



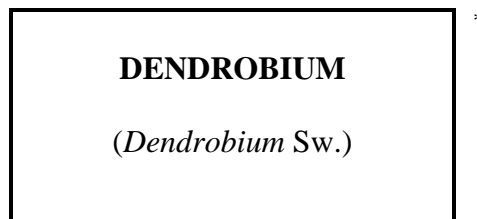
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INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA



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>Dendrobium Sw.</i>	Dendrobium	Dendrobium	Dendrobium	Dendrobium

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 sect. *Brachyanthe*, sect. *Callista*, sect. *Calyptochilus*, sect. *Ceratobium*, sect. *Dendrocoryne*, sect. *Eleutheroglossum*, sect. *Eugenanthe*, sect. *Latourea*, sect. *Oxygenianthe*, sect. *Oxyglossum*, sect. *Pedilonum*, sect. *Phalaenanthe*, sect. *Stachyobium*, of *Dendrobium* Sw. of the family Orchidaceae and their hybrids.

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 two-year old plants that have not previously flowered.

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

10 two year-old plants, each with at least two pseudobulbs.

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

2.5 The plant material should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If it has been treated, full details of the treatment must be given.

3. Method of Examination

3.1 *Duration of Tests*

The minimum duration of tests should normally be a single growing cycle.

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*

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

3.3.2 The tests should be conducted in a greenhouse with the following conditions for the Northern Hemisphere:

Time of submission of plant material:	First half of February
Planting:	February ~ March
Substrate:	Porous with good aeration Size of pot: medium
Temperature:	<i>D. nobile</i> type varieties: minimum 10° C <i>D. phalaenopsis</i> type varieties: minimum 20° C
Shading:	Summer season 30% shading (optimum 50 thousand Lux)
Fertilizing:	April ~ July
Low temperature treatment (flower differentiation):	<i>D. nobile</i> type varieties; 10 ~ 13° C for one month in November

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 10 plants.

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 10 plants or parts taken from each of 10 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 1% and an acceptance probability of at least 95% should be applied. In the case of a sample size of 10 plants, 1 off-type is 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 plant stock to ensure that it exhibits the same characteristics as those shown by the previous material supplied.

4.3.3 The stability of a hybrid variety may, in addition to an examination of the hybrid variety itself, also be assessed by examination of the uniformity and stability of its parent lines.

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: size (characteristic 1)
- (b) Inflorescence: position of flowers (characteristic 18)
- (c) Flower: length in front view (characteristic 27)
- (d) Flower: width in front view (characteristic 28)
- (e) Lip: presence of lateral lobe (characteristic 71)
- (f) Lip: presence of eye (characteristic 77)
- (g) Lip: color pattern (except middle part, eye and throat) (characteristic 80)
- (h) Lip: main color (characteristic 82) with the following groups:

- Gr. 1: green
- Gr. 2: white
- Gr. 3: yellow
- Gr. 4: pink
- Gr. 5: red
- Gr. 6: purple
- Gr. 7: reddish

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*

6.4.1 Where appropriate, example varieties are provided to clarify the states of expression of each characteristic. So far only few varieties exist; therefore, mainly species and only few example varieties are indicated in the Table of Characteristics. All variety denominations are preceded by group names (GREX). General remark: In orchids, a particular grouping on the basis of known parentage, of which the unit is the GREX is in long standing use.

6.4.2 Variety denominations are placed between single quotation marks (e.g. 'Akebono').

6.5 *Legend*

(*) Asterisked characteristic – see Section 6.1.2

QL Qualitative characteristic – see Section 6.3

QN Quantitative characteristic – see Section 6.3

PQ Pseudo-Qualitative characteristic – see Section 6.3

(a)-(e) 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 Beispielssorten Variedades ejemplo	Note/ Nota
1. (*)	Plant: size	Plante: taille	Pflanze: Größe	Planta: tamaño		
QN	very small	très petite	sehr klein	muy pequeña	Enobi Komachi 'Shirayukihime'	1
	small	petite	klein	pequeña	<i>Dendrobium kingianum</i>	3
	medium	moyenne	mittel	media	Wave King 'Akebono'	5
	large	grande	groß	grande	Lucky Girl 'Emiko'	7
	very large	très grande	sehr groß	muy grande		9
2. (*)	(a) Pseudobulb: attitude	Pseudobulbe: disposition	Pseudobulbe: Haltung	Pseudobulbo: porte		
QN	erect	dressé	aufrecht	erecto	'Formidable'	1
	semi-erect	demi dressé	halbaufrecht	semierecto		3
	horizontal	horizontal	waagrecht	horizontal		5
	semi-drooping	demi retombant	halbüberhängend	semicolgante		7
	drooping	retombant	überhängend	colgante		9
3. (*)	(a) Pseudobulb: length	Pseudobulbe: longueur	Pseudobulbe: Länge	Pseudobulbo: longitud		
QN	very short	très court	sehr kurz	muy corto	Enobi Komachi 'Shirayukihime'	1
	short	court	kurz	corto	<i>Dendrobium kingianum</i>	3
	medium	moyen	mittel	medio	Wave King 'Akebono'	5
	long	long	lang	largo	Snow Cap 'Love Song'	7
	very long	très long	sehr lang	muy largo		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
4. (*)	(a) Pseudobulb: thickness	Pseudobulbe: épaisseur	Pseudobulbe: Dicke	Pseudobulbo: grosor		
QN	very thin	très fin	sehr dünn	muy delgado		1
	thin	fin	dünn	delgado	Enobi Komachi 'Shirayukihime'	3
	medium	moyen	mittel	medio	Enobi Parade 'Milky Way'	5
	thick	épais	dick	grueso		7
	very thick	très épais	sehr dick	muy grueso		9
5. (*)	(a) Pseudobulb: shape in longitudinal section	Pseudobulbe: forme en section longitudinale	Pseudobulbe: Form im Längsschnitt	Pseudobulbo: forma en sección longitudinal		
PQ	linear	linéaire	linear	lineal	'Formidable'	1
	lanceolate	lancéolé	lanzettlich	lanceolada		2
	ovate	ovale	eiförmig	oval		3
6.	(a) Pseudobulb: shape in cross section	Pseudobulbe: forme en section transversale	Pseudobulbe: Form im Querschnitt	Pseudobulbo: forma en sección transversal		
PQ	elliptic	elliptique	elliptisch	elíptica		1
	circular	arrondi	rund	circular	'Formidable'	2
	angular	anguleux	kantig	angular	<i>Dendrobium densiflorum</i>	3
7.	Plant: age of flowering pseudobulb (principally)	Plante: âge du pseudobulbe florifère (principalement)	Pflanze: Alter der blühenden Pseudobulbe (hauptsächlich)	Planta: tiempo de floración del pseudobulbo (principalmente)		
QL	one year	un an	ein Jahr	un año	'Formidable'	1
	two years or more	deux ans et plus	zwei Jahre oder mehr	dos años o más		2
8. (*)	(b) Leaf: length	Feuille: longueur	Blatt: Länge	Hoja: longitud		
QN	short	courte	kurz	corta	Stardust 'Chiyomi'	3
	medium	moyenne	mittel	media	Wave King 'Akebono'	5
	long	longue	lang	larga		7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
9. (*)	(b) Leaf: width	Feuille: largeur	Blatt: Breite	Hoja: anchura		
QN	narrow	étroite	schmal	estrecha	Stardust ‘Chiyomi’	3
	medium	moyenne	mittel	media	Wave King ‘Akebono’	5
	broad	large	breit	ancha	Snow Cap ‘Love Song’	7
10. (* (+)	(b) Leaf: shape	Feuille: forme	Blatt: Form	Hoja: forma		
PQ	narrow elliptic	elliptique étroite	schmal elliptisch	elíptica estrecha		1
	elliptic	elliptique	elliptisch	elíptica		2
	narrow ovate	ovale étroite	schmal eiförmig	oval estrecha		3
	narrow obovate	obovale étroite	schmal verkehrt eiförmig	oboval estrecha		4
	spatulate	spatulée	spatelförmig	espatulada		5
11.	(b) Leaf: main green color	Feuille: couleur verte principale	Blatt: hauptsächliche Grünfärbung	Hoja: color verde principal		
QN	light	claire	hell	claro		3
	medium	moyenne	mittel	medio	Enobi Komachi ‘Shirayukihime’	5
	dark	foncée	dunkel	oscuro	Enobi Parade ‘Milky Way’	7
12.	(b) Leaf: presence of variegation	Feuille: présence de panachure	Blatt: Vorhandensein einer Panaschierung	Hoja: presencia de variegado		
QL	absent	absente	fehlend	ausente	Enobi Komachi ‘Shirayukihime’	1
	present	présente	vorhanden	presente		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
13. (b)	Leaf: type of variegation	Feuille: type de panachure	Blatt: Art der Panaschierung	Hoja: tipo de variegado		
(+)						
QL	brindled	mouchetée	gescheckt	pinto		1
	spotted	tachetée	gefleckt	manchado		2
	striped	striée	gestreift	estriado		3
	centered	centrée	in der Mitte	centrado		4
	edged	bordée	gerändert	ribeteado		5
14. (b)	Leaf: color of variegation	Feuille: couleur de la panachure	Blatt: Farbe der Panaschierung	Hoja: color del variegado		
QL	white	blanche	weiß	blanco		1
	yellow	jaune	gelb	amarillo		2
	yellow green	vert-jaune	gelbgrün	verde amarillento		3
	white and yellow	blanche et jaune	weiß und gelb	blanco y amarillo		4
	white and yellow green	blanche et vert-jaune	weiß und gelbgrün	blanco y verde amarillento		5
	yellow and yellow green	jaune et vert-jaune	gelb und gelbgrün	amarillo y verde amarillento		6
15. (b)	Leaf: pubescence	Feuille: pilosité	Blatt: Behaarung	Hoja: pubescencia		
QL	absent	absente	fehlend	ausente		1
	present	présente	vorhanden	presente	'Formidable'	9
16. (b)	Leaf: color of pubescence	Feuille: couleur des poils	Blatt: Farbe der Behaarung	Hoja: color de la pubescencia		
QL	white	blancs	weiß	blanco		1
	black	noirs	schwarz	negro	'Formidable'	2

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
17. (*)	(c) Inflorescence: position of adherence to pseudobulb	Inflorescence: emplacement de l'adhérence au pseudobulbe	Blütenstand: Position des Anhaftens an der Pseudobulbe	Inflorescencia: posición de la adherencia al pseudobulbo		
QL	along whole length	sur toute la longueur	entlang der ganzen Länge	a lo largo de todo el tallo		1
	top part only	seulement sur la partie supérieure	nur am oberen Teil	únicamente en la parte superior	<i>Dendrobium kingianum</i>	2
18. (*)	(c) Inflorescence: position of flowers	Inflorescence: position des fleurs	Blütenstand: Position der Blüten	Inflorescencia: posición de las flores		
QL	along peduncle	le long du pédoncule	entlang des Blütenstiels	a lo largo del pedúnculo	Snow Cap 'Love Song'	1
	apex only	seulement sur le sommet	nur an der Spitze	únicamente en el ápice	Pink Beauty 'Queen'	2
19. (*)	(c) Inflorescence: number of flowers	Inflorescence: nombre de fleurs	Blütenstand: Anzahl Blüten	Inflorescencia: número de flores		
QN	few	rare	gering	bajo	Enobi Komachi 'Shirayukihime'	3
	medium	assez nombreuses	mittel	medio	Snow Cap 'Love Song'	5
	many	nombreuses	groß	alto		7
20. (*) (+)	Peduncle: length	Pédoncule: longueur	Blütenstiel: Länge	Pedúnculo: longitud		
QN	short	court	kurz	corto	Lucky Girl 'Emiko'	3
	medium	moyen	mittel	medio	Enobi Parade 'Milky Way'	5
	long	long	lang	largo	Queen Southeast 'Crystal Queen'	7
21. (*)	Peduncle: thickness	Pédoncule: épaisseur	Blütenstiel: Dicke	Pedúnculo: grosor		
QN	thin	fin	dünn	delgado		3
	medium	moyen	mittel	medio	Lucky Girl 'Emiko'	5
	thick	épais	dick	grueso		7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
22. (* (*)	Peduncle: attitude	Pédoncule: disposition	Blütenstiel: Haltung	Pedúnculo: porte		
PQ	erect	dressé	aufrecht	erecto	Enobi Komachi 'Shirayukihime'	1
	semi-erect	demi dressé	halbaufrecht	semierecto	Snow Cap 'Love Song'	2
	horizontal	horizontal	waagerecht	horizontal		3
	recurving	retombant	zurückgebogen	curvado hacia abajo		4
23. (* (+)	Pedicellate-ovary: length	Ovaire pédonculaire: longueur	Fruchtknoten mit gestielten Blüten: Länge	Ovario pedicelado: longitud		
QN	short	courte	kurz	corto	Wave King 'Akebono'	3
	medium	moyenne	mittel	medio	Snow Cap 'Love Song'	5
	long	longue	lang	largo		7
24. (* (*)	Pedicellate-ovary: thickness	Ovaire pédonculaire: épaisseur	Fruchtknoten mit gestielten Blüten: Dicke	Ovario pedicelado: grosor		
QN	thin	fine	dünn	delgado	Wave King 'Akebono'	3
	medium	moyenne	mittel	medio		5
	thick	épaisse	dick	grueso		7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
25. (*)	(c) Flower: general appearance of petals and sepals	Fleur: apparence générale des pétales et sépales	Blüte: Allgemeine Erscheinung der Blütenblätter und der Kelchblätter	Flor: aspecto general de pétalos y sépalos		
PQ	all incurving	tous incurvés	alle eingebogen	todos curvados hacia adentro		1
	some incurving, some spreading	quelques-uns incurvés, quelques-un étalés	einige eingebogen, einige gespreizt	algunos curvados hacia adentro, otros extendidos	Stardust 'Chiyomi'	2
	all spreading	tous étalés	alle gespreizt	todos extendidos		3
	some spreading, some reflexing	quelques-uns étalés, quelques-uns réfléchis	einige gespreizt, einige zurückgebogen	algunos extendidos, otros curvados hacia afuera	Enobi Komachi 'Shirayukihime'	4
	all reflexing	tous réfléchis	alle zurückgebogen	todos curvados hacia afuera		5
	some incurving, some reflexing	quelques-uns incurvés, quelques-uns réfléchis	einige eingebogen, einige zurückgebogen	algunos curvados hacia adentro y otros hacia afuera		6
26.	(d) Flower: length of mentum	Fleur: longueur du mentum	Blüte: Länge des Mentums	Flor: longitud del mentón		
QN	short	court	kurz	corto	<i>Dendrobium kingianum</i>	3
	medium	moyen	mittel	medio	'Formidable'	5
	long	long	lang	largo		7
27. (*)(+)	(d) Flower: length in front view	Fleur: longueur en vue de face	Blüte: Länge in der Vorderansicht	Flor: longitud en vista frontal		
QN	short	courte	kurz	corta	Enobi Komachi 'Shirayukihime'	3
	medium	moyenne	mittel	media	Lucky Girl 'Emiko'	5
	long	longue	lang	larga		7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
28. (* (+)	(d) Flower: width in front view	Fleur: largeur en vue de face	Blüte: Breite in der Vorderansicht	Flor: anchura en vista frontal		
QN	narrow	étroite	schmal	estrecha	Enobi Komachi 'Shirayukihime'	3
	medium	moyenne	mittel	media	Lucky Girl 'Emiko'	5
	broad	large	breit	ancha		7
29.	(c) Flower: fragrance	Fleur: parfum	Blüte: Duft	Flor: fragancia/perfume		
QL	absent	absent	fehlend	ausente		1
	present	présent	vorhanden	presente	Snow Cap 'Love Song'	9
30. (*	(c) Dorsal sepal: curvature of longitudinal axis	Sépale dorsal: courbure de l'axe longitudinal	Dorsales Kelchblatt: Biegung der Längsachse	Sépalo dorsal: curvatura del eje longitudinal		
QN	strongly incurving	fortement incurvé	stark eingebogen	fuertemente curvado hacia arriba		1
	moderately incurving	moyennement incurvé	mäßig eingebogen	moderadamente curvado hacia arriba		3
	straight	droit	gerade	recto	Snow Cap 'Love Song'	5
	moderately recurving	moyennement retombant	mäßig zurückgebogen	moderadamente curvado hacia abajo	Enobi Komachi 'Shirayukihime'	7
	strongly recurving	fortement retombant	stark zurückgebogen	fuertemente recurvado hacia abajo		9
31. (*	(d) Dorsal sepal: length	Sépale dorsal: longueur	Dorsales Kelchblatt: Länge	Sépalo dorsal: longitud		
QN	short	court	kurz	corto	Enobi Parade 'Milky Way'	3
	medium	moyen	mittel	medio	Wave King 'Akebono'	5
	long	long	lang	largo		7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
32. (*)	(d) Dorsal sepal: width	Sépale dorsal: largeur	Dorsales Kelchblatt: Breite	Sépalo dorsal: anchura		
QN	narrow	étroit	schmal	estrecho	Enobi Parade 'Milky Way'	3
	medium	moyen	mittel	medio	Wave King 'Akebono'	5
	broad	large	breit	ancho		7
33. (* (+)	(d) Dorsal sepal: shape	Sépale dorsal: forme	Dorsales Kelchblatt: Form	Sépalo dorsal: forma		
PQ	narrow elliptic	elliptique étroit	schmal elliptisch	elíptica estrecha	Stardust 'Chiyomi'	1
	elliptic	elliptique	elliptisch	elíptica	Lucky Girl 'Emiko'	2
	ovate	ovale	eiförmig	oval		3
	obovate	obovale	verkehrt eiförmig	oboval		4
	transverse elliptic	elliptique transversal	quer elliptisch	elíptica transversal		5
	spatulate	spatulé	spatelförmig	espatulada		6
34. (* (+)	(c) Dorsal sepal: cross section	Sépale dorsal: section transversale	Dorsales Kelchblatt: Querschnitt	Sépalo dorsal: sección transversal		
QN	strongly concave	fortement concave	stark konkav	fuertemente cóncava		1
	moderately concave	moyennement concave	mittel konkav	moderadamente cóncava		3
	flat	plate	flach	plana	Snow Cap 'Love Song'	5
	moderately convex	moyennement convexe	mittel konvex	moderadamente convexa		7
	strongly convex	fortement convexe	stark konvex	fuertemente convexa	Pink Beauty 'Queen'	9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
35. (*)	(c) Dorsal sepal: twisting	Sépale dorsal: torsion	Dorsales Kelchblatt: Drehung	Sépalo dorsal: torsión		
QN	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil		1
	weak	faible	gering	débil	Stardust 'Chiyomi'	3
	medium	moyenne	mittel	media		5
	strong	forte	stark	fuerte		7
	very strong	très forte	sehr stark	muy fuerte		9
36. (*)	(c) Dorsal sepal: undulation of margin	Sépale dorsal: ondulation du bord	Dorsales Kelchblatt: Randwellung	Sépalo dorsal: ondulación del margen		
QN	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil		1
	weak	faible	gering	débil		3
	medium	moyenne	mittel	media	Pink Beauty 'Queen'	5
	strong	forte	stark	fuerte		7
	very strong	très forte	sehr stark	muy fuerte		9
37. (*)	(c) Lateral sepal: curvature of longitudinal axis	Sépale latéral: courbure de l'axe longitudinal	Seitliches Kelchblatt: Biegung der Längsachse	Sépalo lateral: curvatura del eje longitudinal		
QN	strongly incurving	fortement incurvé	stark eingebogen	fuertemente curvado hacia arriba		1
	moderately incurving	moyennement incurvé	mittel eingebogen	moderadamente curvado hacia arriba		3
	straight	droit	gerade	recto	Snow Cap 'Love Song'	5
	moderately recurving	moyennement retombant	mittel zurückgebogen	moderadamente curvado hacia abajo	Enobi Komachi 'Shirayukihime'	7
	strongly recurving	fortement courbé	stark zurückgebogen	fuertemente curvado hacia abajo		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
38. (*)	(d) Lateral sepal: length	Sépale latéral: longueur	Seitliches Kelchblatt: Länge	Sépalo lateral: longitud		
QN	short	court	kurz	corto	Enobi Parade 'Milky Way'	3
	medium	moyen	mittel	medio	Wave King 'Akebono'	5
	long	long	lang	largo		7
39. (*)	(d) Lateral sepal: width	Sépale latéral: largeur	Seitliches Kelchblatt: Breite	Sépalo lateral: anchura		
QN	narrow	étroit	schmal	estrecho	Enobi Parade 'Milky Way'	3
	medium	moyen	mittel	medio	Wave King 'Akebono'	5
	broad	large	breit	ancho		7
40. (*)(+)	(c) Lateral sepal: shape	Sépale latéral: forme	Seitliches Kelchblatt: Form	Sépalo lateral: forma		
PQ	narrow elliptic	elliptique étroit	schmal elliptisch	elíptica estrecha		1
	elliptic	elliptique	elliptisch	elíptica	Enobi Komachi 'Shirayukihime'	2
	ovate	ovale	eiförmig	oval		3
	obovate	obovale	verkehrt eiförmig	oboval		4
	transverse elliptic	elliptique transversal	quer elliptisch	elíptica transversal		5
	spatulate	spatulé	spatelförmig	espatulada		6

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
41.	(c) Lateral sepal: cross section	Sépale latéral: section transversale	Seitliches Kelchblatt: Querschnitt	Sépalo lateral: sección transversal		
QN	strongly concave	fortement concave	stark konkav	fuertemente cóncava		1
	moderately concave	moyennement concave	mittel konkav	moderadamente cóncava	Stardust ‘Chiyomi’	3
	straight	droit	gerade	recta	Enobi Parade ‘Milky Way’	5
	moderately convex	moyennement convexe	mittel konvex	moderadamente convexa		7
	strongly convex	fortement convexe	stark konvex	fuertemente convexa		9
42.	(c) Lateral sepal: twisting	Sépale latéral: torsion	Seitliches Kelchblatt: Drehung	Sépalo lateral: torsión		
QN	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil		1
	weak	faible	gering	débil	Stardust ‘Chiyomi’	3
	medium	moyenne	mittel	media		5
	strong	forte	stark	fuerte		7
	very strong	très forte	sehr stark	muy fuerte		9
43.	(c) Lateral sepal: undulation of margin	Sépale latéral: ondulation du bord	Seitliches Kelchblatt: Randwellung	Sépalo lateral: ondulación del margen		
QN	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil		1
	weak	faible	gering	débil	Wave King ‘Akebono’	3
	medium	moyenne	mittel	media	Pink Beauty ‘Queen’	5
	strong	forte	stark	fuerte		7
	very strong	très forte	sehr stark	muy fuerte		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
44. (*)	(c) Sepal: number of colors (e)	Sépale: nombre de couleurs	Kelchblatt: Anzahl Farben	Sépalo: número de colores		
QL	one	une	eine	uno		1
	two	deux	zwei	dos	Snow Cap ‘Love Song’	2
	three	trois	drei	tres		3
	more than three	plus de trois	mehr als drei	más de tres		4
45. (*)	(c) Sepal: color pattern (e)	Sépale: répartition de la couleur	Kelchblatt: Farbverteilung	Sépalo: distribución del color		
QL	self-colored	unicolore	einfarbig	del mismo color	Stardust ‘Chiyomi’	1
	shaded	dégradée	schattiert	sombreado	Snow Cap ‘Love Song’	2
	edged	bordée	gerändert	ribeteado	Holy Night ‘Yumeji’	3
	striped	striée	gestreift	estriado		4
	netted	réticulée	netzartig	reticulado		5
	spotted	tachetée	fleckig	manchado		6
	shaded and striped	dégradée et striée	schattiert und gestreift	sombreado y estriado		7
	shaded and netted	dégradée et réticulée	schattiert und netzartig	sombreado y reticulado		8
	shaded and spotted	dégradée et tachetée	schattiert und fleckig	sombreado y manchado		9
46. (*)	(c) Sepal: main color (e)	Sépale: couleur principale	Kelchblatt: Hauptfarbe	Sépalo: color principal		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
47.	(c) <u>Varieties with shaded sepals only:</u> Sepal: extent of shading	<u>Variétés à sépales dégradés</u> seulement: Sépale: étendue du dégradé	<u>Nur Sorten mit schattierten Kelchblättern:</u> Kelchblatt: Ausdehnung der Schattierung	<u>Sólo variedades de sépalos sombreados:</u> Sépalo: extensión del sombreado		
QN	small	petite	gering	pequeño		3
	medium	moyenne	mittel	medio	Snow Cap 'Love Song'	5
	large	grande	groß	grande		7
48.	(c) <u>Varieties with shaded sepals only:</u> Sepal: color of shading	<u>Variétés à sépales dégradés</u> seulement: Sépale: couleur du dégradé	<u>Nur Sorten mit schattierten Kelchblättern:</u> Kelchblatt: Farbe der Schattierung	<u>Sólo variedades de sépalos sombreados:</u> Sépalo: color del sombreado		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
49.	(c) <u>Varieties with edged sepals only:</u> Sepal: color of edging	<u>Variétés à sépales bordés seulement:</u> Sépale: couleur de la bordure	<u>Nur Sorten mit geränderten Kelchblättern:</u> Kelchblatt: Farbe der Ränderung	<u>Sólo variedades de sépalos ribeteados:</u> Sépalo: color del ribeteado		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
50.	(c) <u>Varieties with striped sepals only:</u> Sepal: color of stripes	<u>Variétés à sépales striés seulement:</u> Sépale: couleur des stries	<u>Nur Sorten mit gestreiften Kelchblättern:</u> Kelchblatt: Farbe der Streifen	<u>Sólo variedades de sépalos estriados:</u> Sépalo: color de las estrías		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS: (indíquese el número de referencia)		

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
51.	(c) <u>Varieties with netted sepals only:</u> Sepal: color of netting	<u>Variétés à sépales réticulés seulement:</u> Sépale: couleur de la réticulation	<u>Nur Sorten mit netzartigen Kelchblättern:</u> Kelchblatt: Farbe des Netzes	<u>Solamente variedades de sépalos reticulados:</u> Sépalo: color del reticulado		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
52.	(c) <u>Varieties with spotted sepals only:</u> Sepal: color of spots	<u>Variétés à sépales tachetés seulement:</u> Sépale: couleur des taches	<u>Nur Sorten mit fleckigen Kelchblättern:</u> Kelchblatt: Farbe der Flecken	<u>Sólo variedades de sépalos manchados:</u> Sépalo: color de las manchas		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
53.	(c) <u>Petal: curvature of longitudinal axis</u>	<u>Pétale: courbure de l'axe longitudinal</u>	<u>Blütenblatt: Biegung der Längsachse</u>	<u>Pétalo: curvatura del eje longitudinal</u>		
QN	strongly incurving	fortement incurvé	stark eingebogen	fuertemente curvado hacia arriba		1
	moderately incurving	moyennement incurvé	mittel eingebogen	moderadamente curvado hacia arriba		3
	straight	droit	gerade	recto	Lucky Girl 'Emiko'	5
	moderately recurving	moyennement retombant	mittel zurückgebogen	moderadamente curvado hacia abajo	Enobi Komachi 'Shirayukihime'	7
	strongly recurving	fortement retombant	stark zurückgebogen	fuertemente curvado hacia abajo		9
54.	(d) <u>Petal: length</u>	<u>Pétale: longueur</u>	<u>Blütenblatt: Länge</u>	<u>Pétalo: longitud</u>		
QN	short	court	kurz	corto	Enobi Parade 'Milky Way'	3
	medium	moyen	mittel	medio	Wave King 'Akebono'	5
	long	long	lang	largo		7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
55. (*)	(d) Petal: width	Pétale: largeur	Blütenblatt: Breite	Pétalo: anchura		
QN	narrow	étroit	schmal	estrecho	Enobi Parade 'Milky Way'	3
	medium	moyen	mittel	medio	Wave King 'Akebono'	5
	broad	large	breit	ancho		7
56. (* (+)	(c) Petal: shape	Pétale: forme	Blütenblatt: Form	Pétalo: forma		
PQ	narrow elliptic	elliptique étroit	schmal elliptisch	elíptica estrecha		1
	elliptic	elliptique	elliptisch	elíptica	Stardust 'Chiyomi'	2
	ovate	ovale	eiförmig	oval		3
	obovate	obovale	verkehrt eiförmig	oboval		4
	transverse elliptic	elliptique transversal	quer elliptisch	elíptica transversal		5
	spatulate	spatulé	spatelförmig	espatulada		6
57. (* (+)	(c) Petal: cross section	Pétale: section transversale	Blütenblatt: Querschnitt	Pétalo: sección transversal		
QN	strongly concave	fortement concave	stark konkav	fuertemente cóncava		1
	moderately concave	moyennement concave	mittel konkav	moderadamente cóncava		3
	straight	droit	gerade	recto	Enobi Parade 'Milky Way'	5
	moderately convex	moyennement convexe	mittel konvex	moderadamente convexa		7
	strongly convex	fortement convexe	stark konvex	fuertemente convexa		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
58. (*)	(c) Petal: twisting	Pétale: torsion	Blütenblatt: Drehung	Pétalo: torsión		
QN	absent or very weak	absente ou très faible	fehlend oder sehr gering	ausente o muy débil		1
	weak	faible	gering	débil	Pink Beauty 'Queen'	3
	medium	moyenne	mittel	media		5
	strong	forte	stark	fuerte		7
	very strong	très forte	sehr stark	muy fuerte		9
59. (*)	(c) Petal: undulation of margin	Pétale: ondulation du bord	Blütenblatt: Randwellung	Pétalo: ondulación del margen		
QN	absent or very weak	nulle ou très faible	fehlend oder sehr gering	ausente o muy débil		1
	weak	faible	gering	débil	Stardust 'Chiyomi'	3
	medium	moyenne	mittel	media	Wave King 'Akebono'	5
	strong	forte	stark	fuerte	Pink Beauty 'Queen'	7
	very strong	très forte	sehr stark	muy fuerte		9
60. (*)	(c) Petal: number of colors	Pétale: nombre de couleurs	Blütenblatt: Anzahl Farben	Pétalo: número de colores		
QL	one	une	eine	uno		1
	two	deux	zwei	dos	Holy Night 'Yumeji'	2
	three	trois	drei	tres		3
	more than three	plus de trois	mehr als drei	más de tres		4

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
61. (*)(e)	(c) Petal: color pattern	Pétale: répartition des couleurs	Blütenblatt: Farbverteilung	Pétalo: distribución del color		
QL	self-colored	unicolore	einfarbig	del mismo color		1
	shaded	dégradée	schattiert	sombreado		2
	edged	bordée	gerändert	ribeteado	Holy Night ‘Yumeji’	3
	striped	striée	gestreift	estriado		4
	netted	réticulée	netzartig	reticulado		5
	spotted	tachetée	fleckig	manchado		6
	shaded and striped	dégradée et striée	schattiert und gestreift	sombreado y estriado		7
	shaded and netted	dégradée et réticulée	schattiert und netzartig	sombreado y reticulado		8
	shaded and spotted	dégradée et tachetée	schattiert und fleckig	sombreado y manchado		9
62. (e)	(c) Petal: main color	Pétale: couleur principale	Blütenblatt: Hauptfarbe	Pétalo: color principal		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
63. (c)	<u>Varieties with shaded petals only:</u> Petal: extent of shading	<u>Variétés à pétales dégradés seulement:</u> Pétale: étendue du dégradé	<u>Nur Sorten mit schattierten Blütenblättern:</u> Sorten: Blütenblatt: Ausdehnung der Schattierung	<u>Sólo variedades de pétalos sombreados:</u> Pétalo: extensión del sombreado		
QN	small	petite	gering	pequeño		3
	medium	moyenne	mittel	medio		5
	large	grande	groß	grande		7

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
64.	(c) <u>Varieties with shaded petals only:</u> Petal: color of shading	<u>Variétés à pétales dégradés seulement:</u> Pétale: couleur du dégradé	<u>Nur Sorten mit schattierten Blütenblättern:</u> Blütenblatt: Farbe der Schattierung	<u>Sólo variedades de pétalos sombreados:</u> Pétalo: color del sombreado		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
65.	(c) <u>Varieties with edged petals only:</u> Petal: color of edging	<u>Variétés à pétales bordés seulement:</u> Pétale: couleur de la bordure	<u>Nur Sorten mit geränderten Blütenblättern:</u> Blütenblatt: Farbe der Ränderung	<u>Sólo variedades de pétalos ribeteados:</u> Pétalo: color del ribeteado		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
66.	(c) <u>Varieties with striped petals only:</u> Petal: color of stripes	<u>Variétés à pétales striés seulement:</u> Pétale: couleur des stries	<u>Nur Sorten mit gestreiften Blütenblättern:</u> Blütenblatt: Farbe der Streifen	<u>Sólo variedades de pétalos estriados:</u> Pétalo: color de las estrías		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
67.	(c) <u>Varieties with netted petals only:</u> Petal: color of netting	<u>Variétés à pétales réticulés seulement:</u> Pétales: couleur de la réticulation	<u>Nur Sorten mit netzartigen Blütenblättern:</u> Blütenblatt: Farbe des Netzes	<u>Sólo variedades de pétalos reticulados:</u> Pétalo: color del reticulado		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
68.	(c) <u>Varieties with spotted petals only:</u> Petal: color of spots	<u>Variétés à pétales tachetés seulement:</u> couleur des taches	<u>Nur Sorten mit fleckigen Blütenblättern:</u> Blütenblatt: Farbe der Flecken	<u>Sólo variedades de pétalos manchados:</u> Pétalo: color de las manchas		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
69. (*)(d)	(c) Lip: length	Labelle: longueur	Lippe: Länge	Labio: longitud		
QN	short	court	kurz	corto	Enobi Parade 'Milky Way'	3
	medium	moyen	mittel	medio	Wave King 'Akebono'	5
	long	long	lang	grande		7
70. (*)(d)	(c) Lip: width	Labelle: largeur	Lippe: Breite	Labio: anchura		
QN	narrow	étroit	schmal	estrecho	Enobi Parade 'Milky Way'	3
	medium	moyen	mittel	medio	Himezakura 'Fujikko'	5
	broad	large	breit	ancho	Wave King 'Akebono'	7
71. (*)(*)	(c) Lip: presence of lateral lobe	Labelle: présence du lobe latéral	Lippe: Vorhandensein des Seitenlappens	Labio: presencia de lóbulo lateral		
QL	absent	absent	fehlend	ausente	Stardust 'Chiyomi'	1
	present	présent	vorhanden	presente	<i>Dendrobium bellatulum</i>	9
72. (*)(+)	(c) <u>Varieties without lateral lobes only:</u> Lip: shape	<u>Variétés sans lobes latéraux seulement:</u> Labelle: forme	<u>Nur Sorten ohne Seitenlappen:</u> Lippe: Form	<u>Sólo variedades sin lóbulos laterales:</u> Labio: forma		
PQ	elliptic	elliptique	elliptisch	elíptica	Stardust 'Chiyomi'	1
	circular	arrondi	rund	circular	Pink Beauty 'Queen'	2
	transverse elliptic	elliptique transversale	quer elliptisch	elíptica transversal		3
73. (*)(+)	(c) <u>Varieties without lateral lobes only:</u> Lip: overlapping of basal part	<u>Variétés sans lobes latéraux seulement:</u> Labelle: chevauchement de la partie basale	<u>Nur Sorten ohne Seitenlappen:</u> Überlappen des basalen Teils	<u>Sólo variedades sin lóbulos laterales:</u> Labio: solapado de la parte basal		
QL	absent	absent	fehlend	ausente	Stardust 'Chiyomi'	1
	present	présent	vorhanden	presente		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
74.	(c) <u>Varieties with lateral lobes only:</u> Lip: shape of lateral lobe	<u>Variétés avec lobes latéraux seulement:</u> Labelle: forme du lobe latéral	<u>Nur Sorten mit Seitenlappen:</u> Form des Seitenlappens	<u>Sólo variedades con lóbulos laterales:</u> Labio: forma del lóbulo lateral		
PQ	triangular	triangulaire	dreieckig	triangular		1
	ovate	ovale	eiförmig	oval		2
	narrow trapezoid	trapézoïdal étroit	schmal trapezförmig	trapezoidal estrecha		3
	broad trapezoid	trapézoïdal large	breit trapezförmig	trapezoidal ancha		4
75.	(c) <u>Varieties with lateral lobes only:</u> Lip: shape of apical lobe	<u>Variétés avec lobes latéraux seulement:</u> Labelle: forme du lobe apical	<u>Nur Sorten mit Seitenlappen:</u> Form des apikalen Lappens	<u>Sólo variedades con lóbulos laterales:</u> Labio: forma del lóbulo apical		
PQ	reniform	réniforme	nierenförmig	reniforme		1
	rhombic	losangique	rautenförmig	rómbica		2
	transverse elliptic	elliptique transversale	quer elliptisch	elíptica transversal		3
	elliptic	elliptique	elliptisch	elíptica		4
76.	(c) Lip: eye	Labelle: œil	Lippe: Kelch	Labio: ojo		
PQ	type I	type I	Typ I	tipo I		1
	type II	type II	Typ II	tipo II		2
	type III	type III	Typ III	tipo III		3
	type IV	type IV	Typ IV	tipo IV		4
	type V	type V	Typ V	tipo V		5
	type VI	type VI	Typ VI	tipo VI		6
77.	(c) Lip: presence of eye	Labelle: présence d'un œil	Lippe: Vorhandensein des Kelchs	Labio: presencia de ojo		
QL	absent	absent	fehlend	ausente	Enobi Komachi 'Shirayukihime'	1
	present	présent	vorhanden	presente	Fantasia 'King'	9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
78.	(c) Lip: shape of eye	Labelle: forme de l'œil	Lippe: Form des Kelchs	Labio: forma del ojo		
(*)						
(+)						
PQ	type I	type I	Typ I	tipo I		1
	type II	type II	Typ II	tipo II		2
	type III	type III	Typ III	tipo III		3
	type IV	type IV	Typ IV	tipo IV		4
79.	(c) Lip: number of	Labelle: nombre de	Lippe: Anzahl	Labio: número de		
(*)	(e) colors	couleurs	Farben	colores		
QL	one	une	eine	uno		1
	two	deux	zwei	dos	Snow Cap 'Love Song'	2
	three	trois	drei	tres		3
	four	quatre	vier	cuatro		4
	five	cinq	fünf	cinco		5
	more than five	plus de cinq	mehr als fünf	más de cinco		6
80.	(c) Lip: color pattern	Labelle: répartition	Lippe:	Labio:		
(*)	(e) (except middle part, eye and throat)	de la couleur (sauf partie centrale, œil et gorge)	Farbverteilung (außer mittlerer Teil, Kelch und Schlund)	distribución del color (excepto en la parte central, el ojo y la garganta)		
QL	self-colored	unicolore	einfarbig	del mismo color		1
	shaded	dégradée	schattiert	sombreado	Snow Cap 'Love Song'	2
	edged	bordée	gerändert	ribeteado	Pink Beauty 'Queen'	3
	striped	striée	gestreift	estriado		4
	netted	réticulée	netzartig	reticulado		5
	spotted	tachetée	fleckig	manchado		6
	shaded and striped	dégradée et striée	schattiert und gestreift	sombreado y estriado		7
	shaded and netted	dégradée et réticulée	schattiert und netzartig	sombreado y reticulado		8
	shaded and spotted	dégradée et en taches	schattiert und fleckig	sombreado y manchado		9

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
81.	(c) <u>Varieties with shaded lips only:</u> Lip: extent of shading	<u>Variétés à labelles dégradés seulement:</u> étendue du dégradé	<u>Nur Sorten mit schattierten Lippen:</u> Lippe: Ausdehnung der Schattierung	<u>Sólo variedades con labios sombreados:</u> Labio: extensión del sombreado		
QN	small	petit	gering	pequeño		3
	medium	moyen	mittel	medio		5
	large	grand	groß	grande	Snow Cap 'Love Song'	7
82.	(c) <u>Lip: main color</u> (e)	<u>Labelle: couleur principale</u>	<u>Lippe: Hauptfarbe:</u>	<u>Labio: color principal</u>		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
83.	(c) <u>Lip: color of middle part</u> (+)	<u>Labelle: couleur de la partie médiane</u>	<u>Lippe: Farbe des mittleren Teils</u>	<u>Labio: color de la parte central</u>		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
84.	(c) <u>Varieties with shaded lips only:</u> Lip: color of shading	<u>Variétés à labelles dégradés seulement:</u> Labelle: couleur du dégradé	<u>Nur Sorten mit schattierten Lippen:</u> Lippe: Farbe der Schattierung	<u>Sólo variedades de labios sombreados:</u> Labio: color del sombreado		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
85.	(c) <u>Varieties with edged lips only:</u> Lip: color of edging	<u>Variétés à labelles bordés seulement:</u> Labelle: couleur de la bordure	<u>Nur Sorten mit geränderten Lippen:</u> Lippe: Farbe der Ränderung	<u>Sólo variedades de labios ribeteados:</u> Labio: color del ribeteado		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
86.	(c) <u>Varieties with striped lips only:</u> Lip: color of stripes	<u>Variétés à labelles striés seulement:</u> Labelle: couleur des stries	<u>Nur Sorten mit gestreiften Lippen:</u> Lippe: Farbe der Streifen	<u>Sólo variedades de labios estriados:</u> Labio: color de las estrias		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
87.	(c) <u>Varieties with netted lips only:</u> Lip: color of netting	<u>Variétés à labelles réticulés seulement:</u> Labelle: couleur de la réticulation	<u>Nur Sorten mit netzartigen Lippen:</u> Lippe: Farbe des Netzes	<u>Sólo variedades de labios reticulados:</u> Labio: color del reticulado		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
88.	(c) <u>Varieties with spotted lips only:</u> Lip: color of spots	<u>Variétés à labelles tachetés seulement:</u> Labelle: couleur des taches	<u>Nur Sorten mit fleckigen Lippen:</u> Lippe: Farbe der Flecken	<u>Sólo variedades de labios manchados:</u> Labio: color de las manchas		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
89.	(c) <u>Varieties with eye only:</u> Lip: color of eye	<u>Variétés avec oeil seulement:</u> Labelle: couleur de l'œil	<u>Nur Sorten mit Kelch:</u> Lippe: Farbe des Kelchs	<u>Sólo variedades con ojo:</u> Labio: color del ojo		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
90.	(c) <u>Varieties with different colored throat only:</u> Lip: color of throat	<u>Variétés avec une gorge de couleur différente seulement:</u> Labelle: couleur de la gorge	<u>Nur Sorten mit verschiedenfarbigem Schlund:</u> Lippe: Farbe des Schlundes	<u>Sólo variedades con garganta de diferentes colores:</u> Labio: color de la garganta		
PQ	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
91. (*)	(c) Lip: twisting	Labelle: torsion	Lippe: Drehung	Labio: torsión		
QN	absent or weak	nulle ou faible	fehlend oder gering	ausente o débil	Enobi Komachi 'Shirayukihime'	1
	intermediate	moyenne	mittel	intermedia		2
	strong	forte	stark	fuerte		3
92. (*)	(c) Lip: undulation of margin	Labelle: ondulation du bord	Lippe: Randwellung	Labio: ondulación del margen		
QN	absent or weak	nulle ou faible	fehlend oder gering	ausente o débil	Enobi Parade 'Milky Way'	1
	intermediate	moyenne	mittel	intermedia	Stardust 'Chiyomi'	2
	strong	forte	stark	fuerte	Pink Beauty 'Queen'	3
93. (*)	(c) Lip: fringing of margin	Labelle: frange du bord	Lippe: Randfransen	Labio: orlado del margen		
QN	absent or very fine	nulle ou très fine	fehlend oder sehr fein	ausente o muy fino	Enobi Komachi 'Shirayukihime'	1
	fine	fine	fein	fino		3
	medium	moyenne	mittel	medio		5
	coarse	grossière	grob	burdo		7
94. (*)	(c) Lip: callus	Labelle: callosité	Lippe: Kallusbildung	Labio: callo		
QL	absent	absente	fehlend	ausente		1
	present	présente	vorhanden	presente	<i>Dendrobium bellatulum</i>	9
95. (*)	(c) Lip: pubescence	Labelle: pilosité	Lippe: Behaarung	Labio: pubescencia		
QN	absent or weak	nulle ou faible	fehlend oder gering	ausente o débil		1
	intermediate	moyenne	mittel	intermedia		2
	strong	forte	stark	fuerte	<i>Dendrobium 'Parishii'</i>	3

	English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
96. (*)	(c) Column: length	Colonnette: longueur	Säule: Länge	Columna: longitud		
QN	short	courte	kurz	corta		3
	medium	moyenne	mittel	media		5
	long	longue	lang	larga		7
97. (*)	(f) Column: color of anther cap	Colonnette: couleur du sommet des anthères	Säule: Farbe der Antherenkappe	Columna: color de la caperuza de la antera		
PQ (+)	RHS Colour Chart (indicate reference number)	Code RHS des couleurs (indiquer le numéro de référence)	RHS-Farbkarte (Nummer angeben)	Carta de colores RHS (indíquese el número de referencia)		
98. (*)	(c) Time of flowering	Époque de floraison	Zeitpunkt der Blüte	Época de floración		
PQ	very late	très tardive	sehr spät	muy tardía		1
	early	précoce	früh	temprana		2
	spring	printemps	Frühjahr	en primavera		3
	summer	été	Sommer	en verano		4
	medium	moyenne	mittel	intermedia		5

8. Explanations on the Table of Characteristics

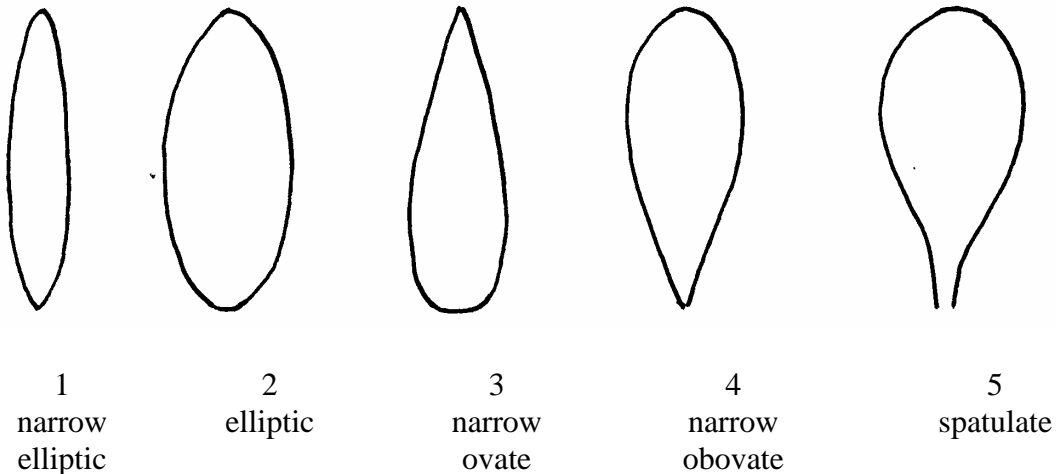
8.1 *Explanations covering several characteristics*

Characteristics containing the following key in the second column of the Table of Characteristics should be examined as indicated below:

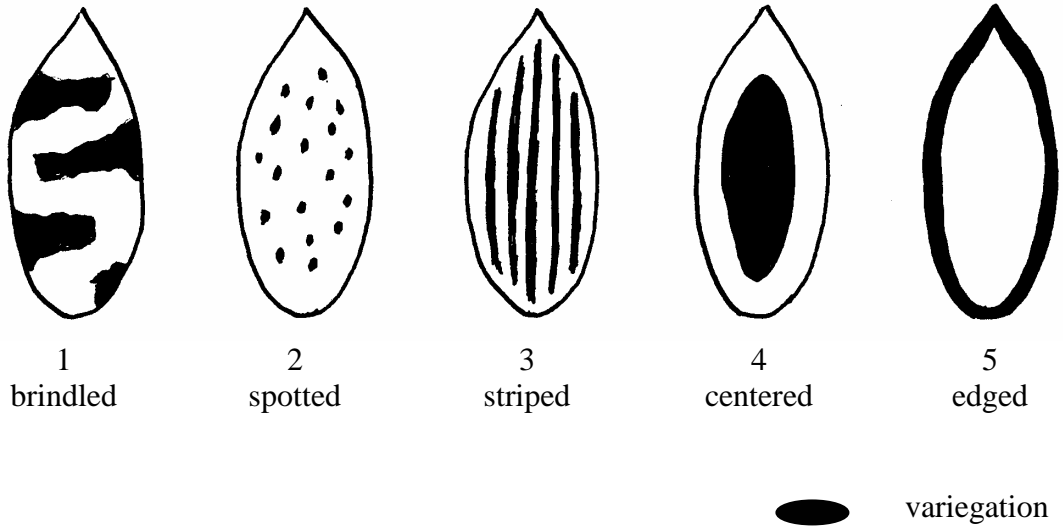
- (a) Observations on the pseudobulb should be made on the flowering pseudobulb.
- (b) Observations on the leaf should be made on the longest leaf of a flowering pseudobulb.
- (c) Observations on the inflorescence and the flower should be made at the time when 50% of the flowers on the inflorescence have opened, on the most recently fully opened flower on the inflorescence before the color starts to fade.
- (d) To be assessed on the most recently opened flower on the inflorescence, before the color starts to fade, at the time when 50% of the flowers on the inflorescence have opened.
- (e) Observations on the color of the sepal, the petal and the lip should be made on the inner side.

8.2 *Explanations for individual characteristics*

Ad. 10: Leaf: shape

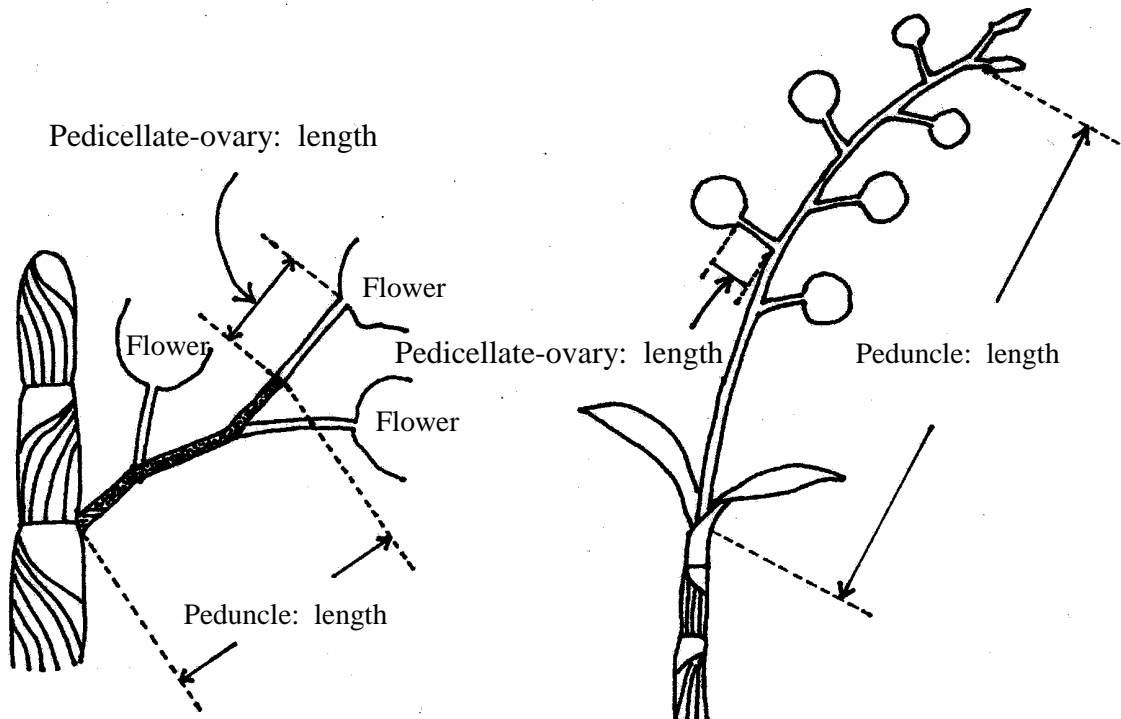


Ad. 13: Leaf: type of variegation



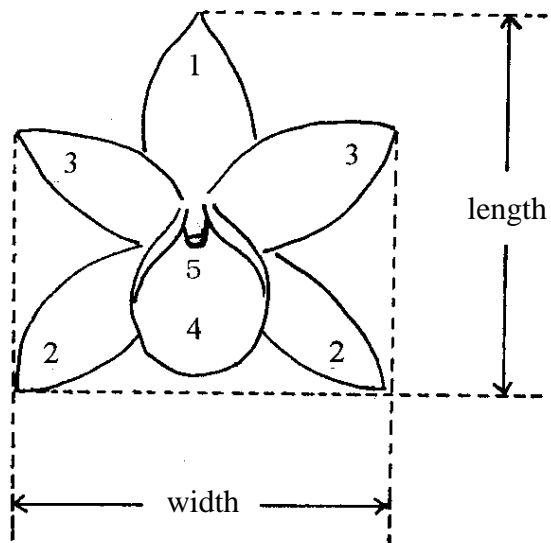
Ad. 20: Peduncle: length

Ad. 23: Pedicellate-ovary: length



Ad. 27: Flower: length in front view

Ad. 28: Flower: width in front view

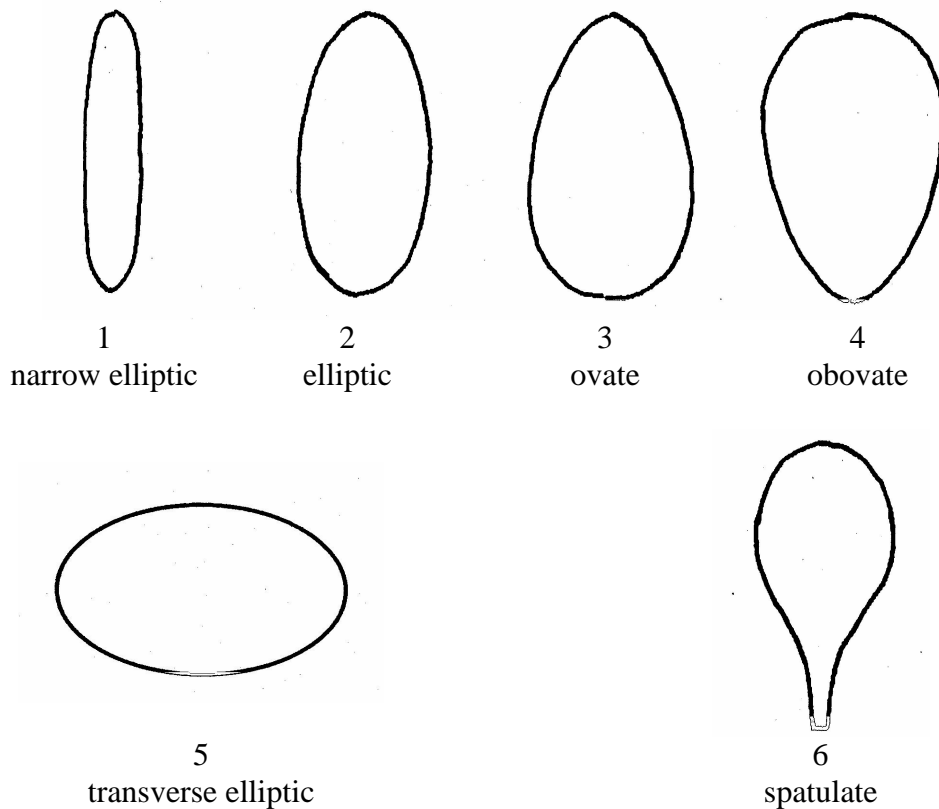


- 1: Dorsal sepal
- 2: Lateral sepal
- 3: Petal
- 4: Lip
- 5: Column

Ad. 33: Dorsal sepal: shape

Ad. 40: Lateral sepal: shape

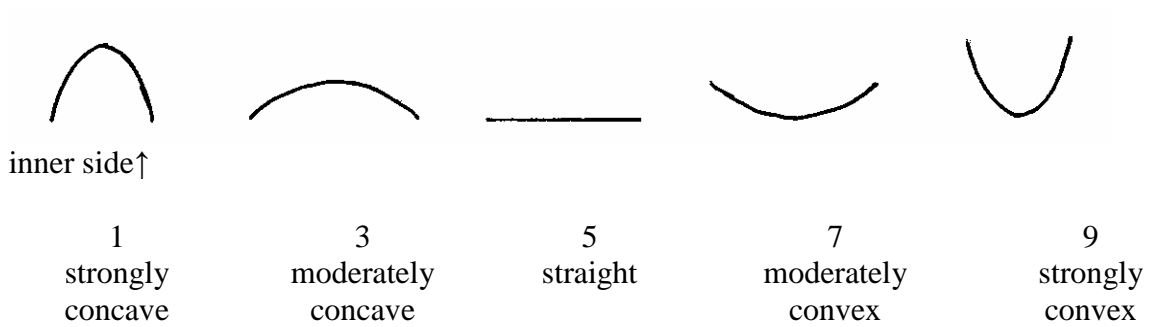
Ad. 56: Petal: shape



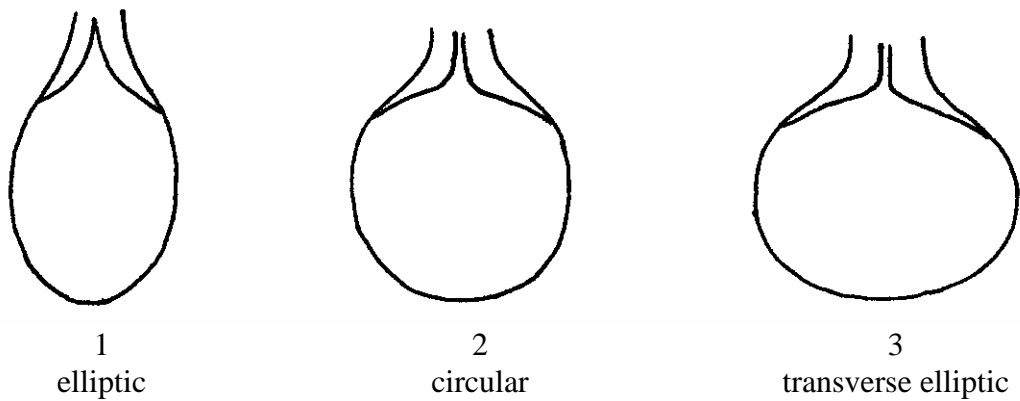
Ad. 34: Dorsal sepal: cross section

Ad. 41: Lateral sepal: cross section

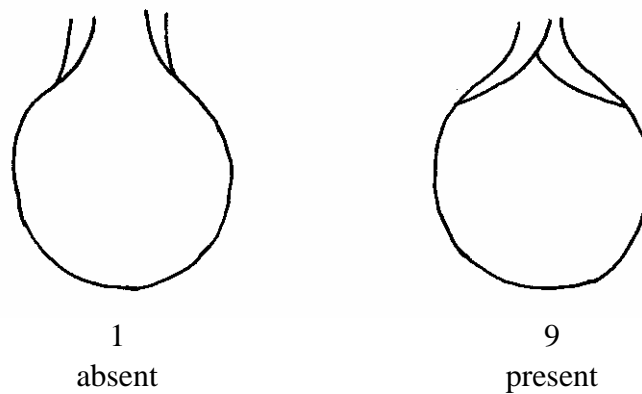
Ad. 57: Petal: cross section



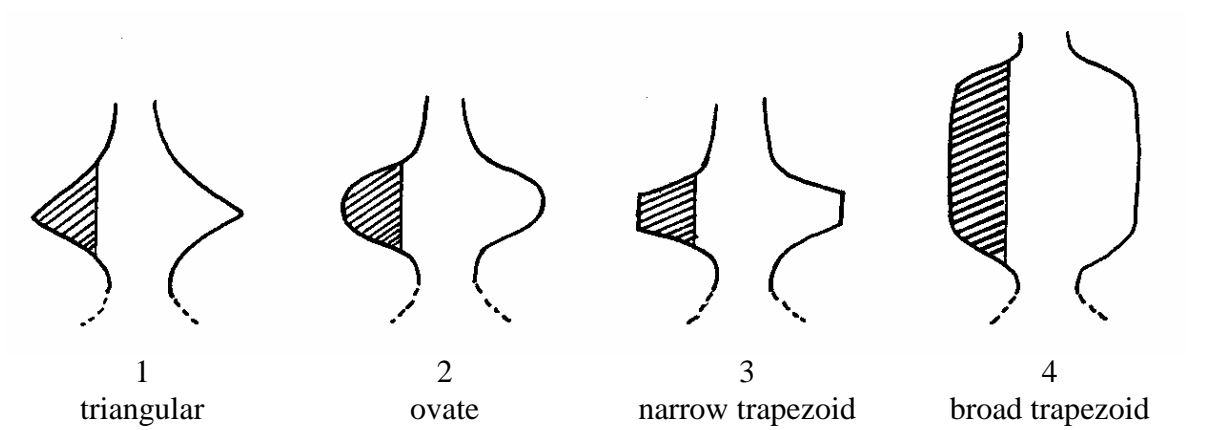
Ad. 72: Varieties without lateral lobes only: Lip: shape



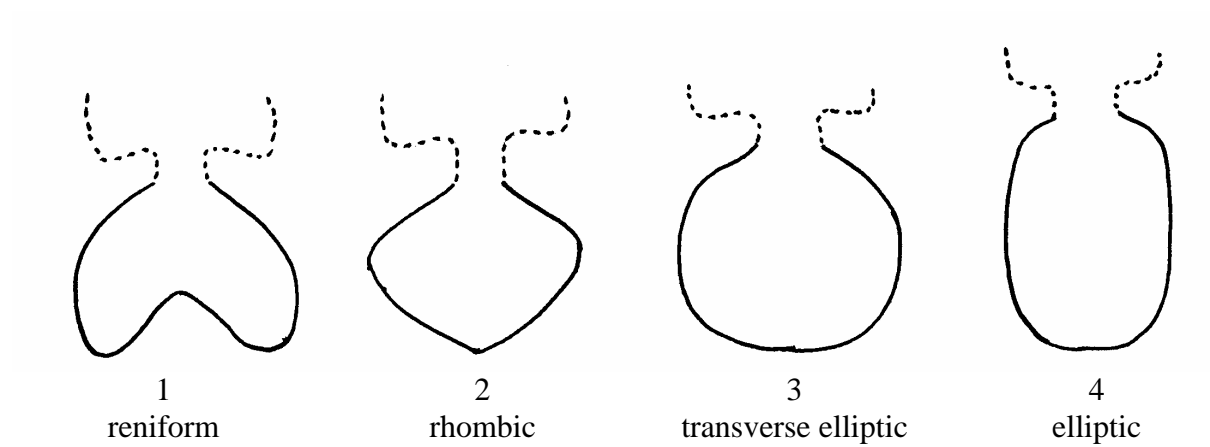
Ad. 73: Varieties without lateral lobes only: Lip: overlapping of basal part



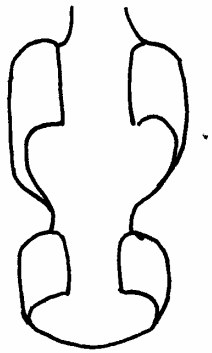
Ad. 74: Varieties with lateral lobes only: Lip: shape of lateral lobe



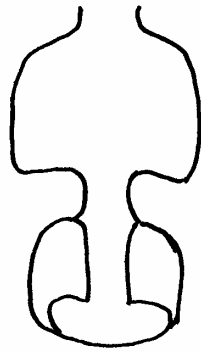
Ad. 75: Varieties with lateral lobes only: Lip: shape of apical lobe



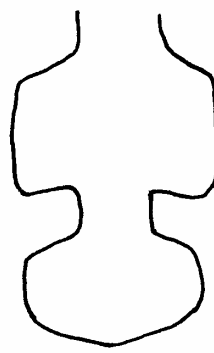
Ad. 76: Lip: eye



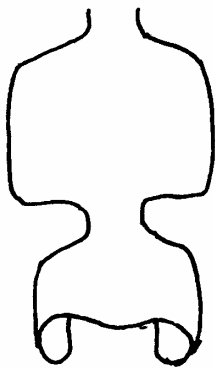
1
type I



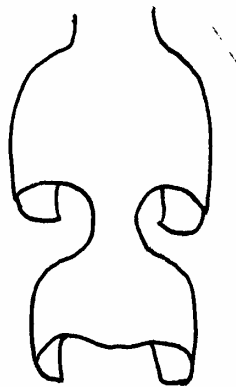
2
type II



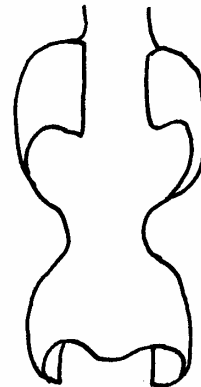
3
type III



4
type IV



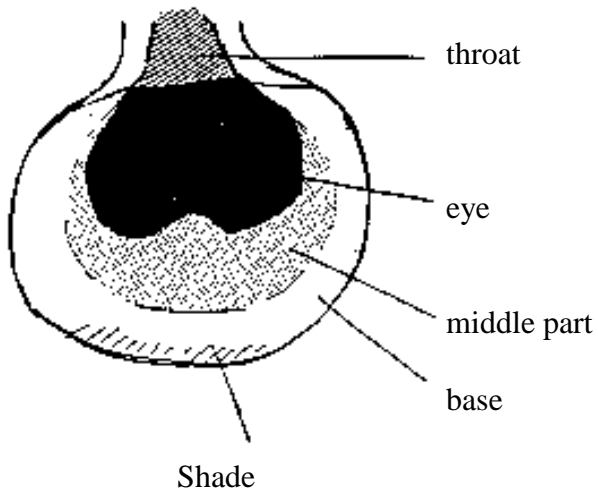
5
type V



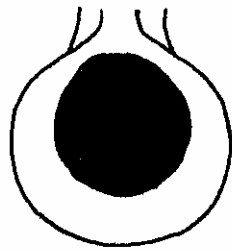
6
type VI

Ad. 77: Lip: presence of eye

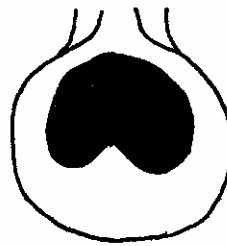
Ad. 83: Lip: color of middle part



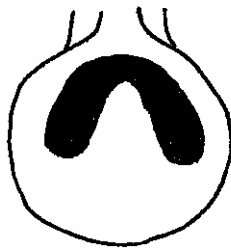
Ad. 78: Lip: shape of eye



1
type I



2
type II



3
type III



4
type IV

Ad. 97: Column: color of anther cap

Observations on the color of the column should be made on the dorsal side.

9. Literature

Encyclopedia of Horticulture, Seibun-Do Shinkosha, Tokyo, Japan (in Japanese), JP.

Karasawa, K., 1994: "Orchid Atlas", Vol. 4, Dendrobium, Orchid Atlas Publishing Society, c/o Yasaka Syobo, Inc., Tokyo, Japan, JP.

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 Genus		
1.1.1 <i>Latin Name</i>	<input type="text" value="Dendrobium Sw."/>	
1.1.2 Common Name	<input type="text" value="Dendrobium"/>	
1.2 Species (please complete)		
1.2.1 <i>Latin Name</i>	<input type="text"/>	
1.2.2 Common Name	<input type="text"/>	
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"/>	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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3. Proposed denomination and breeder's reference

Proposed denomination
(if available)

Breeder's reference

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) cuttings

(b) *in vitro* propagation

(c) other (state method)

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:	
<p>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).</p>			
Characteristics	Example Varieties	Note	
<p>5.1 Plant: size (1)</p>			
very small	Enobi Komachi 'Shirayukihime'	1[]	
small	<i>Dendrobium kingianum</i>	3[]	
medium	Wave King 'Akebono'	5[]	
large	Lucky Girl 'Emiko'	7[]	
very large		9[]	
<p>5.2 Inflorescence: position of flowers (18)</p>			
along peduncle	Snow Cap 'Love Song'	1[]	
apex only	Pink Beauty 'Queen'	2[]	
<p>5.3 Flower: length in front view (27)</p>			
short	Enobi Komachi 'Shirayukihime'	3[]	
medium	Lucky Girl 'Emiko'	5[]	
long		7[]	
<p>5.4 Flower: width in front view (28)</p>			
narrow	Enobi Komachi 'Shirayukihime'	3[]	
medium	Lucky Girl 'Emiko'	5[]	
broad		7[]	
<p>5.5 Lip: presence of lateral lobe (71)</p>			
absent	Stardust 'Chiyomi'	1[]	
present	<i>Dendrobium bellatulum</i>	9[]	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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Characteristics	Example Varieties	Note
5.6 Lip: presence of eye (77)		
absent	Enobi Komachi 'Shirayukihime'	1[]
present	Fantasia 'King'	9[]
5.7 Lip: color pattern (except middle part, eye and throat) (80)		
self-colored		1[]
shaded	Snow Cap 'Love Song'	2[]
edged	Pink Beauty 'Queen'	3[]
striped		4[]
netted		5[]
spotted		6[]
shaded and striped		7[]
shaded and netted		8[]
shaded and spotted		9[]
5.8i Lip: main color (82)		
RHS Colour Chart (indicate reference number)		
.....		
5.8ii Lip: main color (82)		
green		1[]
white	Enobi Komachi 'Shirayukihime'	2[]
yellow	Stardust 'Chiyomi'	3[]
pink	Snow Cap 'Love Song'	4[]
red		5[]
purple	Queen Southeast 'Crystal Queen'	6[]
reddish		7[]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:
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6. Similar varieties and differences from these varieties

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety
<i>(Example)</i>	<i>Lip: color pattern</i>	<i>shaded</i>	<i>shaded and striped</i>

Comments:

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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 color photograph of the variety should accompany the Technical Questionnaire.

8. Authorization for release

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

Yes [] No []

(b) Has such authorization been obtained?

Yes [] No []

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

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

Applicant's name

Signature

Date

[End of document]