of plants

3.4 Test Design

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 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 parts of plants, the number to be taken from each of the plants should be 5.

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 seed or 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) To be provided

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

MG, MS, VG, VS: see Chapter 3.3.2

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

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

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
1.	**VG**	**Tree: ~~Plant~~: vigor**	Proposed by ZA				
(+)							
QN	**(a)**	weak				Aloreña	3
		medium				Picual	5
		strong				Lechin de Sevilla	7
2.	**VG**	**Tree:~~Plant~~ growth habit ~~attitude of branches~~**	Proposed by ZA	Proposed by ES			
(+)							
PQ	**(a)**	erect				Alameña de Cabra	3
		spreading				Picual	5
		drooping				Morona, Sikitia	7
3.	**VG**	**Tree ~~Plant~~: density of canopy**	Proposed by ZA	Proposed by ES			
(+)							
QN	**(a)**	sparse				Gordal de Granada	3
		medium				Picudo	5
		dense				Lechin de Sevilla	7
4.	**VG**	**Fruiting shoot: color**	Proposed by ZA	Proposed to be deleted ES			
PQ	**(a)**	yellow green				Nandi	1
		greyish green				Lechin de Sevilla	2
		light grey				Hojiblanco	3
5.	**VG/ MS**	**Fruiting shoot: length of internodes**		Proposed to be deleted ES			
QN	**(a)**	short				Aloreña	3
		medium				Hojiblanco	5
		long				Morona	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
6.	**VG/ MG**	**Fruiting shoot: thickness**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(a)**	thin					3
		medium					5
		thick					7
7. old 6	**VG**	**Fruiting shoot: feathers**	Proposed by ZA	Proposed to be deleted ES			
QN	**(a)**	absent or very few				Manzanilla	1
		few				Lechin de Granda	3
		medium					5
		many				Carrasqueñode la Sierra	7
		~~very many~~					~~9~~
8. (*) old 7	**VG**	**Leaf blade: size**	Proposed by ZA	Proposed to be deleted ES			
QN	**(b)**	very small				Lechin de Granada	1
		small				Lechin de Sevilla	3
		medium				Picual	5
		large				Gordal Sevillana	7
		very large				Picudo	9
9.	**MS**	**Leaf blade: length**	New characteristic proposed by ZA		Proposed by ES		
QN	**(b)**	very short					1
		short				Arbequina	3
		medium				Picudo	5
		long				Gordal sevillana	7
		very long					9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
10.	**MS**	**Leaf blade: width**	New characteristic proposed by ZA		Proposed by ES		
	(b)	narrow				Callosina	3
		medium				Hojiblanca	5
		broad				Picudo	7
11. (*) old 8	**VG**	**Leaf blade: ratio length/width**			Proposed to be deleted ES		
PQ	**(b)**	short and narrow				Manzanilla	1
		short and broad				Lechin de Granada	3
		long and narrow				Gordal Sevillana	5
		long and broad				Hojiblanca	7
12. old 9	**VS**	**Leaf blade: shape**			Proposed by ES		
(+)							
PQ	**(b)**	lanceolate				Cornezuelo de Jaen	1 ~~3~~
		elliptic-lanceolate				Picual	2 ~~5~~
		elliptic				Manzanilla de Sevilla	3 ~~7~~
13. old 10	**VS**	**Leaf blade: glossiness**	Proposed by ZA		Proposed to be deleted ES		
QN	**(b)**	inconspicuous ~~absent~~				Galego	1
		conspicuous ~~present~~				Lechin de Granada	2 ~~9~~
14. (*) old 11	**VG**	**Leaf blade: green color of upper side**	Proposed by ZA		Proposed to be deleted ES		
QN	**(b)**	light					1
		medium ~~green~~				Lechin de Sevilla	2
		dark ~~green~~				Gorda de Sevillana	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
15. old 12	**VG**	**Leaf blade: color of lower side**			Proposede to be deleted ES		
PQ	**(b)**	grey-green				Carrasqueño de Alcaudete	1
		green-grey				Lechin de Granada	2
16. old 13	**VG**	**Leaf blade: curvature of longitudinal axis**	Proposed by ZA		Proposed by ES		
PQ	**(b)**	epinastic ~~concave~~				Picual Zarza	1
		flat				Galego	2
		hyponastic ~~convex~~				Zarza Picual	3
		helicoid				Yun Celebi	4
17. old 14	**VG**	**Leaf blade: twisting**			Proposed to be deleted ES		
QN	**(b)**	absent very weak ~~absent~~				Gordal Sevillana	1
		weak ~~present~~				Picudo	3 ~~9~~
		medium					5
		strong					7
18. old 15	**VG**	**Plant: abnormal leaves**	Proposed to be deleted ZA		Proposed to be deleted ES		
PQ	**(b)**	absent				Picual	1
		present				Morona, Picudo	9
19. old 16	**VG**	**Plant: shape of abnormal leaves**	Proposed to be deleted ZA		Proposed to be deleted ES		
PQ	**(b)**	double				Picudo	1
		falsiform				Morona	9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
20. (+)	**VG**	**Inflorescence: length**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(c)**	short					3
		medium					5
		long					5
21. old 17 (+)	**VG**	**Inflorescence: structure**	Proposed to be deleted ZA		Proposed to be deleted ES		
QN	**(c)**	short and compact				Aloreña	1
		short and sparse				Picual	2
		long and compact				Morona	3
		long and sparse				Frantoio	4
22. old 18	**VG**	**Inflorescence: branching**	Proposed to be deleted ZA		Proposed to be deleted ES		
QN	**(c)**	weak					3
		medium					5
		strong					7
23. (+)	**VG**	**Inflorescence: width**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(c)**	very narrow					1
		narrow					3
		medium					5
		broad					7
24. old 19	**VG**	**Inflorescence: axillary flowers**	Proposed to be deleted ZA		Proposed to be deleted ES		
QN	**(c)**	absent				Picual	1
		present				Hojiblanca	9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
25. old 20	**VG**	**Flower: size of the bud (just before opening)**			Proposed to be deleted ES		
QN	**(c)**	small				Verdial de Vélez M	3
		medium				Lechin de Sevilla	5
		large				Gordal Sevillana	7
26. (+)	**VG**	**Flower: attitude of corolla**	New characteristic proposed by ZA				
PQ	**(c)**	semi closed				Giarraffa	1
		open				Carolea	2
		reflexed				Frantoio	3
27. old 21	**VG**	**Fruit: size**			Propose to be deleted ES		
QN	**(d)**	very small					1
		small				Lechin de granada	3
		medium				Carrasqueño de la Sierra	5
		large				Picudo	7
		very large				Gordal Sevillana	9
28.	**MS**	**Fruit length**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(d)**	very short					1
		short					3
		medium					5
		long					7
		very long					9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
29.	**MS**	**Fruit: width in position B**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(d)**	very narrow					1
		narrow					3
		medium					5
		broad					7
		very broad					9
30.	**VG**	**Fruit: ratio length/ width**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(d)**	very low					1
		low					3
		medium					5
		high					7
		very high					9
31.	**MG**	**Fruit: weight**	New characteristic proposed by ES				
QN	**(d)**	low				Lechin de Granada	3
		medium				Carrasqueño de la Sierra	5
		high				Picudo	7
		very high				Gordal Sevillana	9
32.	**VG**	**Immature fruit: green color**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(e)**	light					1
		medium					2
		dark					3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
33.	**VG**	**Immature fruit: size of lenticels**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(e)**	small					3
		medium					5
		large					7
34.	**VG**	**Immature fruit: number of lenticels**	New characteristic proposed by ZA			Example varieties to be provided	
QN		few					3
	(e)	medium					5
		many					7
35. (*) old 22	**VG**	**Fruit: shape in position A**	Proposed by ZA				
PQ	**(d)**	ovate					1
		oblong ~~elongated~~				Cornezuelo de Jaen	2
		elliptic				Lechin de Sevilla	3
		circular ~~globose~~				Manzanilla de Sevilla	4
		obovate					5
36. old23	**VG**	**Fruit: color at full maturity**		Proposed by ES			
PQ	**(d)**	~~dark~~ violet				Verdial de Huevar	1
		black				Picual	2
37. old 24	**VG**	**Fruit: conspicuousness of marbling**	Proposed to be deleted ZA		Proposed to be deleted ES		
QN	**(d)**	weak				Cornezuelo	~~3~~
		medium				Hojiblanca	~~5~~
		strong				Santa Catharina	~~7~~

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
38. old 25	**VG**	**Fruit: symmetry in position A**					
PQ	**(d)**	symmetrical				Manzanilla	1
		weakly asymmetric				Hojiblanca	2
		strongly asymmetric				Picudo	3
39. old 26	**VG**	**Fruit: symmetry in position B**			Proposed to be deleted ES		
PQ	**(d)**	symmetrical				Picual	1
		weakly asymmetric				Gordal Sevillana	2
40. old 27	**VG**	**Fruit: position of maximum diameter**					
PQ	**(d)**	towards base				Gordal Sevillana	1
		central				Morona	2
		towards apex				Verdial de Huevar	3
41. old 28	**VG**	**Fruit: shape of apex in position A**	Proposed by ZA				
PQ	**(d)**	acute ~~pointed~~				Cornezuelo de Jaén	1
		obtuse					2
		rounded				Manzanilla de Sevillana	3
42. old 29	**VG**	**Fruit: shape of apex in position B**	Proposed by ZA				
PQ	**(d)**	acute ~~pointed~~				Picudo	1
		obtuse					2
		rounded				Hojiblanca	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
43. (*) (+) old 30	**VG**	**Fruit: ~~mucron~~ nipple**	**Proposed by ZA**	Proposed by ES			
QL	**(d)**	absent or very weakly expressed				Hojiblanca	1
		~~present~~ tenuous weakly expressed				Limoncillo, Pajarero	~~9~~ 2
		obvious strongly expressed				Limoncillo	3
44. old 31	**VG**	**Fruit; position of pistil scar**			Proposed to be deleted by ES. ZA		
PQ	**(d)**	central				Hojiblanca	1
		not central				Carrasqueño de Alcaudete	2
45. old 32	**VG**	**Fruit: shape of base in position A**			Proposed by ES		
PQ	**(d)**	rounded				Cañivano Negro, Gordal Sevillana	1
		truncate				Manzanilla de Sevilla	2
46. (*) (+) old 33	**VG**	**Fruit: shape of base in position B**	Proposed by ZA		Proposed to be deleted ES		
PQ	**(d)**	rounded				Carrasqueño de Alcaudete	1
		truncate				Manzanilla	2
		cordate ~~depressed~~				Cañivano Negro	3
47. (*) (+) old 34	**VG**	**Fruit: width of stalk cavity**			Proposed to be deleted ES ZA		
QN	**(d)**	narrow				Verdial de Huevar	3
		medium					5
		broad				Cañivano Negro	7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
48. old 35	**VG**	**Fruit: shape of stalk cavity**			Proposed to be deleted ES ZA		
PQ	**(d)**	circular				Hojiblanca	1
		elliptic				Loaime	2
49. old 36	**VG**	**Fruit: depth of stalk cavity**			Proposed to be deleted ES		
QN	**(d)**	shallow				Lechin de Granada	3
		medium				Lechin de Sevilla	5
		deep				Cañivano Negro	7
50. (*) old 37	**VG**	**Fruit: shape in basal view ~~of cross section~~**	Proposed by ZA		Proposed to be deleted ES		
PQ	**(d)**	circular				Lechin de Sevilla	1
		elliptic				Verdial de Huevar	2
51.	**VG**	**Fruit: bloom**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(d)**	weak					3
		medium					5
		strong					7
52.	**VG**	**Fruit flesh: degree of coloring at maturity**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(d)**	absent very weak					1
		weak					3
		medium					5
		strong					7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
53. old 38 (+)	**VG**	**Stone: shape in position A**	Proposed by ZA				
PQ	**(f)**	ovate					1
		elliptic				Carrasqueõno de la Sierra	2
		circular ~~elongated~~				~~Bical~~	3
		obovate				Manzanilla	4
54. old 39 (+)	**VG**	**Stone: shape in position B**	Proposed by ZA	Proposed by ES			
PQ	**(f)**	ovate	**spherical**				1
		oblong ~~elongated~~	**ovoid**		Manzanilla de Sevilla	Cornezuelo	2
		elliptic	**elliptic**		Picual	Hojiblanco	3
		circular	**elongated**		Cornezuelo de Jaen		4
		obovate				Aloreña	5
55. old 40 (+)	**VG**	**Stone: symmetry in position A**	**Proposed by ES**				
PQ	**(f)**	symmetrical				Negrillo	1
		slightly asymmetric				Lechin de Sevilla	2
		strongly asymmetric				Picudo	3
56. old 41 (+)	**VG**	**Stone: symmetry in position B**	**Proposed by ES**				
PQ	**(e)**	symmetrical				Hojiblanca	1
		weakly asymmetric				Lechin de Sevilla	2
		~~strongly asymmetric~~				~~Pajarero~~	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
57. (*) (+) old 42	**VG**	**Stone: shape in basal view ~~cross section~~**			Proposed to be deleted ES		
PQ	**(e)**	circular				Royal	1
		elliptic				Gordal Sevillana	2
58. (*) (+) old 43	**VG**	**Stone: position of maximum diameter ~~cross section~~**	Proposed by ZA		Proposed by ES		
PQ	**(e)**	towards base				Argudell	1
		central				Picual	2
		towards apex				Chorruo, Changlot Real	3
59. (*) old 44	**VG**	**Stone: grooving**			Proposed to be deleted ES		
QN	**(e)**	absent or very weak				Lechin de Granada	1
		weak				Verdial de Huever	3
		medium				Picual	5
		strong					7
		very strong					9
60. old 45 ~~(+)~~	**VG**	**Stone: distribution of grooves**			Proposede to be deleted ES, ZA		
PQ	**(e)**						
		including apex				Lucio	1
		excluding apex				Gordal Sevillana	2
61. (*) old 46	**VG**	**Stone: number of grooves on basal end**					
PQ	**(e)**	less than 7				Bical	1
		between 7 and 10				Picual	2
		more than 10				Manzanilla Prieta	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
62. (*) old 47	**VG**	**Stone: distribution of grooves on basal end**		Proposed by ES			
PQ	**(e)**	regular				Hojiblanca	1
		irregular grouped around the suture				Tomatillo	2
63. (+) old 48	**VG**	**Stone: shape of apex** Proposed by ZA ~~**distal end**~~ **in position A**		Proposed by ES			
PQ	**(e)**	acute ~~pointed~~				Picudo	1
		obtuse					2
		rounded				Chorrúo	3
64. (*) (+) old 49	**VG**	**Stone: shape of apex** Proposed by ZA ~~**distal end**~~ **in position B**			Proposed to be deleted ES		
PQ	**(e)**	acute ~~pointed~~				Picual	1
		obtuse					2
		rounded				Imperial	3
65. old 50 (+)	**VG**	**Stone: mucron**			Proposed to be deleted ES		
QL	**(e)**	absent				Lucio	1
		present				Chorruo	9
66. old 51 (+)	**VG**	**Stone: shape of base in position A**	**Proposed by ZA**	**Proposed by ES**			
PQ	**(e)**	acute ~~pointed~~				Royal, Cornezuelo de Jaen	1
		rounded				Morona	2
		truncate				Tomatillo	3

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
67. old 52 (+)	**VG**	**Stone: shape of base in position B**	**Proposed by ZA**		Proposed to be deleted ES		
PQ	**(e)**	acute ~~pointed~~				Royal	1
		rounded				Morona	2
		truncate				Loaime	3
68. old 53	**VG**	**Stone: prominence of ~~conspicuousness of~~ suture**	Proposed by ZA		Proposed to be deleted ES		
QN	**(e)**	weak				Lechin de Granada	3
		medium				Lechin de Sevilla	5
		strong				Gordal Sevillana	7
69. old 54	**VG**	**Stone: curvature of suture**	Proposed to be deleted by ZA		Proposed to be deleted ES		
QN	**(e)**	absent				Ocal	1
		present				Cornezuelo	9
70.	**VG**	**Stone: texture of surface**	New characteristic proposed by ZA	Proposed by ES		Example varieties to be provided	
PQ	**(e)**	smooth				Lechin de Sevilla	1
		rugose				Manzanilla de Cacereña	2
		scabrous				Bodoquera	3
71. old 55	**VG**	**Stone: size**			Proposed to be deleted ES		
QN	**(e)**	small				Lechin de Granada	3
		medium				Aloreña	5
		large				Gordal Sevillana	7
72.	**MS**	**Stone length**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(e)**	short					3
		medium					5
		long					7

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
73.	**MS**	**Stone: width in position B**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(e)**	narrow					3
		medium					5
		broad					7
74.	**VG**	**Stone: ratio length/ width**	New characteristic proposed by ZA			Example varieties to be provided	
QN	**(e)**	low					3
		medium					5
		high					7
75.	**MG**	**Stone weight**	**New characteristic proposed by ES**				
QN	**(e)**	low				Arbequina	1
		medium				Imperial	3
		high				Picudo	5
		very high				Gordal Sevillana	7
76. old 56	**VG**	**Time of flowering**			Proposed to be deleted ES		
QN	**(c)**	early				Gordal Sevillana	
		medium				Picual	
		late				Lechin de Granada	
77. old 57	**VG**	**Time of ripening**	Proposed by ZA		Proposed to be deleted ES		
QN	**(d)**	very early					1
		early				Picual	3
		medium				Gordal Sevillana	5
		late				Hojiblanca	7
		very late				Don Carlo	9

		English	français	deutsch	español	Example Varieties/ Exemples/ Beispielssorten/ Variedades ejemplo	Note/ Nota
78. old 58	**VG**	**Fruit: oil content**			Proposed to be deleted ES		
QN		low				Hojiblanca	3
		medium				Lechin de Sevilla	5
		high				Picual	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, Fruiting shoot: All observations on the plant and fruiting shoot should be made on 25 fruiting branches distributed over the trees.

(b) Leaf blade: All observations on the leaf blade should be made on fully developed leaves from the central part of branches in full growth and should comprise of 25~~100~~ leaves, 5 ~~25~~ from each cardinal point.

(c) Inflorescence: All observations of the inflorescence should be made on 25 ~~50~~ inflorescences (stage of Colbrant and Fabré) from the central part of fruiting branches equally distributed over the trees.

(d) Fruit: All observations on the fruit should be made on 25 ~~50~~ fully ripened fruits. Time of ripening is when 80% of the fruit on the tree has colored. For the fruit two positions (A and B) are used. Position A is the position in which the organ shows its largest asymmetry. Position B is reached from position A by turning by 90º along the longitudinal axis in a way to present the most developed part of the organ to the observer.

(e) Immature fruit: All observations of the immature fruit should be done when 10% of the fruit on the tree has colored

(f) Stone: All observations on the stone should be made on dry well-cleaned stones of the same sample used for the observations on the fruit. For the stone two positions (A and B) are used. Position A is the position in which the organ shows its largest asymmetry. Position B is reached from position A by turning by 90º along the longitudinal axis in a way to present the most developed part of the organ to the observer.

8.2 Explanations for individual characteristics

Ad. 1: Tree ~~Plant~~: vigor

The tree vigor should be considered as the overall abundance of vegetative growth which includes the development of the canopy in both height and volume.

Ad. 2: Tree ~~Plant~~ growth habit ~~attitude of branches~~

The tree growth habit states the natural attitude of the branches and shoots.

Ad. 3: Tree ~~Plant:~~ density of canopy

The plant density refers to the overall abundance of canopy vegetation. The following measures should be taken into account, length of internode, number and vigor of the shoots and the size of the leaves.

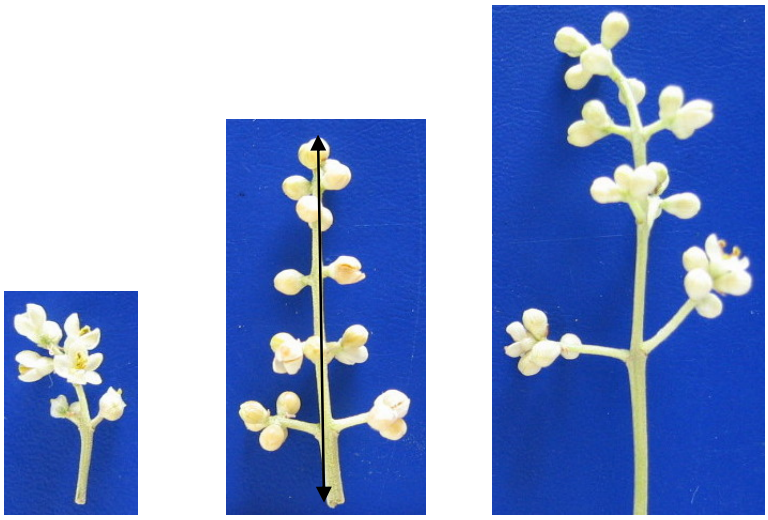
Ad. 12: Leaf blade: shape

1
lanceolate

2
elliptic-lanceolate

3
elliptic

Ad. 20: Inflorescence: length



3
short

5
medium

7
long

Ad. 21: Inflorescence: structure

TO BE PROVIDED

Ad. 23: Inflorescence: width

1
very narrow

3
narrow

5
medium

7
broad

Ad. 26: Flower: attitude of corolla

1
semi closed

2
open

3
reflexed

Ad. 43: Fruit: ~~mucron~~ nipple

1
absent

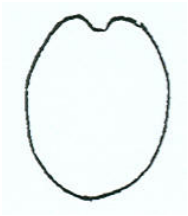
9
present

[To be updated]

Ad. 46: Fruit: shape of base in position B

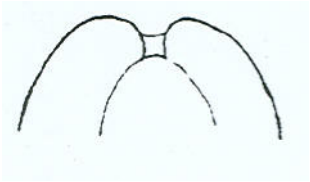
1
rounded

2
truncate

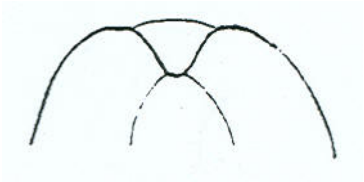


3
cordate ~~depressed~~

Ad. 47: Fruit: width of stalk cavity



3
narrow



7
broad

Ad. 53: Stone: shape in position A
Ad. 54: Stone: shape in position B

1
ovate

2
elliptic

3
circular

4
obovate

Ad. 55: Stone symmetry in position A
Ad. 56: Stone symmetry in position B

1
symmetrical

2
weakly
asymmetric

3
strongly
asymmetric

Ad. 57: Stone: shape in basal view

1
circular

2
elliptic

Ad. 58: Stone: position of maximum diameter

1
towards base

2
central

3
towards apex

Ad. 63: Stone: shape of apex ~~distal end~~ in position A
Ad. 64: Stone: shape of apex ~~distal end~~ in position B

1
acute

2
obtuse

3
rounded

Ad. 65: Stone: mucron

1
absent

9
present

Ad. 66: Stone: shape of base in position A
Ad. 67: Stone: shape of base in position B

1
acute

2
rounded

3
truncate

9. Literature

To be provided

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	*Olea europaea* L.
1.2 Common name	Olive (vegetative propagated fruit varieties)

2. Applicant

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

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	
Breeder's reference	

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

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

4.1 Breeding scheme

Variety resulting from:

4.1.1 Crossing

(a) controlled cross [ ]
(please state parent varieties)
(b) partially known cross [ ]
(please state known parent variety(ies))
(c) unknown cross [ ]

4.1.2 Mutation [ ]
(please state parent variety)

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

4.1.4 Other [ ]
(please provide details)

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) cuttings [ ]

(b) *in vitro* propagation [ ]

(c) other (state method) [ ]

4.2.2 Seed [ ]

4.2.3 Other [ ]
(please provide details)

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

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

5. Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds).

	Characteristics	Example Varieties	Note
5.1 (35) old(22)	**Fruit: shape in position A**		
	ovate		1[ ]
	oblong ~~elongated~~	Cornezuelo de Jean	2[ ]
	elliptic	Lechin de Sevilla	3[ ]
	circular ~~globose~~	Manzanilla de Sevilla	4[ ]
	obovate		5[ ]
5.2 (43) old (30)	**Fruit: ~~mucron~~ nipple**		
	absent or very weakly expressed	Hojiblanca	1[ ]
	~~present~~ tenuous weakly expressed	Limoncillo, Pajarero	~~9~~ 2[ ]
	obvious strongly expressed	Limoncillo	3[ ]
5.3 (46) old 33	**Fruit: shape of base in position B**		
	rounded	Carrasqueño de Alcaudete	1[ ]
	truncate	Manzanilla	2[ ]
	cordate ~~depressed~~	Cañivano Negro	3[ ]
5.4 (47) old 34	**Fruit: width of stalk cavity**		
	narrow	Verdial de Huevar	3[ ]
	medium		5[ ]
	broad	Cañivano Negro	7[ ]

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

6. Similar varieties and differences from these varieties

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

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the **similar** variety(ies)	Describe the expression of the characteristic(s) for **your** candidate variety
Example	*Fruit: color*	*orange red*	*orange*

Comments:

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

[#]7. Additional information which may help in the examination of the variety

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

Yes [ ] No [ ]

(If yes, please provide details)

7.2 What is this variety used for?

Fruit [ ] Ornamental [ ]

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

Yes [ ] No [ ]

(If yes, please provide details)

7.4 Other information

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

8. Authorization for release

(a) Does the variety require prior authorization for release under legislation concerning the protection of the environment, human and animal health?

Yes [ ] No [ ]

(b) Has such authorization been obtained?

Yes [ ] No [ ]

If the answer to (b) is yes, please attach a copy of the authorization.

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

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

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

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

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

(a) Microorganisms (e.g. virus, bacteria, phytoplasma) Yes [ ] No [ ]

(b) Chemical treatment (e.g. growth retardant, pesticide) Yes [ ] No [ ]

(c) Tissue culture Yes [ ] No [ ]

(d) Other factors Yes [ ] No [ ]

Please provide details for where you have indicated “yes”.

……

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

Yes [ ]

(please provide details as specified by the Authority)

No [ ]

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

Applicant’s name

Signature Date

[End of document]