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DES OBTENTIONS
VÉGÉTALES

INTERNATIONALER
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UNIÓN INTERNACIONAL
PARA LA PROTECCIÓN
DE LAS OBTENCIONES
VEGETALES

DRAFT

**GUIDELINES
FOR THE CONDUCT OF TESTS
FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

TOBACCO
(Nicotiana tabacum L.)

These Guidelines should be read in conjunction with document TG/1/2, which contains explanatory notes on the general principles on which the Guidelines have been established.

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I. Subject of these Guidelines

These Test Guidelines apply to all varieties of *Nicotiana tabacum* L.

II. Material Required

1. The competent authorities decide when, where and in what quantity and quality the plant material required for testing the variety is to be delivered. Applicants submitting material from a State other than that in which the testing takes place must make sure that all customs formalities are complied with. As a minimum, the following quantity of plant material is recommended:

2 g.

The seed should at least meet the minimum requirements for germination capacity, moisture content and purity as required for tobacco production in the country in which the application is made.

2. The plant material must not have undergone any treatment unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

III. Conduct of Tests

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

2. The tests should normally be conducted at one place. If any important characteristics of the variety cannot be seen at that place, the variety may be tested at an additional place.

3. The field tests should be carried out under conditions ensuring normal growth. The size of the plots should be such that plants or parts of plants may be removed for measurement and counting without prejudice to the observations which must be made up to the end of the growing period. As a minimum each test should include a total of at least 40 plants in two or more replicates. Separate plots for observation and for measuring should only be used if they have been subject to similar environmental conditions.

4. Additional tests may be established, especially with respect to the classification of tobacco.

IV. Methods and Observations

1. All observations for the assessment of distinctness and stability should be made on the plot as a whole. In the case of measured characteristics, observations should be made on at least 20 plants or parts taken from each of the 20 plants.

2. For the assessment of uniformity a population standard of 1% with an acceptance probability of at least 95% should be applied. In the case of a sample size of 40 plants, the maximum number of off types allowed would be 2.
3. All observations on the plant should be made after the beginning of flowering when the leaves in the middle third of the main stem are fully expanded.
4. All observations on the leaf should be made after the beginning of flowering on the largest fully-developed leaf in the middle third of the main stem, excluding the inflorescence.
5. All observations on flowers should be made on the main inflorescence on fully open flowers at flowering time.
6. All observations on the inflorescence should be made on the main inflorescence at full flowering time.
7. Suckers are excluded from observations except for characteristics related to the suckers themselves.

V. Grouping of Varieties

1. The collection of varieties to be grown should be divided into groups to facilitate the assessment of distinctness. Characteristics which are suitable for grouping purposes are those which are known from experience not to vary, or to vary only slightly, within a variety. Their various states of expression should be fairly evenly distributed throughout the collection.
2. It is recommended that the competent authorities use the following characteristics for grouping varieties:
 - (a) Plant: height of main stem (including inflorescence) (characteristic 2)
 - (b) Plant: number of leaves (characteristic 4)
 - (c) Leaf: shape of blade (characteristic 11)
 - (d) Leaf: color of midrib on lower side (characteristic 13)
 - (e) Time of flowering (50% of plants with at least one corolla open) (characteristic 23)
 - (f) Flower: color of corolla (characteristic 29)
 - (g) Flower: development of stamens (characteristic 30)

VI. Characteristics and Symbols

1. To assess distinctness, uniformity and stability, the characteristics and their states as given in the Table of Characteristics should be used. Two Tables of Characteristics are provided with different sets of example varieties:

- a) Table of Characteristics containing example varieties provided by Greece;
- b) Table of Characteristics containing example varieties provided by Brazil. In this set of example varieties, for certain characteristics, different example varieties, separated by a semicolon, are indicated for Burley type and for Virginia Flue Cured type. Where Virginia Flue Cured type varieties are indicated they follow the semicolon.

2. Notes (numbers), for the purposes of electronic data processing, are given opposite the states of expression for each characteristic.

3. Legend

(*) Characteristics that should be used on all varieties in every growing period over which examinations are made and always be included in the variety descriptions, except when the state of expression of a preceding characteristic or regional environmental conditions render this impossible.

(+) See Explanations on the Table of Characteristics in Chapter VIII.

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

Example varieties provided by Greece/variétés exemples proposés par la Grèce/ von Griechenland vorgeschlagene Beispielsorten/variedades ejemplo propuestas por Grecia

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
1. Plant: shape	Plante: forme	Pflanze: Form	Planta: forma		
(+)					
conical	conique	kegelförmig	cónica	Katerini 53	1
cylindrical	cylindrique	zylindrisch	cilíndrica	Tsembeli Agriniou 21	2
elliptical	elliptique	elliptisch	elipsoide		3
inverted conical	conique déprimé	verkehrt kegelförmig	de cono invertido		4
2. Plant: height of main stem (including inflorescence)	Plante: hauteur de la tige principale (y compris l'inflorescence)	Pflanze: Höhe des Haupttriebes (einschließlich Blütenstand)	Planta: altura del tallo principal (incluida la inflorescencia)		
very short	très basse	sehr niedrig	muy corto	Tsembeli Agriniou 21	1
short	basse	niedrig	corto	Xathi 81	3
medium	moyenne	mittel	mediano	Zihna Pageou	5
tall	haute	hoch	largo	Virginia Hellas 9	7
very tall	très haute	sehr hoch	muy largo	Burley 21E	9
3. Plant: color of main stem	Plante: couleur de la tige principale	Pflanze: Farbe des Haupttriebes	Planta: color del tallo principal		
white green	vert blanchâtre	weißgrün	verde blanquecino	Burley 21E	1
light green	vert clair	hellgrün	verde claro	Ptolemaida 63, Kontoula Zagliveriou Z	2
green	vert	grün	verde	Xanthi 2A, Katerini 53	3
dark green	vert foncé	dunkelgrün	verde oscuro	Sampsous 79, Doxato	4

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
4. Plant: number of leaves (*)	Plante: nombre de feuilles	Pflanze: Anzahl Blätter	Planta: número de hojas		
very few	très petit	sehr gering	muy bajo	Mavros Ipatis	1
few	petit	gering	bajo	Mirodato Agriniou 13B, Niki	3
medium	moyen	mittel	medio	Doxato	5
many	grand	groß	alto	Zihna Pageou	7
very many	très grand	sehr groß	muy alto	Sampsous 79	9
5. Plant: tendency to produce suckers	Plante: tendance à drageonner	Pflanze: Neigung zur Bildung von Seitentrieben	Planta: tendencia a producir chupones		
absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Xanthi 2A	1
weak	faible	gering	débil		3
medium	moyenne	mittel	media		5
strong	forte	stark	fuerte		7
very strong	très forte	sehr stark	muy fuerte		9
6. Leaf: type (+)	Feuille: type	Blatt: Typ	Hoja: tipo		
sessile	sessile	ungestielt	sésil	Virginia Hellas 9, Xanthi 2A	1
petiolate	pétiolée	gestielt	peciolada	Katerini 53 Mirodato Agriniou 13B	2
7. Leaf: angle of insertion (*) (+)	Feuille: angle d'insertion	Blatt: Ansatzwinkel	Hoja: ángulo de inserción		
very acute	très aigu	sehr spitz	muy agudo	Xanthi 2A	1
moderately acute	modérément aigu	mäßig spitz	moderadamente agudo	Mirodato Agriniou 13B	2
right angle	droit	rechtwinklig	ángulo recto		3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
8. (*)	Leaf: length of blade (excluding auricles)	Feuille: longueur du limbe (à l'exclusion des oreillettes)	Blatt: Länge der Spreite (Blattöhrchen ausgenommen)	Hoja: longitud del limbo (excluyendo las aurículas)	
very short	très court	sehr kurz	muy corto	Xanthi 2A	1
short	court	kurz	corto	Kontoula Zagliveriou	3
medium	moyen	mittel	medio	Argiroudis 14/A	5
long	long	lang	largo		7
very long	très long	sehr lang	muy largo	Burley 21 E Virginia Hellas 9	9
9. (*)	Leaf: width of blade	Feuille: largeur du limbe	Blatt: Breite der Spreite	Hoja: anchura del limbo	
very narrow	très étroit	sehr schmal	muy estrecho		1
narrow	étroit	schmal	estrecho		3
medium	moyen	mittel	medio		5
wide	large	breit	ancho		7
very wide	très large	sehr breit	muy ancho		9
10. (*)	Leaf blade: ratio length/width (excluding auricles)	Limbe: rapport longueur/largeur (à l'exclusion des oreillettes)	Blattspreite: Verhältnis Länge/Breite (Blattöhrchen ausgenommen)	Limbo: relación longitud /anchura (excluyendo las aurículas)	
very small	très petit	sehr klein	muy pequeño		1
small	petit	klein	pequeño	Katerini 53	3
medium	moyen	mittel	medio	Sampsous 79	5
large	grand	groß	grande	Tsempeli Agriniou 21	7
very large	très grand	sehr groß	muy grande		9

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
11. Leaf: shape of blade (*) (+)	Feuille: forme du limbe	Blatt: Form der Spreite	Hoja: forma del limbo		
lanceolate	lancéolé	lanzettlich	lanceolada	Tsempeli Agriniou 21	1
narrow elliptic	elliptique étroit	schmal elliptisch	elíptica estrecha	Virginia Hellas 9	2
broad elliptic	elliptique large	breit elliptisch	elíptica ancha	Xanthi 101	3
ovate	ové	eiförmig	oval		4
obovate	obovale	verkehrt eiförmig	oboval		5
cordate	cordé	herzförmig	cordiforme	Katerini 53	6
rounded	arrondi	rund	redondeada		7
12. Leaf: color of blade (*)	Feuille: couleur du limbe	Blatt: Farbe der Blattspreite	Hoja: color del limbo		
yellow green	vert jaune	gelbgrün	verde amarillento	Ptolemaida 63	1
white green	vert blanc	weißgrün	verde blanquecino	Burley 21E	2
light green	vert clair	hellgrün	verde claro	Kontoula Zagliveriou	3
medium green	vert moyen	mittelgrün	verde medio	Xanthi 2A	4
dark green	vert foncé	dunkelgrün	verde oscuro		5
13. Leaf: color of midrib on lower side (*)	Feuille: couleur de la nervure médiane sur la face intérieure	Blatt: Farbe der Mittelrippe an der Unterseite	Hoja: color de la nervadura central del envés		
whitish	blanchâtre	weißlich	blanquecina		1
whitish green	vert blanchâtre	weißlichgrün	verde blanquecina		2
green	verte	grün	verde		3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14. Leaf: shape of tip (+)	Feuille: forme du sommet	Blatt: Form der Spitze	Hoja: forma del ápice		
obtuse	obtus	stumpf	obtuso		1
slightly pointed	légèrement pointu	leicht spitz	ligeramente puntiagudo	Xanthi 2A	3
medium pointed	moyennement pointu	mittel spitz	medianamente puntiagudo	Niki, Ptolemaida 63	5
strongly pointed	fortement pointu	stark spitz	fuertemente puntiagudo	Tsembeli Agriniou 21	7
very strongly pointed	très fortement pointu	sehr stark spitz	muy fuertemente puntiagudo		9
15. Leaf: blistering of blade	Feuille: cloquûre du limbe	Blatt: Blasigkeit der Spreite	Hoja: abullonado del limbo		
absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil	Tsempeli Agriniou 21	1
weak	faible	gering	débil	Peonia 82	3
medium	moyenne	mittel	medio		5
strong	forte	stark	fuerte	Klio, Xanthi 2A	7
very strong	très forte	sehr stark	muy fuerte		9
16. Leaf: undulations of margin	Feuille: ondulations du bord	Blatt: Randwellungen	Hoja: ondulación del borde		
absent or very weak	absentes ou très faibles	fehlend oder sehr gering	ausente o muy débil	Tsempereli Agriniou 21	1
weak	faibles	gering	débil		3
medium	moyennes	mittel	media		5
strong	fortes	stark	fuerte	Xanthi 2A	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
17. Leaf: auricles (sessile types only) (+)	Feuille: oreillettes (seulement pour les types sessiles)	Blatt: Öhrchen (nur ungestielte Typen)	Hoja: aurículas (sólo para los tipos sésiles)		
absent or very weak	absentes ou très faibles	fehlend oder sehr schwach	ausentes o muy débiles		1
weak	faibles	schwach	débiles		3
medium	moyennes	mittel	medianas		5
strong	fortes	stark	fuertes		7
very strong	très fortes	sehr stark	muy fuertes		9
18. Leaf: shape in cross section (+)	Feuille: forme à l'intersection	Blatt: Form im Querschnitt	Hoja: forma en sección transversal		
concave	concave	konkav	cóncava		1
flat	plate	eben	plana		2
convex	convexe	konvex	convexa		3
19. Leaf: longitudinal profile (+)	Feuille: profil longitudinal	Blatt: Längsprofil	Hoja: perfil longitudinal		
straight	droit	gerade	recto		1
slightly recurved	légèrement incurvé	schwach gebogen	ligeramente recurvado		3
moderately recurved	modérément incurvé	mittel gebogen	moderadamente recurvado		5
strongly recurved	fortement incurvé	stark gebogen	fuertemente recurvado		7
20. Leaf: width of blade at basis (sessile types only) (+)	Feuille: largeur du limbe à la base (seulement pour les types sessiles)	Blatt: Breite der Spreite an der Basis (nur ungestielte Typen)	Hoja: anchura de la base del limbo (sólo para tipos sésiles)		
very narrow	très étroit	sehr schmal	muy estrecha		1
narrow	étroit	schmal	estrecha	Argiroudis 14 A	3
medium	moyen	mittel	media	Xanthi 81	5
broad	large	breit	ancha	Karatzova	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
21. Leaf: thickness of veins (excluding midrib)	Feuille: épaisseur des nervures (excepté nervure médiane)	Blatt: Dicke der Adern (ohne Mittelrippe)	Hoja: grosor de los nervios (excluida la nervadura central)		
thin	fines	dünn	delgados		3
medium	moyennes	mittel	medianos		5
thick	épaisses	dick	gruesos		7
22. Leaf: angle of lateral veins to midrib (+)	Feuille: angle des nervures latérales avec la nervure médiane	Blatt: Winkel der Seitenadern zur Mittelrippe	Hoja: ángulo de los nervios laterales con el nervio central		
very acute	très aigu	sehr spitz	muy agudo		1
moderately acute	moyennement aigu	mittel spitz	moderadamente agudo		2
right angle	droit	rechtwinklig	ángulo recto		3
23. Time of flowering (50% of plants with at least one corolla open)	Époque de floraison (50% des plantes avec au moins une corolle ouverte)	Blühzeitpunkt (50% der Pflanzen zeigen wenigstens eine offene Krone)	Época de floración (50% de las plantas con al menos una corola abierta)		
very early	très précoce	sehr früh	muy temprana	Mavros Ipatis	1
early	précoce	früh	temprana	Xanthi 2A	3
medium	moyenne	mittel	media	Doxato	5
late	tardive	spät	tardía		7
very late	très tardive	sehr spät	muy tardía	Kontoula Zagliveriou	9
24. Flower: length (*) (+)	Fleur: longueur (sans le pédoncule)	Blüte: Länge (ohne Blütenstandstiel)	Flor: longitud (excluido el pedúnculo)		
short	courte	kurz	corta	Xanthi 81	3
medium	moyenne	mittel	media	Katerini 53	5
long	longue	lang	larga	Mavros Ipatis	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
25. Flower: diameter of tube (just above calyx) (+)	Fleur: diamètre du tube (juste au-dessus du calice)	Blüte: Durchmesser der Röhre (unmittelbar über dem Kelch)	Flor: diámetro del tubo (justo por encima del cáliz)		
small	petit	klein	pequeño		3
medium	moyen	mittel	mediano		5
large	large	groß	grande		7
26. Flower: swelling of tube	Fleur: renflement du tube	Blüte: Verdickung der Röhre	Flor: engrosamiento del tubo		
weak	faible	gering	débil		3
medium	moyen	mittel	medio		5
strong	fort	stark	fuerte		7
27. Flower: size of corolla (+)	Fleur: taille de la corolle	Blüte: Größe der Krone	Flor: tamaño de la corola		
small	petite	klein	pequeña		3
medium	moyenne	mittel	mediana		5
large	grande	groß	grande		7
28. Flower: expression of tips of corolla (+)	Fleur: expression des pointes de la corolle	Blüte: Ausprägung der Kronenspitzen	Flor: expresión de los ápices de la corola		
absent or very weak	absentes ou très faibles	fehlend oder sehr gering	ausentes o muy débiles	Elassona 26	1
weak	faibles	gering	débiles		3
medium	moyennes	mittel	medianos		5
strong	fortes	stark	fuertes		7
very strong	très fortes	sehr stark	muy fuertes	Xanthi 81	9

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
29. Flower: color of corolla (*)	Fleur: couleur de la corolle	Blüte: Farbe der Krone	Flor: color de la corola		
white	blanche	weiß	blanco		1
light pink	rose clair	hellrosa	rosa claro	Xanthi 2A	2
medium pink	rose moyen	mittelrosa	rosa medio		3
dark pink	rose foncé	dunkelrosa	rosa fuerte	Katerini 53	4
red	rouge	rot	rojo		5
30. Flower: development of stamens (*)	Fleur: développement des étamines	Blüte: Ausbildung von Staubblättern	Flor: desarrollo de los estambres		
none or rudimentary	nul ou rudimentaire	keine oder rudimentär	ninguno o rudimentario	Poroia 52	1
full	complet	vollständig	pleno	Xanthi 2A	2
31. Flower: length of pistil relative to stamens (varieties with fully developed stamens only) (*)	Fleur: longueur du pistil par rapport aux étamines (seulement pour les variétés à développement complet des étamines)	Blüte: Länge des Stempels im Verhältnis zu den Staubblättern (nur Sorten mit vollentwickelten Staubblättern)	Flor: longitud del pistilo en relación con los estambres (sólo para variedades con estambres plenamente desarrollados)		
shorter	plus court	kürzer	más corto	Argiroudis 14 A	1
same length	égal	gleich lang	de igual longitud	Xanthi 2A	2
longer	plus long	länger	más largo	Argous Prossimni	3
32. Inflorescence: shape (+)	Inflorescence: forme	Blütenstand: Form	Inflorescencia: forma		
spherical	sphérique	kugelförmig	esférica	Argiroudis 14A	1
flattened spherical	sphérique aplatie	abgeflacht kugelförmig	esférica aplanada	Kontoula Zagliveriou	2
reversed conical	conique renversée	umgekehrt kegelförmig	de cono invertido		3
double conical	conique double	doppelt kegelförmig	cónica doble	Klio, Ptolemaide 63	4

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
33. Inflorescence: position relative to upper leaves	Inflorescence: position par rapport aux feuilles supérieures	Blütenstand: Stellung im Verhältnis zu den oberen Blättern	Inflorescencia: posición en relación con las hojas superiores		
above	au-dessus	oberhalb	por encima	Ptolemaida 63	1
among	au milieu	dazwischen	entre las hojas	Argiroudis 14A	2
34. Inflorescence: compactness (+)	Inflorescence: densité	Blütenstand: Dichte	Inflorescencia: densidad		
very loose	très lâche	sehr locker	muy laxa		1
loose	lâche	locker	laxa		3
medium	moyenne	mittel	media		5
dense	dense	dicht	densa		7
very dense	très dense	sehr dicht	muy densa		9
35. Fruit: form (+)	Fruit: forme	Frucht: Form	Fruto: forma		
rounded	arrondi	rundlich	redondeado		1
ovate	ovale	eiförmig	oval		2

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

Example varieties provided by Brasil/variétés exemples proposés par Brésil/ von Brasilien vorgeschlagene Beispielsorten/variedades ejemplo propuestas por Brasil

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
1. Plant: shape	Plante: forme	Pflanze: Form	Planta: forma		
(+)					
conical	conique	kegelförmig	cónica	VA 509; MN373	1
cylindrical	cylindrique	zylindrisch	cilíndrica	TN 86;	2
elliptical	elliptique	elliptisch	elipsoide		3
inverted conical	conique déprimé	verkehrt kegelförmig	de cono invertido		4
2. Plant: height of main stem (including inflorescence)	Plante: hauteur de la tige principale (y compris l'inflorescence)	Pflanze: Höhe des Haupttriebes (einschließlich Blütenstand)	Planta: altura del tallo principal (incluida la inflorescencia)		
very short	très basse	sehr niedrig	muy corto		1
short	basse	niedrig	corto	BY 37; MN373	3
medium	moyenne	mittel	mediano	TN90; K326	5
tall	haute	hoch	largo	Banket, A1 KY8959; NC 27NF	7
very tall	très haute	sehr hoch	muy largo		9
3. Plant: color of main stem	Plante: couleur de la tige principale	Pflanze: Farbe des Haupttriebes	Planta: color del tallo principal		
white green	vert blanchâtre	weißgrün	verde blanquecino	TN86	1
light green	vert clair	hellgrün	verde claro	BY64; MN373	2
green	vert	grün	verde	—; K326	3
dark green	vert foncé	dunkelgrün	verde oscuro		4

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
4. Plant: number of leaves (*)	Plante: nombre de feuilles	Pflanze: Anzahl Blätter	Planta: número de hojas		
very few	très petit	sehr gering	muy bajo		1
few	petit	gering	bajo	BY37; NC2326, NC82	3
medium	moyen	mittel	medio	TN90; K326	5
many	grand	groß	alto	BY64; NC27NF	7
very many	très grand	sehr groß	muy alto		9
5. Plant: tendency to produce suckers	Plante: tendance à drageonner	Pflanze: Neigung zur Bildung von Seitentrieben	Planta: tendencia a producir chupones		
absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil		1
weak	faible	gering	débil	TN90; K326	3
medium	moyenne	mittel	media	KY8959; MN373	5
strong	forte	stark	fuerte		7
very strong	très forte	sehr stark	muy fuerte		9
6. Leaf: type (+)	Feuille: type	Blatt: Typ	Hoja: tipo		
sessile	sessile	ungestielt	sésil	TN90; K326	1
petiolate	pétiolée	gestielt	peciolada		2
7. Leaf: angle of insertion (*) (+)	Feuille: angle d'insertion	Blatt: Ansatzwinkel	Hoja: ángulo de inserción		
very acute	très aigu	sehr spitz	muy agudo	BY21, BY64; MN373, K149	1
moderately acute	modérément aigu	mäßig spitz	moderadamente agudo		2
right angle	droit	rechtwinklig	ángulo recto	TN90; K326	3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
8. (*)	Leaf: length of blade (excluding auricles)	Feuille: longueur du limbe (à l'exclusion des oreillettes)	Blatt: Länge der Spreite (Blattöhrchen ausgenommen)	Hoja: longitud del limbo (excluyendo las aurículas)	
	very short	très court	sehr kurz	muy corto	1
	short	court	kurz	corto	TN90; NC27NF 3
	medium	moyen	mittel	medio	VA509; K326 5
	long	long	lang	largo	BY64; C176 7
	very long	très long	sehr lang	muy largo	9
9. (*)	Leaf: width of blade	Feuille: largeur du limbe	Blatt: Breite der Spreite	Hoja: anchura del limbo	
	very narrow	très étroit	sehr schmal	muy estrecho	1
	narrow	étroit	schmal	estrecho	TN90; K149 3
	medium	moyen	mittel	medio	BY21; K326 5
	wide	large	breit	ancho	KY8959, KY907; C176 7
	very wide	très large	sehr breit	muy ancho	9
10. (*)	Leaf blade: ratio length/width (excluding auricles)	Limbe: rapport longueur/largeur (à l'exclusion des oreillettes)	Blattspreite: Verhältnis Länge/Breite (Blattöhrchen ausgenommen)	Limbo: relación longitud /anchura (excluyendo las aurículas)	
	very small	très petit	sehr klein	muy pequeño	1
	small	petit	klein	pequeño	KY907; C176 3
	medium	moyen	mittel	medio	5
	large	grand	groß	grande	BY64; K149 7
	very large	très grand	sehr groß	muy grande	9

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
11. Leaf: shape of blade (*) (+)	Feuille: forme du limbe	Blatt: Form der Spreite	Hoja: forma del limbo		
lanceolate	lancéolé	lanzettlich	lanceolada		1
narrow elliptic	elliptique étroit	schmal elliptisch	elíptica estrecha	VA510; K326	2
broad elliptic	elliptique large	breit elliptisch	elíptica ancha	KY907; SPG70	3
ovate	ové	eiförmig	oval		4
obovate	obovale	verkehrt eiförmig	oboval		5
cordate	cordé	herzförmig	cordiforme		6
rounded	arrondi	rund	redondeada		7
12. Leaf: color of blade (*)	Feuille: couleur du limbe	Blatt: Farbe der Blattspreite	Hoja: color del limbo		
yellow green	vert jaune	gelbgrün	verde amarillento		1
white green	vert blanc	weißgrün	verde blanquecino	Banket A1	2
light green	vert clair	hellgrün	verde claro	TN86; K149	3
medium green	vert moyen	mittelgrün	verde medio	TN90; K326	4
dark green	vert foncé	dunkelgrün	verde oscuro		5
13. Leaf: color of midrib on lower side (*)	Feuille: couleur de la nervure médiane sur la face intérieure	Blatt: Farbe der Mittelrippe an der Unterseite	Hoja: color de la nervadura central del envés		
whitish	blanchâtre	weißlich	blanquecina	TN86	1
whitish green	vert blanchâtre	weißlichgrün	verde blanquecina	TN90; MN373	2
green	verte	grün	verde	—; K326	3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
14. Leaf: shape of tip (+)	Feuille: forme du sommet	Blatt: Form der Spitze	Hoja: forma del ápice		
obtuse	obtus	stumpf	obtuso	TN86	1
slightly pointed	légèrement pointu	leicht spitz	ligeramente puntiagudo	KY 8959; SPG 70	3
medium pointed	moyennement pointu	mittel spitz	medianamente puntiagudo	VA509; K326	5
strongly pointed	fortement pointu	stark spitz	fuertemente puntiagudo	—; NC2326	7
very strongly pointed	très fortement pointu	sehr stark spitz	muy fuertemente puntiagudo		9
15. Leaf: blistering of blade	Feuille: cloqûre du limbe	Blatt: Blasigkeit der Spreite	Hoja: abullonado del limbo		
absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil		1
weak	faible	gering	débil		3
medium	moyenne	mittel	medio		5
strong	forte	stark	fuerte		7
very strong	très forte	sehr stark	muy fuerte		9
16. Leaf: undulations of margin	Feuille: ondulations du bord	Blatt: Randwellungen	Hoja: ondulación del borde		
absent or very weak	absentes ou très faibles	fehlend oder sehr gering	ausente o muy débil		1
weak	faibles	gering	débil		3
medium	moyennes	mittel	media	TN90	5
strong	fortes	stark	fuerte	KY14; K346	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
17. Leaf: auricles (sessile types only) (+)	Feuille: oreillettes (seulement pour les types sessiles)	Blatt: Öhrchen (nur ungestielte Typen)	Hoja: aurículas (sólo para los tipos sésiles)		
absent or very weak	absentes ou très faibles	fehlend oder sehr schwach	ausentes o muy débiles		1
weak	faibles	schwach	débiles	MN373	3
medium	moyennes	mittel	medianas	TN90; K326	5
strong	fortes	stark	fuertes	TN86; C176	7
very strong	très fortes	sehr stark	muy fuertes		9
18. Leaf: shape in cross section (+)	Feuille: forme à l'intersection	Blatt: Form im Querschnitt	Hoja: forma en sección transversal		
concave	concave	konkav	cóncava	KY 8959; K326	1
flat	plate	eben	plana	TN90;	2
convex	convexe	konvex	convexa	KY10; C176	3
19. Leaf: longitudinal profile (+)	Feuille: profil longitudinal	Blatt: Längsprofil	Hoja: perfil longitudinal		
straight	droit	gerade	recto		1
slightly recurved	légèrement incurvé	schwach gebogen	ligeramente recurvado	KY 8959; K326	3
moderately recurved	modérément incurvé	mittel gebogen	moderadamente recurvado	—; C176	5
strongly recurved	fortement incurvé	stark gebogen	fuertemente recurvado		7
20. Leaf: width of blade at basis (sessile types only) (+)	Feuille: largeur du limbe à la base (seulement pour les types sessiles)	Blatt: Breite der Spreite an der Basis (nur ungestielte Typen)	Hoja: anchura de la base del limbo (sólo para tipos sésiles)		
very narrow	très étroit	sehr schmal	muy estrecha		1
narrow	étroit	schmal	estrecha		3
medium	moyen	mittel	media		5
broad	large	breit	ancha		7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
21. Leaf: thickness of veins (excluding midrib)	Feuille: épaisseur des nervures (excepté nervure médiane)	Blatt: Dicke der Adern (ohne Mittelrippe)	Hoja: grosor de los nervios (excluida la nervadura central)		
thin	fines	dünn	delgados	KY10; MN373	3
medium	moyennes	mittel	medianos	TN86; K326	5
thick	épaisses	dick	gruesos		7
22. Leaf: angle of lateral veins to midrib (+)	Feuille: angle des nervures latérales avec la nervure médiane	Blatt: Winkel der Seitenadern zur Mittelrippe	Hoja: ángulo de los nervios laterales con el nervio central		
very acute	très aigu	sehr spitz	muy agudo	KY14; K149	1
moderately acute	moyennement aigu	mittel spitz	moderadamente agudo	TN90; K326	2
right angle	droit	rechtwinklig	ángulo recto		3
23. Time of flowering (50% of plants with at least one corolla open)	Époque de floraison (50% des plantes avec au moins une corolle ouverte)	Blühzeitpunkt (50% der Pflanzen zeigen wenigstens eine offene Krone)	Época de floración (50% de las plantas con al menos una corola abierta)		
very early	très précoce	sehr früh	muy temprana		1
early	précoce	früh	temprana	BY21; MN373	3
medium	moyenne	mittel	media	TN 90; K 326	5
late	tardive	spät	tardía	BY 64; NC27NF	7
very late	très tardive	sehr spät	muy tardía		9
24. Flower: length (*) (+)	Fleur: longueur (sans le pédoncule)	Blüte: Länge (ohne Blütenstandstiel)	Flor: longitud (excluido el pedúnculo)		
short	courte	kurz	corta		3
medium	moyenne	mittel	media	TN90; K 326	5
long	longue	lang	larga		7

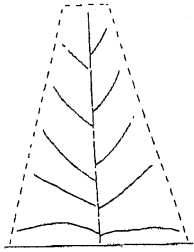
English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
25. Flower: diameter of tube (just above calyx) (+)	Fleur: diamètre du tube (juste au-dessus du calice)	Blüte: Durchmesser der Röhre (unmittelbar über dem Kelch)	Flor: diámetro del tubo (justo por encima del cáliz)		
small	petit	klein	pequeño		3
medium	moyen	mittel	mediano	TN90; K 326	5
large	large	groß	grande		7
26. Flower: swelling of tube	Fleur: renflement du tube	Blüte: Verdickung der Röhre	Flor: engrosamiento del tubo		
weak	faible	gering	débil		3
medium	moyen	mittel	medio		5
strong	fort	stark	fuerte		7
27. Flower: size of corolla (+)	Fleur: taille de la corolle	Blüte: Größe der Krone	Flor: tamaño de la corola		
small	petite	klein	pequeña		3
medium	moyenne	mittel	mediana	TN90; K 326	5
large	grande	groß	grande		7
28. Flower: expression of tips of corolla (+)	Fleur: expression des pointes de la corolle	Blüte: Ausprägung der Kronenspitzen	Flor: expresión de los ápices de la corola		
absent or very weak	absentes ou très faibles	fehlend oder sehr gering	ausentes o muy débiles		1
weak	faibles	gering	débiles	—; C 371 G	3
medium	moyennes	mittel	medianos	KY8959; C176	5
strong	fortes	stark	fuertes	TN90; K 326	7
very strong	très fortes	sehr stark	muy fuertes		9

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
29. Flower: color of corolla (*)	Fleur: couleur de la corolle	Blüte: Farbe der Krone	Flor: color de la corola		
white	blanche	weiß	blanco	VA 528	1
light pink	rose clair	hellrosa	rosa claro		2
medium pink	rose moyen	mittelrosa	rosa medio	TN90; K 326	3
dark pink	rose foncé	dunkelrosa	rosa fuerte	—; C 371 G	4
red	rouge	rot	rojo		5
30. Flower: development of stamens (*)	Fleur: développement des étamines	Blüte: Ausbildung von Staubblättern	Flor: desarrollo de los estambres		
none or rudimentary	nul ou rudimentaire	keine oder rudimentär	ninguno o rudimentario		1
full	complet	vollständig	pleno	TN90; K 326	2
31. Flower: length of pistil relative to stamens (varieties with fully developed stamens only) (*)	Fleur: longueur du pistil par rapport aux étamines (seulement pour les variétés à développement complet des étamines)	Blüte: Länge des Stempels im Verhältnis zu den Staubblättern (nur Sorten mit vollentwickelten Staubblättern)	Flor: longitud del pistilo en relación con los estambres (sólo para variedades con estambres plenamente desarrollados)		
shorter	plus court	kürzer	más corto	TN86; K326	1
same length	égal	gleich lang	de igual longitud	TN90	2
longer	plus long	länger	más largo		3
32. Inflorescence: shape (+)	Inflorescence: forme	Blütenstand: Form	Inflorescencia: forma		
spherical	sphérique	kugelförmig	esférica	KY 8959	1
flattened spherical	sphérique aplatie	abgeflacht kugelförmig	esférica aplanada		2
reversed conical	conique renversée	umgekehrt kegelförmig	de cono invertido		3
double conical	conique double	doppelt kegelförmig	cónica doble		4

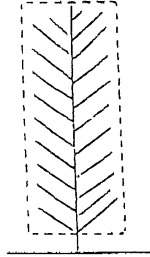
English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
33. Inflorescence: position relative to upper leaves	Inflorescence: position par rapport aux feuilles supérieures	Blütenstand: Stellung im Verhältnis zu den oberen Blättern	Inflorescencia: posición en relación con las hojas superiores		
above	au-dessus	oberhalb	por encima		1
among	au milieu	dazwischen	entre las hojas	TN90; K326	2
34. Inflorescence: compactness (+)	Inflorescence: densité	Blütenstand: Dichte	Inflorescencia: densidad		
very loose	très lâche	sehr locker	muy laxa		1
loose	lâche	locker	laxa	BY 21; MN 373	3
medium	moyenne	mittel	media	TN 90; K 326	5
dense	dense	dicht	densa	BY 64	7
very dense	très dense	sehr dicht	muy densa		9
35. Fruit: form (+)	Fruit: forme	Frucht: Form	Fruto: forma		
rounded	arrondi	rundlich	redondeado	BY 64; C 371 G	1
ovate	ovale	eiförmig	oval	BY 21; K 326	2

VIII. Explanations on the Table of Characteristics

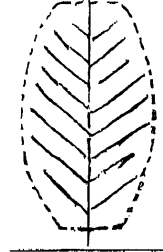
Ad. 1: Plant: shape



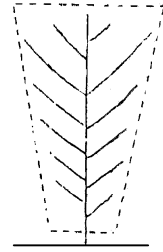
1
conical



2
cylindrical

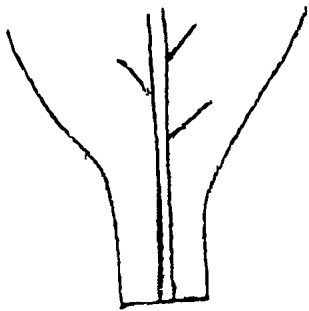


3
elliptical

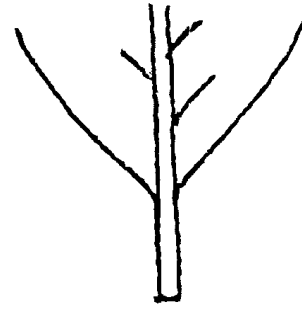


4
inverted conical

Ad. 6: Leaf: type



1
sessile

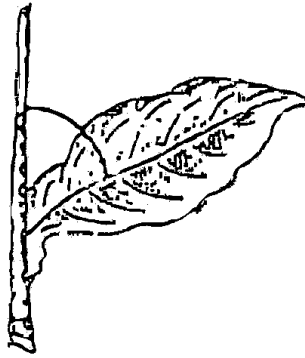


2
petiolate

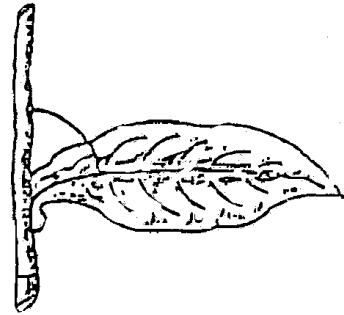
Ad. 7: Leaf: angle of insertion



1
very acute



2
moderately acute

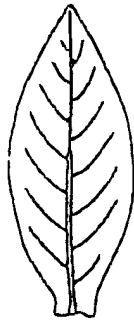


3
right angle

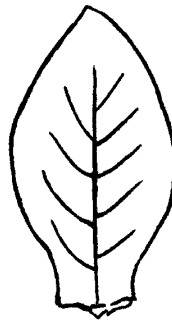
Ad. 11: Leaf: shape of blade



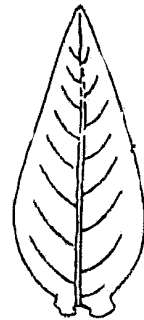
1
lanceolate



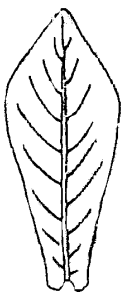
2
narrow elliptic



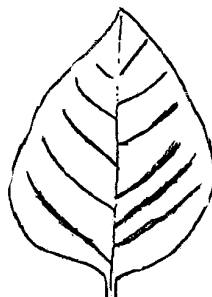
3
broad elliptic



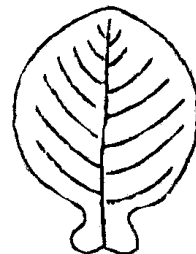
4
ovate



5
obovate



6
cordate



7
rounded

Ad. 14: Leaf: shape of tip



1
obtuse



3
slightly pointed



5
medium pointed

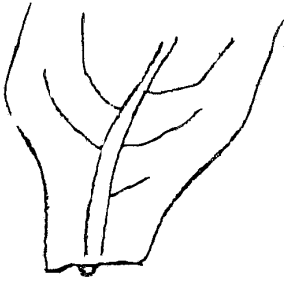


7
strongly pointed

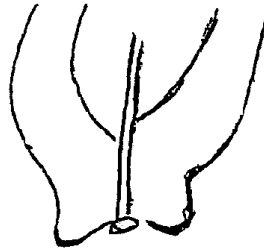


9
very strongly pointed

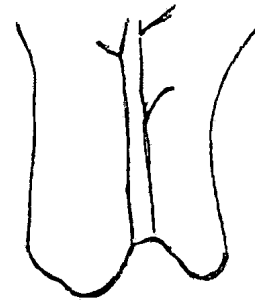
Ad. 17: Leaf: auricles (sessile types only)



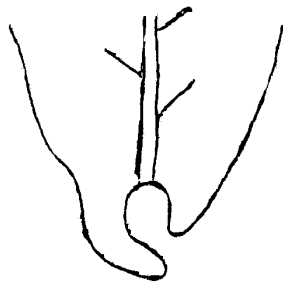
1
absent or very weak



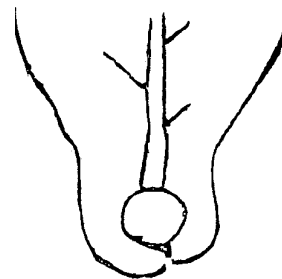
3
weak



5
medium



7
strong



9
very strong

Ad. 18: Leaf: shape in cross section



1
concave

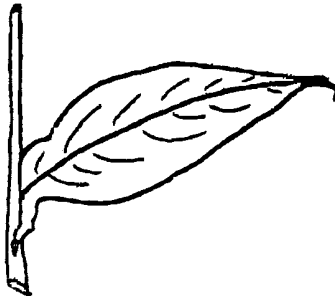


2
flat

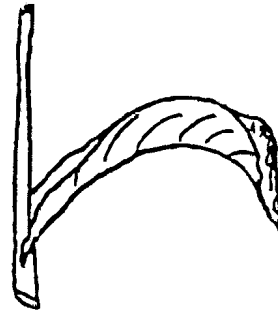


3
convex

Ad. 19: Leaf: longitudinal profile

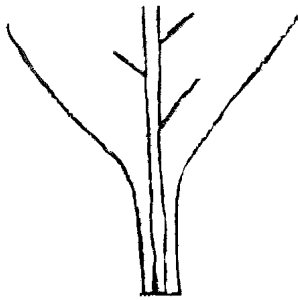


1
straight

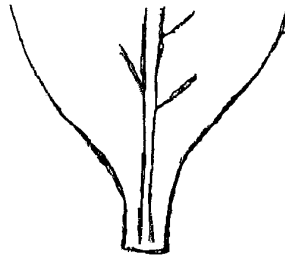


7
strongly recurved

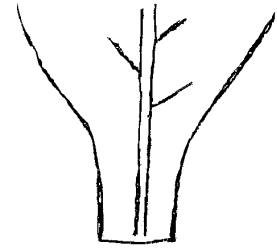
Ad. 20: Leaf: width of blade at basis (sessile types only)



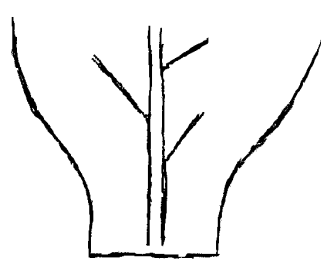
1
very narrow



3
narrow

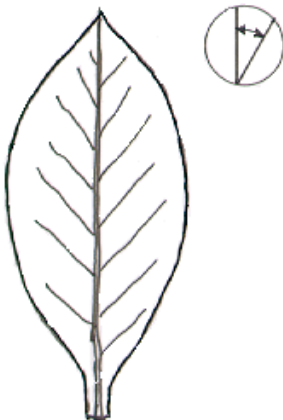


5
medium

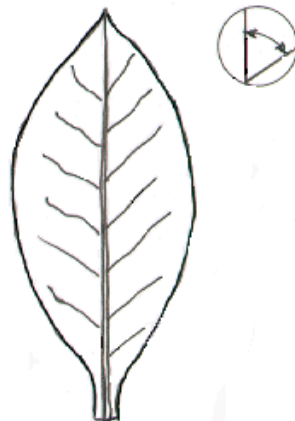


7
broad

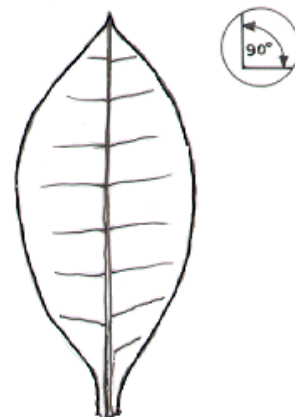
Ad. 22: Leaf: angle of lateral veins to midrib



1
very acute

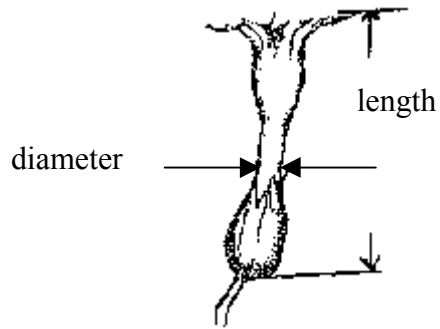


2
moderately acute

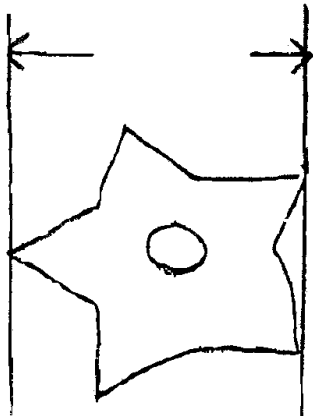


3
right angle

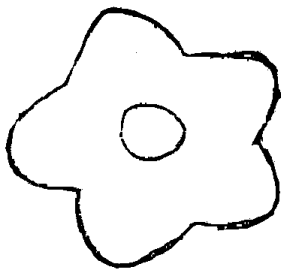
Ad. 24 and 25: Flower: length (excluding peduncle) and diameter of tube (just above calyx)



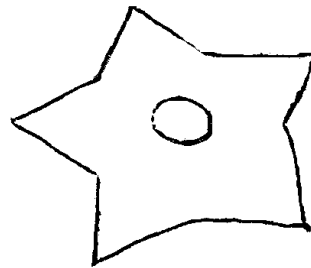
Ad. 27: Flower: size of corolla



Ad. 28: Flower: expression of tips of corolla

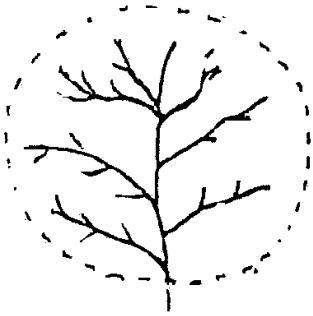


1
absent or very weak

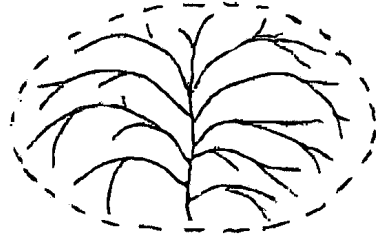


9
very strong

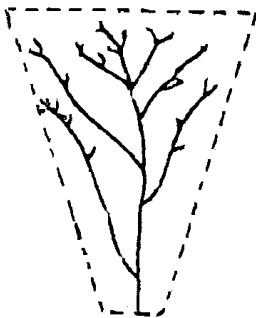
Ad. 32: Inflorescence: shape



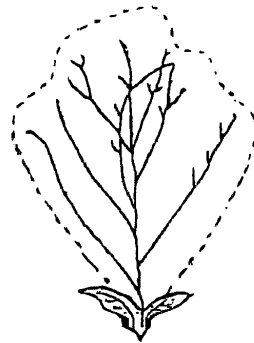
1
spherical



2
flattened spherical



3
reversed conical



4
double conical

Ad. 34: Inflorescence: compactness



1
very loose



3
loose



5
medium



7
dense



9
very dense

Ad. 35: Fruit: form



1
rounded



2
ovate



IX. Literature

X. Technical Questionnaire

	Reference Number (not to be filled in by the applicant)
<p>TECHNICAL QUESTIONNAIRE to be completed in connection with an application for plant breeders' rights</p>	
1. Species	<p><i>Nicotiana tabacum</i> L. TOBACCO</p>
2. Applicant (Name and address)	
3. Proposed denomination or breeder's reference	

4. Information on origin, maintenance and reproduction of the variety

4.1 Type of material

- (a) inbred line
 - male fertile line []
 - male sterile line []
- (b) male sterile single hybrid []
- (c) open pollinated variety []
- (d) other (please indicate) []

.....

4.2 Formula (hybrid varieties) – The information specified in chapters 5 and/to 7 must be provided, on separate sheets, for each component of the hybrid.

Single hybrid

- female parental line
- male parental line

N.B. In the case of use of a male sterility system, indicate the name of the maintainer line of the female parental line

.....

4.3 Genetic origin and breeding method

4.4 Other information

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

Characteristics	Example Varieties Table of Characteristics (a)	Example Varieties Table of Characteristics (b)	Note
5.1 Plant: height of main stem (including inflorescence) (2)			
very short	Tsempeli Agriniou 21		1[]
short	Xanthi 81	BY 37; MN373	3[]
medium	Zihna Pageou	TN90; K326	5[]
tall	Virginia Hellas 9	Banket, A1 KY8959; NC 27NF	7[]
very tall	Burley 21E		9[]
5.2 Plant: number of leaves (4)			
very few	Mavros Ipatis		1[]
few	Mirodato Agriniou 13B, Niki	BY37; NC2326, NC82	3[]
medium	Doxato	TN90; K326	5[]
many	Zihna Pageou	BY64; NC27NF	7[]
very many	Sampsous 79		9[]
5.3 Leaf: shape of blade (11)			
lanceolate	Tsempeli Agriniou 21		1[]
narrow elliptic	Virginia Hellas 9	VA510; K326	2[]
broad elliptic	Xanthi 101	KY907; SPG70	3[]
ovate	Argiroudis 14A		4[]
obovate			5[]
cordate	Katerini 53		6[]
rounded			7[]

Characteristics	Example Varieties Table of Characteristics (a)	Example Varieties Table of Characteristics (b)	Note
5.4 Leaf: color of midrib on lower side (13)			
whitish		TN86	1[]
whitish green		TN90; MN373	2[]
green		—; K326	3[]
5.5 Time of flowering: (50% of plants with at least one corolla open) (23)			
very early	Mavros Ipatis		1[]
early	Xanthi 2A	BY21; MN373	3[]
medium	Doxato	TN 90; K 326	5[]
late		BY 64; NC27NF	7[]
very late	Kontoula Zagliveriou		9[]
5.6 Flower: color of corolla (29)			
white		VA 528	1[]
light pink	Xanthi 2A		2[]
medium pink		TN90; K 326	3[]
dark pink	Katerini 53	—; C 371 G	4[]
red			5[]
5.7 Flower: development of stamens (30)			
none or rudimentary	Poroia 52		1[]
full	Xanthi 2A	TN90; K 326	2[]

6. Similar varieties and differences from these varieties

Denomination of similar variety	Characteristic in which the similar variety is different ^{o)}	State of expression of similar variety	State of expression of candidate variety
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^{o)} In the case of identical states of expressions of both varieties, please indicate the size of the difference.

7. Additional information which may help to distinguish the variety

7.1 Classification of tobacco varieties

- | | |
|------------------------|-----|
| flue cured | [] |
| light air cured | [] |
| dark air cured | [] |
| sun cured | [] |
| fire cured | [] |
| other (please specify) | [] |

7.2 Resistance to pests and diseases

7.3 Special conditions for the evaluation of the variety

7.4 Other information

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 that question is yes, please attach a copy of such an authorization.

[End of document]