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Ces principes directeurs d'examen ont été remplacés par une version ultérieure. La version adoptée la plus récente des principes directeurs d'examen figure à l'adresse suivante : [http://www.upov.int/test\\_guidelines/fr/list.jsp](http://www.upov.int/test_guidelines/fr/list.jsp)

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Diese Prüfungsrichtlinien wurden durch eine neuere Fassung ersetzt. Die neueste angenommene Fassung von Prüfungsrichtlinien ist unter [http://www.upov.int/test\\_guidelines/en/list.jsp](http://www.upov.int/test_guidelines/en/list.jsp) zu finden.

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Las presentes directrices de examen han sido reemplazadas por una versión posterior. La versión de las directrices de examen de más reciente aprobación está disponible en [http://www.upov.int/test\\_guidelines/es/list.jsp](http://www.upov.int/test_guidelines/es/list.jsp).

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TG/46/6

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**

**ONION AND SHALLOT**

*(Allium cepa L.,  
Allium ascalonicum L.)*

**GENEVA**  
**1999**

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## **GUIDELINES**

### **FOR THE CONDUCT OF TESTS**

#### **FOR DISTINCTNESS, UNIFORMITY AND STABILITY**

#### **ONION AND SHALLOT**

*(Allium cepa L.,  
Allium ascalonicum 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 seed and vegetatively propagated varieties of Onion (including Echalion) and Shallot (*Allium cepa* L.). Shallots are also known as *Allium ascalonicum* 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. The minimum quantity of plant material or seed to be supplied by the applicant in one or several samples should be:

- (a) Seed propagated varieties: 60 g. of seed
- (b) Vegetatively propagated varieties: 500 bulblets or sets

The seed should at least meet the minimum requirements for germination capacity, moisture content and purity for marketing seed or plant material in the country in which the application is made. The germination capacity should be as high as possible.

2. The seed and 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 similar growing periods.

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 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. Each test should include a total of 100 plants for vegetatively propagated varieties and 200 plants for seed propagated varieties, which should be divided between two or more replicates. Separate plots for observation and for measuring can only be used if they have been subject to similar environmental conditions.

4. Additional tests for special purposes may be established.

#### IV. Methods and Observations

1. All observations determined by measurement or counting should be made on 60 plants or parts taken from each of 60 plants.
2. For the assessment of uniformity of vegetatively propagated varieties, a population standard of 1% with an acceptance probability of at least 95% should be applied. In the case of a sample size of 100 plants the maximum number of off-types allowed would be 3.
3. For the assessment of uniformity of open-pollinated and hybrid varieties relative uniformity standards should be applied.
4. All observations on the leaf and the foliage should be made just before foliage fall-over.
5. All observations on the bulb should be made at harvest maturity.

#### 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) Bulb: splitting into bulblets (with dry skin around each bulblet) (characteristic 10)
  - (b) Bulb/Bulblet: general shape (in longitudinal section) (characteristic 18)
  - (c) Bulb/Bulblet: basic color of dry skin (characteristic 23)
  - (d) Male sterility (characteristic 36)

#### 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. The name of each example variety is followed by an abbreviation indicating whether the variety is an onion (O) or a shallot (S).
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 the 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.

(1) The optimum stage of development for the assessment of each characteristic is indicated by a number in the second column. The stages of development denoted by each number are described at the end of Chapter VIII.

(2) Type of example variety: O = onion  
S = shallot.



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

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>1. (* )</b>	<b>Plant: number of leaves per pseudostem</b>	<b>Plant: nombre de feuilles par fausse tige</b>	<b>Pflanze: Anzahl Blätter je Pseudostamms</b>	<b>Planta: número de hojas por pseudotallo</b>		
	few	petit	gering	bajo	SY300 (O)	3
	medium	moyen	mittel	medio	The Kelsae (O)	5
	many	grand	groß	alto	Yellow Sweet Spanish (O)	7
<b>2. (* )</b>	<b>Foliage: attitude</b>	<b>Feuillage: port</b>	<b>Laub: Haltung</b>	<b>Follaje: porte</b>		
	erect	dressé	aufrecht	erecto	Pikant (S), Santé (S)	1
	erect to semi-erect	dressé à demi-dressé	aufrecht bis halbaufrecht	erecto a semierecto	Cannon (O), Keep Well (O), Success (S)	2
	semi-erect	demi-dressé	halbaufrecht	semierecto	Southport Red Globe (O), Macador (S), Pikant (S)	3
	semi-erect to horizontal	demi-dressé à horizontal	halbaufrecht bis waagerecht	semierecto a horizontal	Hygro (O)	4
	horizontal	horizontal	waagerecht	horizontal		5
<b>3. (* )</b>	<b>Foliage: waxiness</b>	<b>Feuillage: glaucescence</b>	<b>Laub: Bereifung</b>	<b>Follaje: cerosidad</b>		
	absent to very weak	nulle à très faible	fehlend oder sehr gering	ausente a muy débil		1
	weak	faible	gering	débil	Yellow Sweet Spanish (O), Success (S)	3
	medium	moyenne	mittel	media	Hikeeper (O), Golden Gourmet (S)	5
	strong	forte	stark	fuerte	Calypso (O), Flevo (O), Santé (S)	7
	very strong	très forte	sehr stark	muy fuerte		9

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>4.</b> (* )	<b>Foliage: green color</b>	<b>Feuillage: couleur verte</b>	<b>Laub: Grünfärbung</b>	<b>Follaje: color verde</b>		
	light	claire	hell	claro	Guimar (O), Yellow Sweet Spanish (O), Tropix (S)	3
	medium	moyenne	mittel	medio	Caribo (O), Texas grano 502 (O), Golden Gourmet (S)	5
	dark	foncée	dunkel	oscuro	Hikeeper (O), La Reine (O), Santé (S)	7
<b>5.</b> (* ) (+ )	<b>100</b> <b>Foliage: cranking</b>	<b>Feuillage: cassure</b>	<b>Laub: Abbiegen der Blattspitzen</b>	<b>Follaje: quebrado</b>		
	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil	Pikant (S)	1
	weak	faible	gering	débil	Golden Bear (O), Santé (S)	3
	medium	moyenne	mittel	media	Hyduro (O)	5
	strong	forte	stark	fuerte		7
	very strong	très forte	sehr stark	muy fuerte		9
<b>6.1</b>	<b><u>Onion varieties only: Leaf: length</u></b>	<b><u>Seulement variétés d'oignon: Feuille: longueur</u></b>	<b><u>Nur Zwiebelsorten: Blatt: Länge</u></b>	<b><u>Solamente variedades de cebolla: Hoja: longitud</u></b>		
	very short	très courte	sehr kurz	muy corta	Barletta (O), Pompei (O)	1
	short	courte	kurz	corta	Nocera (O)	3
	medium	moyenne	mittel	media	Jetset (O)	5
	long	longue	lang	larga	Staro (O)	7
	very long	très longue	sehr lang	muy larga	The Kelsae (O)	9

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>6.2</b>	<b><u>Shallot varieties only: Leaf: length</u></b>	<b><u>Seulement variétés d'échalote: Feuille: longueur</u></b>	<b><u>Nur Schalotten-sorten: Blatt: Länge</u></b>	<b><u>Solamente variedades de chalota: Hoja: longitud</u></b>		
	very short	très courte	sehr kurz	muy corta		1
	short	courte	kurz	corta	Pikant (S)	3
	medium	moyenne	mittel	media	Spring Field (S)	5
	long	longue	lang	larga	Ambition (S)	7
	very long	très longue	sehr lang	muy larga		9
<b>7.1</b> (* )	<b><u>Onion varieties only: Leaf: diameter</u></b>	<b><u>Seulement variétés d'oignon: Feuille: diamètre</u></b>	<b><u>Nur Zwiebel-sorten: Blatt: Durchmesser</u></b>	<b><u>Solamente variedades de cebolla: Hoja: diámetro</u></b>		
	small	petit	klein	pequeño	Nocera (O), Paris (O)	3
	medium	moyen	mittel	medio	Hyfast (O)	5
	large	grand	groß	grande	Dorata di Parma (O)	7
<b>7.2</b> (* )	<b><u>Shallot varieties only: Leaf: diameter</u></b>	<b><u>Seulement variétés d'échalote: Feuille: diamètre</u></b>	<b><u>Nur Schalotten-sorten: Blatt: Durchmesser</u></b>	<b><u>Solamente variedades de chalota: Hoja: diámetro</u></b>		
	small	petit	klein	pequeño	Pikant (S)	3
	medium	moyen	mittel	medio	Spring Field (S)	5
	large	grand	groß	grande	Ambition (S)	7
<b>8. 100</b> (+ )	<b><u>Onion varieties only: Pseudostem: length (up to highest green leaf)</u></b>	<b><u>Seulement variétés d'oignon: Fausse tige: longueur (jusqu'à la feuille verte la plus haute)</u></b>	<b><u>Nur Zwiebelsorten: Pseudostamm: Länge (bis zum obersten grünen Blatt)</u></b>	<b><u>Solamente variedades de cebolla: Pseudotallo: longitud (hasta la hoja verde más alta)</u></b>		
	short	courte	kurz	corto	Barletta (O)	3
	medium	moyenne	mittel	medio	The Kelsae (O), Hyduro (O)	5
	long	longue	lang	largo	Goldito (O)	7

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>9. 100</b> (+)	<b><u>Onion varieties only:</u> Pseudostem: diameter (at mid-point of length)</b>	<b><u>Seulement variétés d'oignon:</u> Fausse tige: diamètre (à demi-longueur)</b>	<b><u>Nur Zwiebelsorten:</u> Pseudostamm: Durchmesser (auf halber Länge)</b>	<b><u>Solamente variedades de cebolla:</u> Pseudotallo: diámetro (a media longitud)</b>		
	small	étroite	klein	estrecho	Coler (O)	3
	medium	moyenne	mittel	medio	Calypso (O), Justo (O), La Reine (O)	5
	large	grande	groß	ancho	Blanca grande tardía de Lérida (O), The Kelsae (O)	7
<b>10.</b> (* (+)	<b><u>Bulb: splitting into bulblets (with dry skin around each bulblet)</u></b>	<b><u>Bulbe: séparation en bulbilles (avec des écailles sèches couvrant chaque bulbille)</u></b>	<b><u>Zwiebel: Aufspaltung in Bulbillen (mit getrennter Schale um jede Bulbille)</u></b>	<b><u>Bulbo: separación en bulbillos (con piel seca alrededor de cada bulbillo)</u></b>		
	absent	absent	fehlend	ausente	Pompei (O)	1
	present	présent	vorhanden	presente	Pikant (S)	9
<b>11.</b> (*	<b><u>Shallot varieties only:</u> Bulb: degree of splitting into bulblets</b>	<b><u>Seulement variétés d'échalote:</u> Bulbe: degré de séparation en bulbilles</b>	<b><u>Nur Schalotten-sorten:</u> Zwiebel: Stärke der Aufspaltung in Bulbillen</b>	<b><u>Solamente variedades de chalota:</u> Bulbo: grado de separación en bulbillos</b>		
	weak	faible	gering	débil	Atlas (S)	3
	medium	moyen	mittel	medio	Santé (S)	5
	strong	fort	stark	fuerte	Griselle (S)	7
<b>12.1</b> (*	<b><u>Onion varieties only:</u> Bulb: size</b>	<b><u>Seulement variétés d'oignon:</u> Bulbe: taille</b>	<b><u>Nur Zwiebel-sorten:</u> Zwiebel: Größe</b>	<b><u>Solamente variedades de cebolla:</u> Bulbo: tamaño</b>		
	small	petit	klein	pequeño		3
	medium	moyen	mittel	medio	Rijnsburger 7 (O)	5
	large	grand	groß	grande	The Kelsae (O)	7

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielsorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>12.2</b> (* )	<b><u>Shallot varieties grown from bulblets only:</u></b> <b>Bulblet: size</b>	<b><u>Seulement variétés d'échalote issues de bulbilles:</u></b> <b>Bulbille: taille</b>	<b><u>Nur Schalotten-sorten aus Bulbillen:</u></b> <b>Bulbille: Größe</b>	<b><u>Solamente variedades de chalota a partir de bulbillos:</u></b> <b>Bulbillo: tamaño</b>		
	small	petit	klein	pequeño	Atlas (S)	3
	medium	moyen	mittel	medio	Spring Field (S), Topper (S)	5
	large	grand	groß	grande	Delicato (S), Santé (S)	7
<b>13.1</b> (* )	<b><u>Onion varieties only: Bulb: height</u></b>	<b><u>Seulement variétés d'oignon: Bulbe: hauteur</u></b>	<b><u>Nur Zwiebelsorten: Zwiebel: Höhe</u></b>	<b><u>Solamente variedades de cebolla: Bulbo: altura</u></b>		
	short	bas	niedrig	bajo	Nocera (O), Stuttgarter Riesen (O)	3
	medium	moyen	mittel	medio	Golden Bear (O), Rijnsburger 7 (O)	5
	tall	haut	hoch	alto	Birnförmige (O), The Kelsae (O)	7
<b>13.2</b> (* )	<b><u>Shallot varieties grown from bulblets only: Bulblet: height</u></b>	<b><u>Seulement variétés d'échalote issues de bulbilles: Bulbille: hauteur</u></b>	<b><u>Nur Schalotten-sorten aus Bulbillen: Bulbille: Höhe</u></b>	<b><u>Solamente variedades de chalota a partir de bulbillos: Bulbillo: altura</u></b>		
	very short	très basse	sehr niedrig	muy baja		1
	short	basse	niedrig	baja	Atlas (S)	3
	medium	moyenne	mittel	media	Topper (S)	5
	tall	haute	hoch	alta	Matador (S)	7
	very tall	très haute	sehr hoch	muy alta	Longor (S)	9

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>14.1</b> (* )	<b><u>Onion varieties only: Bulb: diameter</u></b>	<b><u>Seulement variétés d'oignon: Bulbe: diamètre</u></b>	<b><u>Nur Zwiebel-sorten: Zwiebel: Durchmesser</u></b>	<b><u>Solamente variedades de cebolla: Bulbo: diámetro</u></b>		
	small	petit	klein	pequeño	Nocera (O), Owa (O)	3
	medium	moyen	mittel	medio	Rijnsburger 7 (O)	5
	large	grand	groß	grande	Stuttgarter Riesen (O)	7
<b>14.2</b> (* )	<b><u>Shallot varieties grown from bulblets only: Bulblet: diameter</u></b>	<b><u>Seulement variétés d'échalote issues de bulbilles: Bulbille: diamètre</u></b>	<b><u>Nur Schalotten-sorten aus Bulbillen: Bulbille: Durchmesser</u></b>	<b><u>Solamente variedades de chalota a partir de bulbillos: Bulbillo: diámetro</u></b>		
	small	petit	klein	pequeño	Pikant (S)	3
	medium	moyen	mittel	medio	Success (S)	5
	large	grand	groß	grande	Santé (S)	7
<b>15.1</b> (* )	<b><u>Onion varieties only: Bulb: ratio height/diameter</u></b>	<b><u>Seulement variétés d'oignon: Bulbe: rapport hauteur/diamètre</u></b>	<b><u>Nur Zwiebelsorten: Zwiebel: Verhältnis Höhe/Durchmesser</u></b>	<b><u>Solamente variedades de cebolla: Bulbo: relación altura/diámetro</u></b>		
	very small	très petit	sehr klein	muy pequeño	Pompei (O)	1
	small	petit	klein	pequeño	La Reine (O)	3
	medium	moyen	mittel	medio	Rijnsburger 7 (O), Valenciana Temprana (O)	5
	large	grand	groß	grande	Arad (O), The Kelsae (O)	7
	very large	très grand	sehr groß	muy grande	Owa (O)	9

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>15.2</b> (* )	<b><u>Shallot varieties from bulblets only:</u> Bulblet: ratio height/diameter</b>	<b><u>Seulement variétés d'échalote issues de bulbilles:</u> Bulbille: rapport hauteur/diamètre</b>	<b><u>Nur Schalotten-sorten aus Bulbillen:</u> Bulbille: Verhältnis Höhe/Durchmesser</b>	<b><u>Solamente variedades de chalota partir de bulbillos:</u> Bulbillo: relación altura/diámetro</b>		
	very small	très petit	sehr klein	muy pequeño		1
	small	petit	klein	pequeño	Topper (S)	3
	medium	moyen	mittel	medio	Pikant (S), Success (S)	5
	large	grand	groß	grande	Longor (S)	7
	very large	très grand	sehr groß	muy grande		9
<b>16.</b> (* ) (+ )	<b>Bulb/Bulblet: position of maximum diameter</b>	<b>Bulbe/Bulbille: position du diamètre maximal</b>	<b>Zwiebel/Bulbille: Position des größten Durchmessers</b>	<b>Bulbo/Bulbillo: posición del diámetro máximo</b>		
	towards apex	vers le sommet	zur Spitze hin	hacia el ápice	Sweet Sandwich (O), Texas grano 502 (O)	1
	at middle	au milieu	in der Mitte	en el punto medio	Rijnsburger 7 (O), Valenciana tardía de exportacion (O), Red Sun (S)	2
	towards base	vers la base	zur Basis hin	hacia la base	The Kelsae (O)	3
<b>17. 150</b> (+ )	<b>Bulb/Bulblet: width of neck</b>	<b>Bulbe/Bulbille: épaisseur du collet</b>	<b>Zwiebel/Bulbille: Breite des Halses</b>	<b>Bulbo/Bulbillo: anchura del cuello</b>		
	very narrow	très étroit	sehr schmal	muy estrecho	Pikant (S)	1
	narrow	étroit	schmal	estrecho	La Reine (O), Topper (S)	3
	medium	moyen	mittel	medio	Hyduro (O), Santé (S)	5
	broad	large	breit	ancho	Blanca grande tardía de Lérida (O)	7
	very broad	très large	sehr breit	muy ancho		9

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>18. 150</b> (* (+)	<b>Bulb/Bulblet: general shape (in longitudinal section)</b>	<b>Bulbe/Bulbille: forme générale (en section longi- tudinale)</b>	<b>Zwiebel/Bulbille: allgemeine Form (im Längsschnitt)</b>	<b>Bulbo/Bulbillo: forma general (en sección longi- tudinal)</b>		
	elliptic	elliptique	elliptisch	elíptica	Owa (O), Longor (S)	1
	ovate	ovoïde	eiförmig	ovoïde	Birnenförmige (O), Rossa lunga di Firenze (O)	2
	broad elliptic	arrondi(e) allongé(e)	breitelliptisch	elíptica ancha	Ailsa Craig (O), Beacon (O), Early Yellow Globe (O), Hiball (O)	3
	circular	arrondi(e)	rund	circular	Rijnsburger 7 (O), Pikant (S)	4
	broad ovate	ovoïde large	breit eiförmig	obovalada ancha	Hysam (O)	5
	broad obovate	obovoïde large	breit verkehrt eiförmig	obovada ancha	Lilia (O), Texas grano 502 (O), Sweet Sandwich (O)	6
	rhombic	losangique	rhombisch	rómbica	Zittauer gelbe (O), Matador (S)	7
	transverse elliptic	elliptique aplati(e)	querelliptisch	elíptica transversal	Sturka (O), Stuttgarter Riesen (O), Atlantic (S), Golden Gourmet (S)	8
	transverse narrow elliptic	elliptique très aplatis(e)	schmal querelliptisch	elíptica transversal estrecha	Brunswijker (O), De Moissac (O), Paille des vertus (O), Pompei (O)	9



Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>19.</b> (* (+)	<b><u>Onion varieties only: Bulb: shape of top (as for 18)</u></b>	<b><u>Seulement variétés d'oignon: Bulbe: forme du sommet (comme pour 18)</u></b>	<b><u>Nur Zwiebelsorten: Zwiebel: Form der Spitze (wie unter 18)</u></b>	<b><u>Solamente variedades de cebolla: Bulbo: forma del ápice (como en 18)</u></b>		
	depressed	déprimé	ingesunken	deprimido	Dorata di Parma (O)	1
	flat	aplatis	flach	plano	La Reine (O), Sweet Sandwich (O),	2
	slightly raised	légèrement proéminent	leicht vorgewölbt	ligeramente prominente	Valenciana Temprana (O)	3
	rounded	arrondi	abgerundet	redondeado	Rijnsburger 7 (O), Valenciana tardía de exportacion (O)	4
	slightly sloping	légèrement pointu	leicht zugespitzt	ligeramente puntiagudo	Ailsa Craig (O), Rouge pale de Niort (O)	5
	strongly sloping	fortement pointu	stark zugespitzt	fuertemente puntiagudo	Owa (O)	6
<b>20.</b> (* (+)	<b><u>Bulb/Bulblet: shape of base (as for 18)</u></b>	<b><u>Bulbe/Bulbille: forme de la base (comme pour 18)</u></b>	<b><u>Zwiebel/Bulbille: Form der Basis (wie unter 18)</u></b>	<b><u>Bulbo/Bulbillo: forma de la base (como en 18)</u></b>		
	recessed	déprimée	ingesunken	deprimida	Paille des vertus (O)	1
	flat	aplatie	flach	plana	Nocera (O), Valenciana Temprana (O)	2
	round	arrondie	abgerundet	redonda	Rijnsburger 7 (O), Valenciana tardía de exportacion (O) Atlas (S), Delicato (S)	3
	weakly tapered	légèrement conique	leicht konisch	ligeramente cónica	Pompei (O), The Kelsae (O), Bonilla (S), Santé (S)	4
	strongly tapered	fortement conique	stark konisch	fuertemente cónica	Owa (O), Ambition (S)	5

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
21.	<b>Bulb/Bulblet: adherence of dry skin after harvest</b>	<b>Bulbe/Bulbille: adhérence des écailles après la récolte</b>	<b>Zwiebel/Bulbille: Anhaften der Schale nach der Ernte</b>	<b>Bulbo/Bulbillo: adherencia de la piel seca tras la cosecha</b>		
	weak	faible	gering	débil	Ailsa Craig (O), Tropix (S)	3
	medium	moyenne	mittel	media	Rjinsburger 7 (O), Golden Gourmet (S)	5
	strong	forte	stark	fuerte	Stuttgarter Riesen (O), Bonilla (S), Santé (S)	7
22. 150	<b>Bulb/Bulblet: thickness of dry skin</b>	<b>Bulbe/Bulbille: épaisseur des écailles sèches</b>	<b>Zwiebel/Bulbille: Dicke der Schale</b>	<b>Bulbo/Bulbillo: espesor de la piel seca</b>		
	thin	mince	dünn	delgado	La Reine (O), Pikant (S)	3
	medium	moyenne	mittel	medio	Sturon (O), Santé (S)	5
	thick	épaisse	dick	grueso	Birnförmige (O), Espagnol (O)	7
23. (* )	<b>Bulb/Bulblet: basic color of dry skin</b>	<b>Bulbe/Bulbille: couleur de fond des écailles sèches</b>	<b>Zwiebel/Bulbille: Grundfarbe der Schale</b>	<b>Bulbo/Bulbillo: color de fondo de la piel seca</b>		
	white	blanches	weiß	blanca	La Reine (O)	1
	grey	grises	grau	gris	Griselle (S)	2
	green	vertes	grün	verde		3
	yellow	jaunes	gelb	amarilla	Zittauer gelbe (O), Creation (S), Golden Gourmet (S), Topper (S)	4
	brown	brunes	braun	marrón	Valenciana Temprana (O), Ambition (S), Delicato (S)	5
	pink	roses	rosa	rosa	Colorada de Figueras (O), Rox (S)	6
red	rouges	rot	roja	Brunswijker (O), Red Baron (O)	7	

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>24.</b> (* )	<b>Bulb/Bulblet: intensity of basic color of dry skin</b>	<b>Bulbe/Bulbille: intensité de la couleur de fond des écailles sèches</b>	<b>Zwiebel/Bulbille: Intensität der Grundfarbe der Schale</b>	<b>Bulbo/Bulbillo: intensidad del color de fondo de la piel seca</b>		
	light	claire	hell	claro		3
	medium	moyenne	mittel	medio		5
	dark	foncée	dunkel	oscuro		7
<b>25.</b> (* )	<b>150 Bulb/Bulblet: hue of color of dry skin (in addition to basic color)</b>	<b>Bulbe/Bulbille: teinte de la couleur des écailles sèches (en plus de la couleur de fond)</b>	<b>Zwiebel/Bulbille: Farbton der Schale (zusätzlich zu der Grund- farbe)</b>	<b>Bulbo/Bulbillo: matiz del color de la piel seca (además del color de fondo)</b>		
	absent	absente	fehlend	ausente	Pompei (O)	1
	greyish	grisâtre	gräulich	grisáceo		2
	greenish	verdâtre	grünlich	verduco	Otto (O)	3
	yellowish	jaunâtre	gelblich	amarillento	Topper (S)	4
	brownish	brunâtre	bräunlich	amarronado	Santé (S), Success (S)	5
	pinkish	rosâtre	rosa	rosáceo	Delicato (S)	6
	reddish	rougeâtre	rötlich	rojizo	Southport Red Globe (O), Ambition (S), Mikor (S), Pikant (S)	7
	purplish	pourpre	purpurn	purpúreo		8
<b>26.</b> (* )	<b>Bulb/Bulblet: coloration of epi- dermis of fleshy scales</b>	<b>Bulbe/Bulbille: couleur de l'épiderme des écailles</b>	<b>Zwiebel/Bulbille: Farbe der Außen- haut der Schup- penblätter</b>	<b>Bulbo/Bulbillo: color de la epi- dermis de las es- camas interiores</b>		
	absent	absente	fehlend	ausente		1
	greenish	verdâtre	grünlich	verduco	Sturon (O), Golden Gourmet (S)	2
	reddish	rougeâtre	rötlich	rojizo	Brunswijker (O), Ruby (O), Santé (S), Pikant (S)	3

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>27. 150</b> (*) (+)	<b>Bulb/Bulblet: number of axes</b>	<b>Bulbe/Bulbille: nombre de points végétatifs</b>	<b>Zwiebel/Bulbille: Anzahl Vegeta- tionskegel</b>	<b>Bulbo/Bulbillo: número de puntos vegetativos</b>		
	very few	très petit	sehr gering	muy bajo	Barletta (O), Pompei (O)	1
	few	petit	gering	bajo	Figaro (O), Owa (O)	3
	medium	moyen	mittel	medio	Atlas (S), Longor (S)	5
	many	grand	groß	alto	Mikor (S), Topper (S)	7
	very many	très grand	sehr groß	muy alto	Griselle (S)	9
<b>28.</b> (+)	<b>Bulb/Bulblet: dry matter content</b>	<b>Bulbe/Bulbille: teneur en matière sèche</b>	<b>Zwiebel/Bulbille: Trockensub- stanzgehalt</b>	<b>Bulbo/Bulbillo: contenido de materia seca</b>		
	very low	très faible	sehr niedrig	muy bajo	Exhibition (O)	1
	low	faible	niedrig	bajo	Golden Bear (O), The Kelsae (O)	3
	medium	moyenne	mittel	medio	Rijnsburger 7 (O), Golden Gourmet (S), Topper (S)	5
	high	élevée	hoch	alto	Birnförmige (O), Zittauer gelbe (O), Creation (S), Longor (S),	7
	very high	très élevée	sehr hoch	muy alto	Griselle (S)	9
<b>29. 40-100</b>	<b><u>Onion varieties only: Tendency to bolting in <u>spring</u> sown trials</u></b>	<b><u>Seulement variétés d'oignon: Ten- dence à la mon- taison dans les essais semés au <u>printemps</u></u></b>	<b><u>Nur Zwiebelsor- ten: Neigung zum Schossen bei <u>Frühjahrsaussaat</u></u></b>	<b><u>Solamente varie- dades de cebolla: Tendencia a la floración en los ensayos de campo sembrados en <u>primavera</u></u></b>		
	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil	Desihidrobat (O)	1
	weak	faible	gering	débil	Stuttgarter Riesen (O), Zittauer gelbe (O)	3
	medium	moyenne	mittel	media	Legio (O)	5
	strong	forte	stark	fuerte		7
	very strong	très forte	sehr stark	muy fuerte	Bronzé d' Amposta (O)	9

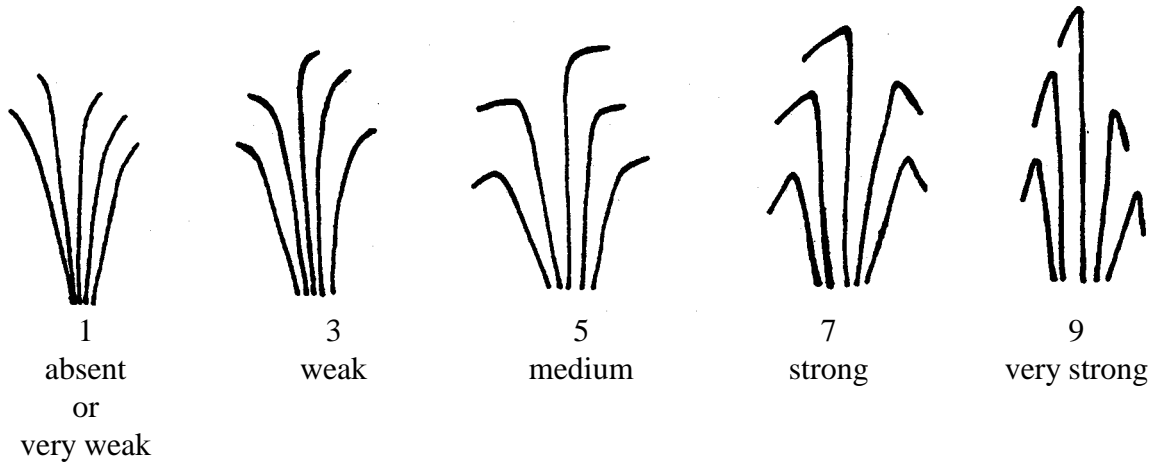
Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>30.</b>	<b><u>Onion varieties only: Time of beginning of bolting in <u>spring</u> sown trials</u></b>	<b><u>Seulement variétés d'oignon: Époque du début de la montaison dans les essais semés au <u>printemps</u></u></b>	<b><u>Nur Zwiebelsorten: Zeitpunkt des Schossbeginns bei <u>Frühjahrs</u>saussaat</u></b>	<b><u>Solamente variedades de cebolla: Época de comienzo de floración de los ensayos de campo sembrados en <u>primavera</u></u></b>		
	early	précoce	früh	temprana	Bronzé d' Amposta (O)	3
	medium	moyenne	mittel	media	Legio (O)	5
	late	tardive	spät	tardía		7
<b>31. 40-100</b>	<b><u>Onion varieties only: Tendency to bolting in <u>autumn</u> sown trials</u></b>	<b><u>Seulement variétés d'oignon: Tendance à la montaison dans les essais semés en <u>automne</u></u></b>	<b><u>Nur Zwiebelsorten: Neigung zum Schossen bei <u>Herbst</u>saussaat</u></b>	<b><u>Solamente variedades de cebolla: Tendencia a la floración en los ensayos de campo sembrados en <u>otoño</u></u></b>		
	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil	Coler(O)	1
	weak	faible	gering	débil	Valenciana Temprana (O)	3
	medium	moyenne	mittel	media	Arad (O)	5
	strong	forte	stark	fuerte	Guimar (O)	7
	very strong	très forte	sehr stark	muy fuerte	Valenciana tardía de exportación (O)	9
<b>32.</b>	<b><u>Onion varieties only: Time of beginning of bolting in <u>autumn</u> sown trials</u></b>	<b><u>Seulement variétés d'oignon: Époque du début de la montaison dans les essais semés en <u>automne</u></u></b>	<b><u>Nur Zwiebelsorten: Zeitpunkt des Schossbeginns bei <u>Herbst</u>saussaat</u></b>	<b><u>Solamente variedades de cebolla: Época de comienzo de floración de los ensayos de campo sembrados en <u>otoño</u></u></b>		
	early	précoce	früh	temprana		3
	medium	moyenne	mittel	media		5
	late	tardive	spät	tardía		7

Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>33. 105</b> (* )	<b><u>Onion varieties only:</u> Time of harvest maturity for <u>autumn</u> sown trials (foliage fall-over in 80% of plants)</b>	<b><u>Seulement variétés d'oignon:</u> Époque de maturité dans les essais semés en <u>automne</u> (chute du feuillage sur 80% des plantes)</b>	<b><u>Nur Zwiebelsorten:</u> Zeitpunkt der Erntereife bei <u>Herbstaussaat</u> (Umfallen des Laubes bei 80 % der Pflanzen)</b>	<b><u>Solamente variedades de cebolla:</u> Época de madurez de cosecha de los ensayos de campo sembrados en <u>otoño</u> (caída de hojas en el 80% de las plantas)</b>		
	very early	très précoce	sehr früh	muy temprana	Coler (O)	1
	early	précoce	früh	temprana	La Reine (O), Sonic (O)	3
	medium	moyenne	mittel	media	Buffalo (O), Imai Early Yellow (O), Valenciana Temprana (O)	5
	late	tardive	spät	tardía	Guimar (O), Senshyu Semi Globe Yellow (O), Shakespeare (O)	7
	very late	très tardive	sehr spät	muy tardía	Valencia tardía (O)	9
<b>34.1 105</b> (* )	<b><u>Onion varieties only:</u> Time of harvest maturity for <u>spring</u> sown trials (as for 33)</b>	<b><u>Seulement variétés d'oignon:</u> Époque de maturité dans les essais semés au <u>printemps</u> (comme pour 33)</b>	<b><u>Nur Zwiebelsorten:</u> Zeitpunkt der Erntereife bei <u>Frühjahrsaussaat</u> (wie unter 33)</b>	<b><u>Solamente variedades de cebolla:</u> Época de madurez de cosecha de los ensayos de campo sembrados en <u>primavera</u> (como para 33)</b>		
	early	précoce	früh	temprana	Golden Bear (O), Buffalo (O)	3
	medium	moyenne	mittel	media	Piroska (O)	5
	late	tardive	spät	tardía	Beacon (O)	7
<b>34.2</b> (* )	<b><u>Shallot varieties only:</u> Time of harvest maturity (as for 33)</b>	<b><u>Seulement variétés d'échalote:</u> Époque de maturité (comme pour 33)</b>	<b><u>Nur Schalotten-sorten:</u> Zeitpunkt der Erntereife (wie unter 33)</b>	<b><u>Solamente variedades de chalota:</u> Época de madurez de cosecha (como para 33)</b>		
	early	précoce	früh	temprana	Rox (S)	3
	medium	moyenne	mittel	media	Creation (S), Pikant (S)	5
	late	tardive	spät	tardía	Golden Gourmet (S), Santé (S)	7

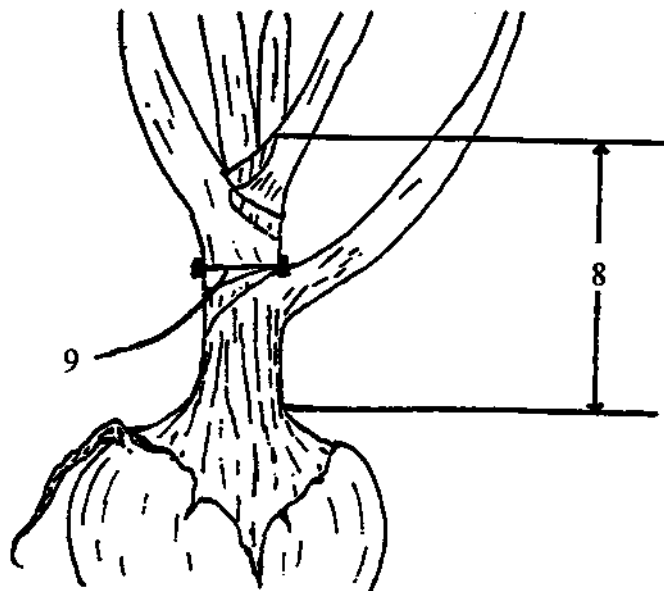
Stage <sup>1)</sup> Stade <sup>1)</sup> Stadium <sup>1)</sup> Estado <sup>1)</sup>	English	français	deutsch	español	Example Varieties <sup>2)</sup> Exemples <sup>2)</sup> Beispielssorten <sup>2)</sup> Variedades ejemplo <sup>2)</sup>	Note/ Nota
<b>35. 160.1</b> <b>(+) 160.2</b>	<b>Time of sprouting during storage</b>	<b>Époque de germination pendant le stockage</b>	<b>Zeitpunkt des Austriebs während der Lagerung</b>	<b>Época de brotación durante el almacenamiento</b>		
	early	précoce	früh	temprana	Golden Bear (O), The Kelsae (O),	3
	medium	moyenne	mittel	media	Hygro (O), Hyper (O)	5
	late	tardive	spät	tardía	Marion (O)	7
<b>36. 270.1</b> <b>(*) 270.2</b>	<b>Male sterility</b>	<b>Stérilité mâle</b>	<b>Männliche Sterilität</b>	<b>Esterilidad masculina</b>		
	absent or very weakly expressed	nulle ou très faiblement exprimée	fehlend oder sehr gering ausgeprägt	ausente o muy débilmente expresada	Rijnsburger 5 (O)	1
	weakly expressed	faiblement exprimée	gering ausgeprägt	débilmente expresada	Hyduro (O), Creation (S)	2
	strongly expressed	fortement exprimée	stark ausgeprägt	fuertemente expresada	Sweet Sandwich (O), Atlas (S)	3

VIII. Explanations on the Table of Characteristics

Ad. 5: Foliage: cranking

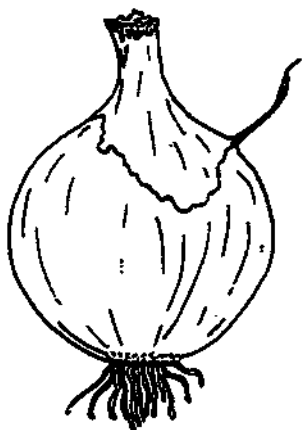


Ad. 8 and 9: Onion varieties only: pseudostem: length (up to highest green leaf) (8) and diameter (at midpoint of length) (9)





Ad. 10: Bulb: splitting into bulblets (with dry skin around each bulblet)

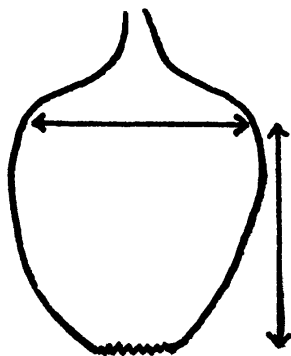


1  
absent

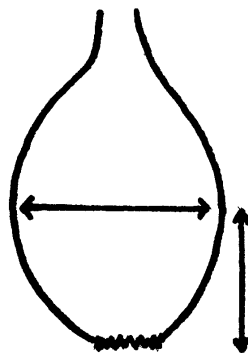


9  
present

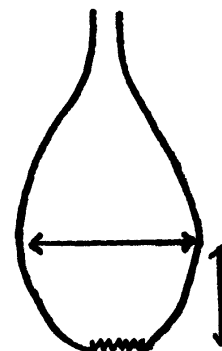
Ad. 16: Bulb/Bulblet: position of maximum diameter



1  
towards apex

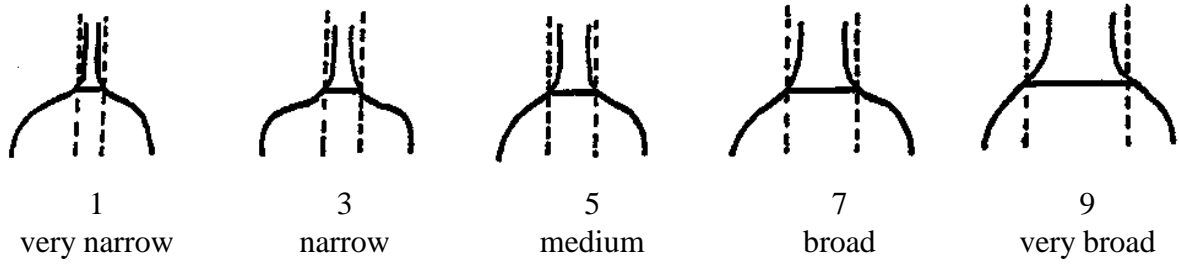


2  
at middle

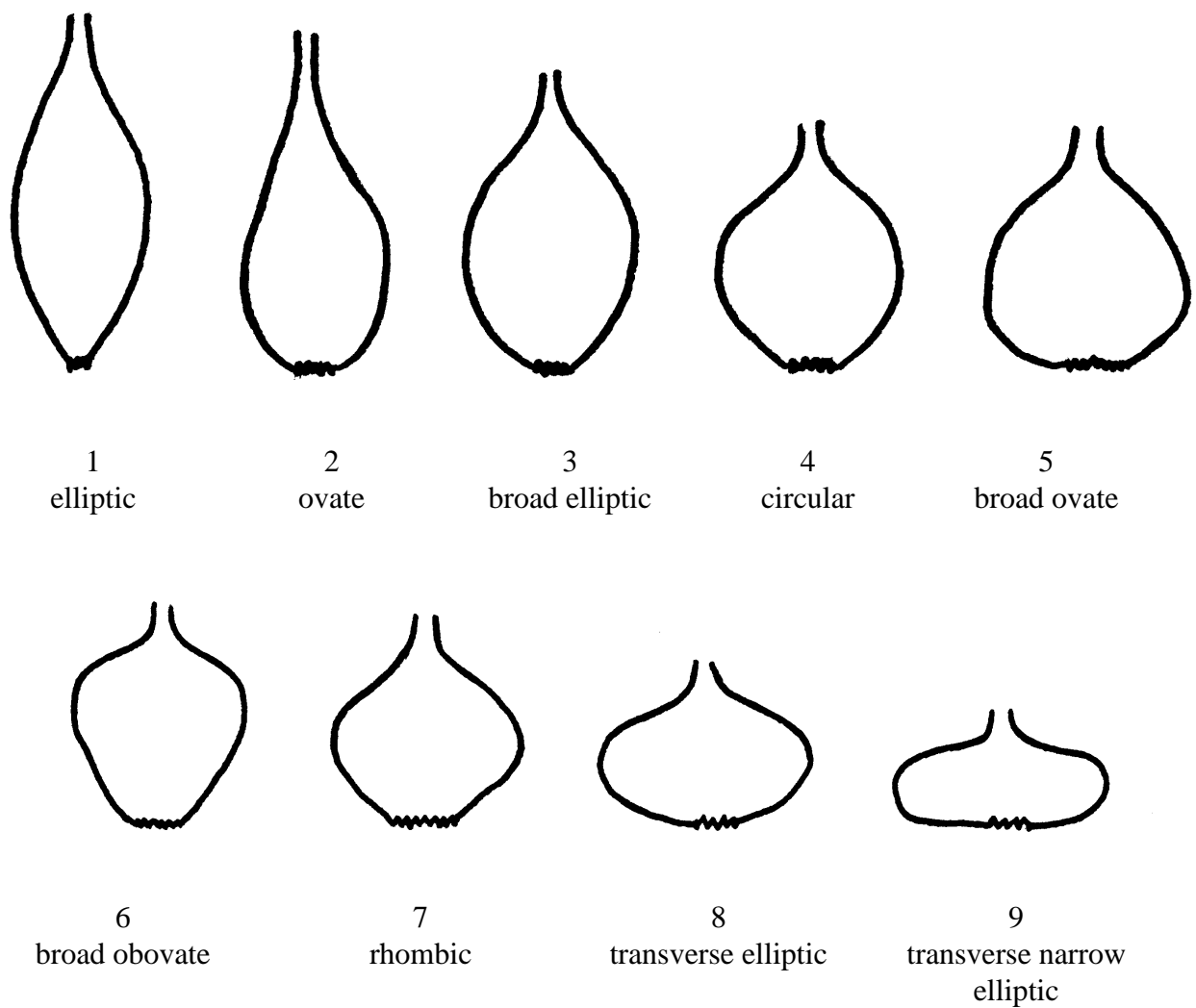


3  
towards base

Ad. 17: Bulb/Bulblet: width of neck



Ad. 18: Bulb/Bulblet: general shape (in longitudinal section)



Ad. 19: Onion varieties only: Bulb: shape of top (as for 18)



2  
flat

1  
depressed

3  
slightly  
raised

4  
rounded

5  
slightly  
sloping

6  
strongly  
sloping

Ad. 20: Bulb/Bulblet: shape of base (as for 18)



1  
recessed

2  
flat

3  
round

4  
weakly tapered

5  
strongly  
tapered

Ad. 27: Bulb/Bulblet: number of axes

The number of axes should be assessed when the bulb/bulblet has completely died back and before there is any sprouting. The bulb or bulblet should be cut in transverse section, starting at the widest point and make further cuts towards the base of the bulb/bulblet, until there is consistency in the number of axes. Each axis appears as a point, often greenish in color surrounded by tissue rings.

Ad. 28: Bulb/Bulblet: dry matter content

Dry matter content should be determined according to IV-1 for 3 x 20 bulbs (e.g. one sample of 20 bulbs from each plot). From these bulbs the dry skin should be removed as well as the protruding part of the root disk. From these 20 bulbs a bulk sample should be prepared by cutting the bulbs into small pieces of 1-5 mm size. A representative sample should be weighed directly after cutting (we should be aware that the biodegradation of sugars and carbohydrates starts as soon as cells are damaged). The samples should be dried for 2 hours at 105°C and then the temperature should be lowered to 65°C during 22 hours. Lowering of temperature is necessary to avoid caramelisation. The remaining weight should be assessed after 24 hours. From these figures the dry matter content may be calculated. The dry matter content could also be assessed by refractometer.

Ad. 35: Time of sprouting during storage

Care should be taken to exclude damaged bulbs. Storage temperature should be maintained between 2°C and 5°C with good ventilation which can be achieved by storing in stacking, slotted trays.

In climates which have cooler summer temperature, it is advisable to 'cure' bulbs for 2 weeks at a temperature of 30-35°C. Temperatures above 40°C should be avoided to prevent growth of *Aspergillus niger*.

A minimum of 50 bulbs are required to assess sprouting. Assessment should be carried out every 2 to 4 weeks.

Code for the Growth Stages 1: Seed to Bulb

<u>Growth stage</u>	<u>General description</u>
<u>Vegetative Cycle</u>	
00	Dry Seed
0	Germination
<u>Seedling growth</u>	
10	Emerged seedling at 'loop' stage
15	Seedling with testa above ground and still attached to cotyledon
20	Emergence of first true leaf
25	Second true leaf stage
30	Third leaf stage
35	Fourth leaf stage
40	Fifth leaf stage
<u>Plant growth</u>	
45	Sixth leaf stage
50	Seventh leaf stage - first leaf senescing
55	Eighth leaf stage
60	
65	Tenth leaf stage; second and third leaves senescing; early bulb development
70	
75	
80	
85	
90	
95	
100	Full expansion of leaves achieved; continued swelling of bulb
105	Beginning of foliage fall-over, weakening of false stem turgidity
115	Leaves dry off; bulb size continues to increase; darkening of bulb scales
120	
125	
130	
135	Bulb at harvestable maturity
140	
145	
150	Complete die-back of foliage; bulb top seals over for dormancy

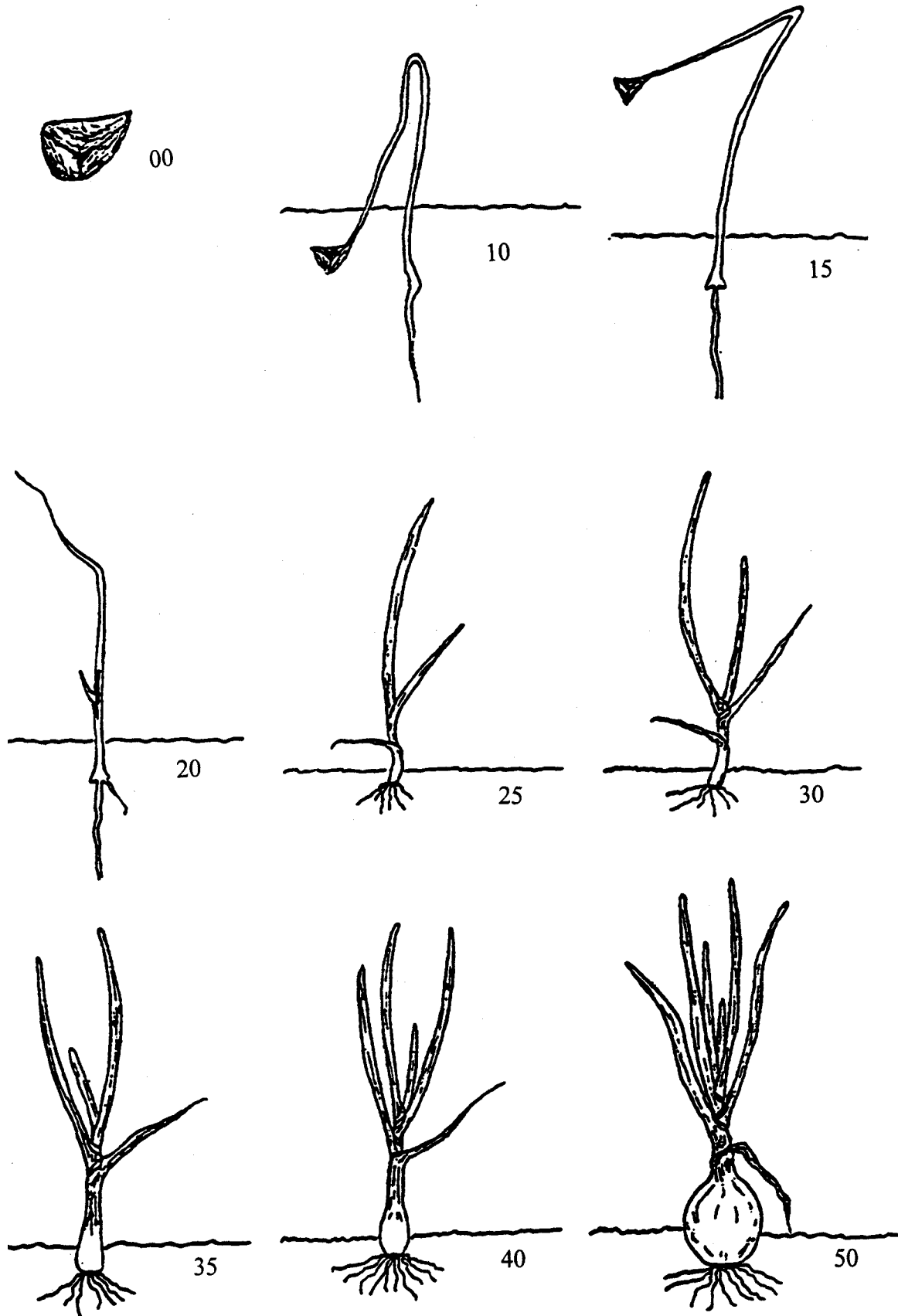
Code for the Growth Stages 2: Bulb to Seed

<u>Growth Stage</u>	<u>General Description</u>
<u>Reproductive Cycle</u>	
160.1	Start of sprouting in store - swelling of root initials or emergence of shoot at top of bulb
170.1	
180.1	Sprouted bulbs with emerging leaves
190.1	
200.1	Splitting of outer skin
210.1	Emergence of scape and undeveloped spathe
220.1	Scape elongation and swelling of middle
230.1	
240.1	Swelling of spathe
250.1	Splitting of spathe
260.1	Enlargement of umbel
270.1	Opening of florets (where fertile)
280.1	Pollination of florets
290.1	Seed set - swelling of pollinated ovaries
300.1	
310.1	
320.1	Ripe seed in umbels
330.1	
340.1	
350.1	Dry seed

Code for the Growth Stages 3: Bulb to Bulblet

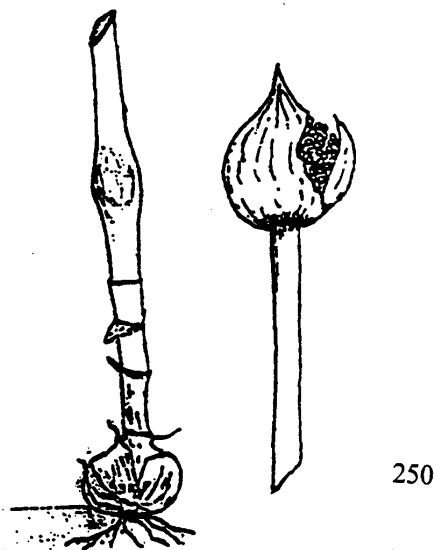
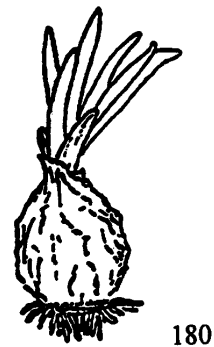
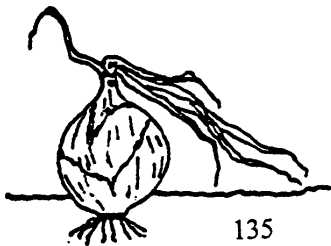
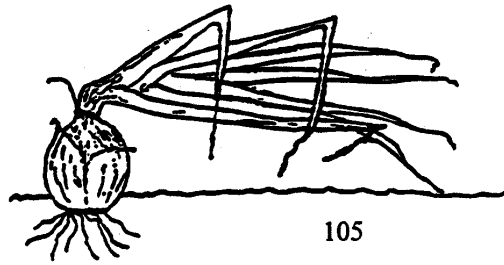
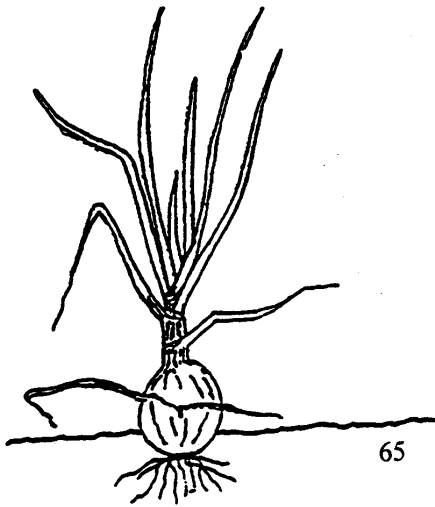
Growth Stage	General Description
150	Dry bulb with complete foliage die-back
160.2	
170.2	Bulb shape becoming less rounded
180.2	
190.2	Bulb shape becoming irregular with development of small splits in the dry outer skin
200.2	
210.2	More than one growing point emerging from the top of the bulb
220.2	
230.2	Long splits developing in the outer skin of the bulb and differentiation of bulb into bulblets
240.2	
250.2	
260.2	
270.2	Separation of bulblets from parent bulb except at base. Bulblets separated from each other by a dry outer skin
280.2	
290.2	Complete separation of bulblets from 'parent bulb'
300.2	Development of many leaves

Code for the Growth Stages 1 and 2: Illustrations





Code for the Growth Stages 1 and 2: Illustrations



## IX. Literature

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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	<i>Allium cepa</i> L., <i>Allium ascalonicum</i> L.	
		(a) ONION	[ ]
		(b) SHALLOT	[ ]
2.	Applicant (Name and address)		
3.	Proposed denomination or breeder's reference		

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

4.1 Variety type

- (a) open-pollinated [ ]
- (b) single hybrid [ ]
- (c) three-way hybrid [ ]
- (d) clone [ ]
- (e) other type (indicate what type) [ ]

.....

4.2 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	Note
<b>5.1 Plant: number of leaves per pseudostem (1)</b>		
few	SY300 (O)	3[ ]
medium	The Kelsae (O)	5[ ]
many	Yellow Sweet Spanish (O)	7[ ]
<b>5.2 Foliage: green color (4)</b>		
light	Guimar (O), Yellow Sweet Spanish (O), Tropix (S)	3[ ]
medium	Caribo (O), Texas Grano 502 (O), Golden Gourmet (S)	5[ ]
dark	Hikeeper (O), La Reine (O), Santé (S)	7[ ]
<b>5.3 Bulb: splitting into bulblets (with dry skin around each bulblet) (10)</b>		
absent	Pompei (O)	1[ ]
present	Pikant (S)	9[ ]
<b>5.4.1 <u>Onion varieties only:</u> Bulb: size (12.1)</b>		
small		3[ ]
medium	Rijnsburger 7 (O)	5[ ]
large	The Kelsae (O)	7[ ]
<b>5.4.2 <u>Shallot varieties grown from bulblets only:</u> Bulblet: size (12.2)</b>		
small	Atlas (S)	3[ ]
medium	Spring Field (S), Topper (S)	5[ ]
large	Delicato (S), Santé (S)	7[ ]

Characteristics	Example Varieties	Note
<b>5.5 Bulb/Bulblet: general shape (in longitudinal section)</b> <b>(18)</b>		
elliptic	Owa (O), Longor (S)	1[ ]
ovate	Birnenförmige (O), Rossa lunga di Firenze (O)	2[ ]
broad elliptic	Alisa Craig (O), Beacon (O), Early Yellow Globe (O), Hiball (O)	3[ ]
circular	Rijnsburger 7 (O), Pikant (S)	4[ ]
broad ovate	Hysam (O)	5[ ]
broad obovate	Lilia (O), Texas grano 502 (O), Sweet Sandwich (O)	6[ ]
rhombic	Zittauer gelbe (O), Matador (S)	7[ ]
transverse elliptic	Sturka (O), Stuttgarter Riesen (O), Atlantic (S), Golden Gourmet (S)	8[ ]
transverse narrow elliptic	Brunswijker (O), De Moissac (O), Paille des vertus (O), Pompei (O)	9[ ]
<b>5.6 Bulb/Bulblet: basic color of dry skin</b> <b>(23)</b>		
white	La Reine (O)	1[ ]
grey	Griselle (S)	2[ ]
green		3[ ]
yellow	Zittauer gelbe (O), Creation (S), Golden Gourmet (S), Topper (S)	4[ ]
brown	Valenciana Temprana (O), Ambition (S), Delicato (S)	5[ ]
pink	Colorada de Figueras (O)	6[ ]
red	Brunswijker (O), Atlas (S), Red Baron (O)	7[ ]

Characteristics	Example Varieties	Note
<b>5.7 Bulb/Bulblet: hue of color of dry skin (25)</b>		
absent	Pompei (O)	1[ ]
greyish		2[ ]
greenish	Otto (O)	3[ ]
yellowish	Topper (S)	4[ ]
brownish	Santé (S), Success (S)	5[ ]
pinkish	Delicato (S)	6[ ]
reddish	Southport Red Globe (O), Ambition (S), Mikor (S), Pikant (S)	7[ ]
purplish		8[ ]
<b>5.8 <u>Onion varieties only</u>: Time of harvest maturity for <u>autumn</u> sown trials (33)</b>		
very early	Coler (O)	1[ ]
early	La Reine (O), Sonic (O)	3[ ]
medium	Buffalo (O), Imai Early Yellow (O), Valenciana Temprana (O)	5[ ]
late	Guimar (O), Senshyu Semi Globe Yellow (O), Shakespeare (O)	7[ ]
very late	Valencia tardía (O)	9[ ]
<b>5.9.1 <u>Onion varieties only</u>: Time of harvest maturity for <u>spring</u> sown trials (foliage fall-over in 80% of plants) (34.1)</b>		
early	Golden Bear (O), Makoi (O)	3[ ]
medium	Piroska (O)	5[ ]
late	Beacon (O)	7[ ]



Characteristics	Example Varieties	Note	
<b>5.9.2 Shallot varieties only: Time of harvest maturity (foliage fall-over in 80% of plants)</b> (34.2)			
early	Rox (S)	3[ ]	
medium	Creation (S), Pikant (S)	5[ ]	
late	Golden Gourmet (S), Santé (S)	7[ ]	
<b>5.10 Male sterility</b> (36)			
absent or very weakly expressed	Rijnsburger 5 (O)	1[ ]	
weakly expressed	Hyduro (O), Creation (S)	2[ ]	
strongly expressed	Sweet Sandwich (O) Atlas (S)	3[ ]	
<b>6. Similar varieties and differences between these varieties</b>			
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
<p><sup>o)</sup> In the case of identical states of expressions of both varieties, please indicate the size of the difference.</p>			

7. Additional information which may help to distinguish the variety

7.1 Resistance to pests and diseases

7.2 Special conditions for testing the variety

7.2.1 Day length conditions which favor full bulb development

(a) short day [ ]

(b) long day [ ]

7.2.2 Dry matter content

(a) low 1[ ]

(b) medium 3[ ]

(c) high 5[ ]

7.2.3 Suitability for storage

(a) none 1[ ]

(b) short term 2[ ]

(c) long term 3[ ]

7.3 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]