

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

**On**

**Orchid  
(*Oncidium* Sw.)**

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

## **I. Subject**

These test guidelines apply to all vegetatively propagated varieties of *Oncidium* Sw. and alliance of the family Orchidaceae.

## **II. Plant Material Required**

1. The Protection of Plant Varieties and Farmers' Rights Authority (PPV & FRA) shall decide when, where and in what quantity and quality the plant material 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. For all varieties, two to three years old 20 plants (10 for each Centre) with at least two pseudobulbs/shoots shall be 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.
4. Plant material shall not have undergone any chemical or bio-physical treatment unless the competent authority allow or request such treatment. If it has been treated, details of the treatment must be given.

## **III. Conduct of Test**

1. The minimum duration of test should normally be two similar flowering seasons.
2. Test shall normally be conducted at two places. If any essential characteristic of the variety is not expressed for visual observations at these places, 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 greenhouse conditions ensuring satisfactory growth for the expression of the relevant characteristics of the variety and for the conduct of the examination.

4. 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 should be designed to a result in total of at least 10 plants.
5. Unless otherwise indicated, all observations determined by measuring or counting should be made on 10 plants or parts taken from each of 10 plants.
6. Additional tests for special purposes may be established.
7. Normally, growth regulators shall not be used.

#### **IV. Methods and Observations**

1. The characteristics described in the Table of Characteristics (Section VII) shall be used for the testing of varieties for their DUS.
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-types allowed would be 1.
4. All observations on the shoot shall be made on the flowering shoot.
5. All observations on the leaf shall be made on the longest leaf of a flowering shoot.
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 and on the most recently fully opened flower on the inflorescence before fading of colour.
7. All observations on the length and width of the flower and parts of the flower shall be made in the spread out position.
8. All observations on the colour of sepal, petal, lip and column shall be made on the inner side.
9. For the assessment of colour characteristics, the Royal Horticultural Society (RHS) colour chart shall be used.

## **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 distinctness 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) Plant: type (Characteristic 1)
  - b) Leaf: number per basal leaves /pseudobulb (Characteristic 7)
  - c) Flower size: width in front view (Characteristic 18)
  - d) Petal: main colour (Characteristic 42)
  - e) Petal: colour pattern (Characteristic 43)
  - f) Lip: main colour (Characteristic 51)
  - g) Lip: colour pattern (Characteristic 52)

## **VI. Characteristics and Symbols**

1. To assess Distinctiveness, Uniformity and Stability, the characteristics and their states as given in the Table of Characteristics shall be used.
2. Notes 1-9 (numbers) shall be used to describe the state of each character for the purpose of electronic data processing.
3. Legend

(\*) Characteristics that shall be observed during every growing season for varieties and hybrids and shall always be included in the description of the varieties and hybrids, except when the state of expression of any of these characters is rendered impossible by a preceding phenological characteristic or by the environment conditions of the testing region. Under such exceptional situation, adequate explanation shall be provided.

(+) See explanations on the Table of Characteristics
4. Characteristics denoted with symbols QL, QN and PQ in the first column of the Table of Characteristics shall be indicated as :

**QL:** Qualitative characteristic

**QN:** Quantitative characteristic

**PQ:** Pseudo-qualitative characteristic

5. (a)-(e) see Section VIII for explanation

6. Type of assessment of characteristics indicated in column six of the Table of Characteristics are 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

## VII. Table of Characteristics

Sl. No.	Characteristics	States	Notes	Example Varieties /hybrids	Type of Assessment
1. QN	Plant type	without pseudobulb	1	Tolu. Jairak Firm Ruddy, Tolu. Jairak Firm 'Fuscous', Tolu. Jairak Firm 'Deep Red', Ianopsis Utriculariodes, Tolu. Jairak Firm 'Butterfly', Tolu. Jairak Firm 'Chocolate Drop', Tolu. Jairak Rainbow 'Coral', Tolu. Jairak Rainbow 'Rosy', Tolu. Popoki, ONC. Baipai, Tolu. Jairak Rainbow 'Charming', Tolu. Jairak Firm 'Strawberry', ONC. Popki Red	VG
		with pseudobulb	9	ONC. Sharry Baby Sweet Fragrance, ONC. Sweet Sugar, Colm. Wildcat Carmera, Colm. Wildcat Bobcat, ONC. Taka Yellow	
2. (* ) QN	Plant: size (cm)	small (<15)	3	ONC. Popki Red,	MS
		medium (15-30)	5	ONC. Sharry Baby Sweet Fragrance, ONC. Sweet Sugar, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Taka Yellow	
		large (>30)	7	ONC. Hawaii Yellow, ONC. Karukera Beauty, ONC. Heaven Scent Redolence, ONC. Shower of Gold (Hughes), ONC. Sunday Best, ONC.	

				Lucky Goldstar, ONC. Sharry Baby 'Sweet Fragrance', ONC. Gower Ramsey, ONC. Royal Robe, ONC. Ramsey Orange, Wilsonara Imperial, ONC. Sharry Baby 'Sphacelatum', ONC. Sphacelatum	
3. (* QN (a)	Pseudobulb: length (cm)	short (<5)	3	ONC. Twinkle	MS
		medium (5-10)	5	ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Taka, ONC. Gold Singer, ONC. Heaven Scent Redolence, Hwra. Lava Burst, ONC. Lucky Goldstar, ONC. Royal Robe, Colm. Wildcat Yellow, ONC. Shower of Gold (Hughes), ONC. Gower Ramsey, ONC. Sharry Baby 'Sweet Fragrance', ONC. Ramsey Orange, ONC. Goodaleara, Wilsonara Imperial, ONC. Red Mini Little Cherry	
		long (>10)	7	ONC. Hawai Yellow, ONC. Karukera Beauty, ONC. Sunday Best, ONC. Sharry Baby 'Sphacelatum', ONC. Sphacelatum	
4. QN	Pseudobulb width (cm)	Narrow (<3)	3	ONC. Kampangsean Snow, ONC. Gold Singer, Hwra. Lava Burst, ONC. Shower of Gold (Hughes), ONC. Lucky Goldstar, Wilsonara Imperial, ONC. Twinkle, ONC. Red Mini Little Cherry	MS
		Medium (3-6)	5	ONC. Hawai Yellow, ONC. Sweet Sugar, Colm. Wildcat Yellow, ONC. Taka, ONC. Karukera Beauty, ONC. Heaven Scent Redolence, ONC. Gower Ramsey, ONC. Royal Robe ONC. Sunday Best, ONC. Sharry Baby 'Sweet Fragrance', ONC. Ramsey Orange, ONC. Goodaleara, ONC. Sharry Baby 'Sphacelatum', ONC. Sphacelatum	
		Broad (>6)	7		
5. (* (+ PQ	Pseudobulb: shape	oblong	1		VG
		elliptic	3	Colm. Wild Cat Carmera, Colm. Wildcat Bobcat,	
		circular	5		

(a)		ovate	7	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance	
6. (* QL (a)	Pseudobulb: groove	absent	1	Colm. Wild Cat Carmera	VG
		present	9	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, Colm. Wildcat Bobcat	
7. (* (+) Q N	Number of basal leaves/ pseudobulb	very few (< 2	3	ONC. Sweet Sugar, ONC. Pink/Yellow, ONC. Sharry Baby Sweet Fragrance	VG
		few (2 to 4)	5	ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Red Mini Little Cherry, ONC. Taka, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
		many ( More than 4)	7	ONC. Hawai Yellow, Brassidium Butterfly	
8. (* QN (b)	Leaf: length (cm)	short (< 15)	3	Ianopsis Utriculariodes, Colm. Wildcat Bobcat, ONC. Popki Red	MS
		medium (15-30)	5	ONC. Ramsey Orange, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Red, ONC. Pink/Yellow, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera	
		long (> 30)	7	ONC. Hawai Yellow, Colm. Wildcat Yellow, Brassidium Butterfly, ONC. Big White, ONC. Blue, ONC. Pink Small Flower.	
9. (*	Leaf: width (cm)	narrow (<2)	3	Ianopsis Utriculariodes, ONC. Popki Red	MS

QN (b)		medium (2-4)	5	ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Blue, ONC. Pink/Yellow, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
		broad (>4)	7	ONC. Hawaii Yellow, Brassidium Butterfly, ONC. Big White, ONC. Red, ONC. Pink Small Flower	
10. (* (+ PQ (a)	Leaf: shape	narrow lanceolate	1	Colm. Wildcat Bobcat, ONC. Popki Red	VG
		linear	3	ONC. Hawaii Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka	
		narrow elliptic	5	ONC. Sharry Baby Sweet Fragrance	
		elliptic	7	Colm. Wild Cat Carmera	
11. PQ (a)	Leaf: orientation	erect	1	ONC. Hawaii Yellow, Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Taka, ONC. Gold Singer, ONC. Karukera Beauty, ONC. Heaven Scent Redolence, Tolu. Jairak Firm Ruddy, Tolu. Jairak Firm 'Fuscous', Tolu. Jairak Firm Deep Red, Hwra. Lava Burst, ONC. Shower of Gold (Hughes), ONC. Sunday Best, Tolu. Jairak Firm 'Butterfly', Tolu. Jairak Firm 'Chocolate Drop', ONC. Lucky Goldstar, ONC. Sharry Baby 'Sweet Fragrance', ONC. Gower Ramsey, ONC. Royal Robe, Tolu. Jairak Rainbow 'Coral', ONC. Goodaleara, Wilsonara Imperial, Tolu. Jairak Rainbow 'Rosy', Tolu. Popoki, ONC. Sharry Baby 'Sphacelatum', ONC. Baipai, Tolu. Jairak Rainbow 'Charming', ONC. Twinkle, ONC.	VG



				Sphacelatum, ONC. Red Mini Little Cherry, Tolu. Jairak Firm 'Strawberry'	
		semi-erect	3	ONC. Hawai Yellow, ONC. Ramsey Orange, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
		horizontal	5		
		pendulous	7		
12. (* QL (a)	Leaf: attitude / nature	normal	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Popki Red	VG
		twisting	9	ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
13. (* (+) QL (b)	Inflorescence: type	simple raceme	3	Colm. Wildcat Yellow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	VG
		panicle	5	Tolu. Jairak Firm Deep Red, Tolu. Jairak Firm 'Chocolate Drop', ONC. Twinkle, ONC. Sphacelatum, Tolu. Jairak Firm 'Strawberry'	
		compound panicle	7	ONC. Hawai Yellow, ONC. Ramsey Orange, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Red Mini Little Cherry, ONC. Taka.	
14. QN (b)	Inflorescence: length (cm) (Peduncle + rachis length)	very short (< 15)	1	Colm. Wildcat Yellow, ONC. Big White, ONC. Blue, ONC. Pink Small Flower, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry	MS

		short (15 – 30)	3	ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Red, ONC. Pink/Yellow, ONC. Taka, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	
		medium (>30 – 60)	5	ONC. Ramsey Orange, Brassidium Butterfly, ONC. Sharry Baby Sweet Fragrance	
		long (>60-90)	7	ONC. Sharry Baby ‘Sphacelatum’, ONC. Sphacelatum	
		extra long (> 90)	9	ONC. Hawai Yellow, ONC. Sharry Baby ‘Sweet Fragrance’, ONC. Ramsey Orange	
15. (* QN (b)	Inflorescence: number of flowers	very few (< 10 )	3	Colm. Wildcat Yellow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	VG
		few (10 – 30)	5	ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Taka, ONC. Sharry Baby Sweet Fragrance	
		many (>30)	7	ONC. Ramsey Orange, ONC. Sharry Baby ‘Sweet Fragrance’, ONC. Gower Ramsey, ONC. Sharry Baby ‘Sphacelatum’, ONC. Hawai Yellow	
16. (* QL	Peduncle: anthocyanin colouration	absent	1	ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Colm. Wild Cat Carmera	VG
		present	9	ONC. Hawai Yellow, ONC. Blue, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, Colm. Wildcat Bobcat, ONC. Popki Red	
17. (* (+ QN (c)	Flower: length in front view (cm)	short (<3)	1	Tolu. Jairak Firm Ruddy, Tolu. Jairak Firm ‘Fuscous’, Tolu. Jairak Firm Deep Red, Ianopsis Utriculariodes	MS
		medium (3-6)	3	ONC. Hawai Yellow, ONC. Ramsey Orange, ONC. Sweet Sugar, ONC.	

				Kampangsean Snow, ONC. Pink Small Flower, ONC. Pink/Yellow, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, ONC. Popki Red ONC. Popki Red	
		long (>6-9)	5	Colm. Wildcat Yellow, ONC. Red, Colm. Wildcat Bobcat	
		very long (>9)	7	Brassidium Butterfly, ONC. Big White, ONC. Blue.	
18. (* (+ QN (c)	Flower: width in front view (cm)	narrow (<3)	1	ONC. Hawai Yellow, ONC. Ramsey Orange, ONC. Kampangsean Snow, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Popki Red	MS
		medium (3-6)	3	Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
		broad (>6-9)	5	ONC. Lucky Goldstar, Brassidium Butterfly	
		very board (>9)	7	ONC. Big White, ONC. Blue, ONC. Royal Robe	
19. QL (c)	Flower: fragrance	absent	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	
		present	9	ONC. Karukera Beauty, ONC. Heaven Scent Redolence, ONC. Sharry Baby 'Sweet Fragrance', ONC. Sharry Baby 'Sphacelatum', ONC. Twinkle	
20. (* Q N (c)	Dorsal sepal: length (cm)	short (<2)	3	ONC. Hawai Yellow, ONC. Ramsey Orange, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	MS

		Medium (2-4)	5	ONC. Red, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
		long (>4)	7	Colm. Wildcat Yellow, Brassidium Butterfly, ONC. Big White, ONC. Blue.	
21. (*Q N (c)	Dorsal sepal: width (cm)	narrow (<1)	3	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	MS
		medium (1-2)	5	Brassidium Butterfly, ONC. Big White, ONC. Blue, Colm. Wild Cat Carmera	
		broad (>2)	7	ONC. Red, Colm. Wildcat Bobcat	
22. (* (+) PQ (c)	Dorsal sepal: shape	lanceolate	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Kampangsean Snow, ONC. Big White, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Taka, Colm. Wildcat Bobcat	VG
		linear	2	ONC. Sweet Sugar, Brassidium Butterfly, ONC. Blue, ONC. Red Mini Little Cherry.	
		oblong	3		
		elliptic	4	ONC. Sharry Baby Sweet Fragrance	
		ovate	5	Tolu. Jairak Firm Ruddy, Tolu. Jairak Firm 'Fuscous', Tolu. Jairak Firm 'Deep Red', Tolu. Jairak Firm 'Butterfly', Hwra. Lava Burst, Tolu. Jairak Firm 'Chocolate Drop', ONC. Sharry Baby 'Sweet Fragrance', Tolu. Jairak Rainbow 'Coral', ONC. Goodaleara, Tolu. Jairak Rainbow 'Rosy', Tolu. Popoki	
		obovate	6	Colm. Wild Cat Carmera, ONC. Baipai, ONC. Twinkle, ONC. Red Mini Little Cherry, Tolu. Jairak Firm 'Strawberry'	
23. (*Q N (c)	Dorsal sepal: curvature of longitudinal axis	strongly incurving	1		VG
		moderately	3	ONC. Hawai Yellow, ONC. Ramsey	

		incurving		Orange, Brassidium Butterfly, ONC. Blue, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, Colm. Wild Cat Carmera	
		straight	5	Colm. Wildcat Bobcat	
		moderately recurving	7	Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, ONC. Taka, ONC. Sharry Baby Sweet Fragrance	
		strongly recurving	9	ONC. Big White, ONC. Popki Red, ONC. Sharry Baby 'Sphacelatum'	
24. QL (c)	Dorsal sepal: twisting	absent	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	VG
		present	9		
25. (* QL (c)	Dorsal sepal: undulation of margin	absent	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	VG
		present	9	ONC. Sweet Sugar, ONC. Pink Small Flower, ONC. Sharry Baby Sweet Fragrance	
26. (* QL (c) (d)	Dorsal sepal: main colour RHS Colour Chart	green	1	ONC. Sweet Sugar	VG
		white	2		
		pink	3		
		yellow	4	Colm. Wild Cat Carmera, ONC. Taka Yellow	
		red	5	ONC. Popki Red	
		purple	6	ONC. Sharry Baby Sweet Fragrance, Colm. Wildcat Bobcat,	
		blue	7		

		violet	8		
27. (* (+)Q L (c) (d)	Dorsal sepal: colour pattern	uniform	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Big White, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Taka.	VG
		shaded	2	ONC. Kampangsean Snow, ONC. Blue, ONC. Red, ONC. Red Mini Little Cherry, ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	
		blotched	3	ONC. Big White, ONC. Blue	
		brindled	4	ONC. Hawai Yellow, ONC. Ramsey Orange, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Taka, Colm. Wild Cat Carmera	
		striped	5	ONC. Pink Small Flower, Ianopsis Utriculariodes	
		edged	6	Colm. Wildcat Bobcat, Tolu. Jairak Firm 'Strawberry'	
28. (* )Q N (c)	Lateral sepal: length (cm)	short (<2)	3	ONC. Hawai Yellow, ONC. Ramsey Orange, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	MS
		medium (2-4)	5	ONC. Red, Colm. Wild Cat Carmera, ONC. Karukera Beauty	
		long (>4)	7	Colm. Wildcat Yellow, Brassidium Butterfly, ONC. Big White, ONC. Blue	
29. (* )Q N (c)	Lateral sepal: width (cm)	narrow (<1)	3	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	MS
		medium (1-2)	5	Brassidium Butterfly, ONC. Big White, ONC. Blue, ONC. Red, Colm. Wild Cat Carmera, Colm. Wildcat	

				Bobcat	
		broad (>2)	7		
30. (* (+ PQ (c)	Lateral sepal: shape	lanceolate	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, Colm. Wildcat Bobcat, ONC. Popki Red	VG
		ovate	3	Miltassia Royal Robe,	
		curving obovate	5	ONC. Kampangsean Snow, ONC. Taka, ONC. Sweet Sugar, ONC. Gold Singer, ONC. Karukera Beauty, Tolu. Jairak Firm 'Fuscous', Tolu. Jairak Firm 'Butterfly', Tolu. Jairak Firm Ruddy, Tolu. Jairak Firm 'Deep Red', Tolu. Jairak Firm 'Chocolate Drop', Hwra. Lava Burst, ONC. Shower of Gold (Hughes), ONC. Sharry Baby 'Sweet Fragrance', Tolu. Jairak Rainbow 'Coral', Wilsonara Imperial, Tolu. Jairak Rainbow 'Rosy', Tolu. Popoki, ONC. Sharry Baby 'Sphacelatum', Tolu. Jairak Rainbow 'Charming', ONC. Sphacelatum, ONC. Red Mini Little Cherry, Tolu. Jairak Firm 'Strawberry'	
		obovate	7	Colm. Wild Cat Carmera, ONC. Baipai, ONC. Twinkle	
		broad obovate	9		
31. (* Q N (c)	Lateral sepal: curvature of longitudinal axis	strongly incurving	1		VG
		moderately incurving	3	ONC. Hawai Yellow, ONC. Ramsey Orange, Brassidium Butterfly, ONC. Blue, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, Colm. Wild Cat Carmera, ONC. Popki Red	
		straight	5	Colm. Wildcat Bobcat	
		moderately recurving	7	Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, ONC. Taka, ONC.	

				Sharry Baby Sweet Fragrance	
		Deflexed	9	ONC. Big White	
32. QL (c)	Lateral sepal: twisting	absent	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, Brassidium Butterfly, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	VG
		present	9	ONC. Sweet Sugar, ONC. Kampangsean Snow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
33. (*Q L (c)	Lateral sepal: undulation of margin	absent	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Popki Red	VG
		present	9	ONC. Sweet Sugar, ONC. Pink Small Flower, ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
34. (* PQ (d)	Lateral sepal: main colour as per RHS Colour Chart	green	1	ONC. Sweet Sugar, Colm. Wild Cat Carmera	VG
		white	2		
		pink	3		
		yellow	4	ONC. Taka Yellow	
		red	5	ONC. Popki Red	
		purple	6	ONC. Sharry Baby Sweet Fragrance, Colm. Wildcat Bobcat,	
		blue	7		
35. (* (+Q L (d)	Lateral sepal: colour pattern as per RHS Colour Chart to be indicated in brackets	uniform	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Big White, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Taka.	VG
		shaded	2	ONC. Kampangsean Snow, ONC. Blue, ONC. Red, ONC. Red Mini Little Cherry, ONC. Sharry Baby Sweet Fragrance, Colm. Wildcat	



				Bobcat, ONC. Popki Red	
		blotched	3	ONC. Big White, ONC. Blue	
		brindled	4	ONC. Ramsey Orange, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Taka, Colm. Wild Cat Carmera	
		striped		Ianopsis Utriculariodes	
		edged		Colm. Wildcat Bobcat, Tolu. Jairak Firm Ruddy, Tolu. Jairak Firm 'Deep Red', Tolu. Jairak Firm 'Chocolate Drop'	
36. (*Q N (c)	Petal: length (cm)	short (<2)	3	ONC. Hawai Yellow, ONC. Ramsey Orange, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	MS
		medium (2-4)	5	Colm. Wildcat Yellow, ONC. Red, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
		long (>4)	7	Brassidium Butterfly, ONC. Big White, ONC. Blue, ONC. Royal Robe	
37. (*Q N (c)	Petal: width (cm)	Narrow (<1)	3	ONC. Hawai Yellow ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	MS
		Medium (1-2)	5	Brassidium Butterfly, ONC. Big White, ONC. Blue, ONC. Red, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
		Broad (>2)	7		
38. (* (+ PQ (c)	Petal: shape	linear	1	Colm. Wildcat Yellow, Brassidium Butterfly, ONC. Big White, ONC. Pink/Yellow	VG
		elliptic	3	ONC. Hawai Yellow, ONC. Ramsey Orange, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Taka, ONC. Sharry Baby Sweet	

				Fragrance, Colm. Wildcat Bobcat	
		narrow obovate	5	Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, Colm. Wild Cat Carmera, ONC. Popki Red	
		obovate	7	ONC. Sweet Sugar, ONC. Gold Singer, Tolu. Jairak Firm Ruddy, Tolu. Jairak Firm 'Deep Red', Tolu. Jairak Firm 'Fuscous', Tolu. Jairak Firm 'Chocolate Drop', Tolu. Jairak Firm 'Butterfly', Ianopsis Utriculariodes, ONC. Shower of Gold (Hughes), ONC. Gower Ramsey, ONC. Ramsey Orange, Tolu. Jairak Rainbow 'Coral', Tolu. Popoki, ONC. Baipai, Tolu. Jairak Rainbow 'Charming', ONC. Twinkle, ONC. Red Mini Little Cherry, Tolu. Jairak Firm 'Strawberry'	
		rectangular	9		
39. (*Q N (c)	Petal: curvature of longitudinal axis	strongly incurving	1		VG
		moderately incurving	3	ONC. Hawaii Yellow, Brassidium Butterfly, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance	
		straight	5	Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	
		moderately recurving	7	Colm. Wildcat Yellow, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow.	
		strongly recurving	9	ONC. Ramsey Orange, ONC. Sweet Sugar	
40. QL (c)	Petal: twisting	absent	1	ONC. Hawaii Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	VG
		present	9	Ianopsis Utriculariodes	

41. (* QL (c)	Petal: undulation of margin	absent	1	ONC. Hawaii Yellow, ONC. Pink/Yellow, Ianopsis Utriculariodes, Colm. Wildcat Bobcat	VG
		present	9	ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, ONC. Popki Red	
42. (* PQ (d)	Petal: main colour as per RHS Colour Chart	green	1	ONC. Sweet Sugar	VG
		white	2		
		pink	3		
		yellow	4	Colm. Wild Cat Carmera, ONC. Taka Yellow	
		red	5	ONC. Popki Red	
		purple	6	ONC. Sharry Baby Sweet Fragrance, Colm. Wildcat Bobcat	
		blue	7		
		violet	8		
43. (* (+) QL (d)	Petal: colour pattern as per RHS Colour Chart to be indicated in brackets	uniform	1	ONC. Hawaii Yellow, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Big White, ONC. Pink Small Flower, ONC. Pink/Yellow	VG
		shaded	2	ONC. Kampangsean Snow, ONC. Blue, ONC. Red, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	
		blotched	3	ONC. Big White, ONC. Blue, ONC. Lucky Goldstar, ONC. Baipai	
		brindled	4	ONC. Hawaii Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow ONC. Sweet Sugar, Brassidium Butterfly, Colm. Wild Cat Carmera	
		striped	5	ONC. Pink Small Flower, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry	
		edged	6	ONC. Red Mini Little Cherry, Colm. Wildcat Bobcat	
44. (*	Lip: curvature of longitudinal axis	incurving	3	ONC. Hawaii Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, Ianopsis Utriculariodes, ONC. Red	VG

				Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance	
		straight	5	Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	
		recurving	7	ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow.	
45. (*Q N (c)	Lip: length (cm)	short (<2)	3	ONC. Hawai Yellow	MS
		medium (2-4)	5	ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	
		long (>4)	7	Brassidium Butterfly, ONC. Big White, ONC. Blue, ONC. Sunday Best, ONC. Royal Robe	
46. (*Q N (c)	Lip: width (cm)	narrow (<2)	3	ONC. Hawai Yellow, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Sharry Baby Sweet Fragrance	MS
		medium (2-4)	5	ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Blue, ONC. Red, ONC. Red Mini Little Cherry, ONC. Taka, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	
		broad (>4)	7	Brassidium Butterfly, ONC. Big White	
47. (* (+) PQ (c)	Lip: shape of apical lobe	ovate	1	ONC. Kampangsean Snow, ONC. Taka, Ianopsis Utriculariodes, ONC. Sweet Sugar, ONC. Gold Singer, Hwra. Lava Burst, Tolu. Jairak Firm 'Chocolate Drop', ONC. Shower of Gold (Hughes), ONC. Sunday Best, ONC. Lucky Goldstar, ONC. Ramsey Orange, Tolu. Jairak Rainbow 'Coral', Tolu. Popoki, ONC. Twinkle, ONC. Sphacelatum	VG
		elliptic	2	ONC. Royal Robe	

		obovate	3	ONC. Goodaleara	
		orbicular	4	ONC. Baipai , Brassidium Butterfly, ONC. Blue, ONC. Red.	
		semi-circular	5	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Big White, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, Colm. Wildcat Bobcat	
		deltoid	6		
		obdeltoid	7		
48. (* (+Q N (c)	Lip: emargination	absent or very shallow	1	ONC. Sunday Best, ONC. Lucky Goldstar, ONC. Royal Robe	VG
		shallow	3	ONC. Ramsey Orange, ONC. Big White, ONC. Blue, ONC. Red, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat	
		medium	5	ONC. Hawai Yellow, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka.	
		deep	7	ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	
49. (* (c)	Lip: size of lateral lobe in relation to apical lobe	smaller	3	ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	VG
		equal	5	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Sweet Sugar, Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka.	
		larger	7		
50. (* (c) QL	Lip: undulation of margin	absent	1	ONC. Heaven Scent Redolence, Ianopsis Utriculariodes, ONC. Royal Robe, ONC. Twinkle	VG
		present	9	ONC. Hawai Yellow, Colm. Wildcat Yellow, ONC. Sweet Sugar,	

				Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Red Mini Little Cherry, ONC. Taka, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Popki Red	
51. (* PQ (d)	Lip: main colour as per RHS Colour Chart	green	1		VG
		white	2	ONC. Sharry Baby Sweet Fragrance	
		pink	3		
		yellow	4	ONC. Sweet Sugar, Colm. Wild Cat Carmera, ONC. Taka Yellow	
		red	5	ONC. Popki Red	
		purple	6	Colm. Wildcat Bobcat	
		blue	7		
		violet	8		
52. (* (+) QL (d)	Lip: colour pattern as per RHS Colour Chart to be indicated in brackets	uniform	1	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Red Mini Little Cherry, Colm. Wildcat Bobcat	VG
		shaded	2	ONC. Sweet Sugar, ONC. Kampangsean Snow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, ONC. Pink/Yellow, Ianopsis Utriculariodes, ONC. Taka, ONC. Sharry Baby Sweet Fragrance, ONC. Popki Red	
		blotched	3	ONC. Hawai Yellow, ONC. Ramsey Orange, Colm. Wildcat Yellow, ONC. Big White, ONC. Blue, ONC. Red, ONC. Pink Small Flower, Colm. Wild Cat Carmera	
		brindled	4	ONC. Big White	
		edged	5		
53. (* QL (d)	Callus: colour of middle part	white	1	ONC. Hawai Yellow, Colm. Wildcat Yellow, ONC. Blue, Ianopsis Utriculariodes	VG
		yellow	2	ONC. Kampangsean Snow, ONC. Big White, ONC. Pink/Yellow, ONC. Red Mini Little Cherry, ONC. Taka, Colm. Wildcat Bobcat	
		orange	3	ONC. Sweet Sugar, ONC. Pink Small Flower, ONC. Popki Red, ONC. Ramsey Orange	
		red	4	ONC. Baipai	

		brown	5	Brassidium Butterfly, ONC. Red, Tolu. Jairak Rainbow 'Rosy', ONC. Sharry Baby 'Sphacelatum'	
54. (* PQ (d)	Callus: colour of margin part	white	1	Colm. Wildcat Yellow, Ianopsis Utriculariodes, ONC. Sharry Baby Sweet Fragrance	VG
		yellow	2	ONC. Ramsey Orange, ONC. Pink/Yellow, ONC. Taka, Colm. Wild Cat Carmera	
		orange	3	ONC. Sweet Sugar, ONC. Pink Small Flower	
		pink	4	ONC. Royal Robe, ONC. Baipai	
		red	5	ONC. Popki Red	
		yellow-brown	6	Brassidium Butterfly, ONC. Kampangsean Snow, ONC. Big White, ONC. Red Mini Little Cherry	
		brown	7	ONC. Hawai Yellow, ONC. Blue, ONC. Red	
55. QN	Column length (cm)	short (< 1)	3	ONC. Sharry Baby Sweet Fragrance, ONC. Sweet Sugar, ONC. Taka Yellow, ONC. Popki Red	MS
		medium (1-2)	5	Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Sunday Best, ONC. Lucky Goldstar	
		long (> 2)	7		
56. QN	Column width (cm)	narrow (< 0.3)	3	Tolu. Jairak Firm Ruddy, Tolu. Jairak Firm 'Fuscous', Ianopsis Utriculariodes.	MS
		medium (0.3-0.6)	5	ONC. Sharry Baby Sweet Fragrance, ONC. Taka Yellow, ONC. Popki Red	
		broad (> 0.6)	7	ONC. Sweet Sugar, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Baipai	
57. PQ	Column orientation	erect	1	ONC. Sharry Baby Sweet Fragrance, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Taka Yellow, ONC. Popki Red	VG
		curved	9	ONC. Hawai Yellow, Colm. Wildcat Yellow, ONC. Taka, ONC. Gold Singer, ONC. Karukera Beauty, Tolu. Jairak Firm Ruddy, Tolu. Jairak Firm 'Deep Red', Tolu. Jairak Firm 'Chocolate Drop', ONC. Royal Robe, Tolu. Jairak Rainbow 'Coral', ONC. Goodaleara, Wilsonara Imperial, Tolu. Jairak Rainbow 'Rosy', Tolu. Popoki,	

				ONC. Baipai, Tolu. Jairak Rainbow 'Charming', ONC. Sphacelatum, Tolu. Jairak Firm 'Strawberry'	
58. QL (e)	Column main colour as per RHS colour Chart	green	1		VG
		white	2	Colm. Wild Cat Carmera	
		pink	3		
		yellow	4	ONC. Sweet Sugar, ONC. Taka Yellow	
		red	5		
		purple	6	ONC. Sharry Baby Sweet Fragrance, Colm. Wildcat Bobcat, ONC. Popki Red	
		blue	7		
		violet	8		
59. QN	Pedicellate ovary length (cm)	small (< 2)	3	Tolu. Jairak Firm Ruddy, Tolu. Jairak Firm 'Deep Red', Ianopsis Utriculariodes, Tolu. Jairak Firm 'Butterfly', Tolu. Popki, Tolu. Jairak Rainbow 'Charming', ONC. Twinkle	MS
		medium (2-3)	5	ONC. Sharry Baby Sweet Fragrance, ONC. Sweet Sugar, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Taka Yellow, ONC. Popki Red	
		long (> 3)	7	Colm. Wildcat Yellow, ONC. Sweet Sugar, ONC. Shower of Gold (Hughes), ONC. Sunday Best, ONC. Lucky Goldstar, ONC. Royal Robe, ONC. Goodaleara, ONC. Sharry Baby 'Sphacelatum', ONC. Baipai, ONC. Sphacelatum	
60. QN	Longevity of flower on plant	short (< 10 days)	3		VS
		medium (10-20 days)	5	Colm. Wildcat Yellow, ONC. Lucky Goldstar, ONC. Royal Robe, ONC. Red Mini Little Cherry, Tolu. Jairak Firm 'Strawberry'	
		long (> 20 days)	7	ONC. Sharry Baby Sweet Fragrance, ONC. Sweet Sugar, Colm. Wild Cat Carmera, Colm. Wildcat Bobcat, ONC. Taka Yellow, ONC. Popki Red	



## VIII. Explanation on the Table of Characteristics

### 8.1 Guidelines for recording the observations of vegetative and flowering characteristics

Characteristics indicated with (a), (b), (c), (d) and (e) in the first column of the Table of Characteristics should be examined as indicated below:

- (a) Observations shall be made on the pseudobulb and the longest leaf of flowering plant.
- (b) Observations on the inflorescence and the flower shall be made at the time when 50% of the flowers on the inflorescence have opened and the most recently fully opened flower on the inflorescence before the color starts to fade.
- (c) Observations on the length and width of the flower and parts of the flower shall be made on the spread out positions.
- (d) Observations on the color of the sepal, the petal and the lip shall be made on inner side at apex, mid and base portion.
- (e) Observations on the colour of column shall be made on inner side at apex, mid and basal region.

### 8.2 Explanation for individual characteristics

#### Characteristic 7: Number of basal leaves / pseudobulb



#### Characteristic 10: Leaf shape



narrow lanceolate  
(1)



linear  
(3)

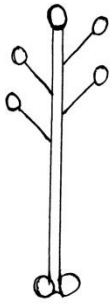


narrow elliptic  
(5)

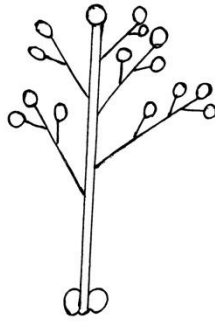


elliptic  
(7)

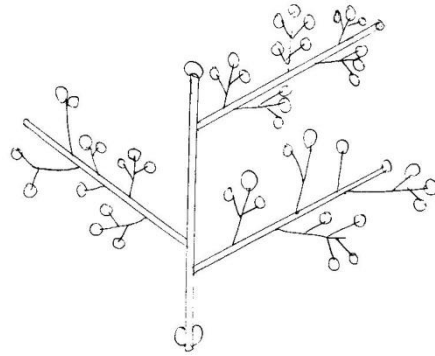
### Characteristics 13: Inflorescence type



simple raceme  
(3)

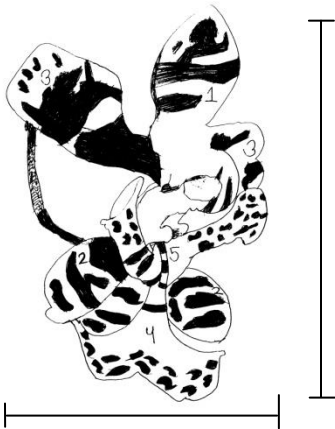


panicle  
(5)



compound panicle  
(7)

### Characteristics 17 & 18: Flower: length and 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

**Characteristics 22: Dorsal sepal: shape**



lanceolate  
(1)



linear  
(2)



oblong  
(3)



elliptic  
(4)



ovate  
(5)



obovate  
(6)

**Characteristics 30: Lateral sepal: shape**



lanceolate  
(1)



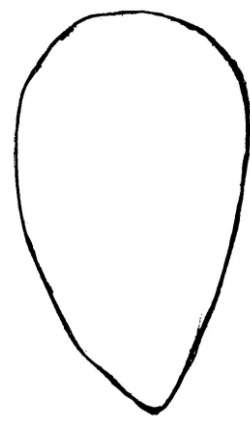
ovate  
(3)



curving obovate  
(5)

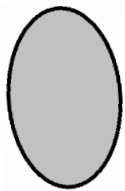


obovate  
(7)



broad obovate  
(9)

**Characteristics 27 & 35: Dorsal sepal and lateral sepal: colour pattern**



uniform  
(1)



shaded  
(2)



blotched  
(3)



brindled  
(4)



striped  
(5)

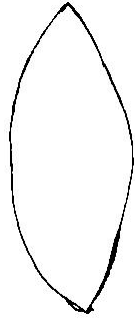


edged  
(6)

**Characteristics 38: Petal shape**



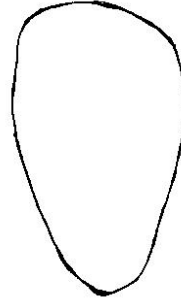
linear  
(1)



elliptic  
(3)



narrow obovate  
(5)

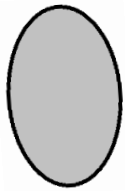


obovate  
(7)



rectangular  
(9)

**Characteristics 43: Petal: colour pattern**



uniform  
(1)



shaded  
(2)



blotched  
(3)



brindled  
(4)

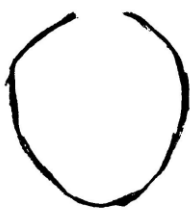


striped  
(5)

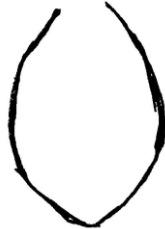


edged  
(6)

**Characteristics 47: Lip: shape of apical lobe**



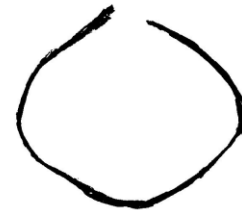
ovate  
(1)



elliptic  
(2)



obovate  
(3)



orbicular  
(4)



semi-circular  
(5)

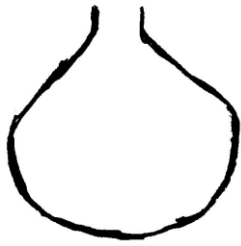


deltoid  
(6)



obdeltoid  
(7)

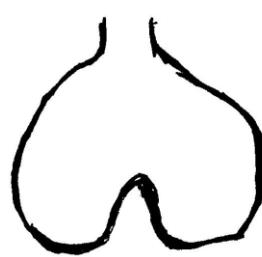
**Characteristics 48: Lip: emargination**



Very shallow  
(1)



shallow  
(3)

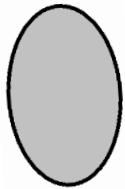


medium  
(5)



deep  
(7)

**Characteristics 52: Lip: colour pattern**



uniform  
(1)



shaded  
(2)



blotched  
(3)



brindled  
(4)



striped  
(5)



edged  
(6)

**IX. Literature:**

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#### **X. Working Group Details:**

These test guidelines developed by the National Core Committee in consultation with the Nodal Officer, DUS test centre, NRC for Orchids and Task Force (3/2012) constituted by the PPV & FR Authority.

#### **Members of the Task Force (3/2012)**

Dr. A.N. Rao	Director (R&D), Centre for Orchid Gene Conservation of Eastern Himalayan Region Hengbung, Senapati Distt., Manipur -	Chairman
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#### **IX. Name of DUS Test Centres**

<b>Nodal DUS Test Centre</b>	<b>Other Test Centre</b>
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