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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

ENDIVE

(Cichorium endivia L.)

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

Alternative Names: *

<i>Latin</i>	<i>English</i>	<i>French</i>	<i>German</i>	<i>Spanish</i>
<i>Cichorium endivia L.</i>	Endive	Chicorée	Endivie	Escarola

ASSOCIATED DOCUMENTS

These guidelines should be read in conjunction with document TG/1/3, “General Introduction to the Examination of Distinctness, Uniformity and Stability and the Development of Harmonized Descriptions of New Varieties of Plants” (hereinafter referred to as 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 *Cichorium endivia* 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 seed.

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

20 g or at least 10,000 seeds.

2.4 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.

2.5 The plant material supplied should be visibly healthy, not lacking in vigor, nor affected by any important pest or disease.

2.6 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 *Duration of Tests*

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

3.2 *Testing Place*

The tests should normally be conducted at one place. If any characteristics of the variety, which are relevant for the examination of DUS, cannot be seen at that place, the variety may be tested at an additional place.

3.3 *Conditions for Conducting the Examination*

The tests should be carried out under conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

3.4 *Test Design*

3.4.1 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.

3.4.2 Each test should be designed to result in a total of at least 60 plants, which should be divided between two or more replicates.

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

Unless otherwise indicated, all observations determined by measuring or counting should be made on 20 plants or plant parts taken from each of 20 plants.

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 minimum duration of tests recommended in section 3.1 reflects, in general, the need to ensure that any differences in a characteristic are sufficiently consistent.

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 2% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 60 plants, 3 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 is 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) Plant: type according to botanical variety (characteristic 1);
- (b) Plain type varieties only: Plant: sub-type (characteristic 2);
- (c) Cut type varieties only: Plant: sub-type (characteristic 3);
- (d) Heart: shape in longitudinal section (characteristic 6);
- (e) Flower: color (characteristic 28);
- (f) Time of bolting (characteristic 30).

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 Section 6.1.2

(a)-(c) See Explanations on the Table of Characteristics in Chapter 8, Section 8.1

(+) See Explanations on the Table of Characteristics in Chapter 8, Section 8.2

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

	English	français	Deutsch	español	Example Varieties Exemples Beispielsorten Variedades ejemplo	Note/ Nota
1. (* (+)	Plant: botanical type	Plante: type de variété botanique	Pflanze: botanischer Typ	Planta: tipo botánico		
	plain type	scarole	ganzblättrig	de hojas anchas	<i>Cichorium endivia</i> var. <i>latifolia</i>	1
	intermediate type	intermédiaire	intermediär	tipo intermedio		2
	cut type	frisée	krausblättrig	de hojas rizadas	<i>Cichorium endivia</i> var. <i>crispa</i>	3
2. (* (+)	<u>Plain type varieties only:</u> Plant: sub-type	<u>Variétés de type scarole seulement:</u> Plante: sous-type	<u>Nur ganzblättrige Sorten:</u> Pflanze: Untergruppe	<u>Sólo variedades de hojas anchas:</u> Planta: subtipo		
	Grosse bouclée	Grosse bouclée	Grosse bouclée	Grosse bouclée		1
	À cœur plein	À cœur plein	À cœur plein	À cœur plein		2
	Géante maraîchère	Géante maraîchère	Géante maraîchère	Géante maraîchère		3
	Cornet	Cornet	Cornet	Cornet		4
3. (* (+)	<u>Non-plain type varieties only:</u> Plant: sub-type	<u>Variétés autres que de type scarole seulement:</u> Plante: sous-type	<u>Nur krausblättrige Sorten und Zwischentypen:</u> Pflanze: Untergruppe	<u>Excluyendo escarola de hojas rizadas:</u> Planta: subtipo		
	Wallonne	Wallonne	Wallonne	Wallonne		1
	Louviers	Louviers	Louviers	Louviers		2
	D'été à cœur jaune	D'été à cœur jaune	D'été à cœur jaune	D'été à cœur jaune		3
	Other types (including intermediate types between cut and plain types)	Autres (y compris types intermédiaires frisée-scarole)	Andere Typen (einschließlich Zwischentypen zwischen krausblättrigen und ganzblättrigen Typen)	Otros tipos (incluidos los intermedios entre los tipos de hojas rizadas y los tipos de hojas anchas)		4

English	français	Deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota	
4. (a) Plant: diameter	Plante: diamètre	Pflanze: Durchmesser	Planta: diámetro			
small	petit	klein	pequeño	Batavia Améliorée, De Louviers	3	
medium	moyen	mittel	medio	Blonde à cœur plein, D'été à cœur jaune, Golda	5	
large	grand	groß	grande	Grosse Pancalière	7	
very large	très grand	sehr groß	muy grande	Super Fiorentina, Wallonne	9	
5. (a) Plant: growth habit	Plante: port	Pflanze: Wuchsform	Planta: porte			
erect	dressé	aufrecht	vertical	Cornet de la Loire, Gloire de l'Exposition	1	
semi-erect	demi dressé	halbaufrecht	semivertical	Blonde à cœur plein, D'été à cœur jaune	3	
horizontal	horizontal	waagrecht	horizontal	Argentée Mirabel, De Ruffec	5	
6. (*) (+)	Heart: shape in longitudinal section	Cœur: forme en section longitudinale	Herz: Form im Längsschnitt	Cogollo: forma en sección longitudinal		
	elliptic	elliptique	elliptisch	elíptica	Cornet de la Loire	1
	transverse broad elliptic	elliptique large transverse	quer breit elliptisch	elíptica ancha transversal	D'été à cœur jaune	2
	transverse narrow elliptic	elliptique étroite transverse	quer schmal elliptisch	elíptica estrecha transversal	Argentée Mirabel, De Louviers, Golda	3
7. (*)	Heart: color	Cœur: couleur	Herz: Farbe	Cogollo: color		
	yellowish green	vert jaunâtre	gelblichgrün	verde amarillento	Blonde à cœur plein, Toujours Blanche	1
	green	vert	grün	verde	Reine d'Hiver	2
8.	Heart: intensity of green color	Cœur: intensité de la couleur verte	Herz: Intensität der Grünfärbung	Cogollo: intensidad del color verde		
	light	claire	hell	claro	De Ruffec, Reine d'Hiver	3
	medium	moyenne	mittel	medio	Wallonne	5
	dark	foncée	dunkel	oscuro		7

English	français	Deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
9. (b) Leaf: attitude	Feuille: port	Blatt: Haltung	Hoja: porte		
erect	dressé	aufrecht	erecta	Cornet de la Loire, Reine d'Hiver	1
semi-erect	demi dressé	halbaufrecht	semierecta	De Ruffec, Géante maraîchère	3
horizontal	horizontal	waagrecht	horizontal	D'hiver de Provence	5
10. (b) Leaf: incurving of distal part (+)	Feuille: courbure de l'extrémité	Blatt: Krümmung der Spitze	Hoja: curvatura de la parte distal		
weak	faible	gering	débil	Blonde à cœur plein, D'hiver de Provence	3
medium	moyenne	mittel	media	Grosse Pancalière	5
strong	forte	stark	fuerte	Géante maraîchère, Reine d'hiver	7
11. (b) Leaf: length	Feuille: longueur	Blatt: Länge	Hoja: longitud		
short	courte	kurz	corta	D'été d'Anjou	3
medium	moyenne	mittel	media	Batavia améliorée, D'hiver de Provence	5
long	longue	lang	larga	Argentée Mirabel, D'été à cœur jaune	7
12. (b) Leaf: maximum width	Feuille: largeur maximale	Blatt: maximale Breite	Hoja: anchura máxima		
narrow	étroite	schmal	delgada	De Namur, D'Hiver du Var	3
medium	moyenne	mittel	media	Batavia Améliorée, Grosse Bouclée 2, Wallonne	5
broad	large	breit	ancha	D'été à cœur jaune, Géante maraîchère	7

English	français	Deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
13. (b) <u>Plain type varieties only</u>: Leaf: shape	<u>Variétés de type scarole seulement</u>: Feuille: forme	<u>Nur ganzblättrige Sorten</u>: Blatt: Form	<u>Sólo variedades de hojas anchas</u>: Hoja: forma		
narrow obovate	obovale étroite	schmal verkehrt eiförmig	oboval estrecha	D'Hiver du Var, Escariol grüner	3
obovate	obovale	verkehrt eiförmig	oboval	Argentée Mirabel	5
broad obovate	obovale large	breit verkehrt eiförmig	oboval ancha	Diva, Géante maraîchère	7
14. (b) Leaf: color (*)	Feuille: couleur	Blatt: Farbe	Hoja: color		
yellowish green	vert jaunâtre	gelblichgrün	verde amarillento	Blonde à cœur plein, Toujours Blanche	1
green	vert	grün	verde	Batavia Amériorée, D'été d'Anjou, De Namur	2
greyish green	vert gris	gräulichgrün	verde grisáceo	De Louviers	3
15. (b) Leaf: intensity of green color	Feuille: intensité de la couleur verte	Blatt: Intensität der Grünfärbung	Hoja: intensidad del color verde		
light	claire	hell	claro		3
medium	moyenne	mittel	medio		5
dark	foncée	dunkel	oscuro		7
16. (b) <u>Non-plain type varieties only</u>: Leaf: distance between lobes	<u>Variétés de type non scarole seulement</u>: Feuille: distance entre les lobes	<u>Nur krausblättrige Sorten und Zwischentypen</u>: Blatt: Abstand zwischen den Lappen	<u>Sólo variedades que no son de hojas anchas</u>: Hoja: distancia entre los lóbulos		
short	petite	kurz	corta	De Louviers, D'été à cœur jaune, Wallonne	3
medium	moyenne	mittel	media	De Meaux	5
long	grande	lang	larga	De Ruffec, Gloire de l'Exposition, Grosse Pancalière	7

English	français	Deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
17. (b) Leaf: dentation of margin	Feuille: denture du bord	Blatt: Zähnung des Randes	Hoja: dentado del borde		
weak	faible	gering	débil		3
medium	moyenne	mittel	medio		5
strong	forte	stark	fuerte		7
18. (b) Leaf: undulation of margin	Feuille: ondulation du bord	Blatt: Randwellung	Hoja: ondulación del borde		
weak	faible	gering	débil		3
medium	moyenne	mittel	media	D'Hiver du Var	5
strong	forte	stark	fuerte	Blonde à cœur plein	7
19. (b) Leaf: creasing	Feuille: crispation	Blatt: Faltung	Hoja: crenado		
weak	faible	gering	débil	Argentée Mirabel, De Namur	3
medium	moyenne	mittel	medio	Batavia Améliorée, D'Hiver de Provence	5
strong	forte	stark	fuerte	Blonde à cœur plein, De Ruffec	7
20. (b) <u>Plain type varieties only</u>: Leaf: glossiness	<u>Variétés de type scarole seulement</u>: Feuille: brillance	<u>Nur ganzblättrige Sorten</u>: Blatt: Glanz	<u>Sólo variedades de hojas anchas</u>: Hoja: brillo		
weak	faible	gering	débil	D'Hiver du Var	3
medium	moyenne	mittel	intermedio	Argentée Mirabel, Blonde à cœur plein	5
strong	forte	stark	fuerte		7

English	français	Deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
21. (b) <u>Non-plain type varieties only:</u> Leaf: ratio length of midrib without lamina/total length of leaf (*) (+)	<u>Variétés de type non scarole seulement:</u> Feuille: rapport longueur de la nervure médiane sans limbe/longueur totale de la feuille	<u>Nur krausblättrige Sorten und Zwischentypen:</u> Blatt: Verhältnis Länge der Mittelrippe ohne Blattspreite/Gesamt-länge des Blattes	<u>Sólo variedades que no son de hojas anchas:</u> Hoja: proporción entre la longitud del nervio central sin lámina y la longitud total de la hoja		
very small	très petit	sehr klein	muy pequeña	D'Olivet	1
small	petit	klein	pequeña	De Louviers	3
medium	moyen	mittel	media	Wallonne	5
large	grand	groß	grande	De Namur	7
very large	très grand	sehr groß	muy grande	Toujours Blanche	9
22. (b) Leaf: width of midrib at base (*) (+)	Feuille: largeur de la nervure médiane à la base	Blatt: Breite der Mittelrippe an der Basis	Hoja: anchura del nervio central en la base		
very narrow	très étroite	sehr schmal	muy estrecho	De Louviers, Toujours Blanche	1
narrow	étroite	schmal	estrecho	D'été d'Anjou, D'Hiver du Var	3
medium	moyenne	mittel	medio	D'été à cœur jaune, Grosse bouclée 2	5
broad	large	breit	ancho	Blonde à cœur plein, Wallonne	7
23. (b) <u>Non-plain type varieties only:</u> Leaf: color of midrib at base (*)	<u>Variétés de type non scarole seulement:</u> Feuille: couleur de la nervure médiane à la base	<u>Nur krausblättrige Sorten und Zwischentypen:</u> Blatt: Farbe der Mittelrippe an der Basis	<u>Sólo variedades que no son de hojas anchas:</u> Hoja: color del nervio central en la base		
white	blanche	weiß	blanco	D'été à cœur jaune	1
pink	rose	rosa	rosa	De Meaux	2

English	français	Deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
24. (c) Stem: height (*)	Tige: hauteur	Stengel: Höhe	Tallo: altura		
short	courte	niedrig	bajo	De Louviers	3
medium	moyenne	mittel	medio	D'été à cœur jaune, Vicor	5
tall	haute	hoch	alto	Cornet de la Loire, D'Hiver de Provence	7
25. (c) Stem: fasciation	Tige: fasciation	Stengel: Verbänderung	Tallo: fasciación		
absent	absente	fehlend	ausente	Cornet d'Anjou, D'Hiver de Provence, Ruffec	1
present	présente	vorhanden	presente	D'été d'Anjou, Golda, Grosse bouclée 2	9
26. (c) Stem: attitude of branches	Tige: port des ramifications	Stengel: Stellung der Seitentriebe	Tallo: porte de las ramificaciones		
erect	dressé	aufrecht	erecto	Batavia Améliorée, D'Olivet, Grosse bouclée 2, Toujours Blanche	1
semi-erect	demi dressé	halbaufrecht	semierecto	D'été d'Anjou	3
horizontal	horizontal	waagrecht	horizontal	Canta, Emilie, Ariga	5
27. (c) <u>Plain type varieties only</u>: Stem: shape of stipules (*)	<u>Variétés de type scarole seulement</u>: Tige: forme des stipules	<u>Nur ganzblättrige Sorten</u>: Stengel: Form der Nebenblätter	<u>Sólo variedades de hojas anchas</u>: Tallo: forma de las estípulas		
elliptic	elliptiques	elliptisch	elíptica	Argentée Mirabel	1
broad elliptic	elliptiques larges	breit elliptisch	elíptica ancha	Blonde à cœur plein	2
circular	arrondis	rund	circular	Solera	3

English	français	Deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
28. (*)	Flower: color	Fleur: couleur	Blüte: Farbe	Flor: color	
white	blanche	weiß	blanco	De Louviers, Pommant seule	1
pink	rose	rosa	rosa	Lisuna, Pinkstar, Rosabella	2
blue	bleue	blau	azul	De Meaux, De Namur, Grosse bouclée 2	3
violet blue	bleu violacé	violettblau	azul violeta	Alaska, Ariga, Sally, Wallonne	4
29. (*)	Time of harvest maturity	Époque de maturité de récolte	Zeitpunkt der Erntereife	Época de madurez para cosecha	
early	précoce	früh	temprana	Sally	3
medium	moyenne	mittel	media	Géante d'Hiver	5
late	tardive	spät	tardía	Wallone	7
very late	très tardive	sehr spät	muy tardía	Cornet d'Anjou	9
30. (*)	Time of bolting	Époque de montaison	Zeitpunkt des Schossens	Época de subida a flor	
very early	très précoce	sehr früh	muy temprana	Isadora, Noveli	1
early	précoce	früh	temprana	De Meaux, Pommant seule	3
medium	moyenne	mittel	media	Elody, Sally	5
late	tardive	spät	tardía	Blonde à cœur plein, De Namur	7
very late	très tardive	sehr spät	muy tardía	Excel, Foxie, Snoopie	9

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: All observations on the plant should be made just before harvest maturity.
- (b) Leaf: All observations on the leaf should be made just before harvest maturity on leaves excluding the outer and center leaves.
- (c) Stem: All observations on the stem should be made on a flowering stem.

8.2 *Explanations for individual characteristics*

Ads. 1, 2, 3: Plant: botanical type and sub-types

Endive varieties can be divided into “Plain Type” and “Cut Type” as well as an “Intermediate Type”:

- (A) Plain type (*C. endivia* var. *latifolia*): Endives of the plain type are characterized by their full foliage with serrated margins. They differ from those of the cut type in that their leaves are broader, undulating or curled-up with marginal dentation and incurved towards the heart of the plant.

Plain type includes the following sub-types :

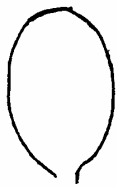
- (1) Grosse bouclée: Short, broad foliage; large, full heart, with white, tightly-curved heart leaves.
- (2) A cœur plein: Somewhat flattened shape because the partly incurved inner leaves tend to cover the heart, thus forming quite a noticeable ball low down; the ball is broad, with crinkly leaves.
- (3) Géante maraichère: Very voluminous variety of erect growth habit, abundant blond-green foliage and a tightly-closed heart.
- (4) Cornet: Compared with the other plain-type endives this one has fewer but much more ample leaves, almost as broad as they are long, the margins broken up into numerous elongated serrations. The leaf, initially folded in the centre of the plant, spreads outwards as it grows, like the bell of a trumpet, often forming a sort of cap that continues for some time to envelop the younger, inner leaves, so forming a true heart.

- (B) Cut type (*C. endivia* var. *crispa*): Endives of the cut type are characterized by their numerous leaves disposed in a rosette shape, deeply indented and creased, smooth and more or less serrated.

Cut type includes the following sub-types:

- (1) Wallonne: This type is characterized by its long, broad leaves cut into symmetrical lobes, with finely indented, curly margins and relatively narrow ribs.
 - (2) Louviers: This type is characterized by very fine ribs, very finely and deeply indented, not very curly foliage and a tight heart.
 - (3) D'été à cœur jaune: This type is characterized by its broad white and fleshy ribs and semi-fine, spreading cut foliage, medium-indentured, and quite a tight yellow heart.
- (C) Intermediate type: The leaves are of the size of the plain type with the outline of a semi-fine cut type.

Ad. 6: Heart: shape in longitudinal section



1
elliptic

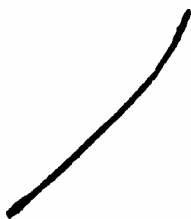


2
transverse broad elliptic

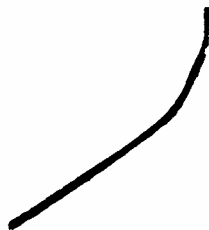


3
transverse narrow elliptic

Ad. 10: Leaf: incurving of distal part



3
weak

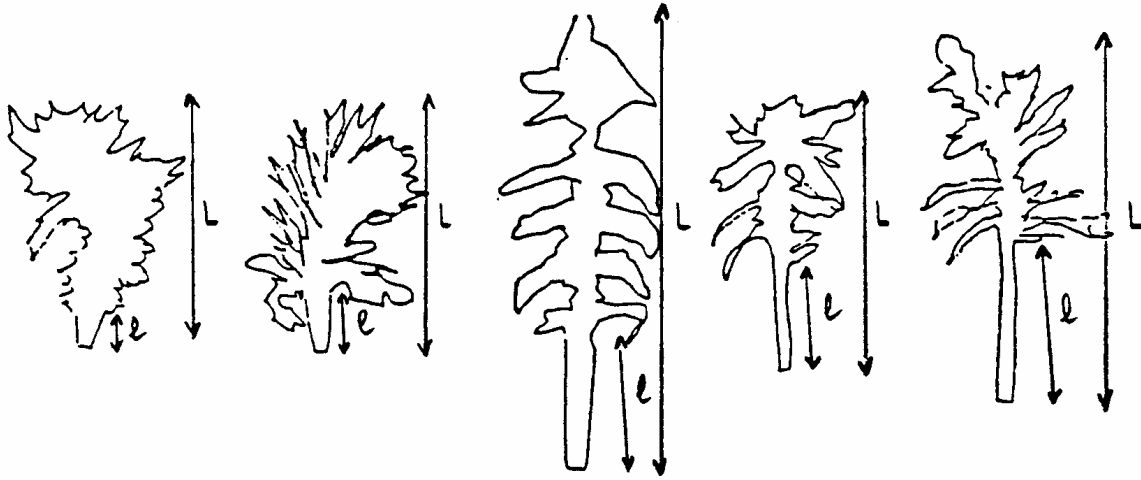


5
medium



7
strong

Ad. 21: Non-plain type varieties only: Leaf: ratio length of midrib without lamina / total length of leaf



L = total length of leaf
l = length of midrib without lamina

1
very small

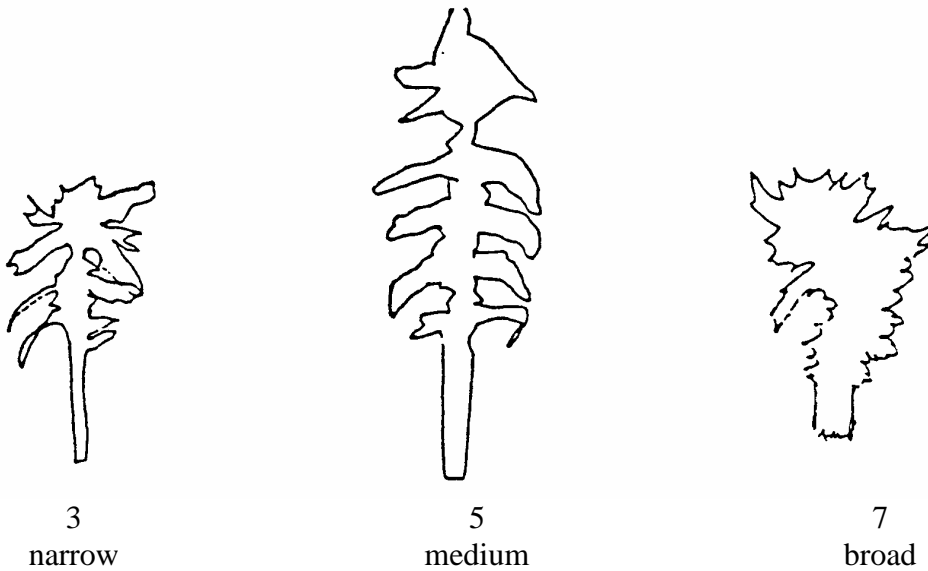
3
small

5
medium

7
large

9
very large

Ad. 22: Leaf: width of midrib at base



3
narrow

5
medium

7
broad

9. Literature

No specific literature.

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 Latin Name	<input type="text" value="Cichorium endivia L."/>	
1.2 Common Name	<input type="text" value="Endive"/>	
2. Applicant		
Name	<input type="text"/>	
Address	<input type="text"/>	
Telephone No.	<input type="text"/>	
Fax No.	<input type="text"/>	
E-mail address	<input type="text"/>	
Breeder (if different from applicant)	<input type="text"/>	
3. Proposed denomination and breeder's reference		
Proposed denomination (if available)	<input type="text"/>	
Breeder's reference	<input type="text"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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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 unknown cross []
(please state known parent variety(ies))
- (c) totally unknown cross []

4.1.2 Mutation []
(please state parent variety)

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

4.1.4 Other []
(please provide details)

4.2 Method of propagating the variety

- (a) Cross-pollination []
- (c) Other []
(please provide details)

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 Plant: botanical type (1)		
plain type	<i>Cichorium endivia</i> var. <i>latifolia</i>	1[]
intermediate type		2[]
cut type	<i>Cichorium endivia</i> var. <i>crispa</i>	3[]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
Characteristics	Example Varieties	Note	
5.2 Plain type varieties only: Plant: sub-type			
(2)			
Grosse bouclée		1[]	
A cœur plein		2[]	
Géante maraichère		3[]	
Cornet		4[]	
5.3 Non-plain type varieties only: Plant: sub-type			
(3)			
Wallonne		1[]	
Louviers		2[]	
D'été à cœur jaune		3[]	
Other types (including intermediate types between cut and plain types)		4[]	
5.4 Heart: shape in longitudinal section			
(6)			
elliptic	Cornet de la Loire	1[]	
transverse broad elliptic	D'été à cœur jaune	2[]	
transverse narrow elliptic	Argentée Mirabel, De Louviers, Golda	3[]	
5.5 Heart: color			
(7)			
yellowish green	Blonde à cœur plein, Toujours Blanche	1[]	
green	Reine d'Hiver	2[]	
5.6 Leaf: color			
(14)			
yellowish green	Blonde à cœur plein, Toujours Blanche	1[]	
green	Batavia Améliorée, D'été d'Anjou, De Namur	2[]	
greyish green	De Louviers	3[]	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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7. Additional information which may help in the examination of the variety

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

Yes [] No []

(If yes, please provide details)

7.2 Special conditions for the examination of the variety

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

Yes [] No []

7.2.2 If yes, please give details:

7.3 Other information

A representative photograph of one or more leaves of the variety may be added to 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.

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

Applicant's name

Signature

Date