

**Guidelines
for the Conduct of Test for
Distinctiveness, Uniformity and Stability**

On

**Orchid
Aranda (*Arachnis* × *Vanda*)**



**Protection of Plant Varieties and Farmers' Rights Authority
(PPV & FRA)
Government of India**

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Orchid (*Aranda*)

I. Subject

These Test Guidelines apply to all vegetatively propagated varieties of the *Aranda* orchids of the family Orchidaceae. The genus *Aranda* is a manmade genus that is a combination of 2 (Two) natural genera combinations of *Arachnis* (Syn. *Arachnanthe*, *Arhychium*, *Armodorium* and *Esmeralda*) × *Vanda* (Syn. *Ascocentrum*, *Ascocentropsis*, *Christensonia*, *Eparmatostigma*, *Euanthe*, *Finetia*, *Gunnaria*, *Neofinetia*, *Nipponorchis* and *Trudelia*) in the parental background.

II. The Plant Material

1. The Protection of Plant Varieties and Farmers' Rights Authority (PPV & FRA) shall decide when, where and in what quantity and quality the plant materials are required for testing of a variety denomination for registration under the Protection of Plant Varieties and Farmers' Rights (PPV & FR) Act, 2001. Applicants submitting such plant material from a country other than India shall make sure that all customs and quarantine requirements stipulated under relevant national legislations and regulations are complied with.
2. The material is to be supplied in the form of vegetatively propagated young plants that have produced the first inflorescence with buds and flowers not opened yet. The minimum quantity of plant material to be supplied by the applicant should be 30 for new varieties and 30 for extant category, e.g., varieties of common knowledge or farmers' varieties which are required for DUS testing.
3. The plant material supplied should be visibly healthy, not lacking in vigour nor affected by any pests or diseases or mechanical damage. Individual plants should be properly packed to avoid transport damage.
4. Plant material shall not have undergone any chemical or bio-physical treatment which would affect the expression of the characteristics of the variety, unless the competent authority allows or requests such treatment. If it has been treated, full details of the treatment must be given.

III. Conduct of Test

1. The minimum duration of tests for new varieties should normally be two similar growing seasons. In the case of farmers' varieties or varieties of common knowledge (VCK), testing of one flowering season is required.
2. If any essential characteristic of the variety is not expressed for visual observations at one place, the variety shall be considered for further examination at another appropriate test site or under special test protocol on request of the applicant.
3. The test should be carried out under protected conditions with 50% shade at an average temperature of 18-35°C and 80-90% relative humidity ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.
4. The plants should be grown in an 8-10 inches pot with a potting medium comprising of soilless medium (like coconut husk, coconut shells, charcoal pieces, leaf moulds, brick pieces and sphagnum moss etc.).
5. The design of the test should be such that the plants or parts of the plants may be removed for measurement and counting without prejudice to the observations which must be made up to the end of the flowering period. Each test shall have at least 10 plants.

IV. Methods of Observation

1. The characteristics described in the Table of Characteristics shall be used for the testing of varieties for their DUS (Section VII).
2. For the assessment of Distinctiveness and Stability, all observations shall be made on 10 plants or parts taken from each of 10 plants.
3. For the assessment of Uniformity, a population standard of 1% and an acceptance probability of at least 95% shall be applied. In the case of a sample size of 10 plants, the maximum number of off-type allowed would be 1.
4. All observations on the stems shall be made on the flowering plant.
5. All observations on the leaf shall be made on the longest leaf of a flowering plant.
6. All observations on the inflorescence and the flower shall 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 fading in colour.
7. All observations on the length and width of the flower must be recorded on fully opened flower and parts of the flower for measuring maximum length and width.

8. All observations on the colour of the sepal, the petal and the lip shall be made both on the inner side and the outer side.
9. All observations on the colour of the column shall be made on the inner and outer side.
10. For the assessment of colour characteristics, it is recommended that Royal Horticultural Society (RHS) color chart shall be used.
11. A decimal code number in the sixth column of Table of Characteristics indicates the optimum stage of observation of each characteristic during the growth and development of plant. The relevant growth stages corresponding to those stages are described below

Decimal Code	Stage
1	When the inflorescence emerges
2	When 50% of the flowers on the inflorescence have opened

V. Grouping of Varieties

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 distinctiveness is aided by the use of grouping characteristics.
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.
3. The following have been agreed as useful grouping characteristics:
 - a) Leaf: attitude (Characteristic 3)
 - b) Inflorescence: number of flowers (Characteristic 7)
 - c) Inflorescence: branching (Characteristic 8)
 - d) Flower: width (Characteristic 9)
 - e) Petal: main colour (Characteristic 32)
 - f) Lip: apical lobe shape (Characteristic 37)
 - g) Lip: apical lobe: main colour (Characteristic 39)

VI. Characteristics and Symbols

- To assess Distinctiveness, Uniformity and Stability, the characteristics and their states as given in the Table of Characteristics shall be used.
- Notes 1-9 (numbers) shall be used to describe the state of each character for the purpose of electronic data processing.
- Type of assessment of characteristics indicated in seventh column of the Table of Characteristics is as Follows:

MG: Measurement by a single observation 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 observations of individual plants or parts of plant

- Characteristics denoted with symbols (+), QN and QL in the first column of the Table of Characteristics shall be indicated as:

(+): See explanations on the Table of Characteristics

QL: Qualitative characteristics

QN: Quantitative characteristics

VII. Table of Characteristics for Vegetative and Floral Traits

Sl. No.	Characteristic	State	Note	Example Varieties /hybrids	Stage of observation	Type of Assessment
1. (+) QN	Plant: width (cm)	Narrow (<30)	3	Aad. 'Christine Coerulea'	1	MS
		Medium (30-45)	5	Aad. 'Happy Beauty' Aad. 'Khaw Phiak Suan x V. Rasri Gold'		
		Broad (> 45)	7	Aad. 'Chark Kuan Orange' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
2. QN	Internode length (cm)	Short (<1.0)	3	---	1	MS
		Medium (1.0-2.0)	5	Aad. 'Happy Beauty' Aad. 'Khaw Phiak Suan x V. Rasri Gold'		
		Long (>2.0)	7	Aad. 'Chark Kuan Red' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
3. (+) QL	Leaf: attitude (at inflorescence emergence)	Erect	3	Aad. 'Walter Oumae White' Aad. 'Jitti Orange' Aad. 'Christine Coerulea'	1	VS
		Horizontal	5	Aad. 'Chark Kuan Red'		

		Arching	7	Aad. 'Chark Kuan Orange' Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty'		
4. QN	Leaf: length (cm) (at inflorescence emergence)	Short (<10)	3	---	1	MS
		Medium (10-20)	5	Aad. 'Walter Oumae White' Aad. 'Christine Coerulea'		
		Long (20-30)	7	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty'		
		Extra-long (>30)	9	---		
5. QN	Leaf: width (cm)	Narrow (<1.5)	3	---	1	MS
		Medium (1.5-3.0)	5	Aad. 'Walter Oumae White' Aad. 'Happy Beauty'		
		Broad (>3.0)	7	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
6. (+) QN	Inflorescence: length (cm)	Short (<30)	3		2	MS
		Medium (30-60)	5	Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Happy Beauty' Aad. 'Walter Oumae White'		
		Long (>60)	7	Aad. 'Chark Kuan Orange' Aad. 'Khaw Phiak Suan x V. Rasri Gold'		
7. QN	Inflorescence: number of flowers	Few (<5)	3		2	VS
		Medium (5-10)	5	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty'		
		Many (>10)	7	Aad. 'Jitti Orange' Aad. 'Chark Kuan Red'		
8. QL	Inflorescence: branching	Absent	1	Aad. 'Happy Beauty' Aad. 'Chark Kuan Red'	2	VG
		Present	9	Aad. 'Khaw Phiak Suan x Kultana Gold' Aad. 'Walter Oumae White'		
9. (+) QN	Flower: width (cm)	Narrow (<4)	3	Aad. 'Chark Kuan Red'	2	MS
		Medium (4-8)	5	Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Walter Oumae White'		
		Broad (>8)	7	Aad. 'Happy Beauty' Aad. 'Khaw Phiak Suan x V. Rasri Gold'		

10. QL	Flower: fragrance	Absent	1	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Happy Beauty'	2	VG
		Present	9			
11. (+) QL	Dorsal sepal curvature in longitudinal axis	Weakly concave	1	Aad. 'Happy Beauty' Aad. 'Chark Kuan Red' Aad. 'Christine Coerulea'	2	VS
		Strongly concave	3	---		
		Straight	5	Aad. 'Jitti Orange' Aad. 'Chark Kuan Orange'		
		Weakly convex	7	Aad. 'Madam Panni' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
		Strongly convex	9	---		
12. (+) QN	Dorsal sepal: length (cm)	Short (<2)	3	---	2	MS
		Medium (2-4)	5	Aad. 'Walter Oumae White' Aad. 'Chark Kuan Red'		
		Long (>4)	7	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty'		
13. (+) QN	Dorsal sepal: width (cm)	Narrow (<1.5)	3	Aad. 'Chark Kuan Red'	2	MS
		Medium (1.5-3.0)	5	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty'		
		Broad (>3.0)	7	Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
14. (+) QL	Dorsal sepal: shape	Oblong	1		2	VG
		Elliptic	3	---		
		Obovate	5	Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Happy Beauty'		
		Spatulate	7	Aad. 'Chark Kuan Red'		
		Orbicular	9	---		
15. QL	Dorsal sepal: apex	Acute	1	--	2	VG
		Obtuse	3	Aad. 'Walter Oumae White' Aad. 'Happy Beauty' Aad. 'Chark Kuan Orange' Aad. 'Madam Panni'		
		Rounded	5	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
16. QL	Dorsal sepal: main colour	Green	1	---	2	VG
		White	2	Aad. 'Walter Oumae White' (155 C)		

		Yellow	3	Aad. 'Khaw Phiak Suan x V. Rasri Gold' (12 A) Aad. 'Madam Panni' (17 B) Aad. 'Khaw Phiak Suan x V. Kultana Gold' (4B)		
		Orange	4	Aad. 'Chark Kuan Orange'(28 D) Aad. 'Jitti Orange' (16 D)		
		Red	5	Aad. 'Chark Kuan Red' (44 A)		
		Brown	6	---		
		Purple	7	Aad. 'Happy Beauty' (N78 B)		
		Blue	8	---		
		Violet	9	Aad. 'Christine Coerulea' (84A)		
17. QL	Dorsal sepal: colour pattern	Uniform	1	Aad. 'Christine Coerulea'	2	VG
		Shaded	2	---		
		Edged	3	---		
		Striped	4	---		
		Netted	5	Aad. 'Happy Beauty' Aad. 'Chark Kuan Red'		
		Spotted	6	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Walter Oumae White' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
		Blotched	7	---		
18. QN	Dorsal sepal: number of colour	One	1	Aad. 'Christine Coerulea'	2	VG
		More than one	3	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Walter Oumae White'		
19. (+) QL	Lateral sepal curvature in longitudinal axis	Weakly concave	1	Aad. 'Happy Beauty' Aad. 'Walter Oumae White' Aad. 'Chark Kuan Red'	2	VG
		Strongly concave	3	Aad. 'Chark Kuan Orange' Aad. 'Jitti Orange'		
		Straight	5	---		
		Weakly convex	7	Aad. 'Madam Panni'		
		Strongly convex	9	Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
20. (+) QN	Lateral sepal: length (cm)	Short (<2)	3		2	MS
		Medium (2-4)	5	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x		

				V. Kultana Gold'		
		Long (>4)	7	Aad. 'Happy Beauty' Aad. 'Christine Coerulea'		
21. (+) QN	Lateral sepal: width (cm)	Narrow (<1.5)	3	---	2	MS
		Medium (1.5-3.0)	5	Aad. 'Happy Beauty' Aad. 'Walter Oumae White'		
		Broad (>3.0)	7	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
22. (+) QL	Lateral sepal: shape	Oblong	1	---	2	VG
		Elliptic	3	---		
		Obovate	5	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty' Aad. 'Walter Oumae White'		
		Spatulate	7	---		
		Orbicular	9	---		
23. QL	Lateral sepal: apex	Acute	1	---	2	VG
		Obtuse	3	Aad. 'Happy Beauty'		
		Rounded	5	Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Chark Kuan Red'		
24. QL	Lateral sepal: main colour	Green	1	---	2	VG
		White	2	Aad. 'Walter Oumae White' (155 C)		
		Yellow	3	Aad. 'Khaw Phiak Suan x V. Rasri Gold' (12 A) Aad. 'Khaw Phiak Suan x V. Kultana Gold' (4 B) Aad. 'Madam Panni' (17 B)		
		Orange	4	Aad. 'Chark Kuan Orange' (28 D)		
		Red	5	Aad. 'Chark Kuan Red' (44A)		
		Brown	6	---		
		Purple	7	Aad. 'Happy Beauty' (N-78B)		
		Blue	8	---		
		Violet	9	Aad. 'Christine Coerulea' (84A)		
25. QL	Lateral sepal colour pattern	Uniform	1	Aad. 'Christine Coerulea'	2	VG
		Shaded	2	---		
		Edged	3	---		
		Striped	4	---		
		Netted	5	Aad. 'Happy Beauty' Aad. 'Chark Kuan Red'		
		Spotted	6	Aad. 'Khaw Phiak Suan x V. Rasri Gold'		

				Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
		Blotched	7	---		
26. QN	Lateral sepal: number of colour	One	1	Aad. 'Christine Coerulea'	2	VG
		More than one	3	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
27. (+) QL	Petal curvature in longitudinal axis	Weakly concave	1	Aad. 'Khaw Phiak Suan x V. Rasri Gold'	2	VG
		Strongly concave	3	--		
		Straight	5	Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Happy Beauty' Aad. 'Chark Kuan Red'		
		Weakly convex	7	Aad. 'Madam Panni'		
		Strongly convex	9	---		
28. (+) QN	Petal Length (cm)	Short (<2)	3		2	MS
		Medium (2-4)	5	Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Chark Kuan Red'		
		Long (>4)	7	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty'		
29. (+) QN	Petal width (cm)	Narrow (<2)	3	Aad. 'Chark Kuan Red' Aad. 'Madam Panni'	2	MS
		Medium (2-4)	5	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty' Aad. 'Walter Oumae White'		
		Broad (>4)	7	---		
30. (+) QL	Petal shape	Oblong	1	---	2	VG
		Elliptic	3	---		
		Obovate	5	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Walter Oumae White' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
		Spatulate	7	Aad. 'Chark Kuan Red' Aad. 'Chark Kuan Orange' Aad. 'Madam Panni'		
		Orbicular	9	---		
31. QL	Petal apex	Acute	1	---	2	VG
		Obtuse	3	Aad. 'Chark Kuan Red' Aad. 'Chark Kuan Orange'		
		Rounded	5	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x		

				V. Kultana Gold'		
32. QL	Petal: main colour	Green	1	---	2	VG
		White	2	Aad. 'Walter Oumae White' (155 C)		
		Yellow	3	Aad. 'Khaw Phiak Suan x V. Rasri Gold' (12 A) Aad. 'Madam Panni' (17 B) Aad. 'Khaw Phiak Suan x V. Kultana Gold' (4 B)		
		Orange	4	Aad. 'Chark Kuan Orange' (28 D)		
		Red	5	Aad. 'Chark Kuan Red' (44 A)		
		Brown	6	---		
		Purple	7	Aad. 'Happy Beauty' (N78 B)		
		Blue	8	---		
		Violet	9	Aad. 'Christine Coerulea' (84A)		
33. QL	Petal colour pattern	Uniform	1	Aad. 'Christine Coerulea'	2	VG
		Shaded	2	---		
		Edged	3	---		
		Striped	4	---		
		Netted	5	Aad. 'Happy Beauty' Aad. 'Jitti Orange' Aad. 'Chark Kuan Red'		
		Spotted	6	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Walter Oumae White'		
		Blotched	7	---		
34. QN	Petal: number of colour	One	1	Aad. 'Christine Coerulea'	2	VG
		More than two	3	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Happy Beauty'		
35. (+) QN	Lip: length of apical lobe (cm)	Short (<1.5)	3	Aad. 'Walter Oumae White' Aad. 'Chark Kuan Red'	2	MS
		Medium (1.5-3.0)	5	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Happy Beauty'		
		Long (>3.0)	7	---		
36. (+) QN	Lip: width of apical lobe (cm)	Narrow (<1)	3	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Walter Oumae White'	2	MS
		Medium	5	Aad. 'Khaw Phiak Suan x		

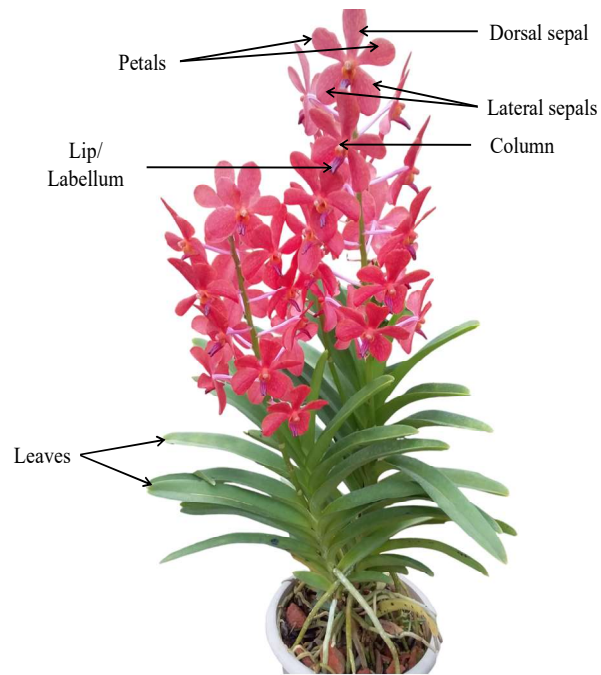
		(1-2)		V. Kultana Gold' Aad. 'Madam Panni'		
		Broad (>2)	7	---		
37. (+) QL	Lip: apical lobe: shape	Oblong	1	Aad. 'Walter Oumae White' Aad. 'Chark Kuan Red' Aad. 'Happy Beauty'	2	VS
		Elliptic	3	---		
		Lanceolate	5	Aad. 'Christine Coerulea'		
		Ovate	7	---		
		Orbicular	9	---		
38. (+) QL	Lip: apical lobe: lobing of apex	Absent	1	Aad. 'Walter Oumae White' Aad. 'Christine Coerulea'	2	VG
		Present	9	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
39. QL	Lip: apical lobe: main colour	Green	1	---	2	VG
		White	2	Aad. 'Walter Oumae White' (155C)		
		Yellow	3	Aad. 'Khaw Phiak Suan x V. Rasri Gold' (12A) Aad. 'Khaw Phiak Suan x V. Kultana Gold' (1B)		
		Orange	4	---		
		Red	5	Aad. 'Chark Kuan Red' (61A)		
		Brown	6	Aad. 'Madam Panni' (172A)		
		Purple	7	Aad. 'Happy Beauty' (N72A) Aad. 'Christine Coerulea' (77A)		
		Blue	8	---		
		Violet	9	---		
40. QL	Lip: apical lobe: colour pattern	Uniform	1	Aad. 'Chark Kuan Red' Aad. 'Chark Kuan Orange'	2	VG
		Shaded	2	Aad. 'Jitti Orange'		
		Edged	3	---		
		Striped	4	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Madam Panni'		
		Netted	5	---		
		Spotted	6	Aad. 'Walter Oumae White' Aad. 'Happy Beauty' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
		Blotched	7			
41. QN	Lip: apical lobe: number of colour	One	1	Aad. 'Chark Kuan Red' Aad. 'Chark Kuan Orange'	2	VS
		Two	3	Aad. 'Khaw Phiak Suan x		

				V. Rasri Gold' Aad. 'Walter Oumae White' Aad. 'Happy Beauty'		
		More than two	5	Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
42. QN	Lip: lateral lobe: length (cm)	Short (<1.5)	3	Aad. 'Walter Oumae White' Aad. 'Chark Kuan Red'	2	MS
		Medium (1.5-3.0)	5	Aad. 'Madam Panni' Aad. 'Khaw Phiak Suan x V. Rasri Gold'		
		Long (>3.0)	7	---		
43. QN	Lip: lateral lobe: width (cm)	Narrow (<0.5)	3	Aad. 'Chark Kuan Red'	2	MS
		Medium (0.5-1.0)	5	Aad. 'Walter Oumae White' Aad. 'Khaw Phiak Suan x V. Kultana Gold'		
		Broad (>1.0)	7	Aad. 'Khaw Phiak Suan x V. Rasri Gold'		
44. QL	Lip: lateral lobe: main colour	Green	1	---	2	VG
		White	2	---		
		Yellow	3	Aad. 'Khaw Phiak Suan x V. Rasri Gold' (12A) Aad. 'Khaw Phiak Suan x V. Kultana Gold'(6A)		
		Orange	4	Aad. 'Chark Kuan Red' (28D)		
		Red	5	---		
		Brown	6	Aad. 'Madam Panni' (172A)		
		Purple	7	Aad. 'Happy Beauty' (75D) Aad. 'Christine Coerulea'(76B)		
		Blue	8	---		
45. QL	Lip: lateral lobe: colour pattern	Uniform	1	---	2	VG
		Shaded	2	Aad. 'Khaw Phiak Suan x V. Kultana Gold' Aad. 'Jitti Orange'		
		Edged	3	---		
		Striped	4	Aad. 'Chark Kuan Orange'		
		Netted	5	---		
		Spotted	6	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty' Aad. 'Chark Kuan Red'		
		Blotched	7			
46. (+) QN	Lip: Keel nos. (Elongated callus)	Absent	1	---	2	VS
		Few (<2)	3	---		
		Medium (2-4)	5	Aad. 'Walter Oumae White'		

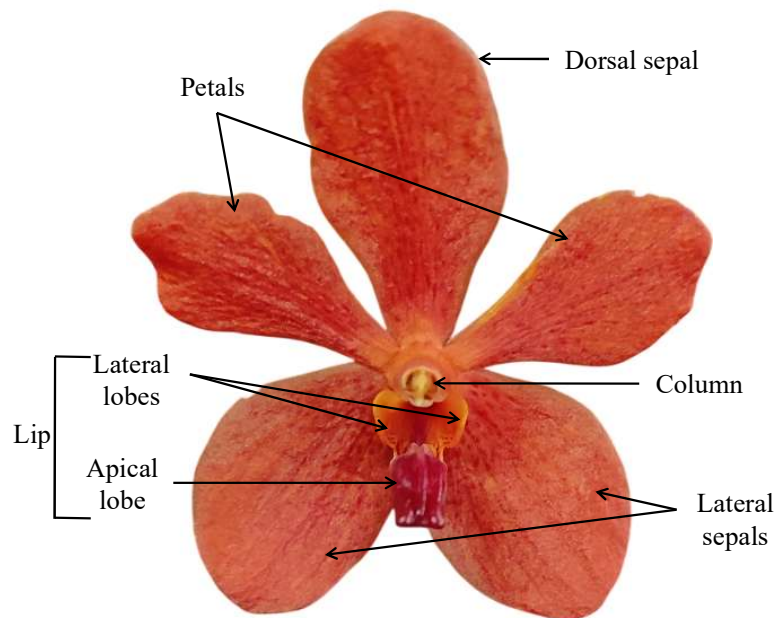
				Aad. 'Chark Kuan Red'		
		many (>4)	7	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty'		
47. (+) QN	Spur length (cm)	Short (0.5)	3	---	2	MS
		Medium (0.5-1.0)	5	Aad. 'Chark Kuan Red' Aad. 'Chark Kuan Orange'		
		Long (>1.0)	7	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Happy Beauty' Aad. 'Walter Oumae White'		
48. QL	Column main colour	Green	1	---	2	VG
		White	2	Aad. 'Walter Oumae White' (155 C)		
		Yellow	3	Aad. 'Khaw Phiak Suan x V. Rasri Gold' (12 C) Aad. 'Khaw Phiak Suan x Kultana Gold' (2 C)		
		Orange	4	Aad. 'Chark Kuan Orange' (14 C)		
		Red	5	Aad. 'Chark Kuan Red' (44A)		
		Brown	6	---		
		Purple	7	Aad. 'Happy Beauty' (76 D) Aad. 'Christine Coerulea' (76C)		
		Blue	8	---		
		Violet	9	---		
49. QL	Column colour pattern	Uniform	1	Aad. 'Khaw Phiak Suan x V. Rasri Gold' Aad. 'Khaw Phiak Suan x Kultana Gold'	2	VG
		Shaded	2	Aad. 'Chark Kuan Orange'		
		Edged	3	---		
		Striped	4	---		
		Netted	5	---		
		Spotted	6	---		
		Blotched	7	---		
50. QN	Column: number of colour	One	1	Aad. 'Khaw Phiak Suan x Kultana Gold' Aad. 'Walter Oumae White'	2	VS
		Two	3	Aad. 'Chark Kuan Orange'		
		More than two	5	---		

Note: Aad. = Aranda

VIII. Explanation to the Table of Characteristics



Aranda plant

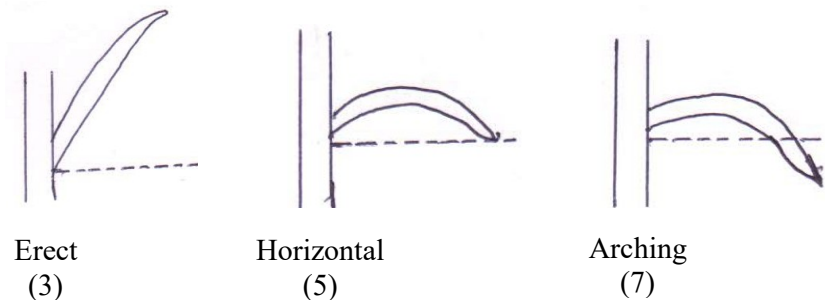


Floral parts of Aranda

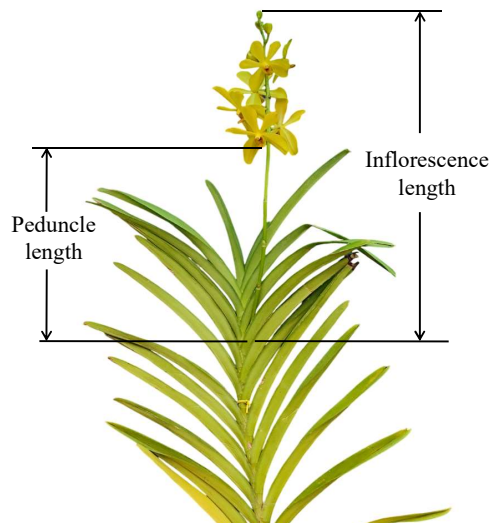
Characteristic 1: Plant width



Characteristic 3: Leaf attitude



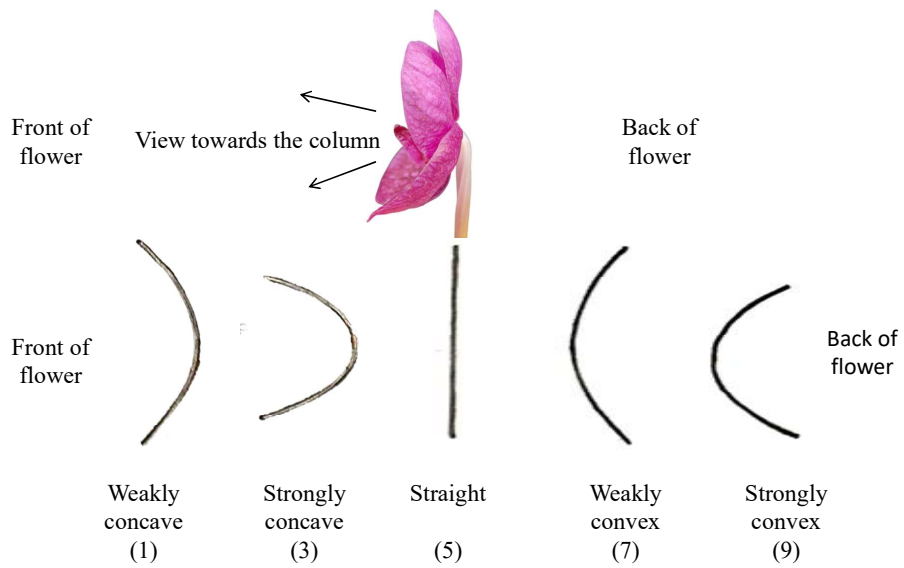
Characteristic 6: Inflorescence length including peduncle length



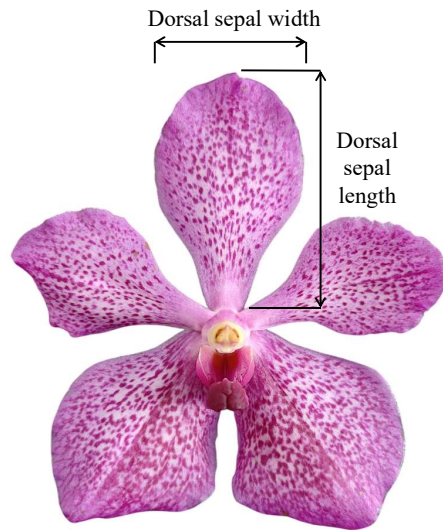
Characteristics 9: Flower width



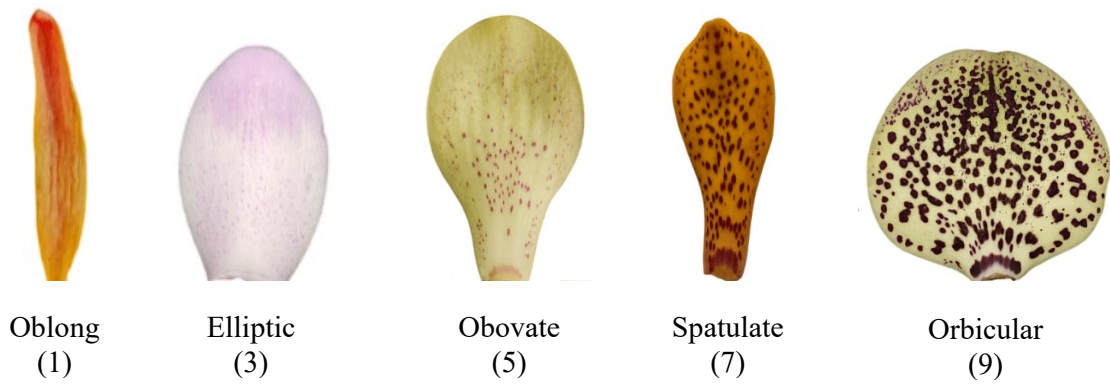
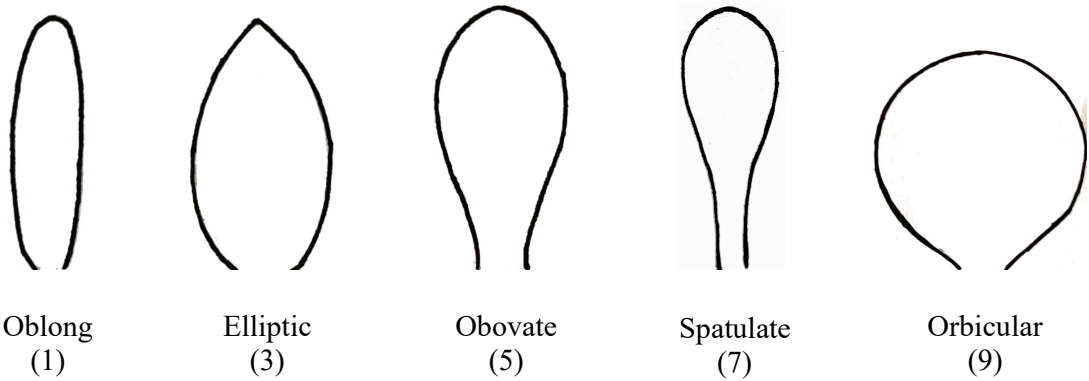
Characteristics 11: Dorsal sepal curvature in longitudinal axis



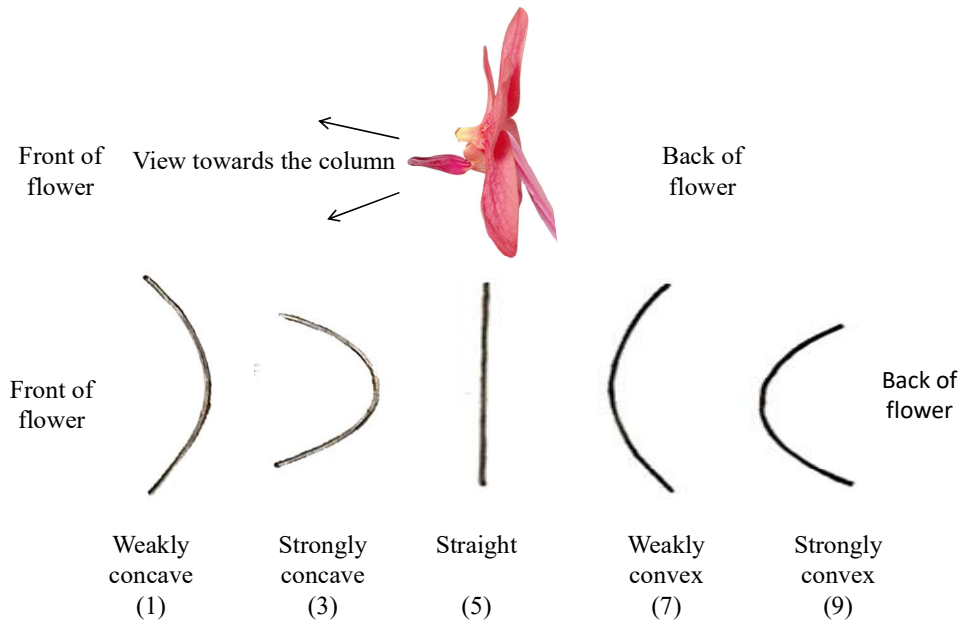
Characteristics 12 & 13: Dorsal sepal: length & width



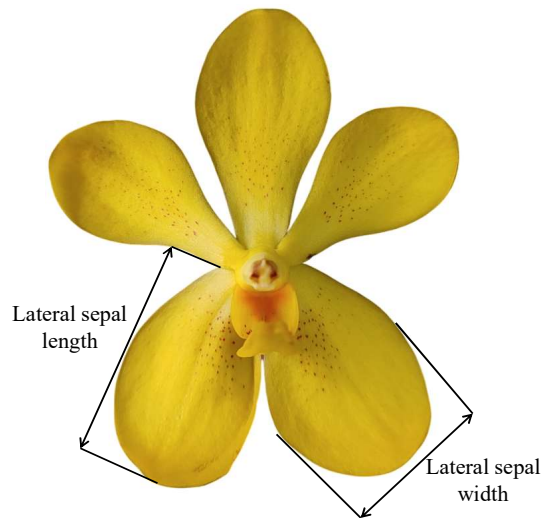
Characteristics 14: Dorsal sepal shape



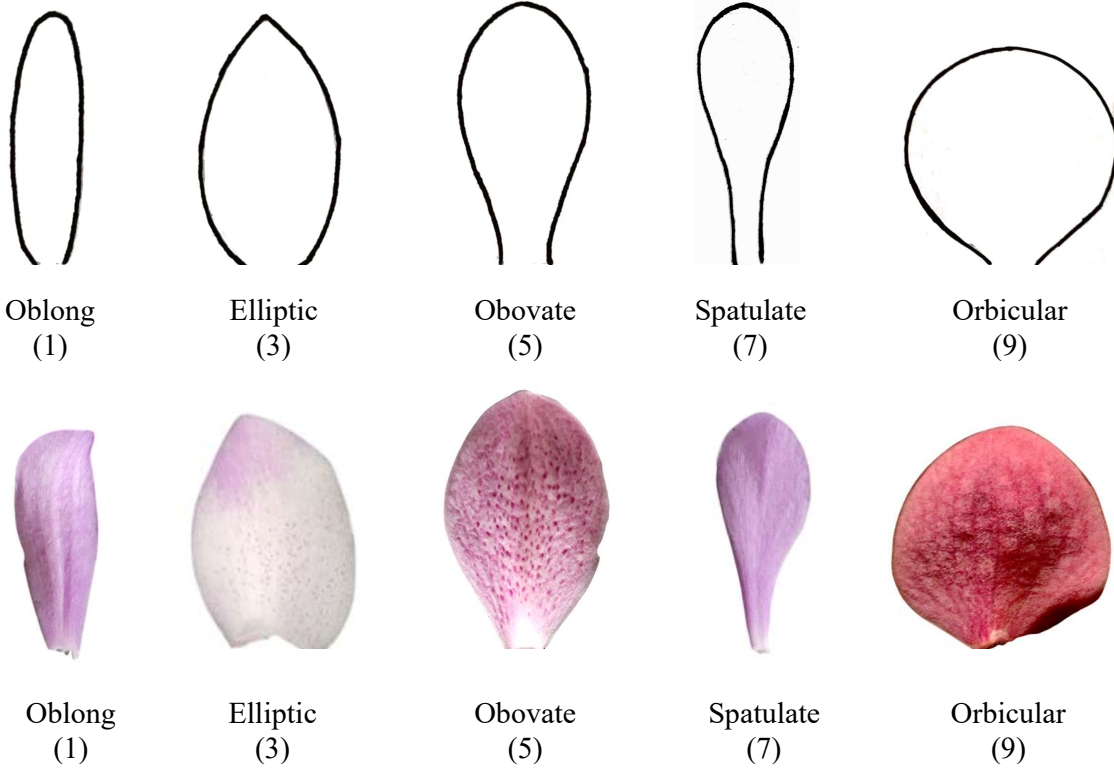
Characteristics 19: Lateral sepal curvature in longitudinal axis



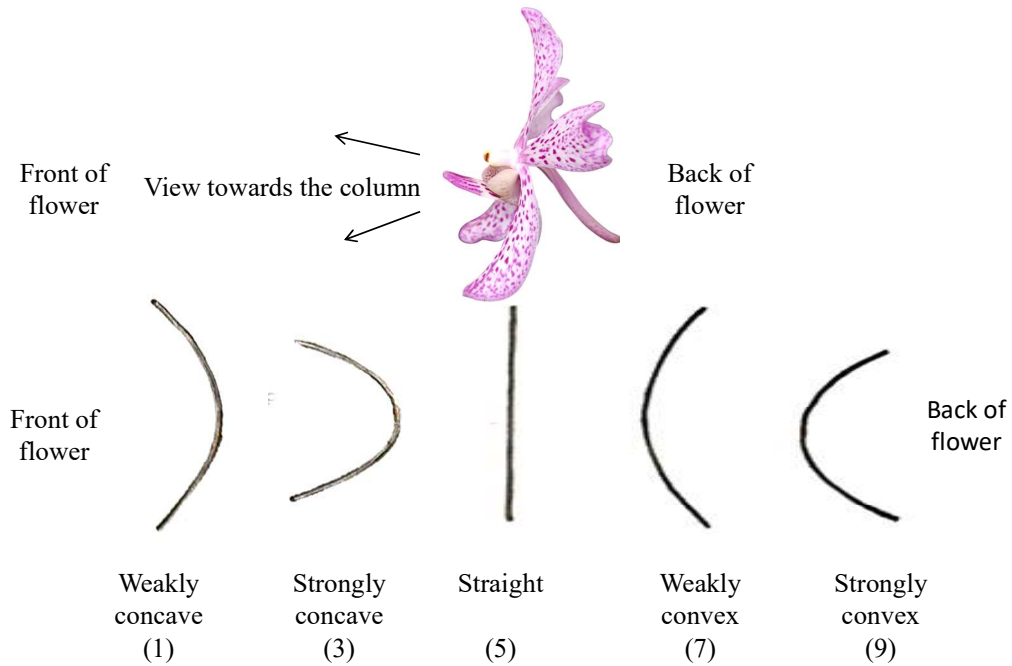
Characteristics 20 & 21: Lateral sepal: length & width



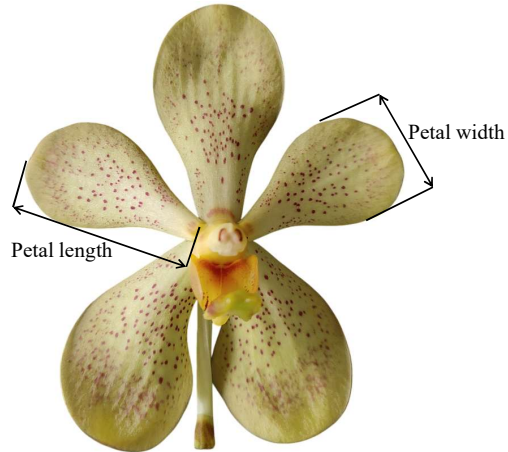
Characteristics 22: Lateral sepal shape



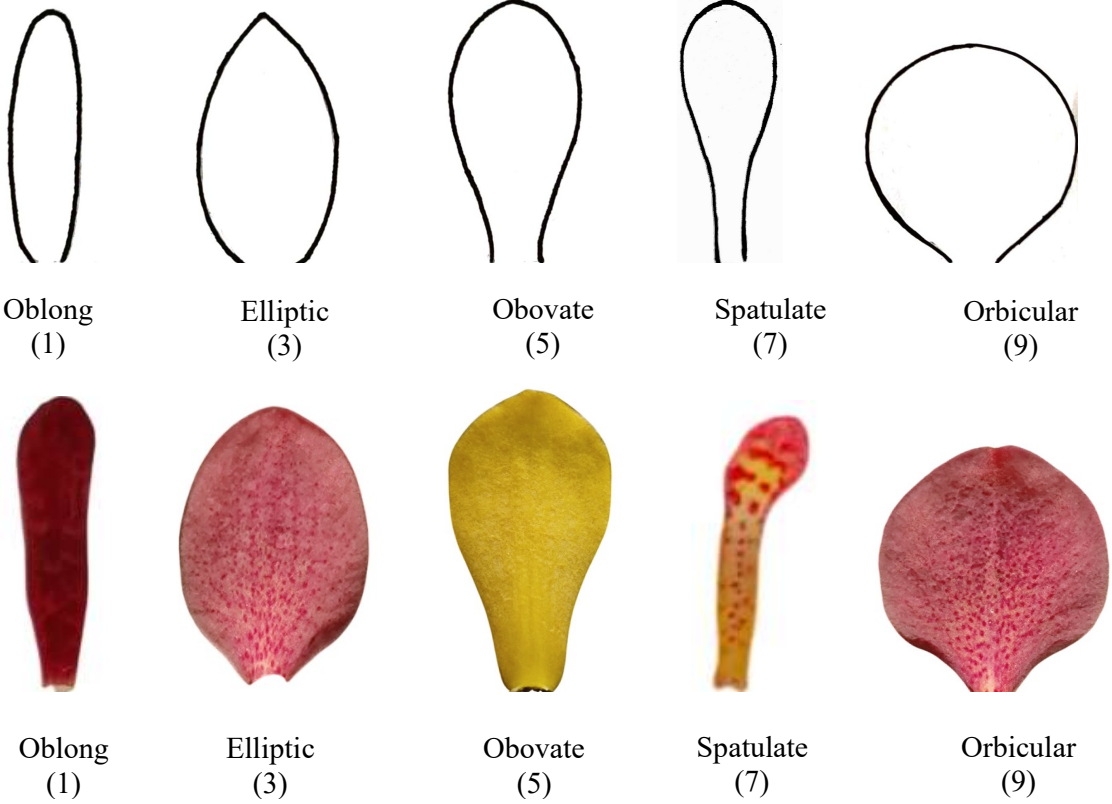
Characteristics 27: Petal curvature in longitudinal axis



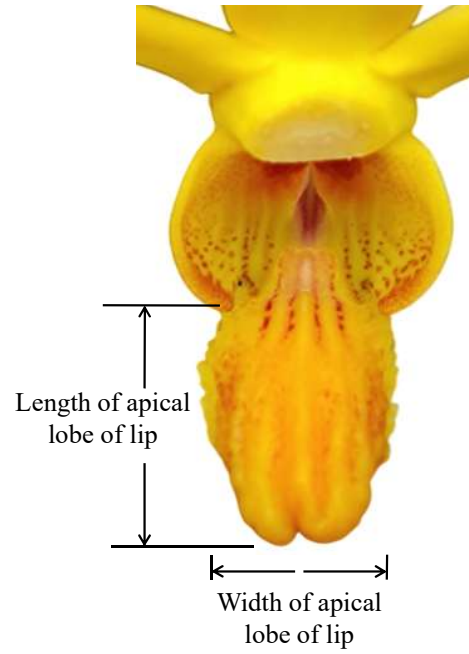
Characteristics 28 & 29: Petal: length & width



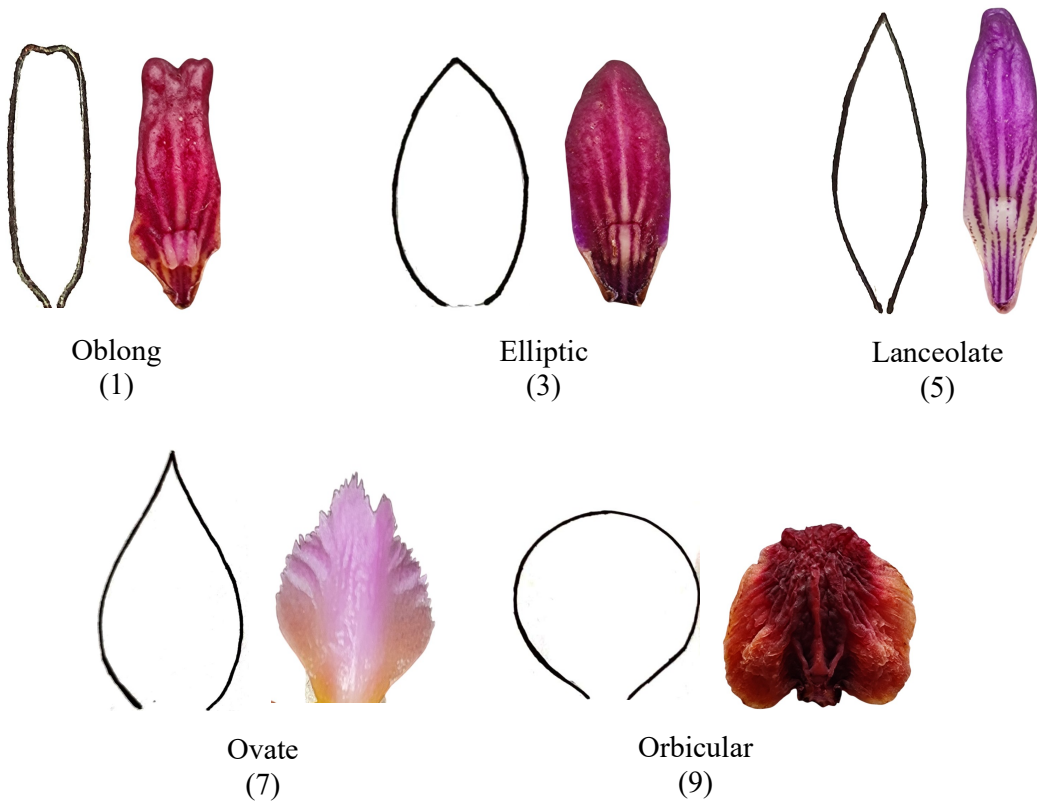
Characteristics 30: Petal shape



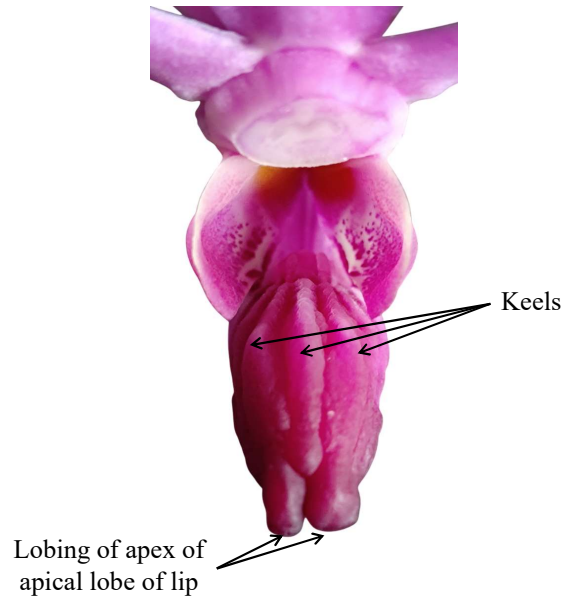
Characteristics 35 & 36: Lip: length & width of apical lobe



Characteristic 37: Lip: apical lobe shape



Characteristics 38 & 46: Lip: apical lobe: lobing of apex and keel numbers



Characteristic 47: Spur length



IX. Reference varieties



Aad. 'Chark Kuan Red'



Aad. 'Chark Kuan Orange'



Aad. 'Khaw Phiak Suan ×
V. Rasri Gold'



Aad. 'Khaw Phiak Suan ×
V. Kultana Gold'



Aad. 'Jitti Orange'



Aad. 'Walter Oumae White'



Aad. 'Happy Beauty'



Aad. 'Madam Panni'



Aad. 'Christine Coerulea'

X. Literature

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XI. Working Group Details

These test guidelines are developed by the National Core Committee in consultation with the Nodal Officer, DUS test centre, NRC for Orchids and Task Force (14/2024) constituted by the PPV & FR Authority.

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