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UPOV

INTERNATIONAL UNION FOR THE PROTECTION OF NEW VARIETIES OF PLANTS

GENEVA

DRAFT

ONCIDIUM

UPOV Code: ONCID

Oncidium Sw. and their intergeneric hybrids with Cochlioda Lindl., Cyrtochilum,Gomesa R.B.,Ionopsis Kunth. and Zelenkoa M.W.Chase & N.H. Williams. *

GUIDELINES

FOR THE CONDUCT OF TESTS

FOR DISTINCTNESS, UNIFORMITY AND STABILITY

prepared by experts from Japan

to be considered by the

Technical Working Party for Ornamental Plants and Forest Trees at forty-fourth session, to be held in Fukuyama, Hiroshima, Japan, from November 7 to 11, 2011

Alternative Names:*

Botanical name	*English*	*French*	*German*	*Spanish*
Oncidium Sw.	Oncidium	Orchidee danseuse, Oncidium	Oncidium	Oncidium
Intergeneric hybrids of *Cochliodaa* Lindl., *Cyrtochilum ?,* *Gomesa* R.B.,*Ionopsis* Kunth *and* *Zelenkoa* M.W. Chase & N.H.Williams				

The purpose of these guidelines ("Test Guidelines") is to elaborate the principles contained in the General Introduction (document TG/1/3), and its associated TGP documents, into detailed practical guidance for the harmonized examination of distinctness, uniformity and stability (DUS) and, in particular, to identify appropriate characteristics for the examination of DUS and production of harmonized variety descriptions.

ASSOCIATED DOCUMENTS

These Test Guidelines should be read in conjunction with 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 *Oncidium* Sw. and their intergeneric hybrids with Cochlioda Lindl., Cyrtochilum,Gomesa R.B.,Ionopsis Kunth. and Zelenkoa M.W.Chase & N.H. Williams.

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 plants that have not previously flowered, ready to show all the characteristics with growing inflorescence.

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

9 plants.

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 Number of Growing Cycles

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

3.2 Testing Place

Tests are normally conducted at one place. In the case of tests conducted at more than one place, guidance is provided in TGP/9 “Examining Distinctness”.

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 Because daylight varies, color determinations made against a color chart should be made either in a suitable cabinet providing artificial daylight or in the middle of the day in a room without direct sunlight. The spectral distribution of the illuminant for artificial daylight should conform with the CIE Standard of Preferred Daylight D 6500 and should fall within the tolerances set out in the British Standard 950, Part I. These determinations should be made with the plant part placed against a white background. The color chart and version used should be specified in the variety description.

3.4 Test Design

3.4.1 Each test should be designed to result in a total of at least 9 plants.

3.4.2 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.

3.5 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 differences observed between varieties may be so clear that more than one growing cycle is not necessary. In addition, in some circumstances, the influence of the environment is not such that more than a single growing cycle is required to provide assurance that the differences observed between varieties are sufficiently consistent. One means of ensuring that a difference in a characteristic, observed in a growing trial, is sufficiently consistent is to examine the characteristic in at least two independent growing cycles.

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.

4.1.4 Number of Plants / Parts of Plants to be Examined

Unless otherwise indicated, for the purposes of distinctness, all observations on single plants should be made on 8 plants or parts taken from each of 8 plants and any other observations made on all plants in the test, disregarding any off-type plants.

4.1.5 Method of Observation

The recommended method of observing the characteristic for the purposes of distinctness is indicated by the following key in the second column of the Table of Characteristics (see document TGP/9 "Examining Distinctness", Section 4 "Observation of characteristics"):

MG: single measurement of a group of plants or parts of plants
MS: measurement of a number of individual plants or parts of plants
VG: visual assessment by a single observation of a group of plants or parts of plants
VS: visual assessment by observation of individual plants or parts of plants

Type of observation: visual (V) or measurement (M)

"Visual" observation (V) is an observation made on the basis of the expert's judgment. For the purposes of this document, "visual" observation refers to the sensory observations of the experts and, therefore, also includes smell, taste and touch. Visual observation includes observations where the expert uses reference points (e.g. diagrams, example varieties, side-by-side comparison) or non-linear charts (e.g. color charts). Measurement (M) is an objective observation against a calibrated, linear scale e.g. using a ruler, weighing scales, colorimeter, dates, counts, etc.

Type of record: for a group of plants (G) or for single, individual plants (S)

For the purposes of distinctness, observations may be recorded as a single record for a group of plants or parts of plants (G), or may be recorded as records for a number of single, individual plants or parts of plants (S). In most cases, "G" provides a single record per variety and it is not possible or necessary to apply statistical methods in a plant-by-plant analysis for the assessment of distinctness."

In cases where more than one method of observing the characteristic is indicated in the Table of Characteristics (e.g. VG/MG), guidance on selecting an appropriate method is provided in document TGP/9, Section 4.2.

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:

4.2.1 For the assessment of uniformity, a population standard of 95% and an acceptance probability of at least 1% should be applied. In the case of a sample size of 9 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 further examined by testing a new plant stock to ensure that it exhibits the same characteristics as those shown by the initial material supplied.

5. Grouping of Varieties and Organization of the Growing Trial

5.1 The selection of varieties of common knowledge to be grown in the trial with the candidate varieties and the way in which these varieties are divided into groups to facilitate the assessment of distinctness are 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:

Guidance for the use of grouping characteristics, in the process of examining distinctness, is provided through the General Introduction and document TGP/9 “Examining Distinctness”.

(a) Plant: size (characteristic 1)
(b) Flower: width in front view (characteristic 23)
(c) Petal: ground color (characteristic 71) with the following groups:
(d) Petal: diffused over color (characteristic 72) with the following groups:
(e) Petal: color of spots (characteristic 75) with the following groups:
(f) Petal: color of band (characteristic 78) with the following groups:
(g) Petal: color of stripe (characteristic 79) with the following groups:
(h) Petal: color of margin (characteristic 81) with the following groups:
(i) Petal: color of macule (characteristic 83) with the following groups:
(j) Lip:apical lobe: ground color (characteristic 92) with the following groups:

Grouping characteristics from (c) to (j) should be applicable with following color groups

Gr.1: white
Gr.2: yellow
Gr.3: orange
Gr.4: pink
Gr.5: red
Gr.6: violet
Gr.7: brown

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

6.2.1 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.

6.2.2 In the case of qualitative and pseudo-qualitative characteristics (see Chapter 6.3), all relevant states of expression are presented in the characteristic. However, in the case of quantitative characteristics with 5 or more states, an abbreviated scale may be used to minimize the size of the Table of Characteristics. For example, in the case of a quantitative characteristic with 9 states, the presentation of states of expression in the Test Guidelines may be abbreviated as follows:

State	Note
small	3
medium	5
large	7

However, it should be noted that all of the following 9 states of expression exist to describe varieties and should be used as appropriate:

State	Note
very small	1
very small to small	2
small	3
small to medium	4
medium	5
medium to large	6
large	7
large to very large	8
very large	9

6.2.3 Further explanation of the presentation of states of expression and notes is provided in document TGP/7 “Development of Test Guidelines”.

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.

6.4.2 Some variety denominations are preceded by group names(GREX). General remark: a particular grouping on the basis of known parentage, of which the unit is the GREX, is in long standing use in orchids.

6.4.3 The variety denominations are placed between single quotation marks (e.g. Ella‘Flambeau’).

6.5 Legend

(*)	Asterisked characteristic	– see Chapter 6.1.2
QL	Qualitative characteristic	– see Chapter 6.3
QN	Quantitative characteristic	– see Chapter 6.3
PQ	Pseudo-qualitative characteristic	– see Chapter 6.3
MG, MS, VG, VS		– see Chapter 4.1.5

(a)-(c) See Explanations on the Table of Characteristics in Chapter 8.1.

(+) See Explanations on the Table of Characteristics in Chapter 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. **(*)** **(+)**	**VG**	**Plant: size**					
QN		small				Twinkle ‘Fragrance Fantasy’	3
		medium				Kinsei ‘Abe No.4’	5
		large				‘Kurisu’	7
2. **(*)** **(+)**	**VG**	**Plant: attitude of leaves**					
QN		erect				Haruka	1
		semi-erect				‘Only You’	2
		horizontal					3
		pendulous					4
3. **(*)**	**VG**	**Pseudobulb: size**					
QN	**(a)**	small				‘Haru Ichiban’	3
		medium					5
		large				Sang-Chan ‘Nihao’ ‘Shimizu Parasol Papurikon’	7
4. **(*)** **(+)**	**VG**	**Pseudobulb: shape in longitudinal section**					
PQ	**(a)**	ovate				Kukoo ‘YMC-2’ Yellow Days	1
		elliptic				‘Haruka’ Sunlight Siesta ‘Ruru’	2
		circular				Dancing Sunlight ‘Ami’	3
		oblate				Kinsei ‘Abe No.4’	4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
5. **(+)**	**VG**	**Pseudobulb: shape in cross section**					
PQ	**(a)**	narrow elliptic				Dancing Sunlight ‘Suzy’	1
		elliptic				Kinsei ‘Abe No.4’	2
		oblate				Mayfair ‘Yellow Angel’	3
		circular					4
6. **(+)**	**MS**	**Pseudobulb: number of cataphylls**					
QN	**(a)**	few				‘Fight Yuko’	1
		medium				Sunlight Siesta ‘Ruru’	2
		many					3
7. **(+)**	**MS**	**Pseudobulb: number of leaves**					
QN	**(a)**	one				Dancing Sunlight ‘Ami’	1
		two				‘Monshirotyo no Cafe’	2
		three				‘Shimizu Parasol Papurikon’	3
		more than three					4
8.	**VG/ MS**	**Leaf: length**					
QN	**(b)**	short				Twinkle ‘Fragrance Fantasy’	3
		medium				Dancing Sunlight ‘Suzy’	5
		long				‘Shimizu Parasol Papurikon’	7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
9. **(*)**	**VG/ MS**	**Leaf: width**					
QN	**(b)**	narrow				‘Sakura no Sato’ ‘Yellow Days’	3
		medium				Dancing Sunlight ‘Suzy’	5
		broad					7
10. **(*)** **(+)**	**VG**	**Leaf: shape**					
PQ	**(b)**	narrow lanceolate				Morning Medley ’Sakurako’	1
		linear				‘Haruka’ ‘Kaori no Izumi’	2
		narrow elliptic					3
		medium elliptic					4
11.	**VG**	**Leaf: shape in cross section**					
QN	**(b)**	concave				‘Yellow Days’	1
		flat				Ella ‘Flambeau’	2
		convex					3
12.	**VG**	**Leaf: intensity of green color on upper side**					
QN		light					1
		medium				Sunlight Siesta ‘Ruru’	2
		dark				Dancing sunlight ‘Nancy’	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
13. **(*)** **(+)**	**VG**	**Inflorescence: type**					
QL		raceme				‘Poco-A-Poco Yellow’	1
		simple panicle				Misaki Wave ‘Yurara’	2
		compound panicle				Dancing Sunlight ‘Ami’	3
14. **(+)**	**VG/ MS**	**Inflorescence: length of flowering part**					
QN		short					3
		medium				‘Monshirotyo no Cafe’	5
		long				‘Kurisu’	7
15. **(+)**	**VG/ MS**	**Inflorescence: width**					
QN		narrow				Twinkle ‘Fragrance Fantasy’	3
		medium				Sunlight Siesta ‘Ruru’	5
		broad				‘Kurisu’	7
16. **(*)**	**MS/ MG**	**Inflorescence: number of flowers**					
QN		few					3
		medium				‘Yasukaspa Akane’	5
		many				Sunlight Siesta ‘Ruru’	7

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
17. **(*)** **(+)**	**VG/ MS**	**Peduncle: length**					
QN		short				‘Sakura no Sato’ ‘Kaoli no Izumi’	3
		medium				Sunlight Siesta ‘Ruru’	5
		long				Ella ‘Flambeau’	7
18. **(*)**	**VG/ MS**	**Peduncle: thickness**					
QN		thin				Twinkle ‘Fragrance Fantasy’	1
		medium				‘Kurisu’	2
		thick					3
19. **(*)** **(+)**	**VG**	**Peduncle: anthocyanin coloration**					
QN		absent or weak				‘Monshirotyo no Cafe’	1
		moderate				‘Kurisu’	2
		strong				Dancing Sunlight ‘Nancy’	3
20. **(*)** **(+)**	**VG**	**Flower: curvature of sepals**					
QN		incurving				Mayfair ‘Yellow Angel’	1
		straight				‘Shimizu Parasol Papurikon’	2
		recurving				Dancing Sunlight ‘Ami’	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
21. **(*)** **(+)**	**VG**	**Flower: curvature of petals**					
QN		incurving				‘Yellow Days’	1
		straight				Dancing Sunlight ‘Ami’	2
		recurving				‘Shimizu Parasol Papurikon’	3
22. **(*)** **(+)**	**VG/ MS**	**Flower: length in front view**					
QN		short				‘Kurisu’	3
		medium				Dancing Sunlight ‘Ami’	5
		long				Makalii ‘Gotoh’	7
23. **(*)** **(+)**	**VG/ MS**	**Flower: width in front view**					
QN		narrow				‘Kurisu’	3
		medium					5
		broad				Ella ‘Flambeau’	7
24.	**QN**	**Flower: fragrance**					
QN		absent or weak				‘Pink Sugar’ Sunlight Siesta ‘Ruru’	1
		moderate				‘Only One’	2
		strong					3
25. **(*)**	**VG/ MS**	**Dorsal sepal: length**					
QN		short				Kukoo ‘YMC-2’ ‘Yellow Days’	1
		medium				Kinsei ‘Abe No.4’	2
		long				Makalii ‘Gotoh’	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
26. (*)	**VG/ MS**	**Dorsal sepal: width**					
QN		narrow				‘Kurisu’	1
		medium				Kukoo ‘YMC-2’ Morning Medley ‘Sakurako’	2
		broad				Kinsei ‘Abe No.4’	3
27. (*) (+)	**VG**	**Dorsal sepal: shape**					
PQ		lanceolate				‘Shell white’	1
		ovate				Ella ‘Flambeau’	2
		linear				Sunlight Siesta ‘Ota’	3
		narrow elliptic				‘Haruka’ Dancing Sunlight ‘Nancy’	4
		elliptic				Misaki Wave ‘Yurara’ ‘Yellow Days’	5
		obovate				‘Kaori no Izumi’	6
28. (*) (+)	**VG**	**Dorsal sepal: curvature of longitudinal axis**					
QN		strongly incurving					1
		moderately incurving				Sang-Chan ‘Nihao’ ‘Yellow Days’	3
		straight				Makalii ‘Gotoh’	5
		moderately recurving				Ella ‘Flambeau’	7
		strongly recurving					9

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
29. **(+)**	**VG**	**Dorsal sepal: cross section**					
QN		strongly concave					1
		moderately concave					2
		flat				Kukoo ‘YMC-2’ ‘Only You’	3
		moderately convex				‘Shell white’ ‘Yellow Days’	4
		strongly convex					5
30. **(+)**	**VG**	**Dorsal sepal: undulation of margin**					
QN		absent or weak				‘Only You’	1
		moderate				‘Yellow Days’	2
		strong					3
31. **(*)**	**VG**	**Dorsal sepal: ground color**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
32. **(+)**	**VG**	**Dorsal sepal: diffused over color (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
34.	**VG**	**Dorsal sepal: number of spots**					
QN	**(c)**	absent or very few				Fight Yuko	1
		few					2
		medium				Makali Gotoh	3
		many					4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
35.	**VG**	**Dorsal sepal: size of spots**					
QN	**(c)**	absent or very small					1
		small					2
		medium				Makali Gotoh	3
		large					4
36. **(+)**	**VG**	**Dorsal sepal: color of spots (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
37.	**VG**	**Dorsal sepal: number of bands**					
QN	**(c)**	absent or very few					1
		few					2
		medium					3
		many					4
38.	**VG**	**Dorsal sepal: distribution of bands**					
PQ	**(c)**	basal area					1
		middle area					2
		distal area					3
		basal and middle area					4
		distal and middle area					5
		whole area					6

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
39. **(+)**	**VG**	**Dorsal sepal: color of bands (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
40. **(+)**	**VG**	**Dorsal sepal: color of stripes (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
41.	**VG**	**Dorsal sepal: width of marginal color**					
QN	**(c)**	absent or very narrow					1
		narrow					2
		medium					3
		broad					4
42. **(+)**	**VG**	**Dorsal sepal: color of margin (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
43.	**VG**	**Dorsal sepal: size of macule**					
QN	**(c)**	absent or very small					1
		small					2
		medium					3
		large					4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
44. **(+)**	**VG**	**Dorsal sepal: color of macule (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
45. **(*)**	**VG/ MS**	**Lateral sepal: length**					
QN		short				Kukoo ‘YMC-2’ ‘Yellow Days’	1
		medium				Kinsei ‘Abe No.4’	2
		long				Makalii ‘Gotoh’	3
46. **(*)**	**VG/ MS**	**Lateral sepal: width**					
QN		narrow				Dancing Sunlight ‘Ami’	1
		medium				Ella ‘Flambeau’	2
		broad				Makalii ‘Gotoh’	3
47. **(*)** **(+)**	**VG**	**Lateral sepal: shape**					
PQ		lanceolate				Dancing Sunlight ‘Suzy’	1
		ovate				Makalii ‘Gotoh’	2
		elliptic					3
		obovate				‘Yasukasupa Koharu’	4
		broad obovate				Kukoo ‘YMC-2’	5
		curving obovate				‘Only You’	6

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
48. **(*)** **(+)**	**VG**	**Lateral sepal: curvature of longitudinal axis**					
QN		strongly incurving					1
		moderately incurving				‘Haruka’ ‘Yellow Days’	2
		straight				‘Only You’	3
		moderately recurving				Makalii ‘Gotoh’	4
		strongly recurving				‘Pink Sugar’ Dancing Sunlight ‘Nancy’	5
49. **(+)**	**VG**	**Lateral sepal: cross section**					
QN		strongly concave					1
		moderately concave					3
		flat				Ella ‘Flambeau’	5
		moderately convex					7
		strongly convex					9
50.	**VG**	**Lateral sepal: twisting**					
QN		absent or weak				Dancing Sunlight ‘Ami’	1
		moderate					2
		strong				Shimizu Parasol Papurikon	3
51. **(+)** **(*)**	**VG**	**Lateral sepal: undulation of margin**					
QN		absent or weak				‘Haruka’ ‘Kaori no Izumi’	1
		moderate				‘Monshirotyo no Cafe’	2
		strong					3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
52. **(*)**	**VG**	**Lateral sepal: ground color**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
53. **(+)**	**VG**	**Lateral sepal: diffused over color (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
54.	**VG**	**Lateral sepal: number of spots**					
QN	**(c)**	absent or very few					1
		few					2
		medium					3
		many					4
55.	**VG**	**Lateral sepal: size of spots**					
QN	**(c)**	absent or very small					1
		small					2
		medium					3
		large					4
56. **(+)**	**VG**	**Lateral sepal: color of spots (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
57.	**VG**	**Lateral sepal: number of bands**					
QN	**(c)**	absent or very few					1
		few					2
		medium					3
		many					4
58.	**VG**	**Lateral sepal: distribution of bands**					
PQ	**(c)**	basal area					1
		middle area					2
		distal area					3
		basal and middle area					4
		distal and middle area					5
		whole area					6
59. **(+)**	**VG**	**Lateral sepal: color of bands (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
60. **(+)**	**VG**	**Lateral sepal: color of stripes (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
61.	**VG**	**Lateral sepal: width of marginal color**					
QN	**(c)**	absent or very narrow					1
		narrow					2
		medium					3
		broad					4
62.	**VG**	**Lateral sepal: color of margin (if present)**					
(+)							
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
63.	**VG**	**Lateral sepal: size of macule**					
QN	**(c)**	absent or very small					1
		small					2
		medium					3
		large					4
64.	**VG**	**Lateral sepal: color of macule (if present)**					
(+)							
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
65.	**VG/**	**Petal: length**					
(*)	**MS**						
QN		short				‘Haruka’ ‘Fight Yuko’	1
		medium				Ella ‘Flambeau’	2
		long				Makalii ‘Gotoh’	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
66. **(*)**	**VG/ MS**	**Petal: width**					
QN		narrow				‘Only You’	1
		medium				‘Fight Yuko’	2
		broad				Kinsei ‘Abe No.4’	3
67. **(*)** **(+)**	**VG**	**Petal: shape**					
PQ		ovate					1
		linear				Sunlight Siesta’Ota’	2
		elliptic					3
		oblanceolate				Dancing Sunlight ‘Ami’	4
		broad obovate				Yasukasupa Komachi	5
68. **(*)** **(+)**	**VG**	**Petal: curvature of longitudinal axis**					
QN		strongly incurving					1
		moderately incurving				Kukoo ‘YMC-2’ ‘Yellow Days’	2
		straight				‘Kaori no Izumi’	3
		moderately recurving				Dancing Sunlight ‘Ami’	4
		strongly recurving					5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
69. **(+)**	**VG**	**Petal: cross section**					
QN		strongly concave					1
		moderately concave					3
		flat				Kukoo ‘YMC-2’ ‘Yellow Days’	5
		moderately convex				‘Shell white’ ‘Monshirotyo no Cafe’	7
		strongly convex					9
70.	**VG**	**Petal: twisting**					
QN		absent or weak				Dancing Sunlight ‘Ami’	1
		moderate					2
		strong				Shimizu Parasol Papurikon	3
71. **(+)**	**VG**	**Petal: undulation of margin**					
QN		absent or weak				‘Haruka’ Sunlight Siesta ‘Ruru’	1
		moderate				‘Yellow Days’	2
		strong					3
72. **(*)**	**VG**	**Petal: ground color**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
73. **(+)**	**VG**	**Petal: diffused over color (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
74.	**VG**	**Petal: number of spots**					
QN	**(c)**	absent or very few					1
		few					2
		medium					3
		many					4
75.	**VG**	**Petal: size of spots**					
QN	**(c)**	absent or very small					1
		small					2
		medium					3
		large					4
76. **(+)**	**VG**	**Petal: color of spots (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
77.	**VG**	**Petal: number of bands**					
QN	**(c)**	absent or very few					1
		few					2
		medium					3
		many					4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
78.	**VG**	**Petal: distribution of bands**					
PQ	**(c)**	basal area					1
		middle area					2
		distal area					3
		basal and middle area					4
		distal and middle area					5
		whole area					6
79. **(+)**	**VG**	**Petal: color of bands (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
80. **(+)**	**VG**	**Petal: color of stripes (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
81.	**VG**	**Petal: width of marginal color**					
QN	**(c)**	absent or very narrow					1
		narrow					2
		medium					3
		broad					4
82. **(+)**	**VG**	**Petal: color of margin (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
83.	**VG**	**Petal: size of macule**					
QN	**(c)**	absent or very small					1
		small					2
		medium					3
		large					4
84. **(+)**	**VG**	**Petal: color of macule** **(if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
85. **(*)** **(+)**	**VG/** **MS**	**Lip: length**					
QN		short				Dancing Sunlight 'Ami'	1
		medium				Makalii 'Gotoh'	2
		long				Ella 'Flambeau'	3
86. **(*)** **(+)**	**VG/** **MS**	**Lip: width**					
QN		narrow				Makalii 'Gotoh' 'Kaoli no Izumi'	1
		medium				'Monshirotyo no Cafe'	2
		broad				Ella 'Flambeau'	3

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
87. **(*)** **(+)**	**VG**	**Lip: size of lateral lobe in relation to apical lobe**					
QN		smaller				Misaki Wave 'Yurara' 'Shimizu Prasol Papurikon'	1
		Same size				Dancing Sunlight 'Ami'	2
		larger				'Haruka' 'Only One'	3
88. **(+)**	**VG**	**Lip: undulation of margin**					
QN		absent or weak				Dancing Sunlight 'Ami'	1
		moderate					2
		strong					3
89. **(*)** **(+)**	**VG**	**Lip: apical lobe: shape**					
PQ		rhombic				'Only You'	1
		circular					2
		oblate					3
		flabellate				'Pink Sugar' 'Monshirotyo no Cafe'	4
		obdeltate					5

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
90. **(*)** **(+)**	**VG**	**Lip: apical lobe: indentation of apex**					
QN		absent or very weak				‘Yasukasupa Akane’	1
		weak				Dancing Sunlight ‘Ami’	2
		medium				‘Pink Sugar’ ‘Shimizu Prasol Papurikon’	3
		strong				‘Haruka’ ‘Yellow Days’	4
91. **(*)**	**VG**	**Lip: apical lobe: curvature of longitudinal axis**					
QN		incurving				Mayfair ‘Yellow Angel’ ‘Yellow Days’	1
		straight				‘Pink Sugar’ ‘Shimizu Prasol Papurikon’	2
		recurving				‘Only You’	3
92.	**VG**	**Lip: apical lobe: cross section**					
QN		concave				‘Kaori no Izumi’	1
		flat				Kinsei ‘Abe No.4’	2
		convex				‘Only You’	3
93. **(*)**	**VG**	**Lip: apical lobe: ground color**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
94. **(+)**	**VG**	**Lip: apical lobe: diffused over color (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
95.	**VG**	**Lip: apical lobe: number of spots**					
QN	**(c)**	absent or very few					1
		few					2
		medium					3
		many					4
96.	**VG**	**Lip: apical lobe: size of spots**					
QN	**(c)**	absent or very small					1
		small					2
		medium					3
		large					4
97. **(+)**	**VG**	**Lip: apical lobe: color of spots (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
98.	**VG**	**Lip: apical lobe: number of bands**					
QN	**(c)**	absent or very few					1
		few					2
		medium					3
		many					4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
99.	**VG**	**Lip: apical lobe: distribution of bands**					
PQ	**(c)**	basal area					1
		middle area					2
		distal area					3
		basal and middle area					4
		distal and middle area					5
		whole area					6
100. **(+)**	**VG**	**Lip: apical lobe: color of bands (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
101.	**VG**	**Lip: apical lobe: width of marginal color**					
QN	**(c)**	absent or very narrow					1
		narrow					2
		medium					3
		broad					4
102	**VG**	**Lip: apical lobe: width of marginal color**					
QN	**(c)**	absent or very narrow					1
		narrow					2
		medium					3
		broad					4

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
103. **(+)**	**VG**	**Lip: apical lobe: color of margin (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
104.	**VG**	**Lip: lateral lobe: ground color**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
105. **(+)**	**VG**	**Lip: lateral lobe: diffused over color (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
106. **(+)**	**VG**	**Lip: lateral lobe: color of spots (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
107. **(+)**	**VG**	**Lip: lateral lobe: color of bands (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					
108. **(+)**	**VG**	**Lip: lateral lobe: color of margin (if present)**					
PQ	**(c)**	RHS Colour Chart (indicate reference number)					

		English	français	deutsch	español	Example Varieties Exemples Beispielssorten Variedades ejemplo	Note/ Nota
109.	**VG**	**Lip: callus: color**					
PQ		white					1
		yellow					2
		orange					3
		red					5
		red purple					4
		yellow brown					6
		brown					7
110.	**VG**	**Lip: color of blotches surouding callus**					
PQ		white					1
		yellow					2
		orange					3
		red					5
		red purple					4
		yellow brown					6
		brown					7

8. Explanations on the Table of Characteristics

8.1 Explanations covering several characteristics

Unless otherwise noted, all characteristics should be observed when 80% of flowers have opened on the first inflorescence.

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

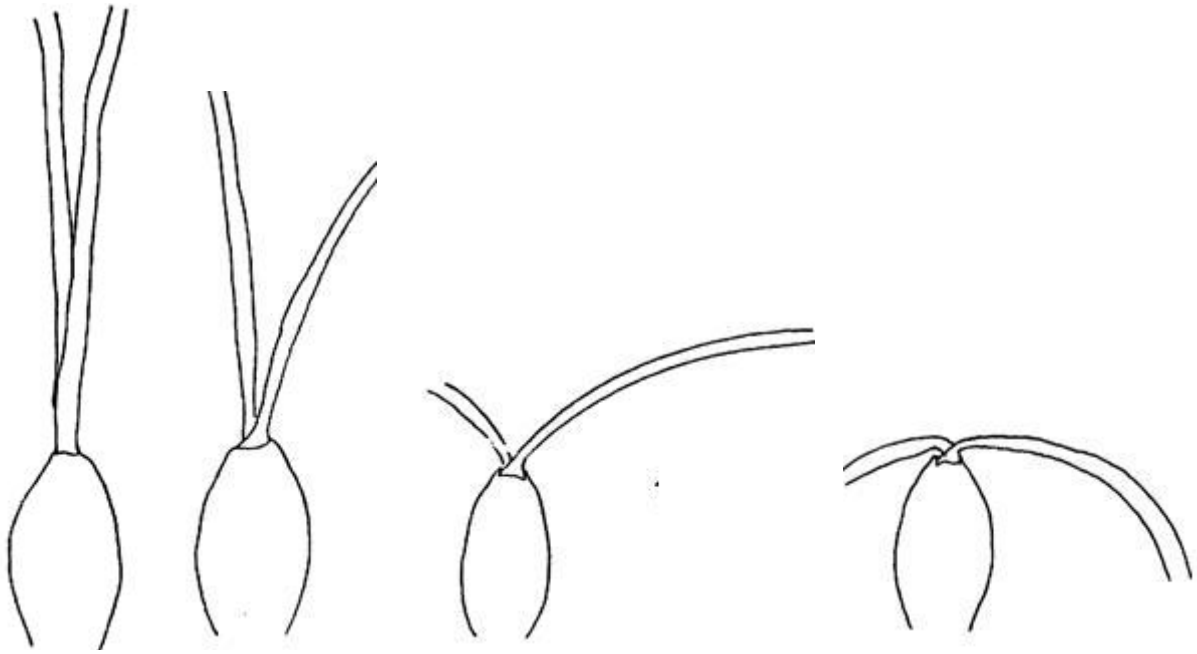
(a) Observations on pseudobulb should be made on the flowering pseudobulb.
(b) Observations on leaf should be made on the longest leaf of a flowering pseudobulb.
(c) Observations on the sepal, petal and lip should be made on the front of flower.

8.2 Explanations for individual characteristics

Ad. 1: Plant: size

The size of plant is evaluated by observation of whole plant size including pseudobulb and leaf.

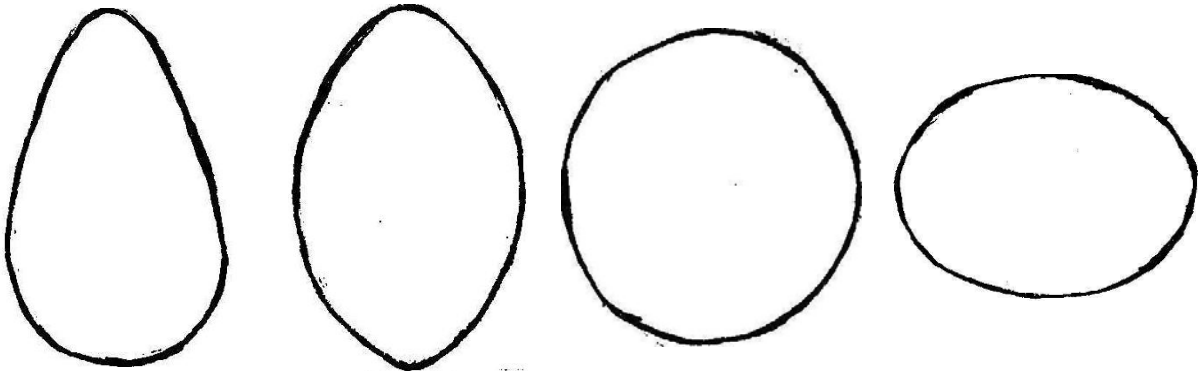
Ad.2: Plant: attitude of leaves



1 erect | 2 semi-erect | 3 horizontal | 4 pendulous

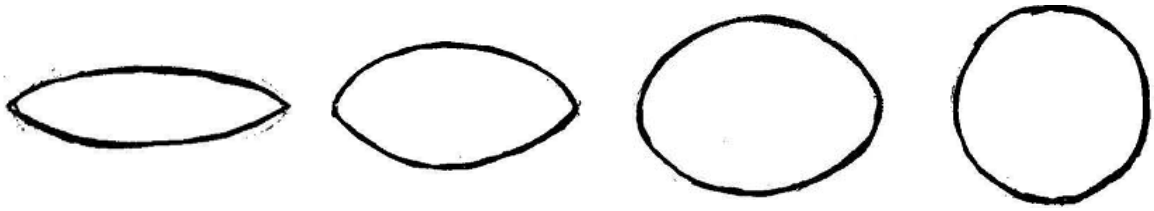
Ad. 4: Pseudobulb: shape in longitudinal section

The shape in longitudinal section should be observed shape in longitudinal section of the most broad part of pseudobulb.



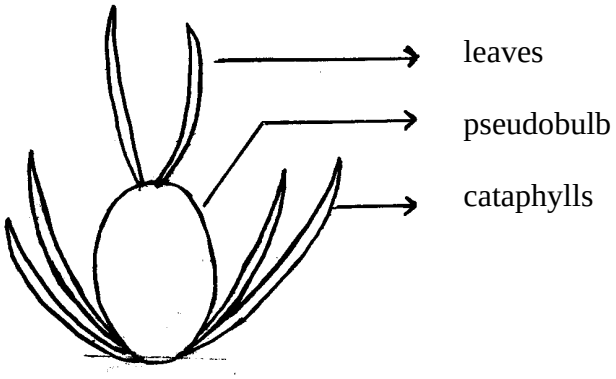
1	2	3	4
ovate	elliptic	circular	oblate

Ad. 5: Pseudobulb: shape in cross section



1	2	3	4
narrow elliptic	elliptic	oblate	circular

Ad. 6: Pseudobulb: number of cataphylls
Ad. 7: Pseudobulb: number of leaves

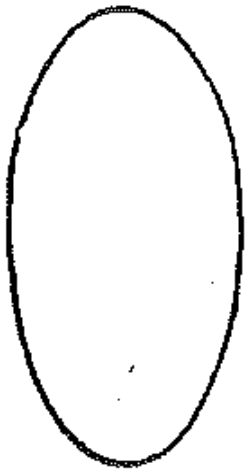


Ad. 10: Leaf : shape

1
narrow lanceolate

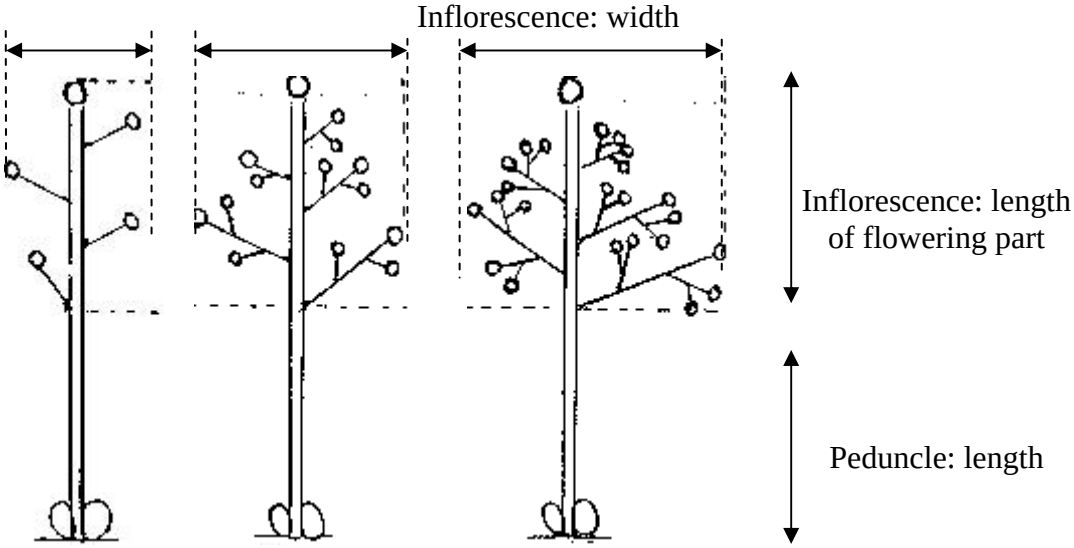
2
linear

3
narrow elliptic



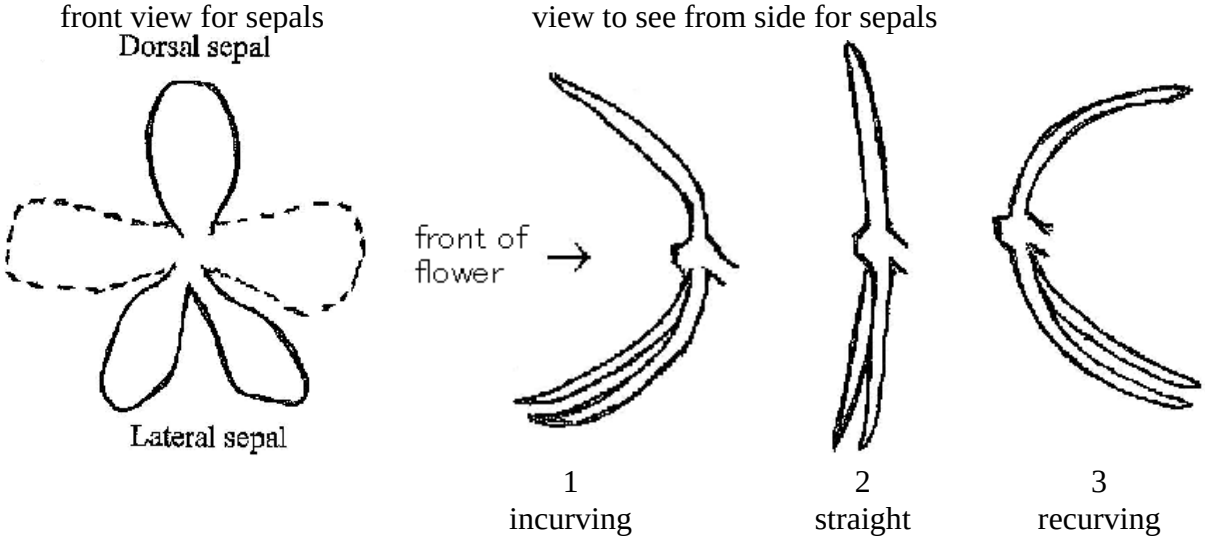
4
medium elliptic

Ad. 13: Inflorescence: type
Ad. 14: Inflorescence: length of flowering part
Ad. 15: :Inflorescence : width
Ad. 17: Peduncle : length



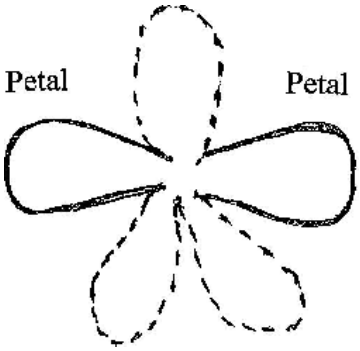
Ad.19: Peduncle: anthocyanin coloration
]
Anthocyanin coloration should be observed on the area of strongest coloration along whole length of peduncle.

Ad. 20: Flower: curvature of sepals

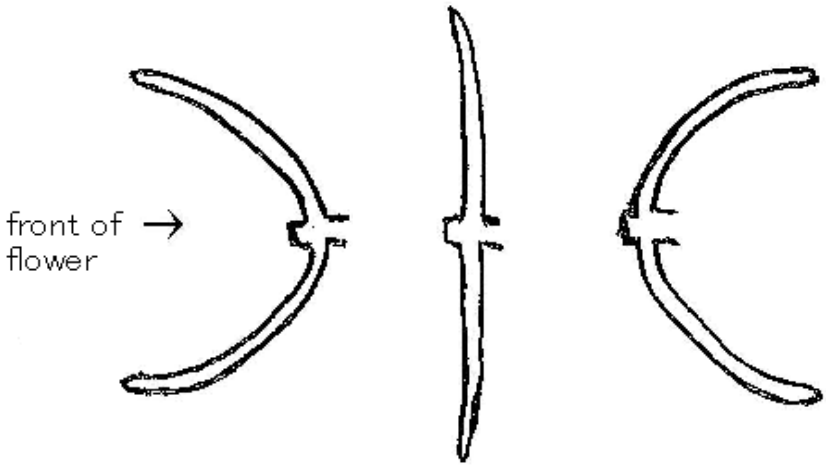


Ad. 21: Flower: curvature of petals

front view for petals



view to see from above for petals



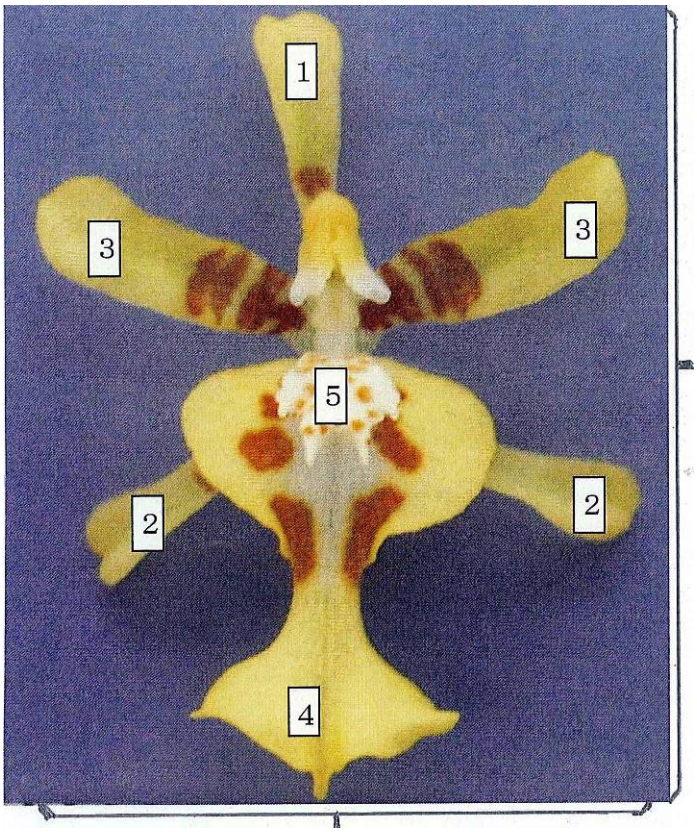
1 incurving

2 straight

3 recurving

Ad. 22: Flower: length in front view

Ad. 23: Flower: width in front view

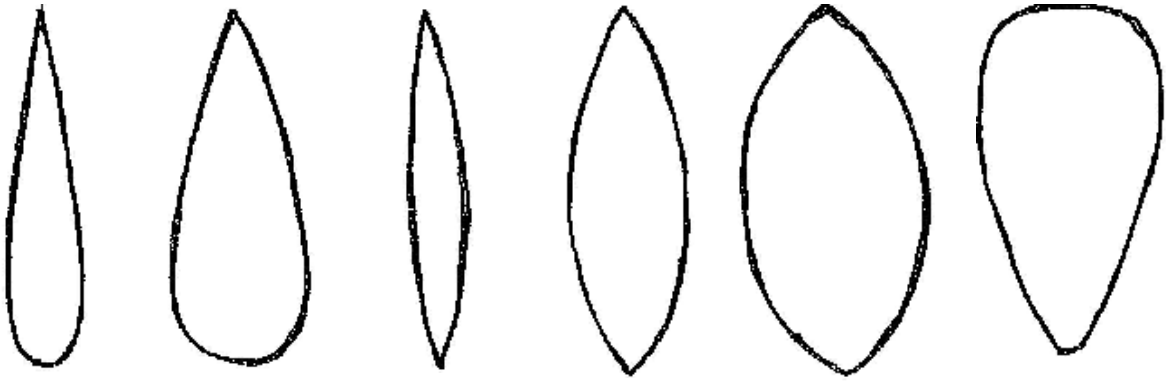


Flower: length in front view

Flower: width in front view

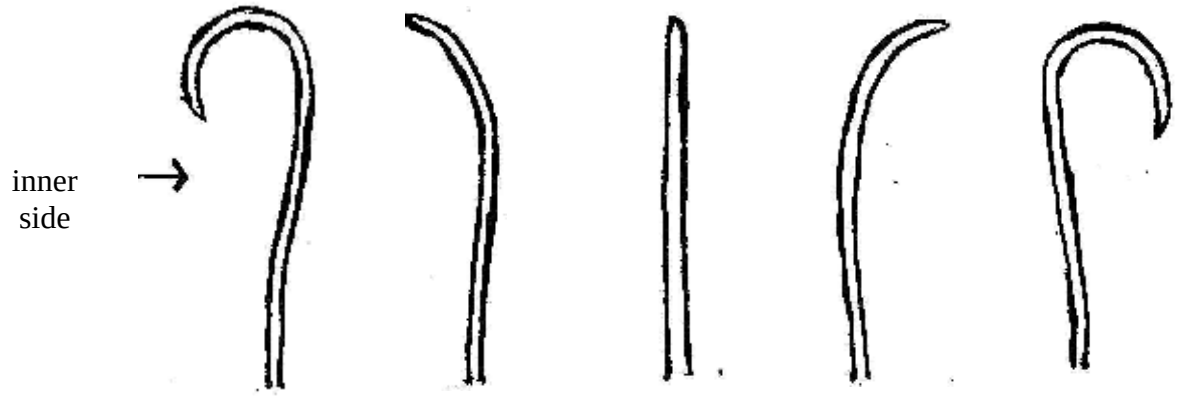
1 Dorsal sepal
2 Lateral sepal
3 Petal
4 Lip
5 Callus

Ad. 27: Dorsal sepal: shape



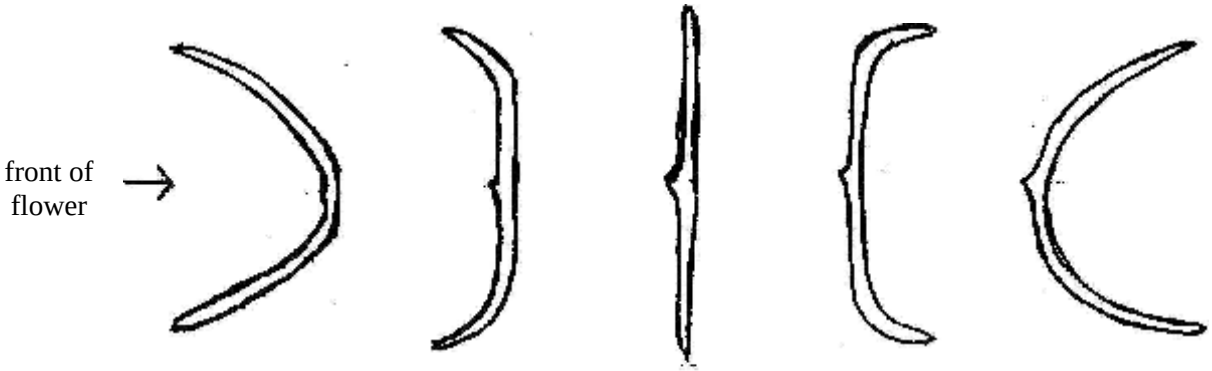
1 lanceolate | 2 ovate | 3 linear | 4 nallow elliptic | 5 elliptic | 6 obovate

Ad. 28: Dorsal sepal: curvature of longitudinal axis
Ad. 48: Lateral sepal: curvature of longitudinal axis
Ad. 68: Petal: curvature of longitudinal axis



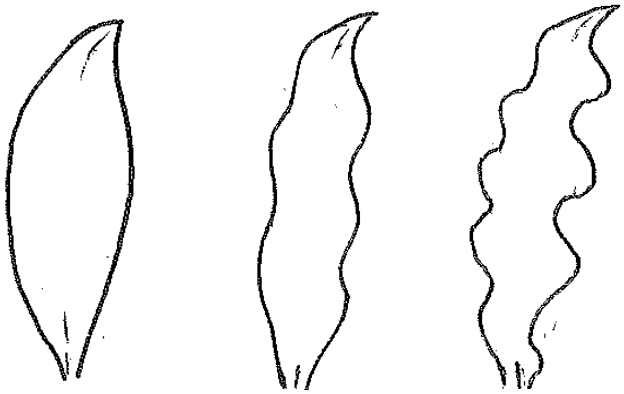
1 strongly incurving | 2 moderately incurving | 3 straight | 4 moderately recurving | 5 strongly recurving

Ad. 29: Dorsal sepal: cross section
Ad. 49: Lateral sepal: cross section
Ad. 69: Petal: cross section



1	3	5	7	9
strongly concave	moderately concave	flat	moderately convex	strongly convex

Ad.30: Dorsal sepal: undulation of margin
Ad.51: Lateral sepal: undulation of margin
Ad.71: Petal: undulation of margin
Ad.88: Lip: undulation of margin

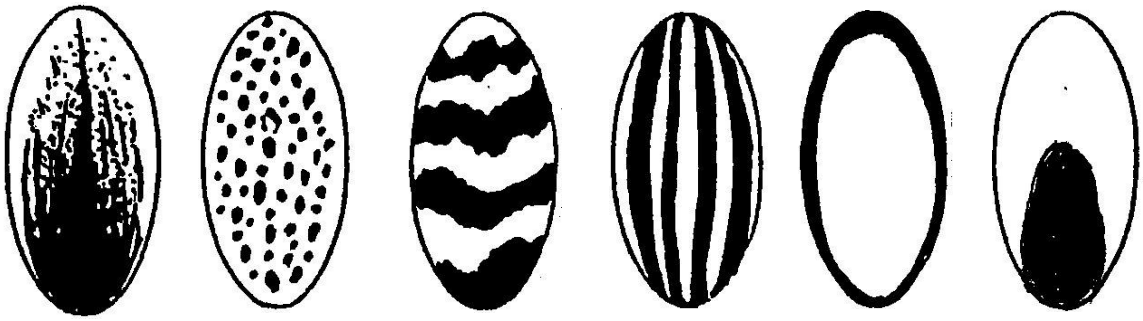


1	2	3
absent or weak	medium	strong

Ad. 31: Dorsal sepal: ground color
Ad. 52: Lateral sepal: ground color
Ad. 72: Petal: ground color
Ad. 93: Lip: apical lobe: ground color

Ground color is the color beside of diffused over color, color of spot, bands, stripes, margin and macule which originated by anthocyanin pigmentation, is likely as the color of inner tissue layer of the organs.

Ad. 32: Dorsal sepal: diffused over color(if present)
Ad. 36: Dorsal sepal: color of spots(if present)
Ad. 39: Dorsal sepal: color of bands(if present)
Ad. 40: Dorsal sepal: color of stripes(if present)
Ad. 42: Dorsal sepal: color of margin(if present)
Ad. 44: Dorsal sepal: color of macule(if present)
Ad. 53: Lateral sepal: diffused over color(if present)
Ad. 56: Lateral sepal: color of spots(if present)
Ad. 59: Lateral sepal: color of bands(if present)
Ad. 60: Lateral sepal: color of stripes(if present)
Ad. 62: Lateral sepal: color of margin(if present)
Ad. 64: Lateral sepal: color of macule(if present)
Ad. 73: Petal: diffused over color(if present)
Ad. 76: Petal: color of spots(if present)
Ad. 79: Petal: color of bands(if present)
Ad. 80: Petal: color of stripes(if present)
Ad. 82: Petal: color of margin(if present)
Ad. 84: Petal: color of macule(if present)

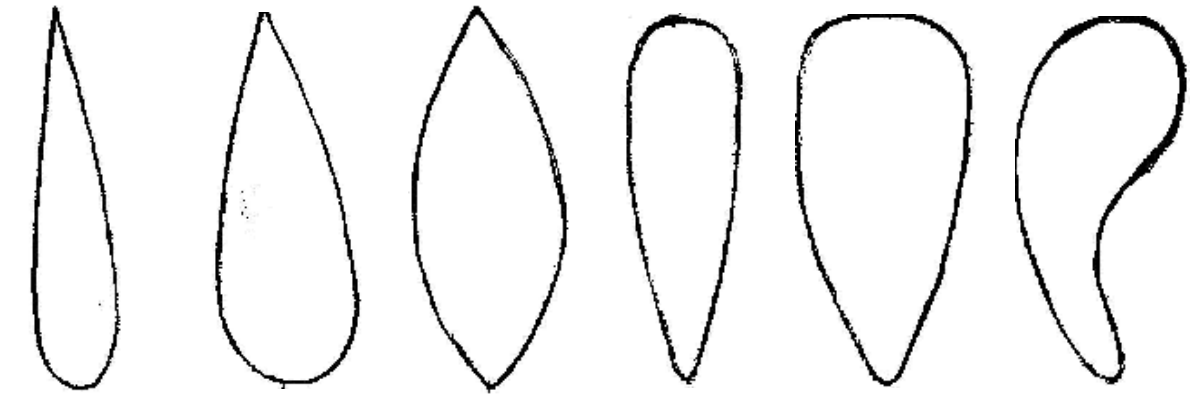


diffused over color | color of spots | color of bands | color of stripes | color of margin | color of macule

Ad.32: Dorsal sepal: diffused over color(if present)
Ad.53: Lateral sepal: diffused over color(if present)
Ad.73: Petal: diffused over color(if present)
Ad.94: Lip: apical lobe: diffused over color(if present)
Ad.105: Lip: lateral lobe: diffused over color(if present)

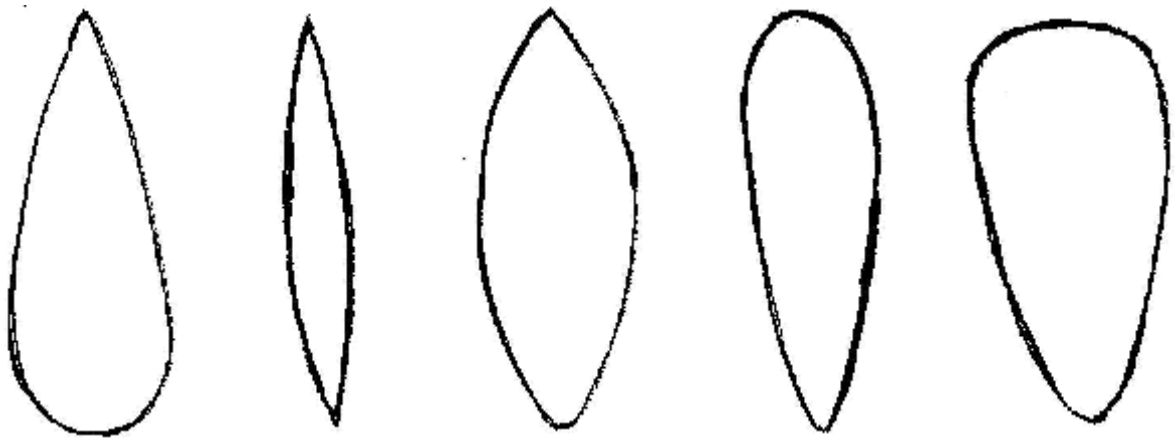
Diffused over color should be observed at base of the each organs.

Ad. 47: Lateral sepal: shape



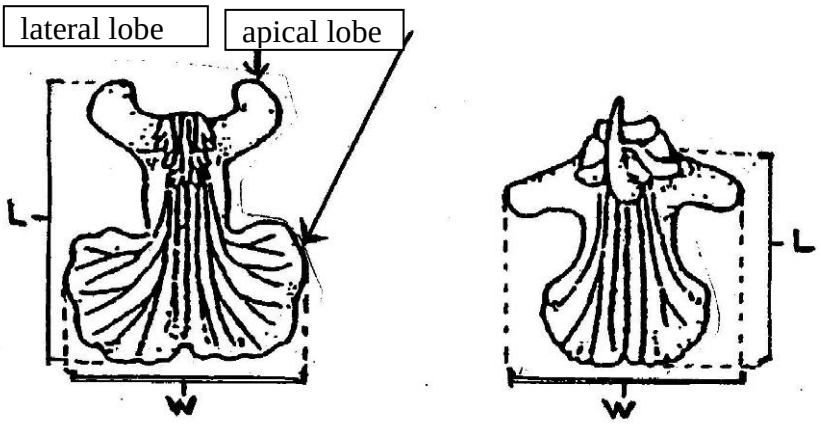
1	2	3	4	5	6
lanceolate	ovate	elliptic	obovate	broad obovate	curving obovate

Ad. 67: Petal : shape

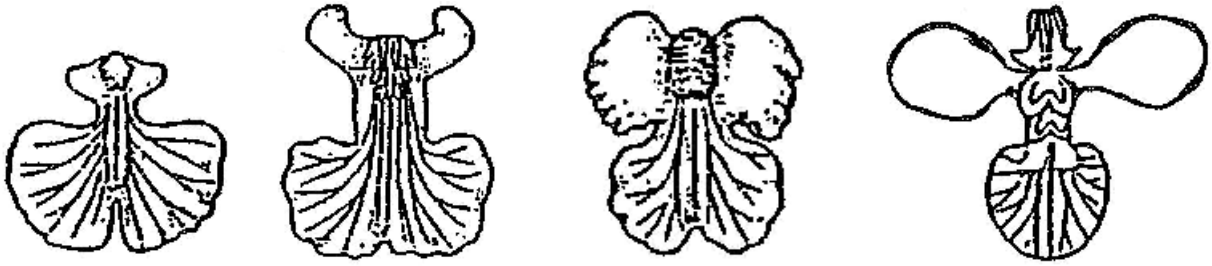


1	2	3	4	5
ovate	linear	elliptic	oblanceolate	broad obovate

Ad. 85: Lip: length
Ad. 86: Lip: width



Ad. 87: Lip: size of lateral lobes in relation to apical lobe



1
small

2
same

3
large

Ad. 89: Lip: apical lobe : shape

1
rhombic

2
circular

3
oblate

4
flabellate

5
obdeltate

Ad. 90: Lip: apical lobe: indentation of apex

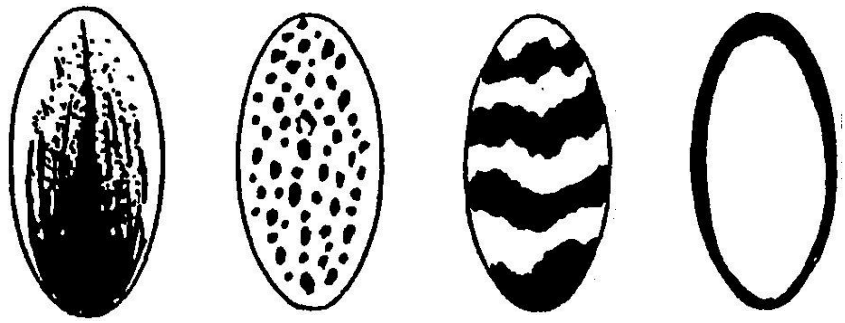
1
absent or very weak

2
weak

3
medium

4
strong

Ad. 94: Lip: apical lobe: diffused over color(if present)
Ad. 97: Lip: apical lobe: color of spots(if present)
Ad. 100: Lip: apical lobe: color of bands(if present)
Ad. 103: Lip: apical lobe: color of margin(if present)
Ad. 105: Lip: lateral lobe: diffused over color(if present)
Ad. 106: Lip: lateral lobe: color of spots(if present)
Ad. 107: Lip: lateral lobe: color of bands(if present)
Ad. 108: Lip: lateral lobe: color of margin(if present)



diffused over color

color of spots

color of bands

color of margin

8.3 Explanation of the origin of example varieties

No.	Denomination	GREX	Seed parent	Pollen parent
1	Dancing Sunlight 'Suzy'	Dancing Sunlight	*Cochlioda*	*Oncidium*
2	Dancing Sunlight Ami	Dancing Sunlight	*Cochlioda*	*Oncidium*
3	Dancing Sunlight Nancy	Dancing Sunlight	*Cochlioda*	*Oncidium*
4	Ella 'Flambeau'	Ella	*Gomesa*	*Oncidium*
5	Fight Yuko'		*Oncidium*	*Oncidium*
6	Haru Ichiban'		Mutant of *Oncidium*	
7	Haruka'		*Ionopsis*	*Oncidium*
8	Kaori no Izumi'		*Oncidium*	*Oncidium*
9	Kinsei 'Abe No.4'	Kinsei	*Oncidium*	*Oncidium*
10	Kukoo 'YMC-2'	Kukoo	*Zelenkoa*	*Oncidium*
11	Kurisu'		*Cochlioda*	*Oncidium*
12	Makalii 'Gotoh'	Makalii	*Oncidium*	*Oncidium*
13	Mayfair 'Yellow Angel'	Mayfair	*Oncidium*	*Cyrtocidium*
14	Misaki Wave 'Yurara'	Misaki Wave	*Cyrtocidium*	*Oncidium*
15	Monshirotyo no Café'		*Oncidium*	*Oncidium*
16	Morning Medley 'Sakurako'	Morning Medley	*Cochlioda*	*Oncidium*
17	Only One'		*Oncidium*	*Oncidium*
18	Only You'		*Oncidium*	*Oncidium*
19	Pink Sugar'		*Ionopsis*	*Oncidium*
20	Poco-A-Poco Yellow'		*Oncidium*	Ionopsis
21	Sakura no Sato'		*Ionopsis*	*Oncidium*
22	Sang-Chan 'Nihao'	Sang Chan	*Cyrtocidium*	*Cyrtochilum*
23	Shell white'		*Cyrtocidium*	*Oncidium*
24	Shimizu Parasol Papurikon'		*Oncidium*	*Oncidium*
25	Sunlight Siesta 'Ota'	Sunlight Siesta	*Cochlioda*	*Oncidium*
26	Sunlight Siesta 'Ruru'	Sunlight Siesta	*Cochlioda*	*Oncidium*
27	Twinkle 'Fragrance Fantasy'	Twinkle	*Oncidium*	*Oncidium*
28	Yasukasupa Akane'		*Oncidium*	*Oncidium*
29	Yasukasupa Koharu'		*Oncidium*	*Oncidium*
30	Yasukasupa Komachi'		*Oncidium*	*Oncidium*
31	Yellow Days'		Mutant of *Oncidium*	

9. Literature

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Oda, Z., 1984: Orchid-Varieties,Breeding,Cultivation and Propagation. The Hokuryu Ltd. Tokyo, JP, pp.315 to 319

Karasawa, K., 1996: Color Dictionary of Orchid. The Yamatokeikoku Ltd. Tokyo, JP, pp. 407 to 432.

Higuchi, H., 1983: Japanese Test Guideline for Oncidium. Ministry of Agriculture, Forestry and Fisheries. Japan, Tokyo, 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(please indicate the relevant genus or hybrid)

1.1.1	Botanical name	[*Oncidium* SW.]	
1.1.2	Common name	[Oncidium]	[ ]
1.2.1	Botanical name	[hybrid between *Oncidium* Sw.and *Cochlioda* Lindl.]	
1.2.2	Common name	[Oncidioda]	[ ]

2. Applicant

Name	
Address	
Telephone No.	
Fax No.	
E-mail address	

Breeder (if different from applicant)

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

3. Proposed denomination and breeder's reference

Proposed denomination (if available)	
Breeder's reference	

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

[#]4. Information on the breeding scheme and propagation of the variety

4.1 Breeding scheme

4.1.1 Crossing

(a) controlled cross [ ]
(please state parent varieties)

(……..……..…) x (……..……..…)
female parent male parent

(b) partially known cross [ ]
(please state known parent variety(ies))

(……..……..…) x (……..……..…)
female parent male parent

(c) unknown cross [ ]

4.1.2 Mutation [ ]
(please state parent variety)

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

4.1.4 Other [ ]
(please provide details)”

[#] Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

4.2 Method of propagating the variety

4.2.1 Vegetative propagation

(a) cuttings [ ]

(b) *in vitro* propagation [ ]

(c) other (state method) [ ]

4.2.2 Seed [ ]

4.2.3 Other [ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

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

	Characteristics	Example Varieties	Note
5.1 (1)	**Plant: size**		
	very small		1[ ]
	very small to small		2[ ]
	small	Twinkle 'Fragrance Fantasy'	3[ ]
	small to medium		4[ ]
	medium	Kinsei 'Abe No.4'	5[ ]
	medium to large		6[ ]
	large	'Kurisu'	7[ ]
	large to very large		8[ ]
	very large		9[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Characteristics	Example Varieties	Note
5.2 (23)	**Flower: width in front view**		
	very narrow		1[ ]
	very narrow to narrow		2[ ]
	narrow	'Kurisu'	3[ ]
	narrow to medium		4[ ]
	medium		5[ ]
	Medium to broad		6[ ]
	broad	Ella 'Flambeau'	7[ ]
	broad to very broad		8[ ]
	very broad		9[ ]
5.3 (71)	**Petal: ground color**		
	white		1[ ]
	yellow		2[ ]
	orange		3[ ]
	pink		4[ ]
	red		5[ ]
	violet		6[ ]
	brown		7[ ]
5.4 (73)	**Petal: diffused over color(if present)**		
	white		1[ ]
	yellow		2[ ]
	orange		3[ ]
	pink		4[ ]
	red		5[ ]
	violet		6[ ]
	brown		7[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Characteristics	Example Varieties	Note
5.5 (76)	**Petal: color of spots (if present)**		
	white		1[ ]
	yellow		2[ ]
	orange		3[ ]
	pink		4[ ]
	red		5[ ]
	violet		6[ ]
	brown		7[ ]
5.7 (79)	**Petal: color of bands (if present)**		
	white		1[ ]
	yellow		2[ ]
	orange		3[ ]
	pink		4[ ]
	red		5[ ]
	violet		6[ ]
	brown		7[ ]
5.8 (80)	**Petal: color of stripes (if present)**		
	white		1[ ]
	yellow		2[ ]
	orange		3[ ]
	pink		4[ ]
	red		5[ ]
	violet		6[ ]
	brown		7[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

	Characteristics	Example Varieties	Note
5.9 (82)	**Petal: color of margin (if present)**		
	white		1[ ]
	yellow		2[ ]
	orange		3[ ]
	pink		4[ ]
	red		5[ ]
	violet		6[ ]
	brown		7[ ]
5.10 (84)	**Petal: color of macule (if present)**		
	white		1[ ]
	yellow		2[ ]
	orange		3[ ]
	pink		4[ ]
	red		5[ ]
	violet		6[ ]
	brown		7[ ]
5.11 (93)	**Lip: apical lobe: ground color (if present)**		
	white		1[ ]
	yellow		2[ ]
	orange		3[ ]
	pink		4[ ]
	red		5[ ]
	violet		6[ ]
	brown		7[ ]

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

6. Similar varieties and differences from these varieties

Please use the following table and box for comments to provide information on how your candidate variety differs from the variety (or varieties) which, to the best of your knowledge, is (or are) most similar. This information may help the examination authority to conduct its examination of distinctness in a more efficient way.

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
Example	*Petal: ground color*	*yellow*	*white*

Comments:

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

[#]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 Are there any special conditions for growing the variety or conducting the examination?

Yes [ ] No [ ]

(If yes, please provide details)

7.3 Other information

A representative color image 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.

[#] Authorities may allow certain of this information to be provided in a confidential section of the Technical Questionnaire.

TECHNICAL QUESTIONNAIRE	Page {x} of {y}	Reference Number:

9. Information on plant material to be examined or submitted for examination.

9.1 The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc.

9.2 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 the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

(a) Microorganisms (e.g. virus, bacteria, phytoplasma) Yes [ ] No [ ]

(b) Chemical treatment (e.g. growth retardant, pesticide) Yes [ ] No [ ]

(c) Tissue culture Yes [ ] No [ ]

(d) Other factors Yes [ ] No [ ]

Please provide details for where you have indicated “yes”.

……

9.3 Has the plant material to be examined been tested for the presence of virus or other pathogens?

Yes [ ]
(please provide details as specified by the Authority)

No [ ]

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

Applicant’s name

Signature Date

[Annex follows]

Comments from experts

Chapter	Item	Comment
1	Subject of these Test Guidelines	Consider to remove genus of Cochlioda , Cyrtocidium, Ionopsis Zelenkoa, Gomesa, as they are intergeneric hybrids of Oncidium. They are new hybrid genera in the RHS system. Please refer to the RHS list of genus for Orchid as there was a revision of the Genus Oncidium Japan inclusion of the above genera is akin to having a UPOV Vanda TG to include Mokara, Aranda, Aranthera, Renantanda. We had accepted Oncidium and their intergeneric hybrid as Oncidium group, If we apply the test guideline the restricted plant group, we must develop so many TG to cover them. It will be take a long period to start examination, and Applicant must wait so long time to have PBR.
4.14	Number of Plants	These plants number is different according to which kind of orchids are.(Phalae : 9 plants to be supplied, 5 plants to be examined, Onci : 9 plants to be supplied, 8 plants to be examined) -> It's better to set a standard of number of plants(supply and examination) in Orchids family. We also think so, harmonization is necessary on this part.

Char	Item	Comments	
~~5.3 (a)~~ 1	Plant: size	Suggest that the plant size should **exclude** peduncle & inflorescence as these characteristic can be influence by environmental factors & age of plants and not constant Peduncle and inflorescence will be deleted in the last draft from Ad.1.	
1	Plant: size	It's hard to examine the right size without standards and also hard to find and compare with example varieties. It's better to add MG. It will be clear by visual observation with comparison to example varieties.	

1	Plant: size	(+) should be deleted. there are explanation in Chapter8.2	
2	Plant : attitude of leaves	illustration should be provide adiadram added	
3	Pseudobulb: size	the threshold should be given in 8.1 to classify it easily It is better to compare to the example varieties.	
4 5	Pseudobulb:shape in longitudinal section Pseudobulb:shape in cross section	'shape in' change to 'shape of' keep 'in'	
5	Pseudobulb:shape in cross section	misfit between description and graphic illustration，please check TGP14-1 linear to narrow elliptic broad oblate to elliptic narrow oblate to oblate	
6	Pseudobulb: depth of grooving	I don't know if this char is clear for everyone or useful to add an help ? So agree with it, it might be affected by growing conditions. this characteristics is better to delete.	
10	leaf: width	Is a 1 to 9 scale necessary? it has enough variation between varieties.	
11	Leaf: shape	Char.11 is necessary to describe the leaf shape, I think Char.9 and 10 should be deleted. Or for Char.9 and 10, the range of length and width should be given to be helpful to judge the shape Char.9 and 10 is useful to difine the varieties. It is better to compare to the example varieties.	

15, 18	Inflorescence length Peduncle length	Noted your explanation of Inflorescence: Length of flowering part and Peduncle: Length It appears that there are varying description or explanation on inflorescence & peduncle in Orchid TGs like the Dendrobium & Phalaenopsis TG. It would be good that all Orchid experts drafting TG to harmonize and have common understanding of terminology TG for Phalaenopsis is reconsidering by the expert of Netherland, in present. On these characteristics, terminology was harmonized among them	
18	Peduncle length	Is range 1-9 necessary? They have wide variation for 1-9 range.	
27	Dorsal sepal: width	Char.27 could be deleted if Char.28 is preserved Both of them are useful to define the varieties.	
29	Dorsal sepal: curvature of longitudinal axis	The numbering of the different states in the help is from 1 to 5. To be checked. Same remark for char 48, 68 Agree them	
32	Dorsal sepal: ground color	Can it always be observed? yes	
34	Dorsal sepal: number of spots	I understood in the e-mail attached with the guideline, these are new char, but necessary to add example var or (+) in a further step. Example varieties for State1 and 3 are filled	
45 46	Lateral sepal: length Lateral sepal: width	Char.45,46 could be deleted, because Char.47 is enough to describe the sepal. If the difference in lateral sepal size is quite great between varieties, Char.45,46 maybe be preserved, if not, only mainly different in shape, Char.45,46 can be deleted Both of them are useful to define the varieties.	
50	Lateral sepal: twisting	Graphic illustration should be added Example varieties for State3 are filled	
65 66	Petal: length Petal: width	Char.65 and 66 reference to Char.45and 46 Both of them are useful to define the	

		varieties.	
70	Petal: twisting	Graphic illustration had better be added Example varieties for State3 are filled	
8.1(c)	Observations on the color of leaf should be made on the upper side, and on the sepal, petal, apical lobe of lip and lateral lobe of lip should be made on the inner side.	Recommend to use the word 'front of flower" instead of "inner side" We will follow the comments.	
8.2	Explanations for individual characteristics Ad. 1: Plant: size The size of plant is evaluated by observation of whole plant size including leaf, peduncle and inflorescence.	Noted in Ad 1: The plant size is evaluated by observation including leaf, peduncle & inflorescence Suggest the plant size should exclude peduncle & inflorescence as these characteristic can be influence by environmental factors & age of plants and not constant See Char.1	
Ad 20	Peduncle: anthocyanin coloration	Should it be moved to 8.1? not necessary	
Ad 21,22	Flower: curvature of sepals Flower: curvature of petals	Recommend to use the word 'front of flower" instead of "inner side" with drawing reference to the column (the reproductive part) We will replace them to "front of flower"	
Ad 28	Dorsal sepal: shape	State 5 medium elliptic should be change to elliptic 'medium' will delete	
Ad 30, 49, 69	Dorsal sepal: cross section Lateral sepal: cross section Petal: cross section	Recommend to use the word 'front of flower" instead of "inner side" with drawing reference to the column (the reproductive part) we will change to "front of flower"	
Ad 32 52 72 93	Dorsal sepal: ground color Lateral sepal: ground color Petal: ground color Lip: apical lobe: ground color	Put it into 8.1 not necessary	

[End of Annex and of document]