



TG/195/1

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

**UNION INTERNATIONALE  
POUR LA PROTECTION  
DES OBTENTIONS  
VÉGÉTALES**

**INTERNATIONALER  
VERBAND ZUM SCHUTZ  
VON PFLANZEN-  
ZÜCHTUNGEN**

**UNIÓN INTERNACIONAL  
PARA LA PROTECCIÓN  
DE LAS OBTENCIONES  
VEGETALES**

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

**TOBACCO**

*(Nicotiana tabacum L.)*

**GENEVA  
2002**

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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.

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
I. Subject of these Guidelines .....	3
II. Material Required .....	3
III. Conduct of Tests .....	3
IV. Methods and Observations .....	3
V. Grouping of Varieties .....	4
VI. Characteristics and Symbols .....	4
VII. Table of Characteristics .....	6
VIII. Explanations on the Table of Characteristics .....	16
IX. Literature .....	24
X. Technical Questionnaire .....	25

ANNEX

## I. Subject of these Test 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 seed is recommended:

2 g.

The seed should meet the minimum requirements for germination, species and analytical purity, health and moisture content, specified by the competent authority. In cases where the seed is to be stored, the germination capacity should be as high as possible and should be stated by the applicant.

2. The seed 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 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. 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. Each test should be designed to result in a total of, at least 40 plants, which should be divided between two and 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.
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 14);
  - (d) Leaf: color of midrib on lower side (characteristic 22);
  - (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.
2. Where appropriate, example varieties are provided to clarify the states of expression of each characteristic. Two lists with different sets of example varieties are provided in the Annex to this Test Guidelines:

- (a) A table containing example varieties provided by Greece;
  - (b) A table containing example varieties provided by Brazil. In this set of example varieties, for certain characteristics, different example varieties are indicated for Burley type and for Virginia Flue Cured type. Virginia Flue Cured type varieties are indicated by #.
3. Notes (numbers), for the purposes of electronic data processing, are given opposite the states of expression for each characteristic.
4. 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. Table of Characteristics/Tableau des caractères/Merkmalstabelle/Tabla de caracteres

See Annex for example varieties / Voir l'annexe pour des variétés exemples / Siehe Anlage für Beispielsorten / Véanse el Anexo para las variedades ejemplo.

English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>1. Plant: shape</b>	<b>Plante: forme</b>	<b>Pflanze: Form</b>	<b>Planta: forma</b>		
(+)					
conical	conique	kegelförmig	cónica		1
cylindrical	cylindrique	zylindrisch	cilíndrica		2
elliptical	elliptique	elliptisch	elipsoide		3
inverted conical	conique inversée	verkehrt kegelförmig	de cono invertido		4
<b>2. Plant: height of main stem (including inflorescence)</b>	<b>Plante: hauteur de la tige principale (y compris l'inflorescence)</b>	<b>Pflanze: Höhe des Haupttriebes (einschließlich Blütenstand)</b>	<b>Planta: altura del tallo principal (incluida la inflorescencia)</b>		
very short	très courte	sehr niedrig	muy corto		1
short	courte	niedrig	corto		3
medium	moyenne	mittel	mediano		5
tall	haute	hoch	largo		7
very tall	très haute	sehr hoch	muy largo		9
<b>3. Plant: color of main stem</b>	<b>Plante: couleur de la tige principale</b>	<b>Pflanze: Farbe des Haupttriebes</b>	<b>Planta: color del tallo principal</b>		
white green	vert blanchâtre	weißgrün	verde blanquecino		1
light green	vert clair	hellgrün	verde claro		2
medium green	vert moyen	mittelgrün	verde medio		3
dark green	vert foncé	dunkelgrün	verde oscuro		4



English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>4. Plant: number of leaves</b> (* )	<b>Plante: nombre de feuilles</b>	<b>Pflanze: Anzahl Blätter</b>	<b>Planta: número de hojas</b>		
very few	très petit	sehr gering	muy bajo		1
few	petit	gering	bajo		3
medium	moyen	mittel	medio		5
many	grand	groß	alto		7
very many	très grand	sehr groß	muy alto		9
<b>5. Plant: tendency to produce suckers</b>	<b>Plante: tendance à drageonner</b>	<b>Pflanze: Neigung zur Bildung von Seitentrieben</b>	<b>Planta: tendencia a producir chupones</b>		
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	media		5
strong	forte	stark	fuerte		7
very strong	très forte	sehr stark	muy fuerte		9
<b>6. Leaf: type</b> (+)	<b>Feuille: type</b>	<b>Blatt: Typ</b>	<b>Hoja: tipo</b>		
sessile	sessile	ungestielt	sésil		1
petiolate	pétiolée	gestielt	peciolada		2
<b>7. Leaf: angle of insertion</b> (* ) (+)	<b>Feuille: angle d'insertion</b>	<b>Blatt: Ansatzwinkel</b>	<b>Hoja: ángulo de inserción</b>		
very acute	très aigu	sehr spitz	muy agudo		1
moderately acute	modérément aigu	mäßig spitz	moderadamente agudo		2
right angle	droit	etwa rechtwinklig	ángulo recto		3

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>8. Leaf: length of blade (excluding auricles)</b> (* )	<b>Feuille: longueur du limbe (à l'exclusion des oreillettes)</b>	<b>Blatt: Länge der Spreite (ohne Blattöhrchen)</b>	<b>Hoja: longitud del limbo (excluyendo las aurículas)</b>		
very short	très court	sehr kurz	muy corto		1
short	court	kurz	corto		3
medium	moyen	mittel	medio		5
long	long	lang	largo		7
very long	très long	sehr lang	muy largo		9
<b>9. Leaf: width of blade</b> (* )	<b>Feuille: largeur du limbe</b>	<b>Blatt: Breite der Spreite</b>	<b>Hoja: anchura del limbo</b>		
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
<b>10. Leaf: ratio length/width of blade (excluding auricles)</b> (* )	<b>Feuille : rapport longueur/largeur du limbe (à l'exclusion des oreillettes)</b>	<b>Blatt: Verhältnis Länge/Breite der Spreite (Blattöhrchen ausgenommen)</b>	<b>Hoja: proporción entre la longitud y la anchura del limbo (excluidas las aurículas)</b>		
very small	très petit	sehr klein	muy pequeño		1
small	petit	klein	pequeño		3
medium	moyen	mittel	medio		5
large	grand	groß	grande		7
very large	très grand	sehr groß	muy grande		9

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>11. Leaf: width of blade at basis (sessile types only)</b> (+)	<b>Feuille: largeur du limbe à la base (seulement pour les variétés avec des feuilles de type sessile)</b>	<b>Blatt: Breite der Spreite an der Basis (nur ungestielte Typen)</b>	<b>Hoja: anchura de la base del limbo (sólo para tipos sésiles)</b>		
very narrow	très étroit	sehr schmal	muy estrecha		1
narrow	étroit	schmal	estrecha		3
medium	moyen	mittel	media		5
broad	large	breit	ancha		7
<b>12. Leaf: thickness of veins (excluding midrib)</b>	<b>Feuille: épaisseur des nervures (excepté nervure médiane)</b>	<b>Blatt: Dicke der Adern (ohne Mittelrippe)</b>	<b>Hoja: grosor de los nervios (excluida la nervadura central)</b>		
thin	finas	dünn	delgados		3
medium	moyennes	mittel	medianos		5
thick	épaisses	dick	gruesos		7
<b>13. Leaf: angle of lateral veins to midrib</b> (+)	<b>Feuille: angle des nervures latérales avec la nervure médiane</b>	<b>Blatt: Winkel zwischen Seitenadern und Mittelrippe</b>	<b>Hoja: ángulo de los nervios laterales con el nervio central</b>		
very acute	très aigu	sehr spitz	muy agudo		1
moderately acute	moyennement aigu	mäßig spitz	moderadamente agudo		2
right angle	droit	etwa rechtwinklig	ángulo recto		3
<b>14. Leaf: shape of blade</b> (* (+)	<b>Feuille: forme du limbe</b>	<b>Blatt: Form der Spreite</b>	<b>Hoja: forma del limbo</b>		
lanceolate	lancéolé	lanzettlich	lanceolada		1
narrow elliptic	elliptique étroit	schmal elliptisch	elíptica estrecha		2
broad elliptic	elliptique large	breit elliptisch	elíptica ancha		3
ovate	ovale	eiförmig	oval		4
obovate	obovale	verkehrt eiförmig	oboval		5
cordate	cordé	herzförmig	cordiforme		6
rounded	arrondi	rund	redondeada		7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>15. Leaf: shape of tip</b> (+)	<b>Feuille: forme du sommet</b>	<b>Blatt: Form der Spitze</b>	<b>Hoja: forma del ápice</b>		
obtuse	obtus	stumpf	obtuso		1
slightly pointed	légèrement pointu	leicht spitz	ligeramente puntiagudo		3
medium pointed	moyennement pointu	mäßig spitz	medianamente puntiagudo		5
strongly pointed	fortement pointu	stark spitz	fuertemente puntiagudo		7
very strongly pointed	très fortement pointu	sehr stark spitz	muy fuertemente puntiagudo		9
<b>16. Leaf: shape in cross section</b> (+)	<b>Feuille: forme en section transversale</b>	<b>Blatt: Form im Querschnitt</b>	<b>Hoja: forma en sección transversal</b>		
concave	concave	konkav	cóncava		1
flat	plate	eben	plana		2
convex	convexe	konvex	convexa		3
<b>17. Leaf: longitudinal profile</b> (+)	<b>Feuille: profil longitudinal</b>	<b>Blatt: Längsprofil</b>	<b>Hoja: perfil longitudinal</b>		
straight	droit	gerade	recto		1
slightly recurved	légèrement incurvé	schwach gebogen	ligeramente recurvado		3
moderately recurved	modérément incurvé	mäßig gebogen	moderadamente recurvado		5
strongly recurved	fortement incurvé	stark gebogen	fuertemente recurvado		7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>18. Leaf: blistering of blade</b>	<b>Feuille: cloûre du limbe</b>	<b>Blatt: Blasigkeit der Spreite</b>	<b>Hoja: abullonado del limbo</b>		
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
<b>19. Leaf: undulations of margin</b>	<b>Feuille: ondulations du bord</b>	<b>Blatt: Randwellungen</b>	<b>Hoja: ondulación del borde</b>		
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		5
strong	fortes	stark	fuerte		7
<b>20. Leaf: development of auricles (+)</b>	<b>Feuille : développement des oreillettes</b>	<b>Blatt: Entwicklung der Öhrchen</b>	<b>Hoja: desarrollo de las aurículas</b>		
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
<b>21. Leaf: color of blade (*)</b>	<b>Feuille: couleur du limbe</b>	<b>Blatt: Farbe der Spreite</b>	<b>Hoja: color del limbo</b>		
yellow green	vert-jaune	gelbgrün	verde amarillento		1
white green	vert-blanc	weißgrün	verde blanquecino		2
light green	vert clair	hellgrün	verde claro		3
medium green	vert moyen	mittelgrün	verde medio		4
dark green	vert foncé	dunkelgrün	verde oscuro		5

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>22. (*)</b>	<b>Leaf: color of midrib on lower side</b>	<b>Feuille: couleur de la nervure médiane sur la face inférieure</b>	<b>Blatt: Farbe der Mittelrippe an der Unterseite</b>	<b>Hoja: color de la nervadura central del envés</b>	
	whitish	blanchâtre	weißlich	blanquecina	1
	whitish green	vert blanchâtre	weißlichgrün	verde blanquecina	2
	green	verte	grün	verde	3
<b>23. (*)</b>	<b>Time of flowering (50% of plants with at least one corolla open)</b>	<b>Époque de floraison (50% des plantes avec au moins une corolle ouverte)</b>	<b>Blühzeitpunkt (50% der Pflanzen zeigen wenigstens eine offene Krone)</b>	<b>Época de floración (50% de las plantas con al menos una corola abierta)</b>	
	very early	très précoce	sehr früh	muy temprana	1
	early	précoce	früh	temprana	3
	medium	moyenne	mittel	media	5
	late	tardive	spät	tardía	7
	very late	très tardive	sehr spät	muy tardía	9
<b>24. (*)(+)</b>	<b>Flower: length (excluding peduncle)</b>	<b>Fleur: longueur (sans le pédoncule)</b>	<b>Blüte: Länge (ohne Blütenstiel)</b>	<b>Flor: longitud (excluido el pedúnculo)</b>	
	short	courte	kurz	corta	3
	medium	moyenne	mittel	media	5
	long	longue	lang	larga	7
<b>25. (+)</b>	<b>Flower: diameter of tube (just above calyx)</b>	<b>Fleur: diamètre du tube (juste au-dessus du calice)</b>	<b>Blüte: Durchmesser der Röhre (unmittelbar über dem Kelch)</b>	<b>Flor: diámetro del tubo (justo por encima del cáliz)</b>	
	small	petit	klein	pequeño	3
	medium	moyen	mittel	mediano	5
	large	large	groß	grande	7

English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>26. Flower: swelling of tube</b> (+)	<b>Fleur: renflement du tube</b>	<b>Blüte: Verdickung der Röhre</b>	<b>Flor: engrosamiento del tubo</b>		
weak	faible	gering	débil		3
medium	moyen	mittel	medio		5
strong	fort	stark	fuerte		7
<b>27. Flower: size of corolla</b> (+)	<b>Fleur: taille de la corolle</b>	<b>Blüte: Größe der Krone</b>	<b>Flor: tamaño de la corola</b>		
small	petite	klein	pequeña		3
medium	moyenne	mittel	mediana		5
large	grande	groß	grande		7
<b>28. Flower: expression of tips of corolla</b> (+)	<b>Fleur: expression des pointes de la corolle</b>	<b>Blüte: Ausprägung der Kronenspitzen</b>	<b>Flor: expresión de los ápices de la corola</b>		
absent or very weak	absentes ou très faibles	fehlend oder sehr gering	ausentes o muy débiles		1
weak	faibles	gering	débiles		3
medium	moyennes	mittel	medianos		5
strong	fortes	stark	fuertes		7
very strong	très fortes	sehr stark	muy fuertes		9
<b>29. Flower: color of corolla</b> (* )	<b>Fleur: couleur de la corolle</b>	<b>Blüte: Farbe der Krone</b>	<b>Flor: color de la corola</b>		
white	blanche	weiß	blanco		1
light pink	rose clair	hellrosa	rosa claro		2
medium pink	rose moyen	mittelrosa	rosa medio		3
dark pink	rose foncé	dunkelrosa	rosa fuerte		4
red	rouge	rot	rojo		5

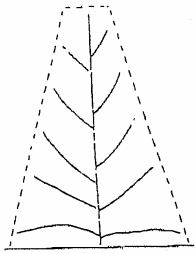
English	français	deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
<b>30. Flower: development of stamens</b> (*)	<b>Fleur: développement des étamines</b>	<b>Blüte: Ausbildung von Staubblättern</b>	<b>Flor: desarrollo de los estambres</b>		
none or rudimentary	nul ou rudimentaire	keine oder rudimentär	ninguno o rudimentario		1
full	complet	vollständig	pleno		2
<b>31. Flower: length of pistil relative to stamens (varieties with fully developed stamens only)</b> (*)	<b>Fleur: longueur du pistil par rapport aux étamines (seulement pour les variétés à développement complet des étamines)</b>	<b>Blüte: Länge des Stempels im Verhältnis zu den Staubblättern (nur Sorten mit vollentwickelten Staubblättern)</b>	<b>Flor: longitud del pistilo en relación con los estambres (sólo para variedades con estambres plenamente desarrollados)</b>		
shorter	plus court	kürzer	más corto		1
same length	égal	gleich lang	de igual longitud		2
longer	plus long	länger	más largo		3
<b>32. Inflorescence: shape</b> (+)	<b>Inflorescence: forme</b>	<b>Blütenstand: Form</b>	<b>Inflorescencia: forma</b>		
spherical	sphérique	kugelförmig	esférica		1
flattened spherical	sphérique aplatie	abgeflacht kugelförmig	esférica aplanada		2
inverted conical	conique inversée	verkehrt kegelförmig	de cono invertido		3
double conical	conique double	doppelt kegelförmig	cónica doble		4
<b>33. Inflorescence: position relative to upper leaves</b>	<b>Inflorescence: position par rapport aux feuilles supérieures</b>	<b>Blütenstand: Stellung im Verhältnis zu den oberen Blättern</b>	<b>Inflorescencia: posición en relación con las hojas superiores</b>		
among	au milieu	dazwischen	entre las hojas		1
above	au-dessus	oberhalb	por encima		2



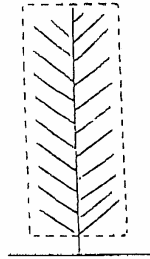
English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
<b>34. Inflorescence: compactness</b> (+)	<b>Inflorescence: densité</b>	<b>Blütenstand: Dichte</b>	<b>Inflorescencia: densidad</b>		
very loose	très lâche	sehr locker	muy laxa		1
loose	lâche	locker	laxa		3
medium	moyenne	mittel	media		5
dense	dense	dicht	densa		7
very dense	très dense	sehr dicht	muy densa		9
<b>35. Fruit: form</b> (+)	<b>Fruit: forme</b>	<b>Frucht: Form</b>	<b>Fruto: forma</b>		
rounded	arrondi	rundlich	redondeado		1
intermediate	intermédiaire	intermediär	intermedio		2
ovate	ovale	eiförmig	oval		3

VIII. Explanations on the Table of Characteristics

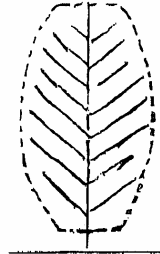
Ad. 1: Plant: shape



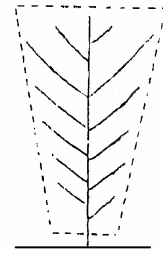
1  
conical



2  
cylindrical

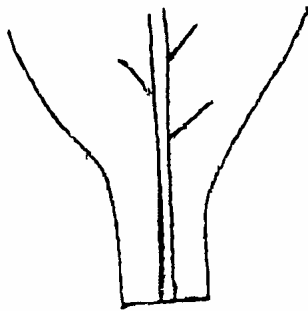


3  
elliptical

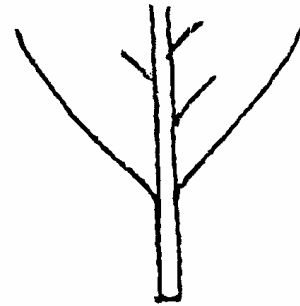


4  
inverted conical

Ad. 6: Leaf: type



1  
sessile

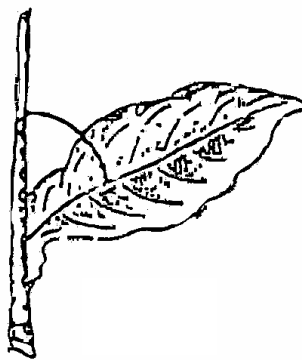


2  
petiolate

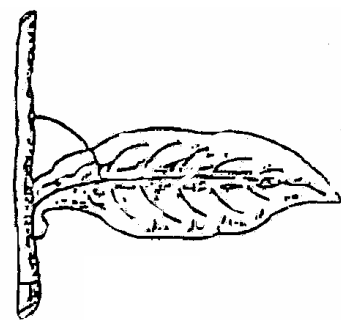
Ad. 7: Leaf: angle of insertion



1  
very acute

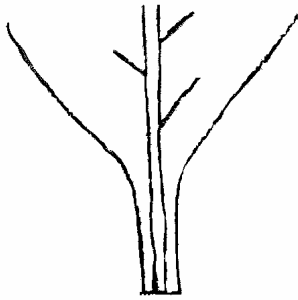


2  
moderately acute

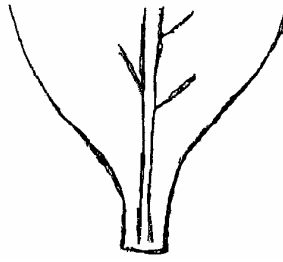


3  
right angle

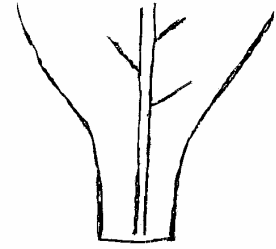
Ad. 11: Leaf: width of blade at basis (sessile types only)



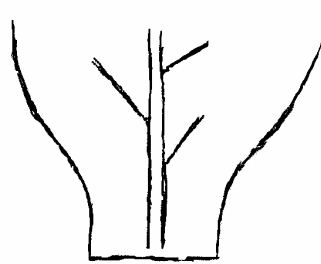
1  
very narrow



3  
narrow

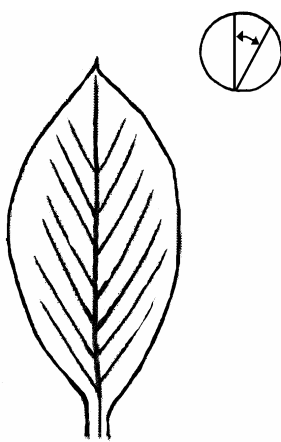


5  
medium

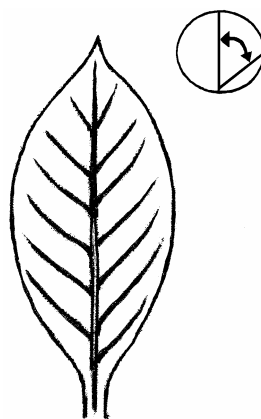


7  
broad

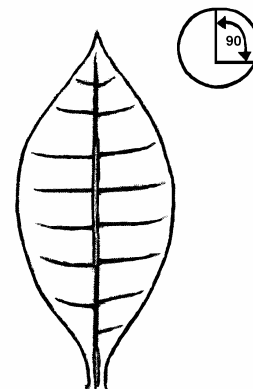
Ad. 13: Leaf: angle of lateral veins to midrib



1  
very acute



2  
moderately acute

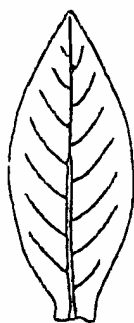


3  
right angle

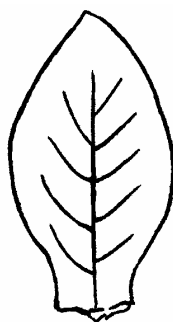
Ad. 14: Leaf: shape of blade



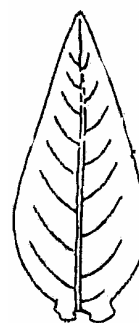
1  
lanceolate



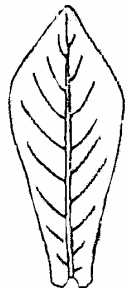
2  
narrow elliptic



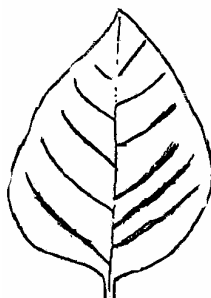
3  
broad elliptic



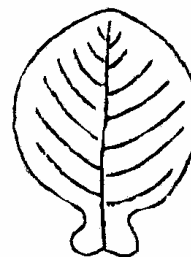
4  
ovate



5  
obovate



6  
cordate



7  
rounded

Ad. 15: Leaf: shape of tip



1  
obtuse



3  
slightly pointed



5  
medium pointed



7  
strongly pointed

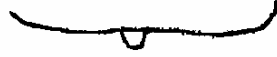


9  
very strongly pointed

Ad. 16: Leaf: shape in cross section



1  
concave

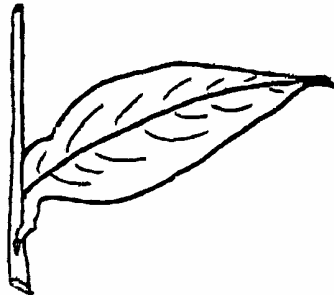


2  
flat

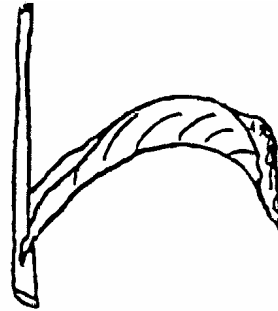


3  
convex

Ad. 17: Leaf: longitudinal profile



1  
straight

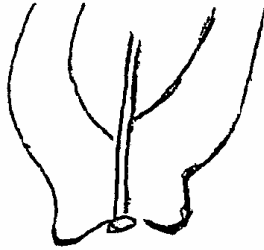


7  
strongly recurved

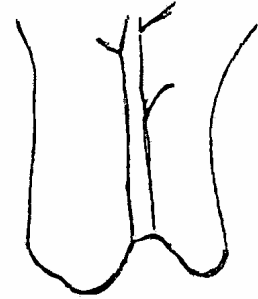
Ad. 20: Leaf: development of auricles



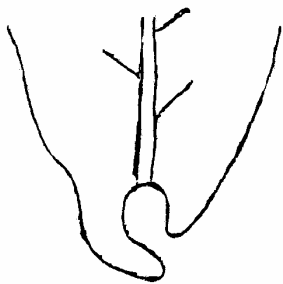
1  
absent or very weak



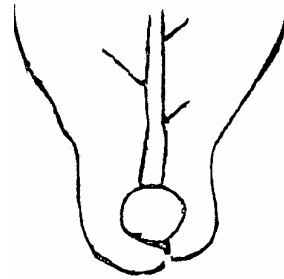
3  
weak



5  
medium

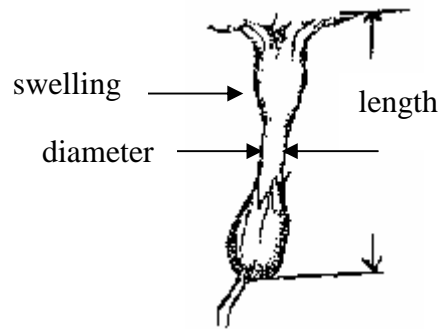


7  
strong

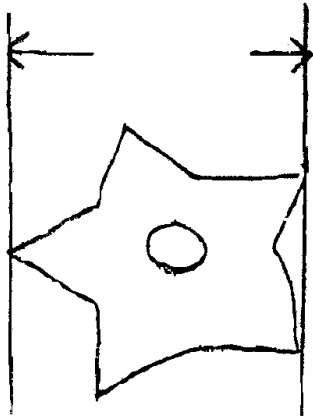


9  
very strong

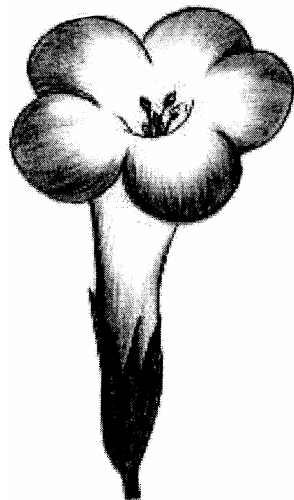
Ad. 24, 25 and 26: Flower: length (excluding peduncle), diameter of tube (just above calyx) and swelling of tube



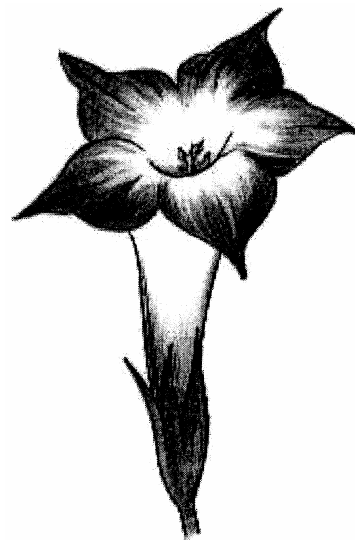
Ad. 27: Flower: size of corolla



Ad. 28: Flower: expression of tips of corolla

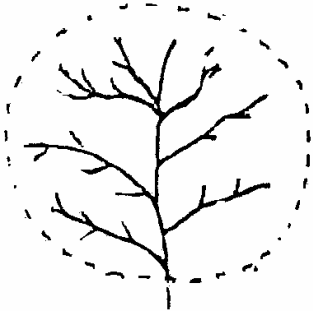


1  
absent or very weak

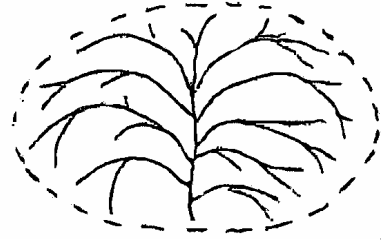


9  
very strong

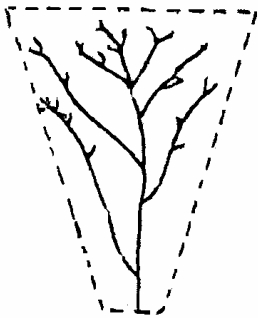
Ad. 32: Inflorescence: shape



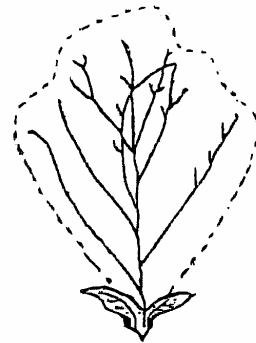
1  
spherical



2  
flattened spherical



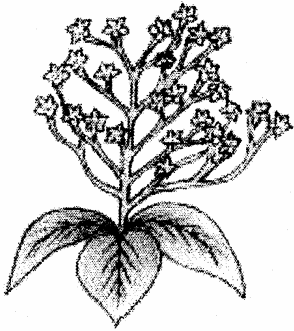
3  
inverted conical



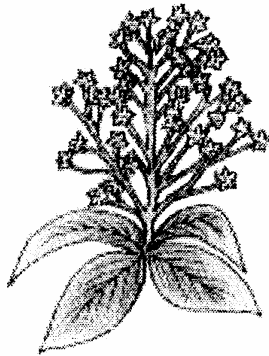
4  
double conical



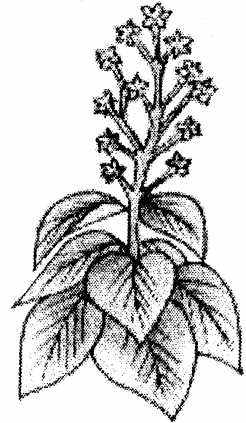
Ad. 34: Inflorescence: compactness



3  
loose

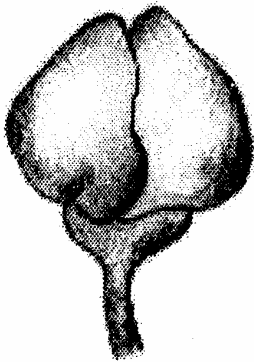


5  
medium

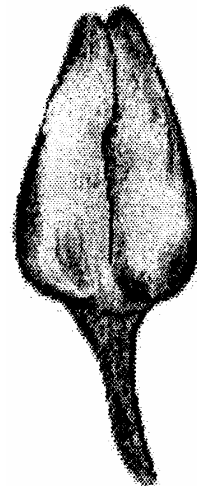


7  
dense

Ad. 35: Fruit: form



1  
rounded



3  
ovate

IX. Literature

No specific literature.

X. Technical Questionnaire

	Reference Number (not to be filled in by the applicant)
<p><b>TECHNICAL QUESTIONNAIRE</b> 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	Note
<b>5.1 Plant: height of main stem (including inflorescence)</b> <b>(2)</b>	
very short	1[ ]
short	3[ ]
medium	5[ ]
tall	7[ ]
very tall	9[ ]
<b>5.2 Plant: number of leaves</b> <b>(4)</b>	
very few	1[ ]
few	3[ ]
medium	5[ ]
many	7[ ]
very many	9[ ]
<b>5.3 Leaf: shape of blade</b> <b>(14)</b>	
lanceolate	1[ ]
narrow elliptic	2[ ]
broad elliptic	3[ ]
ovate	4[ ]
obovate	5[ ]
cordate	6[ ]
rounded	7[ ]

Characteristics	Note
<b>5.4 Leaf: color of midrib on lower side (22)</b>	
whitish	1[ ]
whitish green	2[ ]
green	3[ ]
<b>5.5 Time of flowering (50% of plants with at least one corolla open) (23)</b>	
very early	1[ ]
early	3[ ]
medium	5[ ]
late	7[ ]
very late	9[ ]
<b>5.6 Flower: color of corolla (29)</b>	
white	1[ ]
light pink	2[ ]
medium pink	3[ ]
dark pink	4[ ]
red	5[ ]
<b>5.7 Flower: development of stamens (30)</b>	
none or rudimentary	1[ ]
full	2[ ]

6. Similar varieties and differences from these varieties

Denomination of similar variety	Characteristic in which the similar variety is different <sup>o)</sup>	State of expression of similar variety	State of expression of candidate variety
---------------------------------	--	--	--

<sup>o)</sup> 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.

[Annex follows]



ANNEX

EXAMPLE VARIETIES

	<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
Part I	Introduction .....	2
Part II	Table containing example varieties provided by Greece ....	3
Part III	Table containing example varieties provided by Brazil .....	4

## Part I

### Introduction

This Annex contains two lists of example varieties provided to clarify the states of expression of each characteristic.

Part II / Partie II / Teil II / Parte II

Example varieties provided by Greece / Variétés exemples proposées par la Grèce / von Griechenland vorgeschlagene Beispielsorten /  
Variedades ejemplo propuestas por Grecia

Example varieties Beispielssorten Exemples Variedades ejemplo	Characteristic number Merkmalsnummer Numéro de caractère Número del carácter																																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35			
Argiroudis 14 A								5			3																							1	1	1		
Argous Prossimni																																		3				
Burley 21E		9	1					9													2																	
Doxato			4	5																			5															
Elassona 26																													1									
Karatzova											7																											
Katerini 53	1		3			2				3				6											5				4									
Klio																		7																		4		
Kontoula Zagliveriou			2					3													3		9												2			
Mavros Ipatis				1																			1	7														
Mirodato Agriniou 13B				3		2	2																															
Niki				3											5																							
Peonia 82																		3																				
Poroia 52																																			1			
Ptolemaida 63			2												5							1													4	2		
Sampsous 79			4	9						5																												
Tsembeli Agriniou 21	2	1									7				1	7		1	1																			
Virginia Hellas 9		7				1		9						2																								
Xanthi 2A			3		1	1	1	1							3			7	7		4		3							2	2	2						
Xanthi 81		3									5														3					9								
Xanthi 101														3																								
Zihna Pageou		5		7																																		

States of expression/Niveaux d'expression  
Ausprägungsstufe/Niveles de expresión

Part III / Partie III / Teil III / Parte III

Example varieties provided by le Brazil / Variétés exemples proposées par le Brésil / Von Brasilien vorgeschlagene Beispielsorten /  
Variedades ejemplo propuestas por Brasil

Example varieties Beispielssorten Exemples Variedades ejemplo	Characteristic number Merkmalsnummer Número de caractère Número del carácter																																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35			
Banket A1		7																			2																	
BY21							1		5														3													3	3	
BY37		3		3																																		
BY64 #			2	7			1	7		7													7													7	1	
C176 #								7	7	3					3	5			7										5									
C371 G #																													3	4							7	
K149 #							1		3	7			1								3																	
K326 #		5	3	5	3	1	3	5	5			5	2	2	7	1	3			5	4	3	5	5	5		5	7	3	2	1		2	5	3			
K346 #																				7																		
KY10												3				3																						
KY14													1						7																			
KY8959		7			5				7						5	1	3												5					1				
KY907								7	3					3																								
MN373 #	1	3	2		5		1					3									3		2	3												3		
NC2326 #				3											9																							
NC27 NF #		7		7				3																7														
NC82 #				3																																		
SPG70 #														3	5																							
TN86	2		1									5			3						7	3	1											1				
TN90		5		5	3	1	3	3	3				2			2				5	5	4	2	5	5	5		5	7	3	2	2		2	5	5		
VA509	1							5							7																							
VA510														2																								
VA528																																					1	

States of expression/Niveaux d'expression  
Ausprägungsstufe/Niveles de expresión

[End of document/Fin du document/Ende des Dokuments/Fin del documento]