

# **MORPHOLOGICAL CHARACTERIZATION IN DENDROBIUM SPP.**

**L.C. De**

**R. G. Devadas**

**Geetamani Chhetri**

**Manoj Srivastava**

**R.P. Medhi**



**National Research Centre for Orchids**  
(Indian Council of Agricultural Research)  
Pakyong – 737 106,  
Sikkim, India



# **Morphological Characterization in Dendrobium spp.**

National Research Centre for Orchids  
Pakyong-737106, Sikkim

Copyright @ 2014 National Research Centre for Orchids

## **Compiled and Edited by**

L.C. De

## **Published by**

L. C. De and R.P. Medhi  
National Research Centre for Orchids  
Pakyong-737106, Sikkim

## **Cover Photographs**

**Front:** Glimpses of Dendrobium species

## **Printed**

February, 2014

# PREFACE

Dendrobiums are Asian epiphytes, grown as popular flowering potted plants and cut flowers around the world due to their floriferousness, wide range in flower color, size and shape, year round availability and lengthy vase life. Hawaii, California and Florida are major potted Dendrobium growing regions in the United states. The wholesale value of sales for this commodity in Hawaii has been found for several decades. The total orchid cut flower trade of the world mostly consists of 85% Dendrobium species and 15% Phalaenopsis and Cymbidium species and Asia is the main source of orchid to enter the world.

The present technical publication '*Morphological Characterization in Dendrobium spp*' under the project '**Preparation for Plant Varieties Protection and DUS Testing through ICAR-SAU system**' covers the wide aspects of taxonomic description starting botanical description, valuable genetic resources, grouping of species, characteristics and symbol, morphological descriptors, explanations of characteristics and digitalization of important species used for improvement program.

I hope that it will be a useful handy reference technical bulletin for amateur and professional orchid growers, small and big orchid farmers, orchid entrepreneurs, florist shops, taxonomists, plant breeders and students.

(Lakshman Chandra De)



# Contents

1.	Introduction	1
2.	Botanical description	1
3.	Valuable genetic resources	1
4.	Grouping of species	11
5.	Characteristics and Symbol	11
6.	Table of morphological characteristics	13
7.	Explanation on table of characteristics	38
8.	Digitalization	42



## **Introduction**

*Dendrobium* consists of 1600 species of sympodial epiphytic orchids. The genera are characterized by long pseudobulbs or canes with soft leaves on entire length or in some species, pseudobulbs are short or swollen terminating in two coriaceous leaves. The pseudobulbs are of four types, cane woody, cane cylindrical, cane clavate fleshy and bulbous round. The leaf size ranges from 2.5cm to 40cm, thick, are deciduous or evergreen. In some groups, the flowers joined in pairs or three on small peduncle on the entire length of the pseudobulbs, with caduceous leaves. In some species, with persistent leaves, the flowers are grouped in pairs or threes or alternately closely set forming erect or pendent thyrses. In another group, flowers are generally solitary and small, arising from the axils of leaves. The inflorescences are terminal or subterminal and arranged with one to several dozens of flowers with extremely diverse dimensions, size and ranges of flower colour.

Dendrobiums are popular for cut flowers and for interiorscaping. They are also valuable as pot plants or hanging baskets. Some species are hanged on the walls or on tree branches to cover the bare walls and branches.

### **Valuable genetic resources:**

*Dendrobium aggregatum*: Distributed in South China, Burma, Thailand and Laos. The pseudobulbs are short clustered, yellowish, furrowed with persistent fleshy solitary leaves. Inflorescence is pendulous or arching bearing 12 or more flowers. The flowers are yellow, 5cm in

*Dendrobium aggregatum*



diameter, fragrant, long lasting and produced in March-April.

*Dendrobium superbum*: Native to Indonesia, Malayasia and the Philippines.

The pseudobulbs are pendulous, cane like with small, fleshy, glossy green, leathery leaves. The inflorescence is two flowered. The flowers are highly fragrant, 10cm in diameter and produced in winter-spring season.

*Dendrobium bigibbum*: Native to Queensland and new Guinea. The pseudobulbs are erect, slender with leathery, evergreen leaves. Inflorescence is terminal, arching and arranged with 25 or more flowers. The flowers are pure white to rosy mauve and produced during winter and spring season.

*Dendrobium chrysotoxum*: Native to Himalayas, Burma, South China, Thailand and Laos. The pseudobulbs are erect, clustered, club shaped with leathery coriaceous leaves. The inflorscences are arching, 30cm long, yellow with orange blotched lip and produced during March-April.



*D. chrysotoxum*

*Dendrobium densiflorum*: Distributed in Himalayas to Burma. The pseudobulbs are erect, four sided, 30cm long, green and club shaped. The leaves are coriaceous, dark



green and persistent. Each pseudobulb produces 2 to 3 inflorescence. The inflorescence is borne from the upper nodes of pseudobulbs, many flowered, pendulous and cylindrical. The flowers are golden yellow with orange lip, scented, 5cm across and produced during April-May.



*D. densiflorum*

*Dendrobium fimbriatum*: Distributed in Himalayas, Burma, Vietnam, Malay Peninsula and Thailand. The pseudobulbs are stem like, slender, terete, stout, erect or arching. The



*Dendrobium fimbriatum*

inflorescence is 8 to 15 flowered, 20 cm long produced from the top of the ripened stem. The flowers are yellow with orange yellow lip, 7.5cm in diameter and produced during March to May.

*Dendrobium formosum*: Native to Himalayas, Burma to Peninsula, Thailand and Andaman Islands. The pseudobulbs are leafy, erect, pendulous with ovate oblong leaves, persistent. Inflorescence is terminal or axillary 3 to 5 flowered in short cluster. The flowers are very large, 10cm in



*Dendrobium formosum*

diameter, fragrant, pure white with orange yellow lip

*Dendrobium loddigesii*: Native to China. The pseudobulbs are small, slender, numerous, clump forming with caduceus oblanceolate leaves. The flowers are solitary, pale pink with fringed lip, fragrant, long lasting and 5cm in diameter.

*Dendrobium nobile*: Native to South China, Nepal, Himalayas, Thailand, Vietnam, Laos and Formosa. The pseudobulbs are arching or erect, 60-90cm tall with caduceus, leathery, glossy green leaves. Inflorescence is 1 to 3 flowered, short and arises from the upper nodes of the old leafless pseudobulbs. The flowers are fragrant, long lasting, 10cm in diameter, waxy, lip with white margin. The flowers are produced during April-May.



*Dendrobium nobile*

*Dendrobium pierardii*: Native to Himalayas, Burma, China and India. The pseudobulbs are thin, very elongated, 60-75cm long, stem like, pendulous or drooping with soft textured deciduous lanceolate leaves. Flowers are 5cm in diameter, scented, short lived, pale pink with yellow lip streaked with red and produced during March - April. This species is ideal for covering bare walls and hanging baskets.

*Dendrobium speciosum*: A robust species from Australia and New Guinea. Pseudobulbs are swollen, conical and

terminated by 2 to 4 leaves. The leaves are apical, persistent, rigid and leathery. Flowers are many and arranged closely in pendent thyrses. Flowers are fragrant and produced during autumn and early winter.

*Dendrobium spectabilis*: Native to New Guinea and Solomon Islands. The pseudobulbs are club shaped. The flowers are 7.5cm across, cream to pale greenish in colour with mottled dull purple veins and yellow white lip.

*Dendrobium thyrsiflorum*: Native to Himalayas, Burma and Thailand. The pseudobulbs are club shaped with several ridges and cylindrical. The leaves are persistent and coriaceous. Inflorescence is pendulous and densely flowered. The flowers are 5cm in diameter, white with orange yellow lip and produced during winter and spring.



*D. thyrsiflorum*

*Dendrobium crepidatum*: Native to Bhutan, India and Nepal. A pendulous orchid with long, curved pseudobulbs and linear lanceolate leaves. Inflorescence is lateral,



*Dendrobium crepidatum*

leafless at flowering and borne in fascicles of 2 to 4 flowers. Flowers are 2-3.5cm across, white, flushed with pink lilac and white lip. Flowers are produced in April-May.

*Dendrobium denudans*:

Native to Bhutan, India and Nepal. Pseudobulbs are slender, clustered with oblong, sessile leaves. Inflorescence is terminal and bearing about ten flowers. Flowers are greenish or white and produced during September-October.

*Dendrobium heterocarpum*: Native to Bhutan, India and Nepal. Pseudobulbs are stout, erect or pendent, with many oblanceolate leaves. Inflorescence is lateral and bearing blooms in fascicles of 1-3 along the nodes. The flowers are 5cm across, ochraceous yellow to cream in colour and produced in March-April.



*Dendrobium heterocarpum*

*Dendrobium jenkinsii*: Native to India and Bhutan.



*D. jenkinsii*

Pseudobulbs are aggregated, oval, compressed, ridged with solitary leaves borne at the apex. The flowers are 2 to 4cm in diameter, orange yellow with a heart shaped

lip and produced during May.

*Dendrobium bensoniae*: Native to Manipur and Mizoram. Pseudobulbs are fleshy, stout and pale yellow with deciduous linear leaves. The flowers arise in fascicles of 1-3 flowers from the upper nodes of leafless pseudobulbs. The

flowers are long lasting, 4-6cm in diameter, scented and pure white in colour and yellow lip. The flowers are produced in May-June.



*D. bensoniae*

*Dendrobium devonianum*: This species is native to Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram and



*Dendrobium devonianum*

Nagaland. Pseudostems are slender, cylindrical, pendent with linear-lanceolate leaves. Inflorescence is lateral, 1-3 flowered. Flowers are 2-5cm across, white with purple apex and produced in May-July.

*Dendrobium falconeri*: Native to Arunachal Pradesh, Manipur, Meghalaya, Mizoram and Nagaland.

Pseudostems are pendent, branched with bead like nodes and linear leaves. Inflorescence is lateral, 1-2 flowered. Flowers are 3-5cm across, white-pale pink with purple tips and are produced during May-June.



*Dendrobium falconeri*

*Dendrobium farmeri*: Native to North East India. Pseudobulbs are 4 angled, club shaped with 2-3 lance shaped leaves near the apex. Inflorescences are borne on cylindric, pendulous raceme arises from the apices of the mature new growth.



*Dendrobium farmeri*



*Dendrobium gibsonii*

*Dendrobium gibsonii*: Native to Arunachal Pradesh, Meghalaya, Nagaland and Sikkim. Pseudostems are tall, slender and bearing many ovate-lanceolate sessile leaves. Inflorescence is lateral, pendent, slender and 5-10 flowered. Flowers are fragrant, 2-3cm in diameter, yellow orange and produced in July-August.

*Dendrobium infundibulum*: Native to Manipur, Mizoram and Nagaland. Pseudostems are erect, cylindric with linear lanceolate leaves. Inflorescence is terminal or lateral, 2-3 flowered and borne in raceme. Flowers are 7.5 to 10cm across, pure white and long lasting with orange yellow lip disc. Flowers are produced during April-May.

*Dendrobium parishii*: Native to Manipur and Mizoram. Pseudostems are cylindrical, arching to pendent with oblong lanceolate leaves. Inflorescence is borne at nodes of leafless pseudostems and 2-3 flowered. The flowers are 3-

5cm in diameter, fragrant, rosy purple and produced in June-July.

*Dendrobium primulinum*: Native to North East States of India. Pseudostems are stout, cylindrical, prostrate or pendent with oblanceolate leaves.



*Dendrobium parishii*

Inflorescence arises from nodes of past seasons growth and 1-2 flowered. The flowers are 4-8cm across, highly scented, rosy pastel pink with cream yellow lip. The flowers are produced during March-April.



*Dendrobium primulinum*

*Dendrobium transparens*: Native to A.P., Meghalaya, Nagaland and Sikkim. Pseudostems are slender, erect or pendent, with linearlanceolate leaves. Inflorescence develops laterally and 2-3 flowered. Flowers are 3-5cm in diameter, fragrant, pale rosy mauve to white in colour and produced during May.



*Dendrobium transparens*

*Dendrobium williamsonii*: Native to Assam, Manipur and Meghalaya. Pseudostems are erect, spindle shaped with velvety lanceolate leaves. Inflorescence is 1 to 3 flowered. Flowers are 3-5 cm across, fragrant, pale green ivory with brick red lip and produced during March-April.



*Dendrobium williamsonii*

*Dendrobium ochreatum*: Native to North east States. Pseudostems are stout, cylindrical, curved with ovate lanceolate leaves. Flowers are 5-7 cm across, fragrant, fleshy, golden yellow with maroon purple disc. The flowers are produced during May-June.



*Dendrobium ochreatum*

to Assam and Meghalaya. Flowers develop in fascicles of 2-4 at each node of long pendent stem. Flowers are soft mauve with a white lip and produced during April-May.

*Dendrobium aphyllum* : Native



*Dendrobium aphyllum*

*Dendrobium moschatum*: Native to Meghalaya, Assam and



*Nagaland*. Drooping racemes of 7-15 apricot yellow flowers appear on the upper part of the stem. Lip is slipper shaped, dark orange in colour and with two identical eye like maroon blotches. Flowers are produced during May-June.



*Dendrobium moschatum*

## Grouping of species

The following characteristics shall be used for grouping of *Dendrobium* species:

- (a) Plant height
- (b) Internode number
- (c) Inflorescence number per shoot per year
- (d) Flower size: width
- (e) Flower : predominant colour
- (f) Lip: main colour
- (g) Lip: lobation
- (h) Lip: ornamentation
- (I) Flowering time

## Characteristics and symbols

1. To assess the characteristics and their states as given in the Table of Characteristics were 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 all species, and shall always be included in the description of the species, 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 containing the following key in the first column of the Table characteristics shall be examined as indicated below:

**QL**- Qualitative characteristic

**QN**- Quantitative characteristic

**PQ**- Pseudo-Qualitative characteristic

5. Type of assessment of characteristics indicated in column six of the Table characteristics are as follows:

**MG**: Measurement by a single observation of a group 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 plants

## Table of Characteristics

Sl. No.	Characteristic	State	Note	Example Varieties /hybrids	Type of Assessment
1. * QN	Plant height (From base to the tip of the flowering pseudobulb)	Very small (<20cm)	1	<i>D. crumenatum</i> , <i>D. candidum</i> , <i>D. parishii</i> , <i>D. heterocarpum</i> , <i>D. jenkensii</i> , <i>D. loddigesii</i> ,	MS
		Small (20-40 cm)	3	<i>D. gibsonii</i> , <i>D. acinaciforme</i> , <i>D. bulboflorum</i> , <i>D. chrysotoxum</i> , <i>D. primulinum</i> , <i>D. bensoniae</i> , <i>D. longicornu</i> , <i>D. kingianum</i> , <i>D. pendulum</i> ,	
		Medium (41-60cm)	5	<i>D. aphyllum</i> , <i>D. nobile</i> , <i>D. primulinum</i> , <i>D. thyrsoflorum</i> , <i>D. secundum</i> , <i>D. draconis</i>	
		Large (61-80cm)	7	<i>D. chrysanthum</i> , <i>D. densiflorum</i> , <i>D. aduncum</i> , <i>D. hookerianum</i> , <i>D. ruckeri</i>	
		Very large (>80cm)	9	<i>D. moschatum</i> , <i>D. devonianum</i> , <i>D. fimbriatum</i> ,	
2. (+) * QN (a)	Nature of shoot at flowering	Cane woody	1	<i>D. gibsonii</i> , <i>D. bensoniae</i> , <i>D. aphyllum</i> , <i>D. ruckeri</i> , <i>D. aduncum</i> , <i>D. cathcartii</i>	VG
		Cane cylindrical fleshy	3		
		Cane clavate fleshy	5	<i>Den. primulinum</i> , <i>Den. nobile</i> , <i>Den. parishii</i> , <i>Den. pendulum</i> , <i>Den. loddigesii</i>	
		Bulbous round	7	<i>Den. aggregatum</i> , <i>Den. chrysotoxum</i> , <i>Den. jenkensii</i>	

3. * QN (a)	Internode number (flowering shoot)	Few (<5)	1	<i>D. jenkinsii</i>	VS
		Medium (5-10)	3	<i>D. kingianum, D. pendulum, D. densiflorum, D. bensoniae, D. chrysotoxum,</i>	
		Many (>10)	5	<i>D. chrysanthum, D. aduncum, D. gibsonii, D. acinaciforme, D. aphyllum, D. primulinum, D. ruckeri, D. fimbriatum, D. moschatum, D. draconis, D. loddigesii, D. secundum,</i>	
4. QN	Internode length (longest)	Small (<3cm)	3	<i>D. acinaciforme, D. aphyllum, D. chrysanthum, D. draconis, D. pendulum, D. gibsonii, D. primulinum, D. jenkinsii, D. loddigesii, D. secundum, D. bensoniae</i>	MS
		Medium (3-6cm)	5	<i>D. aduncum, D. moschatum, D. kingianum, D. ruckeri, D. fimbriatum, D. nobile, D. chrysotoxum,</i>	
		Large (>6cm)	7	<i>D. densiflorum</i>	
5. QN	Internode diameter (widest part of shoot)	Small (<2.0cm)	3	<i>D. aduncum, D. acinaciforme, D. chrysanthum, D. kingianum, D. gibsonii, D. aphyllum, D. pendulum, D. primulinum, D. loddigesii, D. fimbriatum, D. moschatum, D. bensoniae, D. draconis, D. jenkinsii, D. secundum, D. chrysotoxum, D. nobile</i>	MS
		Medium (2.0-4.0cm)	5	<i>D. ruckeri</i>	
		Large (>4.0cm)	7		
6. QN (a)	Number of Leaves on flowering shoot)	Absent	1	<i>D. aduncum, D. bensoniae, D. moschatum, D. gibsonii</i>	VS
		Few (<3)	3	<i>D. loddigesii, D. kingianum, D. ruckeri, D. jenkinsii, D. nobile</i>	
		Medium (3-6)	5	<i>D. densiflorum, D. secundum, D. chrysotoxum,</i>	
		Many (>6)	7	<i>D. chrysanthum, D. acinaciforme, D. draconis,</i>	

7. QN (a)	Leaf length (largest leaf)	Very short (< 5.0cm)	1	<i>D. crumenatum</i> , <i>D. acinaciforme</i> , <i>D. bulboflorum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. loddigesii</i>	MS
		Short (5.0 – 10.0cm)	3	<i>D. candidum</i> , <i>D. aphyllum</i> , <i>D. aduncum</i> , <i>D. chrysotoxum</i> , <i>D. fimbriatum</i> , <i>D. gibsonii</i> , <i>D. kingianum</i> , <i>D. parishii</i> , <i>D. transparens</i> , <i>D. devonianum</i> , <i>D. longicornu</i> , <i>D. secundum</i> , <i>D. nobile</i> ,	
		Medium (10.1cm – 15.0cm)	5	<i>D. bensoniae</i> , <i>D. chrysanthum</i> , <i>D. moschatum</i> , <i>D. thrysiflorum</i> , <i>D. draconis</i> ,	
		Long (>15.0 cm)	7	<i>D. chrysanthum</i> , <i>D. densiflorum</i> , <i>D. chrysotoxum</i> ,	
8. QN (a)	Leaf width (largest leaf)	Narrow (<2.0cm)	3	<i>D. crumenatum</i> , <i>D. bensoniae</i> , <i>D. acinaciforme</i> , <i>D. bulboflorum</i> , <i>D. candidum</i> , <i>D. fimbriatum</i> , <i>D. gibsonii</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. nobile</i> , <i>D. loddigesii</i> ,	MS
		Medium (2.0cm - 4.0cm)	5	<i>D. aphyllum</i> , <i>D. aduncum</i> , <i>D. chrysotoxum</i> , <i>D. draconis</i> , <i>chrysanthum</i> , <i>D. nobile</i> , <i>D. kingianum</i> , <i>D. parishii</i> , <i>D. longicornu</i> ,	
		Broad (4.1cm - 6.0cm)	7	<i>D. moschatum</i> , <i>D. densiflorum</i> , <i>D. thrysiflorum</i> , <i>D. farmeri</i> , <i>D. chrysotoxum</i> ,	
		Very broad (>6.0cm)	9		
9. (+) PQ (a)	Leaf shape	Linear	1	<i>D. crepidatum</i> , <i>D. devonianum</i> ,	VG
		Elliptic	3	<i>D. bensoniae</i> , <i>D. crumenatum</i> , <i>D. loddigesii</i> , <i>D. bulboflorum</i> , <i>D. thrysiflorum</i> , <i>D. parishii</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. nobile</i> ,	
		Lanceolate	5	<i>D. aduncum</i> , <i>D. candidum</i> , <i>D. chrysotoxum</i> , <i>D. chrysanthum</i> , <i>D. draconis</i> , <i>D. gibsonii</i> , <i>D. ruckeri</i> , <i>D. farmeri</i> , <i>D. kingianum</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> ,	
		Ovate	7	<i>D. moschatum</i> ,	
		Flat	9	<i>D. anceps</i> , <i>D. acinaceforme</i>	

10. (+) PQ (a)	Leaf apex (Largest leaf)	Acute	1	<i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. loddigesii</i> , <i>D. moschatum</i> , <i>D. bensoniae</i> , <i>D. densiflorum</i> , <i>D. crepidatum</i> , <i>D. fimbriatum</i> , <i>D. gibsonii</i> , <i>D. ruckeri</i> , <i>D. devonianum</i> , <i>D. farmeri</i> , <i>D. thyrsoiflorum</i> , <i>D. kingianum</i> ,	VG
		Obtuse	3		
		Forked	5	<i>D. jemkensis</i> , <i>D. nobile</i> , <i>D. parishii</i> ,	
		Emarginate	7	<i>D. jenkensis</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. draconis</i> ,	
		Acuminate	9	<i>D. chrysanthum</i> ,	
11. * QN (b)	Inflorescence number/cane	Single (1)	1	<i>D. gibsonii</i> , <i>D. cumenatum</i> , <i>D. acinaciforme</i> , <i>D. draconis</i> , <i>D. moschatum</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> ,	VS
		Few (2)	3	<i>D. bensoniae</i> , <i>D. loddigesii</i> , <i>D. parishii</i> , <i>D. pierardii</i> , <i>D. densiflorum</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> ,	
		Many (>2)	5	<i>D. acinaciforme</i> , <i>D. bulboflorum</i> , <i>D. aphyllum</i> , <i>D. aduncum</i> , <i>D. chrysanthum</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. densiflorum</i> , <i>D. primulinum</i> , <i>D. kingianum</i> , <i>D. pendulum</i> , <i>D. secundum</i> ,	
12. PQ (b)	Inflorescence orientation	Erect	1	<i>D. acinaciforme</i> , <i>D. fimbriatum</i> , <i>D. kingianum</i> , <i>D. aphyllum</i> , <i>D. loddigesii</i> ,	VG
		Horizontal	3	<i>D. aphyllum</i> , <i>D. nobile</i> , <i>D. bensoniae</i> , <i>D. draconis</i> , <i>D. gibsonii</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. ruckeri</i> , <i>D. jenkensis</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. chrysanthum</i> ,	
		Arching	5	<i>D. moschatum</i> , <i>D. chrysotoxum</i> , <i>D. parishii</i>	
		Pendulus	7	<i>D. aduncum</i> , <i>D. densiflorum</i> , <i>D. gibsonii</i> , <i>D. thyrsoiflorum</i> , <i>D. crepidatum</i> , <i>D. fimbriatum</i> , <i>D. farmeri</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. ruckeri</i> , <i>D. chrysotoxum</i> ,	

13. * QN (b)	Inflorescence length	Very short (<20cm)	1	<i>D. loddigesii</i> , <i>D. gibsonii</i> , <i>D. bensoniae</i> , <i>D. crumenatum</i> , <i>D. draconis</i> , <i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. aduncum</i> , <i>D. chrysotoxum</i> , <i>D. chrysanthum</i> , <i>D. densiflorum</i> , <i>D. fimbriatum</i> , <i>D. thrysiflorum</i> , <i>D. kingianum</i> , <i>D. pendulum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. nobile</i> ,	MS
		Short (20cm-40 cm)	3	<i>D. densiflorum</i> ,	
		Medium (41cm-60 cm)	5	<i>D. aphyllum</i>	
		Long (>60cm)	7		
14. QN (b)	Peduncle length (Base of inflorescence to the 1 <sup>st</sup> Flower)	Short (<10 cm)	3	<i>D. chrysanthum</i> , <i>D. gibsonii</i> , <i>D. loddigesii</i> , <i>D. moschatum</i> , <i>D. bensoniae</i> , <i>D. cumenatum</i> , <i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. draconis</i> , <i>D. kingianum</i> , <i>D. transparens</i> , <i>D. hookerianum</i> , <i>D. devonianum</i> , <i>D. fimbriatum</i> , <i>D. jenkinsii</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> ,	MS
		Medium (10-20cm)	5	<i>D. primulinum</i> , <i>D. thrysiflorum</i> ,	
		Long (>20cm)	7		
15. * QN (b)	Flower number / inflorescence	Few (< 7)	3	<i>D. loddigesii</i> , <i>D. gibsonii</i> , <i>D. aphyllum</i> , <i>D. crumenatum</i> , <i>D. dracon is</i> , <i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. aduncum</i> , <i>D. chrysotoxum</i> , <i>D. chrysanthum.</i> , <i>D. primulinum</i> , <i>D. longicornu</i> , <i>D. pendulum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. nobile</i> ,	VS
		Medium (7-10)	5	<i>D. bulboflorum</i> , <i>D. bensoniae</i> , <i>D. kingianum</i> , <i>D. fimbriatum</i> ,	
		Many (>10)	7	<i>D. aphyllum</i> , <i>D. moschatum</i> , <i>D. thrysiflorum</i> , <i>D. densiflorum</i> , , <i>D. chrysotoxum</i> ,	

16. QN (c)	Flower length (Tip of dorsal sepal to tip of lip)	Small (<3.0cm)	3	<i>D. aduncum</i> , <i>D. crumenatum</i> , <i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. bulboflorum</i> , <i>D. ap hyllum</i> , <i>D. gibsonii</i> , <i>D. thrysiflorum</i> , <i>D. kingianum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. pierardii</i> , <i>D. gibsonii</i>	MS
		Medium (3.0-6.0cm)	5	<i>D. chrysotoxum</i> , <i>D. loddigesii</i> , <i>D. bensoniae</i> , <i>D. draconis</i> , <i>D. parishii</i> , <i>D. nobile</i> , <i>D. primulinum</i> , <i>D. fimbriatum</i> , <i>D. pendulum</i> , <i>D. secundum</i> , <i>D. densiflorum</i> , <i>D. devonianum</i> , <i>D. chrysanthemum</i> , <i>D. transparens</i>	
		Large (>6.0cm)	7	<i>D. moschatum</i> ,	
17. * QN (c)	Flower width in front view (Tip distance of two lateral petals)	Small (<3.0cm)	3	<i>D. crumenatum</i> , <i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. bulboflorum</i> , <i>D. aduncum</i> , <i>D. kingianum</i> , <i>D. jenkinsii</i> , <i>D. devonianum</i> , <i>D. parishii</i> , <i>D. pierardii</i> , <i>D. gibsonii</i>	MS
		Medium (3.0-6.0cm)	5	<i>D. loddigesii</i> , <i>D. chrysotoxum</i> , <i>D. chrysanthum</i> , <i>D. nobile</i> , <i>D. primulinum</i> , <i>D. transparens</i> , <i>D. densiflorum</i> , <i>D. bensoniae</i> , <i>D. aphyllum</i> , <i>D. pendulum</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> , <i>D. secundum</i> ,	
		Large (>6.0cm)	7	<i>D. moschatum</i> , <i>D. draconis</i> ,	
18. QL (b)	Flower fragrance	Absent	1	<i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. bulboflorum</i> , <i>D. chrysanthemum</i> , <i>D. thrysiflorum</i> , <i>D. aphyllum</i> ,	VG
		Present	9	<i>D. bensoniae</i> , <i>D. crumenatum</i> , <i>D. chrysanthum</i> , <i>D. aduncum</i> , <i>D. chrysotoxum</i> , <i>D. draconis</i> , <i>D. gibsonii</i> , <i>D. nobile</i> , <i>D. densiflorum</i> , <i>D. primulinum</i> , <i>D. loddigesii</i> , <i>D. fimbriatum</i> , <i>D. moschatum</i> , <i>D. parishii</i> , <i>D. kingianum</i> , <i>D. pendulum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> ,	



19. QN (b)	Flower longevity on the plant	Short (<15 days)	3	<i>D. acinaciforme</i> , <i>D. gibsonii</i> , <i>D. aduncum</i> , <i>D. chrysanthum</i> , <i>D. loddigesii</i> , <i>D. pendulum</i> , <i>D. crepidatum</i> , <i>D. densiflorum</i> , <i>D. devonianum</i> , <i>D. gibsonii</i> , <i>D. moschatum</i> , <i>D. kingianum</i> , <i>D. jenkinsii</i> , <i>D. chrysotoxum</i> , <i>D. loddigessi</i> , <i>D. thyrsoiflorum</i> , <i>D. bensoniae</i>	VG
		Medium (15-30 days)	5	<i>D. aphyllum</i> , <i>D. chrysanthum</i> , <i>D. fimbriatum</i> , <i>D. lituiflorum</i> , <i>D. primulinum</i> , <i>D. ruckeri</i> , <i>D. 'July'</i> ,	
		Long (> 30 days)	7	<i>D. draconis</i> , <i>D. nobile</i> ,	
20. QN (c)	Dorsal sepal length	Small (<2.0cm)	1	<i>D. gibsonii</i> , <i>D. crumenatum</i> , <i>D. candidum</i> , <i>D. bulbosiflorum</i> , <i>D. aduncum</i> , <i>D. chrysanthum</i> , <i>D. kingianum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. densiflorum</i> , <i>D. thyrsoiflorum</i> , <i>D. acinaciforme</i> , <i>D. pieradii</i>	MS
		Medium (2.0cm-4.0cm)	3	<i>D. devonianum</i> , <i>D. aphyllum</i> , <i>D. chrysanthum</i> , <i>D. chrysotoxum</i> , <i>D. draconis</i> , <i>D. loddigesii</i> , <i>D. nobile</i> , <i>D. primulinum</i> , <i>D. bensoniae</i> , <i>D. parishii</i> , <i>D. pendulum</i> , <i>D. fimbriatum</i> , <i>D. secundum</i> , <i>D. transparens</i>	
		Large (4.1cm-6.0cm)	5	<i>D. moschatum</i> ,	
		Very large (>6.0cm)	7		
21. QN (c)	Dorsal sepal width (at middle)	Narrow (<1.0cm)	3	<i>D. bensoniae</i> , <i>D. aphyllum</i> , <i>D. crumenatum</i> , <i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. bulbosiflorum</i> , <i>D. aduncum</i> , <i>D. draconis</i> , <i>D. kingianum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. devonianum</i> , <i>D. primulinum</i> , <i>D. transparens</i> , <i>D. pieradii</i> , <i>D. gibsonii</i>	MS
		Medium (1.0cm-2.0cm)	5	<i>D. chrysotoxum</i> , <i>D. chrysanthum</i> , <i>D. loddigesii</i> , <i>D. nobile</i> , <i>D. fimbriatum</i> , <i>D. parishii</i> , <i>D. moschatum</i> , <i>D. pendulum</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. thyrsoiflorum</i>	
		Broad (>2.0cm)	7		

22. (+) PQ (c)	Dorsal sepal shape	Linear	1	<i>D. bensoniae</i> , <i>D. secundum</i>	VG
		Oblong	3	<i>D. crumenatum</i> , <i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. bulboflorum</i> , <i>D. aduncum</i> , <i>D. chrysanthum</i> , <i>D. kingianum</i> , <i>D. aphyllum</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> ,	
		Elliptic	5	<i>D. bensoniae</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. densiflorum</i> , <i>D. loddigesii</i> , <i>D. primulinum</i> , <i>D. moschatum</i> , <i>D. fimbriatum</i> , <i>D. pendulum</i> , <i>D. jenkinsii</i> ,	
		Obovate	7	<i>D. gibsonii</i> , <i>D. thysiflorum</i> , <i>D. nobile</i>	
23. PQ (c)	Dorsal sepal curvature	Straight	1	<i>D. gibsonii</i> , <i>D. crumenatum</i> , <i>D. acinaciforme</i> , <i>D. aphyllum</i> , <i>D. fimbriatum</i> , <i>D. bensoniae</i> , <i>D. moschatum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. ruckeri</i> , <i>D. loddigesii</i> , <i>D. nobile</i> ,	VG
		Deflexed	3	<i>D. bulboflorum</i> , <i>D. candidum</i> , <i>D. aduncum</i> , <i>D. parishii</i> , <i>D. moschatum</i> , <i>D. kingianum</i> , <i>D. secundum</i>	
		Incurved	5	<i>D. acinaciforme</i> , <i>D. densiflorum</i> , <i>D. draconis</i> , <i>D. jenkinsii</i> , <i>D. chrysotoxum</i> , <i>D. chrysanthum</i> ,	
24. (+) PQ (c)	Dorsal sepal apex	Acute	1	<i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. chrysanthum</i> , <i>D. devonianum</i> , <i>D. gibsonii</i> , <i>D. farmeri</i> , <i>D. kingianum</i> , <i>D. pendulum</i> , <i>D. loddigesii</i> ,	VG
		Acuminate	3	<i>D. moschatum</i> , <i>D. draconis</i> , <i>D. parishii</i> ,	
		Obtuse	5	<i>D. bensoniae</i> , <i>D. gibsonii</i> , <i>D. primulinum</i> , <i>D. thysiflorum</i> , <i>D. crepidatum</i> , <i>D. aphyllum</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i>	
		Emarginate	7	<i>D. chrysotoxum</i> , <i>D. nobile</i>	

25. QN (c)	Lateral sepal length	Small (<2.0cm)	3	<i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. bulboflorum</i> , <i>D. aduncum</i> , <i>D. gibsonii</i> , <i>D. kingianum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. densiflorum</i> , <i>D. pierradii</i>	MS
		Medium (2.0cm- <4.0cm)	5	<i>D. bensoniae</i> , <i>D. loddigesii</i> , <i>D. aphyllum</i> , <i>D. chrysotoxum</i> , <i>D. draconis</i> , <i>D. nobile</i> , <i>D. primulinum</i> , <i>D. parishii</i> , <i>D. pendulum</i> , <i>D. fimbriatum</i> , <i>D. secundum</i> , <i>D. thyrsoflorum</i> , <i>D. devonianum</i> , <i>D. chrysanthum</i> , <i>D. transparens</i>	
		Large (4.0 cm- 6.0cm)	7	<i>D. moschatum</i> , <i>D. draconis</i>	
		Very large (>6.0cm)	9		
26. QN (c)	Lateral sepal width (at middle)	Narrow (<1.0cm)	3	<i>D. bensoniae</i> , <i>D. crumenatum</i> , <i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. bulboflorum</i> , <i>D. aphyllum</i> , <i>D. draconis</i> , <i>D. kingianum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. devonianum</i> , <i>D. transparens</i> , <i>D. pierradii</i>	MS
		Medium (1.0cm- 2.0cm)	5	<i>D. gibsonii</i> , <i>D. aduncum</i> , <i>D. chrysanthum</i> , <i>D. loddigesii</i> , <i>D. densiflorum</i> , <i>D. nobile</i> , <i>D. fimbriatum</i> , <i>D. parishii</i> , <i>D. kingianum</i> , <i>D. primulinum</i> , <i>D. pendulum</i> , <i>D. thyrsoflorum</i> , <i>D. chrysotoxum</i>	
		Broad (>2.0cm)	7	<i>D. moschatum</i> ,	
27. (+) PQ (c)	Lateral sepal shape	Linear	1	<i>D. secundum</i>	VG
		Oblong	3	<i>D. gibsonii</i> , <i>D. bensoniae</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. fimbriatum</i> , <i>D. nobile</i> ,	
		Elliptic	5	<i>D. chrysotoxum</i> , <i>D. densiflorum</i> , <i>D. parishii</i> , <i>D. fimbriatum</i> ,	
		Obovate	7	<i>D. crumenatum</i> , <i>D. candidum</i> , <i>D. bulboflorum</i> , <i>D. aphyllum</i> ,	
		Triangular	9	<i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. kingianum</i> , <i>D. ruckeri</i> ,	
		Others		<i>D. loddigesii</i> , <i>D. chrysanthum</i> ,	

28. PQ (c)	Lateral sepal curvature	Straight	1	<i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. chrysanthum</i> , <i>D. chrysotoxum</i> , <i>D. loddigesii</i> , <i>D. perardii</i> , <i>D. primulinum</i> ,	VG
		Deflexed	3	<i>D. gibsonii</i> , <i>D. bensoniae</i> , <i>D. moschatum</i> , <i>D. nobile</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. aphyllum</i> , <i>D. crumenatum</i> , <i>D. kingianum</i> , <i>D. pendulum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> ,	
		Incurved	5	<i>D. moschatum</i> , <i>D. draconis</i> , <i>D. chrysotoxum</i> , <i>D. chrysanthum</i> ,	
29. (+) PQ (c)	Lateral sepal apex	Acute	1	<i>D. gibsonii</i> , <i>D. acinaciforme</i> , <i>D. chrysanthum</i> , <i>D. aduncum</i> , <i>D. bensoniae</i> , <i>D. devonianum</i> , <i>D. kingianum</i> , <i>D. aphyllum</i> , <i>D. pendulum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. nobile</i> ,	VG
		Acuminate	3	<i>D. draconis</i> , <i>D. moschatum</i> , <i>D. loddigesii</i> , <i>D. parishii</i> ,	
		Obtuse	5	<i>D. gibsonii</i> , <i>D. primulinum</i> , <i>D. thyrsiflorum</i> , <i>D. crepidatum</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. chrysotoxum</i> ,	
30. QL (d)	Outside ornamentation in sepals	Absent	1	<i>D. acinaciforme</i> , <i>D. bensoniae</i> , <i>D. chrysanthum</i> , <i>D. draconis</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> ,	VG
		Uniform	2	<i>D. gibsonii</i> (orange)	
		Mixed	3	<i>D. nobile</i> (purple),	
		Spot	4	<i>D. aduncum</i> (purple),	
		Blotch	5	<i>D. pendulum</i> (purple violet), <i>D. primulinum</i> ,	
		Streak/Stripe/Netted	6	<i>D. kingianum</i> (purple violet), <i>D. aphyllum</i> , <i>D. moschatum</i> (Red purple), <i>D. loddigesii</i> (Purple)	

31. QL (d)	Inside ornamentation in sepals	Absent	1	<i>D. acinaciforme</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. draconis</i> , <i>D. gibsonii</i>	VG
		Uniform	2	<i>D. jenkinsii</i> , <i>D. secundum</i> (white), <i>D. chrysotoxum</i> (yellow), <i>D. chrysanthum</i> (yellow orange)	
		Mixed	3	<i>D. kingianum</i> , <i>D. nobile</i> (purple),	
		Spot	4	<i>D. aduncum</i> (Purple violet)	
		Blotch	5	<i>D. pendulum</i> (purple violet), <i>D. primulinum</i> (red purple)	
		Streak/Stripe/Netted	6	<i>D. aphyllum</i> , (purple), <i>D. bensoniae</i> (Red purple) <i>D. moschatum</i> (Red purple), <i>D. loddigesii</i> (Purple netted and striped)	
		Netted	7		
32. QN (c)	Petal length	Small (<2.0cm)	1	<i>D. kingianum</i> , <i>D. crumenatum</i> , <i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. bulbosiflorum</i> , <i>D. aduncum</i> , <i>D. ruckeri</i> , <i>D. jenkinsii</i> , <i>D. gibsonii</i> , <i>D. thyrsoiflorum</i> , <i>D. pierardii</i>	MS
		Medium (2.0cm-4.0cm)	3	<i>D. densiflorum</i> , <i>D. aphyllum</i> , <i>D. chrysotoxum</i> , <i>D. loddigesii</i> , <i>D. draconis</i> , <i>D. primulinum</i> , <i>D. fimbriatum</i> , <i>D. parishii</i> , <i>D. bensoniae</i> , <i>D. pendulum</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. devonianum</i> , <i>D. nobile</i> , <i>D. chrysanthum</i> , <i>D. transparens</i>	
		Large (4.1cm-6.0cm)	5	<i>D. moschatum</i> ,	
		Very large (>6.0cm)	7		
33. QN (c)	Petal width (at middle)	Very narrow (<1.0cm) (ceratobium)	1	<i>D. kingianum</i> , <i>D. crumenatum</i> , <i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. bulbosiflorum</i> , <i>D. aduncum</i> , <i>D. ruckeri</i> , <i>D. secundum</i> , <i>D. primulinum</i> , <i>D. pierardii</i> , <i>D. gibsonii</i>	MS

		Narrow (1.0cm-2.0cm) (Intermediate)	3	<i>D. gibsonii</i> , <i>D. bensoniae</i> , <i>D. loddigesii</i> , <i>D. nobile</i> , <i>D. aphyllum</i> , <i>D. draconis</i> , <i>D. chrysotoxum</i> , <i>D. chrysanthum</i> , <i>D. densiflorum</i> , <i>D. pendulum</i> , <i>D. thyrsoflorum</i> , <i>D. devonianum</i> , <i>D. parishii</i> , <i>D. transparens</i> , <i>D. jenkinsii</i>	
		Medium (2.1cm-3.0cm) (Intermediate)	5	<i>D. fimbriatum</i>	
		Broad (>3.0cm) (phalaenanthe)	7	<i>D. moschatum</i>	
34. (+) PQ (c)	Petal shape	Linear	1	<i>D. ruckeri</i> , <i>D. secundum</i>	VG
		Oblong	3	<i>D. primulinum</i> , <i>D. acinaciforme</i> ,	
		Elliptic	5	<i>D. aduncum</i> , <i>D. loddigesii</i> , <i>D. bensoniae</i> , <i>D. candidum</i> , <i>D. bulboflorum</i> , <i>D. aphyllum</i> , <i>D. gibsonii</i> , <i>D. pendulum</i> , <i>D. jenkinsii</i> , <i>D. nobile</i> ,	
		Obovate	7	<i>D. aduncum</i> , <i>D. moschatum</i> , <i>D. chrysotoxum</i> , <i>D. chrysanthum</i> , <i>D. fimbriatum</i> , <i>D. primulinum</i> , <i>D. thyrsoflorum</i> ,	
		Broadly ovate	9	<i>D. nobile</i> , <i>D. bensoniae</i> , <i>D. kingianum</i> , <i>D. parishii</i> , <i>D. draconis</i>	
		Others			
35. (+) PQ (c)	Petal curvature	Straight	1	<i>D. crumenatum</i> , <i>D. fimbriatum</i> , <i>D. bensoniae</i> , <i>D. nobile</i> , <i>D. loddigesii</i>	VG
		Deflexed	3	<i>D. acinaciforme</i> , <i>D. chrysanthum</i> , <i>D. aduncum</i> , <i>D. candidum</i> , <i>D. aphyllum</i> , <i>D. chrysotoxum</i> , <i>D. draconis</i> , <i>D. moschatum</i> , <i>D. primulinum</i> ,	
		Incurved	5	<i>D. acinaciforme</i> , <i>D. gibsonii</i> , <i>D. kingianum</i> , <i>D. pendulum</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i>	

36. (+) PQ (c)	Petal apex	Acute	1	<i>D. bensoniae</i> , <i>D. draconis</i> , <i>D. devonianum</i> , <i>D.</i> <i>gibsonii</i> , <i>D. loddigesii</i> , <i>D.</i> <i>parishii</i> , <i>D. kingianum</i> , <i>D.</i> <i>aphyllum</i> , <i>D. ruckeri</i> , <i>D.</i> ‘	VG
		Acuminate	3	<i>D. aduncum</i> ,’	
		Obtuse	5	<i>D. acinaciforme</i> , <i>D.</i> <i>bensoniae</i> , <i>D. farmeri</i> , <i>D.</i> <i>gibsonii</i> , <i>D. thyrsiflorum</i> , <i>D. crepidatum</i> , <i>D.</i> <i>pendulum</i> , <i>D. primulinum</i> , <i>D. fimbriatum</i> , <i>D.</i> <i>densiflorum</i> , , <i>D. jenkinsii</i> , <i>D. nobile</i> ,	
		Emarginate	7	<i>D. chrysanthum</i> , <i>D.</i> <i>moschatum</i> ,	
37. QL (d)	Outside petal colour (as per RHS chart)	Base	1	<i>D. kingianum</i> (white), <i>D. nobile</i> (white), <i>D.</i> <i>pendulum</i> (purple violet), <i>D. primulinum</i> (purple), <i>D.</i> <i>fimbriatum</i> (orange), <i>D.</i> <i>densiflorum</i> (yellow orange), <i>D. jenkinsii</i> (yellow), <i>D. secundum</i> (white), <i>D. chrysotoxum</i> (yellow orange), <i>D.</i> <i>loddigesii</i> (purple), <i>D.</i> <i>thyrsiflorum</i> (yellow), <i>D.</i> <i>bensoniae</i> (white), <i>D.</i> <i>moschatum</i> (yellow orange), <i>D. draconis</i> (white), <i>D. acinaciforme</i> (green yellow), <i>D. gibsonii</i> (yellow orange), <i>D.</i> <i>aduncum</i> (purple), <i>D.</i> <i>chrysanthum</i> (yellow orange),	VG
		Middle	3	<i>D. kingianum</i> (purple violet), <i>D. nobile</i> (white), <i>D. pendulum</i> (white), <i>D.</i> <i>primulinum</i> (red purple), <i>D.</i> <i>fimbriatum</i> (orange), <i>D.</i> <i>densiflorum</i> (yellow orange), <i>D. jenkinsii</i> (yellow), <i>D. secundum</i> (white), <i>D. chrysotoxum</i> (yellow orange), <i>D.</i> <i>loddigesii</i> (purple), <i>D.</i> <i>thyrsiflorum</i> (white), <i>D.</i> <i>bensoniae</i> (white), <i>D.</i> <i>moschatum</i> (red purple), <i>D.</i> <i>draconis</i> (white), <i>D.</i> <i>acinaciforme</i> (green yellow), <i>D. gibsonii</i> (yellow orange), <i>D.</i> <i>aduncum</i> (purple), <i>D.</i> <i>chrysanthum</i> (yellow orange),	

		Apex	5	<i>D. kingianum</i> (purple violet), <i>D. nobile</i> (purple), <i>D. pendulum</i> (purple violet), <i>D. primulinum</i> ( red purple), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. jenkinsii</i> (yellow), <i>D. secundum</i> (white), <i>D. chrysotoxum</i> (yellow orange), <i>D. loddigesii</i> (purple), <i>D. thyrsoiflorum</i> (white), <i>D. bensoniae</i> (white), <i>D. moschatum</i> (red purple), <i>D. draconis</i> (white), <i>D. acinaciforme</i> (green yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (purple), <i>D. chrysanthum</i> (yellow orange),	
38. QL (d)	Inside petal colour	Base		<i>D. kingianum</i> (white), <i>D. nobile</i> (white), <i>D. pendulum</i> (purple violet), <i>D. primulinum</i> ( purple), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow), <i>D. jenkinsii</i> (yellow), <i>D. secundum</i> (white), <i>D. chrysotoxum</i> (yellow orange), <i>D. loddigesii</i> (purple), <i>D. thyrsoiflorum</i> (yellow), <i>D. bensoniae</i> (white), <i>D. moschatum</i> (yellow orange), <i>D. draconis</i> (white), <i>D. acinaciforme</i> (green yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (purple), <i>D. chrysanthum</i> (yellow orange),	VG
		Middle		<i>D. kingianum</i> (purple violet), <i>D. nobile</i> (white), <i>D. pendulum</i> (white), <i>D. primulinum</i> ( red purple), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. jenkinsii</i> (yellow), <i>D. secundum</i> (white), <i>D. chrysotoxum</i> (yellow orange), <i>D. loddigesii</i> (purple), <i>D. thyrsoiflorum</i> (white), <i>D. bensoniae</i> (white), <i>D. moschatum</i> (red purple), <i>D. draconis</i> (white), <i>D. acinaciforme</i> (green yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (purple), <i>D. chrysanthum</i> (yellow orange)	



		Apex		<i>D. kingianum</i> (purple violet), <i>Dendrobium nobile</i> (purple), <i>D. pendulum</i> (purple violet), <i>D. primulinum</i> (red purple), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. jenkinsii</i> (yellow), <i>D. secundum</i> (white), <i>D. chrysotoxum</i> (yellow orange), <i>D. loddigesii</i> (purple), <i>D. thyrsoiflorum</i> (white), <i>D. bensoniae</i> (white), <i>D. moschatum</i> (red purple), <i>D. draconis</i> (white), <i>D. acinaciforme</i> (green yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (purple), <i>D. chrysanthum</i> (yellow orange)	
39. QL (d)	Petal ornamentation	Uniform	1	<i>D. acinaciforme</i> , <i>D. fimbriatum</i> , <i>D. draconis</i> , <i>D. densiflorum</i> , <i>D. chrysanthum</i> , <i>D. gibsonii</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> ,	VG
		Mixed	3	<i>D. aphyllum</i> , <i>D. moschatum</i> , <i>D. nobile</i>	
		Spotted	5	<i>D. aduncum</i>	
		Blotch	7	<i>D. kingianum</i> , <i>D. pendulum</i> (purple violet), <i>D. primulinum</i>	
		Streak/stripe/shade	9	<i>D. bensoniae</i> , <i>D. loddigesii</i> ,	
40. QN (c)	Labellum (lip) length (Spread out)	Small (< 2cm)	3	<i>D. acinaciforme</i> , <i>D. chrysanthum</i> , <i>D. aduncum</i> , <i>D. kingianum</i> , <i>D. ruckeri</i> , <i>D. candidum</i>	MS
		Medium (2cm-4cm)	5	<i>D. aphyllum</i> , <i>D. bensoniae</i> , <i>D. draconis</i> , <i>D. gibsonii</i> , <i>D. primulinum</i> , <i>D. loddigesii</i> , <i>D. moschatum</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. thyrsoiflorum</i> , <i>D. devonianum</i> , <i>D. parishii</i> , <i>D. transparens</i> , <i>D. pierardii</i> , <i>D. pendulum</i>	
		Large (>4cm)	7		

41. * QN (c)	Lip width	Narrow (<2cm)	3	<i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. draconis</i> , <i>D. kingianum</i> , <i>D. ruckeri</i> , <i>D. thyrsiflorum</i> , <i>D. parishii</i> , <i>D. bensoniae</i> , <i>D. nobile</i> , <i>D. chrysanthum</i> , <i>D. candidum</i> , <i>D. transparens</i> , <i>D. loddigesii</i> , <i>D. pierardii</i>	MS
		Medium (2cm-4cm)	5	<i>D. aphyllum</i> , <i>D. gibsonii</i> , <i>D. moschatum</i> , <i>D. primulinum</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkensii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. devonianum</i> , <i>D. pendulum</i>	
		Broad (>4cm)	7		
42. (+) PQ (c)	Lip shape (Spread out)	Ovate	1	<i>D. aduncum</i> , <i>D. nobile</i>	VG
		Oblanceolate	3	<i>D. aphyllum</i> , <i>D. bensoniae</i>	
		Sub-orbicular	5	<i>D. gibsonii</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. loddigesii</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkensii</i>	
		Obovate	7	<i>D. secundum</i>	
		Others	9	<i>D. acinaciforme</i> , <i>D. chrysanthum</i> , <i>D. moschatum</i> , <i>D. chrysotoxum</i>	
43. (+) PQ (c)	Lip apex	Acute	1	<i>D. draconis</i>	VG
		Obtuse	3	<i>D. acinaciforme</i> , <i>D. moschatum</i> , <i>D. chrysanthum</i> , <i>D. fimbriatum</i> , <i>D. gibsonii</i>	
		Emarginate	5	<i>D. kingianum</i> , <i>D. aphyllum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. loddigesii</i> , <i>D. ruckeri</i> , <i>D. densiflorum</i> , <i>D. jenkensii</i> , <i>D. chrysotoxum</i>	
		Truncate	7		
		Acuminate	9	<i>D. aduncum</i>	
44. PQ (c)	Lip curvature	Straight	1	<i>D. aphyllum</i> , <i>D. bensoniae</i> , <i>D. chrysanthum</i> , <i>D. draconis</i> , <i>D. gibsonii</i> , <i>D. pendulum</i> , <i>D. loddigesii</i> , <i>D. moschatum</i> , <i>D. primulinum</i> , <i>D. ruckeri</i> , <i>D. densiflorum</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i>	VG
		Reflexed with straight apex	3	<i>D. acinaciforme</i> , <i>D. fimbriatum</i> , <i>D. jenkensii</i>	
		Reflexed with curved apex	5	<i>D. kingianum</i>	
		Incurved with straight apex	7	<i>D. aduncum</i>	

45. * PQ (c)	Lip lobation	Absent	1	<i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. bensoniae</i> , <i>D. chrysanthum</i> , <i>D. gibsonii</i> , <i>D. moschatum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. loddigesii</i>	VG
		Present	9	<i>D. kingianum</i> , <i>D. aphyllum</i> , <i>D. draconis</i> , <i>D. ruckeri</i> , <i>D. nobile</i> ,	
46. PQ (c)	Lip surface texture	Glabrous (Smooth)	1	<i>D. acinaciforme</i> , <i>D. kingianum</i> , <i>D. ruckeri</i> ,	VS
		Pubescence (Hairy)	9	<i>D. aduncum</i> , <i>D. aphyllum</i> , <i>D. bensoniae</i> , <i>D. chrysanthum</i> , <i>D. gibsonii</i> , <i>D. moschatum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. loddigesii</i>	
47. * QL (d)	Inside lip colour (as per RHS chart)	Base	1	<i>D. bensoniae</i> (yellow green), <i>D. kingianum</i> (yellow green), <i>D. aphyllum</i> (Purple), <i>D. nobile</i> (Purple), <i>D. pendulum</i> (white), <i>D. secundum</i> (white), <i>D. primulinum</i> (red purple), <i>D. ruckeri</i> (yellow), <i>D. jenkinsii</i> (yellow), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. chrysotoxum</i> (yellow orange), <i>D. moschatum</i> , (yellow orange), <i>D. draconis</i> (Red), <i>D. acinaciforme</i> (green yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (white), <i>D. loddigesii</i> (yellow), <i>D. chrysanthum</i> (Yellow)	VG

		Middle	3	<p><i>D. kingianum</i> (Violet blue),  <i>D. primulinum</i> D.  <i>fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. chrysotoxum</i> (yellow orange), <i>D. moschatum</i> (yellow orange), <i>D. secundum</i> (white), <i>D. bensoniae</i> (white), <i>D. jenkinsii</i> (yellow), <i>D. nobile</i> (green white), <i>D. draconis</i> (white), <i>D. acinaciforme</i> (red purple), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (White), <i>D. loddigesii</i> (Yellow orange), <i>D. chrysanthum</i> (Yellow orange)</p>	
		Apex	5	<p><i>D. kingianum</i> (Violet), <i>D. aphyllum</i>(Green yellow), <i>D. primulinum</i>(Green yellow), <i>D. pendulum</i>(purple violet), <i>D. nobile</i>(purple violet) <i>D. ruckeri</i>, <i>D. jenkinsii</i> (yellow), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. chrysotoxum</i> (yellow orange), <i>D. moschatum</i>, (yellow orange), <i>D. secundum</i>(white), <i>D. bensoniae</i> (white), <i>D. draconis</i> (White), <i>D. acinaciforme</i>(yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (purple violet), <i>D. loddigesii</i> (purple), <i>D. chrysanthum</i> (Yellow orange)</p>	

48. QL (d)	Outside lip colour (as per RHS chart)	Base	1	<i>D. kingianum</i> ( <i>D. bensoniae</i> (Yellow green), <i>D. aphyllum</i> (Yellow green), <i>D. pendulum</i> (yellow orange), <i>D. chrysotoxum</i> (yellow orange), <i>D. primulinum</i> (red purple), <i>D. ruckeri</i> (yellow), <i>D. jenkinsii</i> (yellow), <i>D. moschatum</i> (yellow), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. secundum</i> (white), <i>D. nobile</i> (green), <i>D. draconis</i> (Orange white), <i>D. acinaciforme</i> (green yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (white), <i>D. loddigesii</i> (yellow), <i>D. chrysanthum</i> (yellow)	VG
		Middle	3	<i>D. kingianum</i> (Violet blue), <i>D. pendulum</i> (yellow), <i>D. jenkinsii</i> (yellow), <i>D. primulinum</i> (green yellow), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. chrysotoxum</i> (yellow orange) <i>D. moschatum</i> (yellow orange), <i>D. bensoniae</i> (white), <i>D. nobile</i> (green white), <i>D. draconis</i> (White), <i>D. acinaciforme</i> (red purple), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (white), <i>D. loddigesii</i> (purple & yellow orange), <i>D. chrysanthum</i> (yellow orange)	
		Apex	5	<i>D. kingianum</i> (Violet), <i>D. aphyllum</i> (Green yellow), <i>D. pendulum</i> (purple violet), <i>D. nobile</i> (purple violet), <i>D. primulinum</i> (green yellow), <i>D. ruckeri</i> , <i>D. jenkinsii</i> (yellow), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. chrysotoxum</i> (yellow orange), <i>D. moschatum</i> (yellow orange), <i>D. secundum</i> (white), <i>D. bensoniae</i> (white), <i>D. draconis</i> (White), <i>D. acinaciforme</i> (green yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (purple violet), <i>D. loddigesii</i> (purple), <i>D. chrysanthum</i> (Yellow orange)	

49. QL (d)	Lip ornamentation colour (Colour as per RHS chart)	Inside	1	<i>D. bensoniae</i> (Purple blotch), <i>D. kingianum</i> , <i>D. 'D. nobile D. aphyllum</i> (purple striped), <i>D. primulinum</i> (red purple stripe), <i>D. ruckeri</i> (grey purple), <i>D. fimbriatum</i> (red stripe/blotch), <i>D. jenkinsii</i> (yellow orange), <i>D. secundum</i> (grey purple stripe), <i>D. chrysotoxum</i> (red striped), <i>D. moschatum</i> (Red purple blotch), <i>D. draconis</i> (red striped and netted), <i>D. acinaciforme</i> (red purple spotted), <i>D. gibsonii</i> (grey purple blotch), <i>D. aduncum</i> (Purple violet spotted), <i>D. loddigesii</i> (yellow orange blotch), <i>D. chrys anthum</i> (red purple blotch)	VG
		Outside	3	<i>D. aphyllum</i> (purple striped), <i>D. bensoniae</i> (Purple blotch) <i>D. primulinum</i> , <i>D. nobile</i> (red purple blotch), <i>D. ruckeri</i> (grey purple), <i>D. moschatum</i> (Red purple stripes), <i>D. acinaciforme</i> (red purple blotched), <i>D. aduncum</i> (purple violet shaded), <i>D. loddigesii</i> (yellow orange)	
50. (+) PQ (c)	Lip margin	Entire	1	<i>D. gibsonii</i> , <i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. bensoniae</i> , <i>D. chrysanthum</i> , <i>D. loddigesii</i> , <i>D. moschatum</i> , <i>D. kingianum</i> , <i>D. aphyllum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i>	VG
		Wavy	3	<i>D. aduncum</i> , <i>D. loddigesii</i> , <i>D. bensoniae</i> , <i>D. moschatum</i> , <i>D. kingianum</i> , <i>D. aphyllum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. fimbriatum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. acinaciforme</i> , <i>D. densiflorum</i> , <i>D. gibsonii</i> , <i>D. chrysanthum</i> , <i>D. ruckeri</i> , <i>D. nobile</i> , <i>D. draconis</i> ,	

		Fimbriate	5	<i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. bensoniae</i> , <i>D. kingianum</i> , <i>D. pendulum</i> , <i>D. ruckeri</i> , <i>D. jenkensii</i> , <i>D. nobile</i> , <i>D. aphyllum</i> , <i>D. draconis</i> , <i>D. primulinum</i> , <i>D. secundum</i> , <i>D. moschatum</i> , <i>D. fimbriatum</i> , <i>D. chrysanthum</i> , <i>D. densiflorum</i> , <i>D. loddigesii</i> , <i>D. chrysotoxum</i> , <i>D. gibsonii</i>	
51. PQ (c)	Lip callus	Absent	1	<i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. bensoniae</i> , <i>D. pendulum</i> , <i>D. fimbriatum</i> , <i>D. jenkensii</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. gibsonii</i> , <i>D. chrysanthum</i> ,	VG
		Present	9	<i>D. kingianum</i> (3), <i>D. aphyllum</i> (3), <i>D. primulinum</i> , <i>D. ruckeri</i> , <i>D. secundum</i> (3), <i>D. moschatum</i> (2), <i>D. draconis</i> (5), <i>D. loddigesii</i> (3)	
52. PQ (c)	Lip pubescence	Absent	1	<i>D. acinaciforme</i> , <i>D. kingianum</i> , <i>D. densiflorum</i> , <i>D. draconis</i> ,	VG
		Present	9	<i>D. aphyllum</i> , <i>D. jenkensii</i> , <i>D. aduncum</i> , <i>D. bensoniae</i> , <i>D. primulinum</i> , <i>D. moschatum</i> , <i>D. ruckeri</i> , <i>D. secundum</i> , <i>D. gibsonii</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. loddigesii</i> , <i>D. chrysanthum</i> ,	
53. QN (c)	Column length	Short (<1.5cm)	3	<i>D. acinaciforme</i> , <i>D. chrysanthum</i> , <i>D. aduncum</i> , <i>D. aphyllum</i> , <i>D. bensoniae</i> , <i>D. pendulum</i> , <i>D. gibsonii</i> , <i>D. primulinum</i> , <i>D. draconis</i> , <i>D. moschatum</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> , <i>D. loddigesii</i> , <i>D. densiflorum</i> , <i>D. jenkensii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. thyrsiflorum</i> , <i>D. devonianum</i>	MS
		Medium (1.5cm-2.0cm)	5		
		Long (2.1cm-2.5cm)	7		
		Very long (>2.5cm)	9	<i>D. kingianum</i> ,	

54. QN (c)	Column width across stigma	Narrow (<0.5cm)	3	<i>D. chrysanthum</i> , <i>D. acinaciforme</i> , <i>D. bensoniae</i> , <i>D. draconis</i> , <i>D. kingianum</i> , <i>D. gibsonii</i> , <i>D. aphyllum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. loddigesii</i>	MS
		Medium (0.5cm-1.0cm)	5	<i>D. aduncum</i> , <i>D. moschatum</i>	
		Broad (>1.0cm).	7		
55. QL (e)	Inside Column Colour (as per RHS chart)	Base	1	<i>D. gibsonii</i> (yellow orange), <i>D. kingianum</i> (white), <i>D. ruckeri</i> (white), <i>D. secundum</i> (white), <i>D. aphyllum</i> (Purple), <i>D. pendulum</i> (yellow), <i>D. fimbriatum</i> (yellow), <i>D. moschatum</i> (yellow), <i>D. primulinum</i> (red purple), <i>D. densiflorum</i> (yellow orange), <i>D. chrysotoxum</i> (yellow orange), <i>D. jenkinsii</i> , <i>D. nobile</i> (green), <i>D. bensoniae</i> (Purple violet), <i>D. draconis</i> (Red), <i>D. acinaciforme</i> (yellow), <i>D. aduncum</i> (white), <i>D. loddigesii</i> (purple), <i>D. chrysanthum</i> (Yellow)	VG
		Middle	3	<i>D. kingianum</i> (white), <i>D. ruckeri</i> (white), <i>D. secundum</i> (white), <i>D. aphyllum</i> (purple), <i>D. pendulum</i> (purple), <i>D. bensoniae</i> (purple violet), <i>D. primulinum</i> (red purple), <i>D. fimbriatum</i> (red purple), <i>D. chrysotoxum</i> (red), <i>D. moschatum</i> , (red purple), <i>D. densiflorum</i> (yellow orange), <i>D. jenkinsii</i> (yellow green), <i>D. nobile</i> (purple violet), <i>D. draconis</i> (Yellow green), <i>D. acinaciforme</i> (yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (white), <i>D. loddigesii</i> (purple), <i>D. chrysanthum</i> (Yellow)	



		Apex	5	<i>D. kingianum</i> (white), <i>D. D. secundum</i> (white), <i>D. bensoniae</i> (white), <i>D. aphyllum</i> (white), <i>D. ruckeri</i> (white), <i>D. pendulum</i> (yellow), <i>D. fimbriatum</i> (yellow) <i>D. moschatum</i> (yellow), <i>D. primulinum</i> (purple), <i>D. densiflorum</i> (yellow orange), <i>D. chrysotoxum</i> , (yellow orange), <i>D. jenkensii</i> (green yellow), <i>D. draconis</i> (Yellow green), <i>D. acinaciforme</i> (yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (white), <i>D. loddigesii</i> (white), <i>D. chrysanthum</i> (Yellow)	
56. QL (e)	Outside column colour	Base	1	<i>D. pendulum</i> (white), <i>D. kingianum</i> (white), <i>D. ruckeri</i> (white), <i>D. secundum</i> (white), <i>D. aphyllum</i> (white), <i>D. primulinum</i> (white), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. chrysotoxum</i> , (yellow orange), <i>D. bensoniae</i> (yellow green), <i>D. jenkensii</i> (yellow), <i>D. nobile</i> (green), <i>D. moschatum</i> , (Green yellow), <i>D. draconis</i> (Yellow green), <i>D. acinaciforme</i> (yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (white), <i>D. loddigesii</i> (green white), <i>D. chrysanthum</i> (Yellow)	VG
		Middle	2	<i>D. pendulum</i> (white), <i>D. secundum</i> (white), <i>D. kingianum</i> (white), <i>D. bensoniae</i> (white), <i>D. aphyllum</i> (white), <i>D. ruckeri</i> (white), <i>D. primulinum</i> (red purple), <i>D. moschatum</i> (red purple), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. chrysotoxum</i> , (yellow orange), <i>D. jenkensii</i> (yellow), <i>D. nobile</i> (green), <i>D. draconis</i> (Yellow green), <i>D. acinaciforme</i> (yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (white), <i>D. loddigesii</i> (purple), <i>D. chrysanthum</i> (Yellow)	

		Apex	3	<i>D. pendulum</i> (white), <i>D. aphyllum</i> (white), <i>D. ruckeri</i> , <i>D. bensoniae</i> (white), <i>D. kingianum</i> (white), <i>D. secundum</i> (white), <i>D. primulinum</i> (white), <i>D. fimbriatum</i> (orange), <i>D. densiflorum</i> (yellow orange), <i>D. chrysotoxum</i> , (yellow orange), <i>D. jenkinsii</i> (yellow), <i>D. nobile</i> (green), <i>D. moschatum</i> (Red purple), <i>D. draconis</i> (Yellow green), <i>D. acinaciforme</i> (Yellow), <i>D. gibsonii</i> (yellow orange), <i>D. aduncum</i> (white), <i>D. loddigesii</i> (green white), <i>D. chrysanthum</i> (Yellow)	
57. QL (e)	Inside column ornamentation (colour as per RHS chart)	Uniform	1	<i>D. acinaciforme</i> , <i>D. kingianum</i> , <i>D. densiflorum</i> , <i>D. draconis</i> , <i>D. secundum</i> ,	VG
		Spotted	3	<i>D. ruckeri</i> , <i>D. aduncum</i> ,	
		Blotch	5		
		Streaked/Striped/shaded	7	<i>D. aphyllum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. jenkinsii</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. bensoniae</i> , <i>D. moschatum</i> , <i>D. gibsonii</i> (red stripe), <i>D. loddigesii</i> , <i>D. chrysanthum</i> (red purple)	
58. QL (e)	Outside column ornamentation	Absent	1	<i>D. acinaciforme</i> , <i>D. kingianum</i> , <i>D. aphyllum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. gibsonii</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> , <i>D. bensoniae</i> , <i>D. draconis</i> , <i>D. loddigesii</i> , <i>D. chrysanthum</i>	VG
		Spotted	3	<i>D. aduncum</i> ,	
		Blotch	5		
		Streaked/striped/shaded	7		
59. QL	Anther cap colour (as per RHS chart)	White	1	<i>D. ruckeri</i> , <i>D. kingianum</i> , <i>D. bensoniae</i> , <i>D. aphyllum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. secundum</i> , <i>D. draconis</i> (White), <i>D. acinaciforme</i> (white),	VG
		Yellow	3	<i>D. densiflorum</i> , <i>D. chrysotoxum</i> , <i>D. jenkinsii</i> , <i>D. gibsonii</i> , <i>D. loddigesii</i> , <i>D. chrysanthum</i> ,	

		Purple	5	<i>D. fimbriatum</i> , , <i>D. nobile</i> , <i>D. moschatum</i> , <i>D. aduncum</i>	
60. QN	Pedicel length with ovary	Short (<2.0cm)	3	<i>D. crumenatum</i> , <i>D. acinaciforme</i> , <i>D. candidum</i> , <i>D. bulbosiflorum</i> , <i>D. aduncum</i> , <i>D. kingianum</i> , <i>D. ruckeri</i> , <i>D. secundum</i>	MS
		Medium (2.0cm-3.0cm)	5	<i>D. aphyllum</i> , <i>D. densiflorum</i> , <i>D. gibsonii</i> , <i>D. primulinum</i> , <i>D. bensoniae</i> , <i>D. densiflorum</i> ,	
		Long (3.1cm-4.0cm)	7	<i>D. bensoniae</i> , <i>D. loddigesii</i> , <i>D. chrysanthum</i> , <i>D. fimbriatum</i> , <i>D. parishii</i> , <i>D. pendulum</i> , <i>chrysotoxum</i> ,	
		Very long (>4.0cm)	9	<i>D. chrysotoxum</i> , <i>D. chrysanthum</i> , <i>D. draconis</i> , <i>D. nobile</i> , <i>D. moschatum</i> , , <i>D. jenkinsii</i> , <i>D. nobile</i> ,	
61. QN (c)	Spur length or Mentum	Absent	1		MS
		Short (< 1.5cm)	3	<i>D. acinaciforme</i> , <i>D. aduncum</i> , <i>D. chrysanthum</i> , <i>D. moschatum</i> , <i>D. kingianum</i> , <i>D. aphyllum</i> , <i>D. bensoniae</i> , <i>D. gibsonii</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. ruckeri</i> , <i>D. fimbriatum</i> , <i>D. densiflorum</i> , <i>D. loddigesii</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> , <i>D. nobile</i> ,	
		Medium (1.5cm-2.0cm)	5	<i>D. draconis</i> ,	
		Long (>2.0cm)	7		
62. * PQ	Flowering season	Winter Season (Nov-Jan)	1		VG
		Spring Season (Feb-April)	3	<i>D. nobile</i> , <i>D. kingianum</i> , <i>D. aphyllum</i> , <i>D. pendulum</i> , <i>D. primulinum</i> , <i>D. ruckeri</i> , <i>D. densiflorum</i> , <i>D. jenkinsii</i> , <i>D. secundum</i> , <i>D. chrysotoxum</i> ,	
		Summer Season (May-July)	5	<i>D. parishii</i> , <i>D. pieradii</i> , <i>D. thyrsoiflorum</i> , <i>D. fimbriatum</i> , <i>D. primulinum</i> , <i>D. loddigesii</i> , <i>D. densiflorum</i> , <i>D. nobile</i> ,	
		Rainy season (Aug-October)	7	<i>D. bensoniae</i> , <i>D. gibsonii</i> , <i>D. draconis</i> , <i>D. aduncum</i> , <i>D. chrysanthum</i> , <i>D. chrysotoxum</i> , <i>D. candidum</i> , <i>D. moschatum</i> , <i>D. acinaciforme</i> ,	

# Explanations on the Table of Characteristics

## 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 on the leaf, pseudobulb and internode length should be made on the flowering pseudobulb.

(b) Observations on the inflorescence and the flower should be made at the time

when 50% of the flowers on the inflorescence have opened, on the most recently fully opened flower on the inflorescence before the color starts to fade.

(c) Observations on the length and width of the flower and parts of the flower should be made on the extended organ.

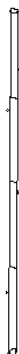
(d) Observations on the color of the sepal, the petal and the lip should be made on

the outer side and inner side at apex, mid and base portion.

(e) Observations on the colour of column should be made on the outer side and inner side at apex, mid and basal region.

# Explanations for individual characteristics

## Characteristics 2: Nature of stem



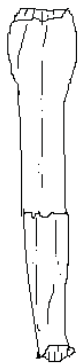
1

Cane  
woody  
fleshy



3

cane  
cylindric  
fleshy



5

cane  
clavate



7

bulbous  
round

## Characteristics 9: Leaf shape



1

Linear



3

Elliptic



5

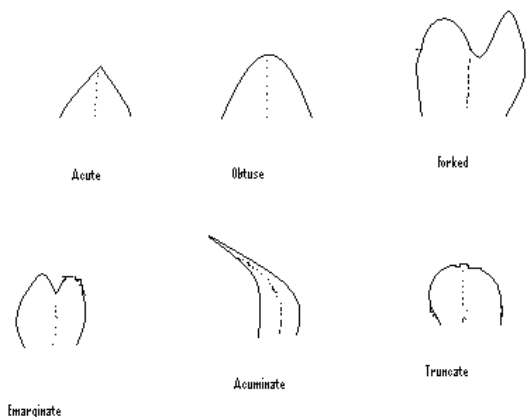
Lanceolate



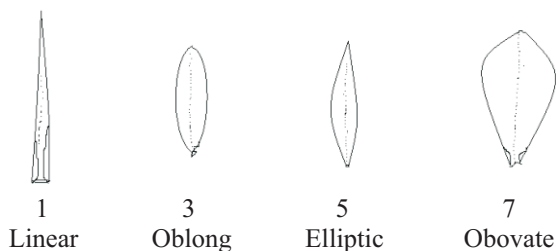
7

Ovate

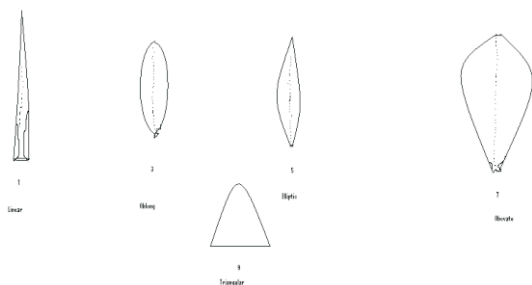
Characteristics 10, 24, 29, 36 & 43: Apexes for leaf, dorsal sepal, lateral sepal, petal & lip



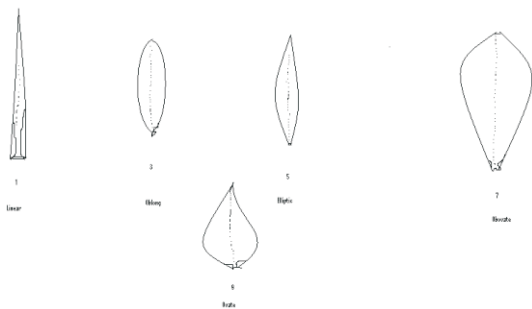
Characteristics 22: Dorsal sepal shape



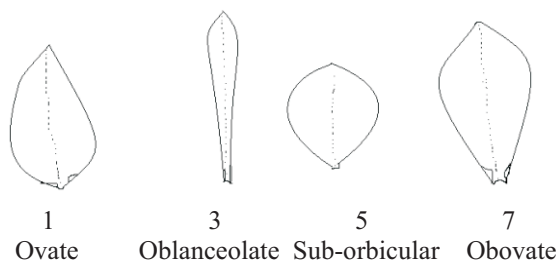
Characteristics 27: Lateral sepal shape



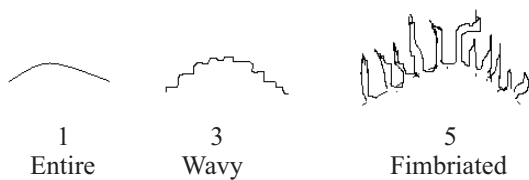
## Characteristics 34: Petal shape



## Characteristics 42 : Lip shape



## Characteristics 50: Lip margin

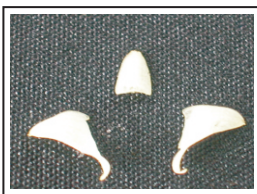


## Digitalization:

### *Dendrobium acinaciforme*



General appearance of flower



Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 0.6 x 1.0 cm

Sepal size & color : Dorsal sepal: 3.5 x 0.2 cm; Lateral sepals: 0.5 x 0.4 cm; Inside: green-yellow (RHS- 1D); Outside: green-yellow (RHS-1C).

Petal size & color : 0.3 X 0.15 cm; green-yellow (RHS 1D).

Lip size & color : 0.8 X 0.7 cm; Inside; yellow-green (RHS- 1D)at base, yellow (RHS-2D)at apex & margins yellow (RHS- 2D) at apical part & red-purple (RHS- 59A) at basal part; Outside: green-yellow (RHS-1C) at base, green-yellow (RHS- 1D) at apex & margins yellow(RHS-2D) at apical part & red-purple (RHS-59A) at basal part.

Lip callus : absent.

Column size & color : 0.1 x 0.15 cm. Yellow (RHS- 2D).

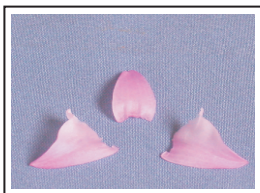
Mentum/spur length : 0.6 cm.



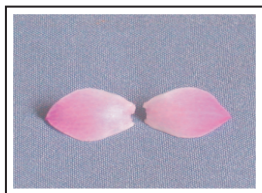
## *Dendrobium aduncum*



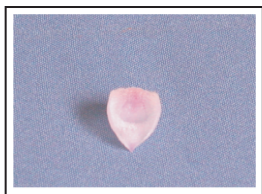
General appearance of flower



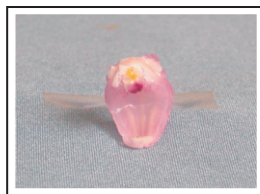
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 2.2 x 2.5 cm.

Sepal size & color : Dorsal sepal: 1.5 x 0.9 cm; Lateral sepals: 1.6 x 1.6 cm; Inside: Purple (RHS- 75A) at apex & (RHS 75B) at base & margins; Outside: Red purple (RHS – N74C) at base & apex and purple (RHS- 75A) at margins.

Petal size & color : 1.4 x 0.8 cm; Inside: Purple (RHS- 75C) at base (RHS- 75A) at apex and (RHS- 75D) at margins; Outside: Purple (RHS- 75A) at base & apex and (RHS- 75C) at margins.

Lip size & color : 1.7 x 1.1 cm; White (RHS- N155B) at base & margins and purple violet (RHS- N81D) at apex.

Lip callus : Absent.

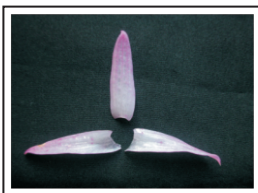
Column size & color : 0.5 x 0.6 cm; white ((RHS- N155B) with Purple violet (RHS- N 80A) margins at apex.

Mentum/spur length : 1.4 cm.

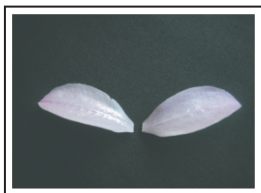
## *Dendrobium aphyllum*



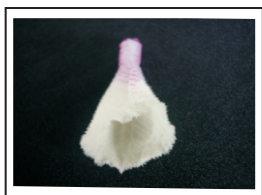
General appearance  
of flower



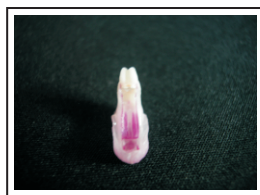
Color & shape of dorsal  
& lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 3.5 x 4.5 cm

Sepal size & color : Dorsal sepal: 2.5 x 0.8 cm; Lateral sepals: 2.2 x 0.8 cm; Inside: purple (RHS- 75C at base, N 78C at apex & N 78D at margin); Outside: purple (RHS- N 78C at base & apex and N 78D at margin). Purple (RHS- N 78C) stripes on both sides.

Petal size & color : 2.6 x 1.2 cm; white at base & margin and purple (RHS- 75A) at apex.

Lip size & color : 2.5 x 2.6 cm; Inside: purple (N 78A) at base, green-yellow (RHS- 1C) at apex, margin of apical lobe green-yellow (RHS- 1C) and lateral lobes transparent; Outside: white at base, apex & margins same as inside. Purple (N 78A) stripes on both sides.

Lip callus : present (3)

Column size & color : 0.7 x 0.2 cm; Inside: purple (RHS N 78A)

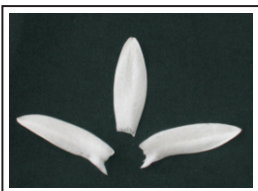
at base & margin and white at apex; Outside: white (RHS-155A) at base & apex and white (RHS- 155D) at margins.

Mentum/spur length : 0.5 cm.

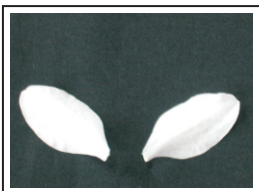
### *Dendrobium bensoniae*



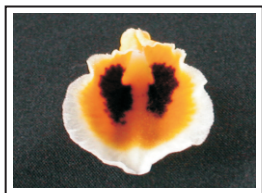
General appearance of flower



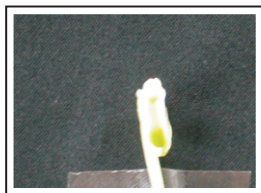
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 5.0 x 6.0 cm.

Sepal size & color : Dorsal sepal: 3.0 x 0.9 cm; Lateral sepals: 2.9 x 0.9cm; white.

Petal size & color : 3.0 cm X 1.9 cm, white.

Lip size & color : 3.2 cm X 3.4 cm, Inside: yellow-green (RHS-145B) at base, white (RHS-155A) at apex & margins; Outside: yellow-green (RHS-145B) at base & white (RHS-155A) at apex & margins. Presence of purple (RHS- N79A) blotch towards base.

Lip callus : absent.

Column size & color : 0.5 x 0.3 cm. Inside: purple-violet (RHS- N 80 A) at base & margins, apex white; Outside: yellow- green (RHS- 145C) at base, white at apex and margins.

Mentum/spur length : 0.7 cm.

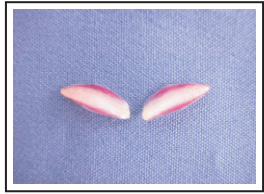
### *Dendrobium praecinctum*



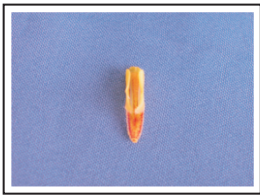
General appearance of flower



Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 1.2 x 1.9 cm

Sepal size & color : Dorsal sepal: 1.0 x 0.4 cm; Lateral sepals: 1.0 x 0.5 cm; yellow-green (RHS- 150C) at base, yellow-green (RHS- 151D) at apex & red-purple (RHS - 59A) at margins.

Petal size & color : 1.0 x 0.4 cm; yellow (RHS-2C) at base, yellow-orange (RHS 16C) at apex & red purple (RHS 59A) at margins.

Lip size & color : 1.1 x 0.9 cm; Inside: greyed-orange (RHS- 167A) at base; yellow-green (RHS- 151A) at apex & yellow-green (RHS- 151A) at margin of lateral lobe and red purple

(RHS- 59A) at margin of apical lobe; Outside: yellow-green (RHS-153D) at base; greyed-orange (RHS- 167A) at apex & yellow-green (RHS-153A) at margin of lateral lobe & red purple (RHS- 59A) at margin of apical lobe.

Lip callus : Present (2)

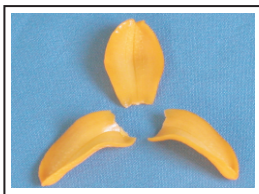
Column size & color : 0.3 x 0.15 cm; Inside: green-yellow (RHS- 1D) at base & apex and red purple (RHS- 59A) at margins; Outside: green-yellow (RHS- 1C & 1D) at base & apex respectively and red-purple (RHS- 59A) at margins.

Mentum/spur length : 0.5 cm.

### *Dendrobium chrysanthum*



General appearance of flower



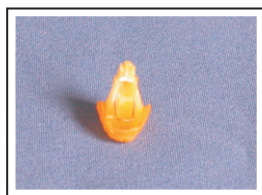
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 2.0 x 3.2 cm.

Sepal size & color : Dorsal sepal: 1.7 x 0.9 cm; Lateral sepals: 1.7 x 0.9 cm; Inside: Yellow-orange (RHS- 21B): Outside: Yellow-orange (RHS- 21A)

Petal size & color : 1.8 x 1.3 cm; Yellow-orange (RHS- 21B).

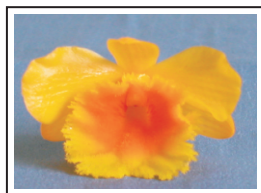
Lip size & color : 1.8 X 2.2 cm; Yellow (RHS- 13B) at base and yellow-orange (RHS- 21A) at apex & margins.

Lip callus : absent.

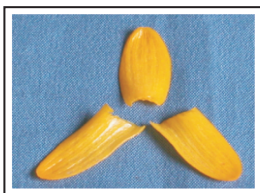
Column size & color : 0.6 x 0.35 cm; yellow (RHS- 13B) with red purple (RHS- 59C) stripe at 2 sides of inner surface.

Mentum/spur length : 0.5 cm.

### *Dendrobium chrysotoxum*



General appearance of flower



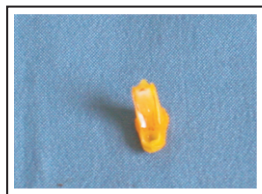
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 2.7 X 4.2cm

Sepal size & color : Dorsal sepal: 2.0X.9cm; Lateral sepals: 2.0 X 0.8cm; yellow orange (RHS-14B) at base & margins & (RHS-14A) at apex.

Petal size & color : 2.2 X 1.5 cm, yellow-orange (RHS-14B).

Lip size & color : 2.4 X 2.7cm, yellow-orange (RHS-14B) at

base & margins and (RHS-14A) at apex.

Lip callus : absent.

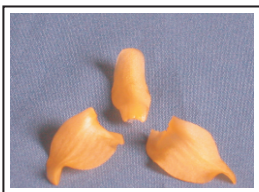
Column size & color : 0.7 x 0.25 cm. Inside: yellow-orange (RHS- 17C &17D) respectively at base & apex, margins red (RHS-39A); Outside: yellow-orange (RHS- 17C).

Mentum/spur length : 0.4 cm.

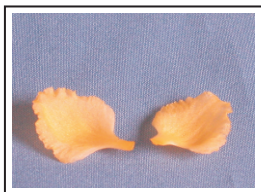
### *Dendrobium densiflorum*



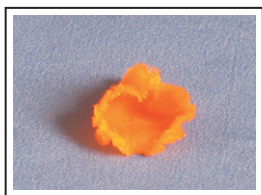
General appearance of flower



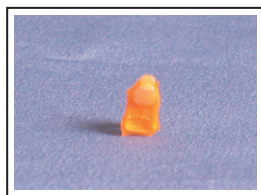
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 2.4 x 3.5 cm.

Sepal size & color : Dorsal sepal: 1.6 x 1.0 cm; Lateral sepals: 2.0 x 1.1 cm; yellow-orange (RHS- 14C).

Petal size & color : 1.5 X 1.3 cm; Inside: yellow (RHS – 13C) at base & yellow-orange (RHS- 14C) at apex & margins; Outside: yellow-orange (RHS- 14C).

Lip size & color : 2.2 X 2.3 cm; Inside: yellow-orange (RHS-

21A) at base & apex and (RHS- 21B) at margins: Outside: yellow-orange (RHS- 21B) at base & margins and (RHS- 21A) at apex.

Lip callus : absent

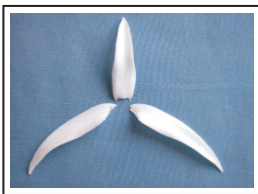
Column size & color : 0.5 x 0.3 cm; Inside: yellow-orange (RHS- 18A) at base & apex, yellow-orange (RHS- 21A) at margins; Outside: yellow-orange (RHS -21B) at base & apex and (RHS- 21A) at margins.

Mentum/spur length : 0.5 cm.

### *Dendrobium draconis*



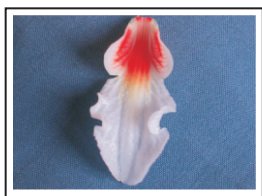
General appearance of flower



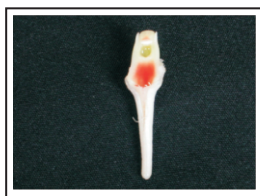
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 5.8 x 6.9 cm.

Sepal size & color : Dorsal sepal: 3.4 x 0.9 cm; Lateral sepals: 4.0 x 0.9 cm; white.

Petal size & color : 3.5 x 1.2 cm; white.



Lip size & color : 3.7 x 1.7 cm; Inside: white with red (RHS-47B) at base; Outside: white with orange-white (RHS-159C) at base.

Lip callus : present (5)

Column size & color : 0.7 x 0.4 cm; Inside: yellow green (RHS-145C) with red (RHS-47B) at base, Outside: yellow green (RHS-145D with 145C) at base.

Mentum/spur length : 1.7 cm.

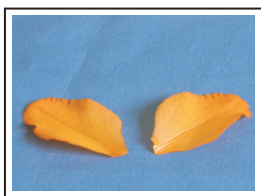
### *Dendrobium fimbriatum*



General appearance of flower



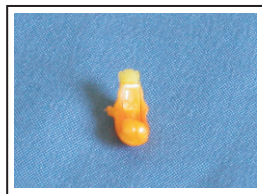
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 3.6 x 5.0 cm.

Sepal size & color : Dorsal sepal: 2.5 x 1.3 cm; Lateral sepals: 2.5 x 1.1 cm; orange (RHS- N 25D at base & margins and N 25C at apex).

Petal size & color : 2.7 x 1.7 cm; orange (RHS- N 25D at base and N 25C at apex & margins).

Lip size & color : 2.8 x 2.6 cm; orange (RHS- N 25C at base and N 25D at apex& margins).

Lip callus : absent.

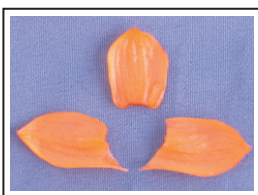
Column size & color : 0.7 x 0.3 cm; Inside: yellow (RHS- 10B) at base & apex, red-purple (RHS- 64B) at margins: Outside: orange (RHS- N 25D).

Mentum/spur length: 0.6 cm.

### *Dendrobium gibsonii*



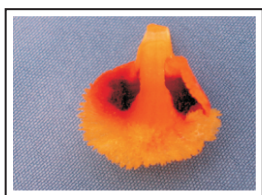
General appearance of flower



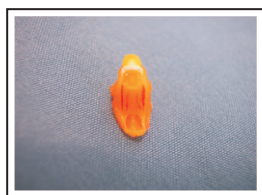
Color & shape of dorsal & lateral sepals



Color & shape of petals



Color & shape of Lip



Column color & anther cap

Flower size : 1.6 x 1.2 cm

Sepal size & color : Dorsal sepal: 1.6 x 1.2 cm; Lateral sepal: 1.8 x 1.1 cm; Inside: yellow-orange (RHS- 23A); Outside: Lateral sepals, yellow-orange (RHS 23A) at base apex & margins, dorsal sepal, orange (RHS-N25B) at base, orange (RHS-N25C) at apex & margins.

Petal size & color : 1.6 x 1.1 cm; yellow-orange (RHS- 23A).

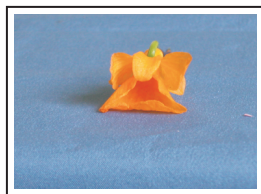
Lip size & color : 2.0 X 2.2 cm; yellow-orange (RHS-17A) with 2 greyed-purple (RHS- 187A) blotches on inner surface.

Lip callus : Absent.

Column size & color : 0.4 x 0.3 cm; Inside: yellow-orange (RHS-19A) with red (RHS- 51A) stripe at 2sides; Outside: yellow- orange (RHS-23B).

Mentum/spur length : 0.7 cm.

### *Dendrobium jenkensis*



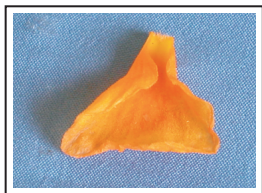
General appearance of flower



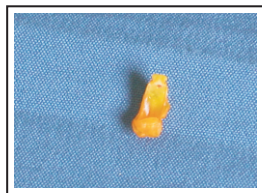
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 2.3 x 2.8 cm

Sepal size & color : Dorsal sepal: 1.3 x 0.8 cm; Lateral sepals: 1.4 x 0.8 cm; yellow (RHS- 13B)

Petal size & color : 1.5 X 1.3 cm; yellow (RHS- 13A)

Lip size & color : 2.3 X 3.0 cm; Inside: yellow (RHS- 14A) at

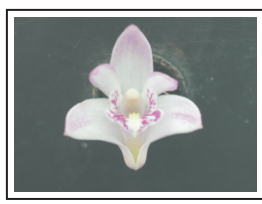
base & (RHS- 14B) at apex & margins; Outside: yellow (RHS- 14B) at base & (RHS- 14C) at apex and margins.

Lip callus : absent

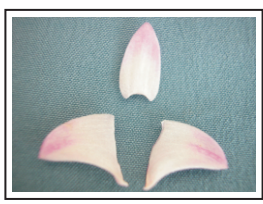
Column size & color : 0.3 x 0.2 cm; Inside: green-yellow (RHS- 1B) at base & apex and yellow-orange (RHS- 22A) at margins; Outside: yellow (RHS- 2B) at base & apex and yellow (RHS- 13C) at margins.

Mentum/spur size & color : 0.5cm.

### *Dendrobium kingianum*



General appearance of flower



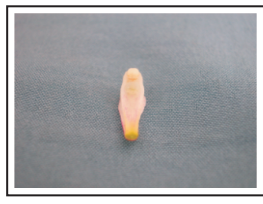
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 1.5 x 1.8 cm

Sepal size & color : Dorsal sepal: 1.2 x 0.6 cm; Lateral sepals: 1.2 x 0.8 cm; Inside: white with purple violet (RHS- N81B /D) apex & margins. Outside: white with purple violet (RHS- N80B apex & N 81C margins)

Petal size & color : 1.1 x 0.3 cm, Inside: white with purple-violet (RHS- N80 B/ C/D) apex & margins.

Lip size & color : 1.1 x 1.2 cm, Violet (RHS- N 87 A/B) & violet blue (RHS-91D) mixed with yellow green (RHS- 145B) at base.

Lip callus : present (3)

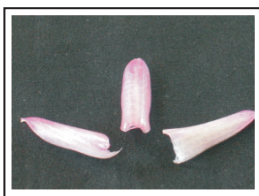
Column size & color : 0.3 x 0.2 cm, white

Mentum/spur length : 0.9 cm.

### *Dendrobium lodigessi*



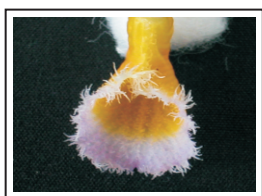
General appearance of flower



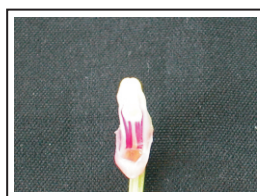
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 3.2 x 4.7 cm.

Sepal size & color : Dorsal sepal: 2.4 x 1.0 cm; Lateral sepals: 2.3 x 1.1 cm; Inside: purple (RHS- 75A) at base & purple (RHS- 77B) at apex & margins; Outside: purple (RHS- 77B).

Petal size & color : 2.6 X 1.1 cm; purple (RHS- 76D) at base &

margins and (RHS- 76B) at apex.

Lip size & color : 2.4 x 2.7 cm; yellow (RHS- 11D) at base, purple (RHS- 76A) at apex of inner side & purple (RHS- N78C) at apex of outer side. Margins purple (RHS- 76A) towards apex & yellow-orange (RHS- 17A) towards base.

Lip callus : present (3)

Column size & color : 0.8 x 0.35 cm; Inside: purple (RHS- N 79C) at base & margins, white at apex; Outside: green –white (RHS- 157D) at base & apex, purple (RHS- 77C) at margins.

Mentum/spur length : 0.8 cm.

### *Dendrobium moschatum*



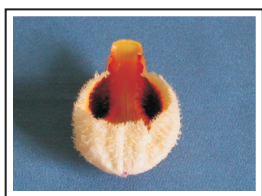
General appearance of flower



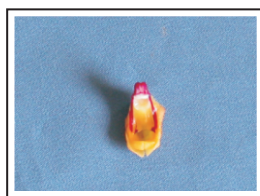
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 7.2 x 8.7 cm.

Sepal size & color : Dorsal sepal: 4.2 x 2.3 cm; Lateral sepals: 4.3 x 2.1 cm; Inside: yellow-orange (RHS 18C) at base & margins, red-purple (RHS 63C) at apex; Outside: yellow-

orange (RHS- 19A) with red-purple (RHS- 59A) lines at base, yellow-orange (RHS- 19A) mixed with red-purple (RHS- 59D) at apex, margins yellow-orange (RHS-19B).

Petal size & color : 4.2 X 3.5 cm; Inside: yellow-orange (RHS- 18C) at base, red-purple (RHS – 63C) at apex, margins yellow-orange (RHS- 18C) towards base and red-purple (RHS – 63D) towards apex; Outside: yellow orange (RHS- 19A) at base, red-purple (RHS – 63D) at apex, margins yellow- orange (RHS- 18C) towards base and red-purple (RHS – 63D) towards apex.

Lip size & color : 3.8 x 2.8 cm; Inside: yellow-orange (RHS- 23B) at base, yellow-orange (RHS- 18D) at apex & margins; Outside: yellow (RHS- 13C) at base, yellow-orange (RHS- 18D) at apex & margins.

Lip callus : present (2)

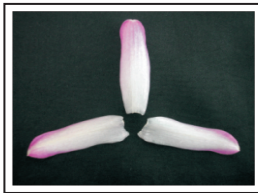
Column size & color : 0.8 x 0.5 cm; Inside: yellow (RHS- 5C & 5D) at base & apex respectively, red-purple (RHS- 59A) at margins; Outside: green-yellow (RHS- 1C) at base, red-purple (RHS- 59A) at apex & margins.

Mentum/spur length: 1.0 cm

### *Dendrobium nobile*



General appearance of flower



Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size :5.6 x 5.5 cm.

Sepal size & color : Dorsal sepal: 3.2 x 1.2 cm; Lateral sepals: 3.2 x 1.1 cm; Inside: purple (RHS- 76D & 76B) at base & margins respectively, purple-violet (RHS – 81C) at apex; Outside: purple (RHS- 76D at base & 76A) at apex and margins.

Petal size & color : 3.2 x 1.9 cm; purple (RHS- 76D & 76B) at base & margins respectively and purple-violet (RHS-N 81B) at apex.

Lip size & color :3.0 x 1.5 cm; Inside: purple (RHS- N 78A) at base, purple-violet (RHS- N 81B) at apex and green-white (RHS 157A) at margins; Outside: green (RHS- 143A) at base, purple-violet (RHS- N 81C) at apex and green-white (RHS- 157A) at margins.

Lip callus : absent.

Column size & color : 0.6 x 0.3 cm; Inside: green (RHS- 143A & B) at base & apex respectively and purple-violet (RHS- N81A) at margins; Outside: green (RHS- 143A) at base & (RHS- 143C) at apex and margins.

Mentum/spur size & color : 0.8 cm.



## *Dendrobium pendulum*



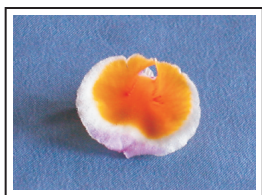
General appearance  
of flower



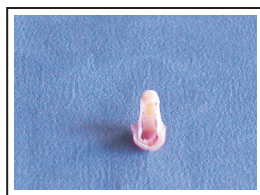
Color & shape of dorsal  
& lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size :3.9 X 5.0 m.

Sepal size & color : Dorsal sepal: 2.6 X1.2cm; Lateral sepals: 2.5 X 1.1 cm; Inside: purple (RHS- 77D) at base, purple-violet (RHS- N 82B) at apex, margins white with purple-violet (RHS- N82B) at tip; Outside: purple-violet (RHS-N82B) at base (RHS-N82C) at apex, margins white with purple-violet (RHS- N82B) at tip.

Petal size & color : 2.7X1.7cm, purple violet (RHS- N82 A, B, D) at base & apex, margins white.

Lip size & color : 2.6cm X2.1 cm; Inside: white at base, purple-violet (RHS-N 82B) at apex, margins yellow ( RHS-11D). Outside: yellow-orange (RHS- 19D) at base, purple-violet (RHS-N82B) at apex, margins yellow (RHS-11D).

Lip callus : absent

Column size & color : 0.6 X 0.25 cm; Inside: yellow (RHS-2D)

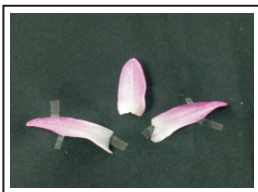
at base & apex, purple-violet (RHS-N82A); Outside: white.

Mentum/spur length : 0.5 cm.

### *Dendrobium primulinum*



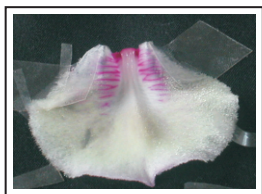
General appearance of flower



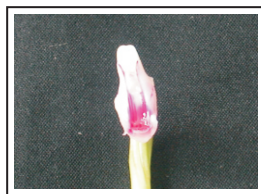
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 4.0 x 6.0 cm.

Sepal size & color : Dorsal sepal: 3.2 x 1.2 cm; Lateral sepals: 3.1 x 0.9 cm; Inside: purple (RHS- 75D) at base, red-purple (RHS- 72B) at apex & margins; Outside: purple (RHS- 75B) at base, red-purple (RHS- 72B) at apex & margins.

Petal size & color : 3.1 x 1.0 cm; purple (RHS- 75D) at base, red-purple (RHS- 72B) at apex & margins.

Lip size & color : 3.3 x 3.5 cm; red purple (RHS- 71A) at base, green-yellow (RHS-1D) at apex and margins.

Lip callus : present (3)

Column size & color : 0.7 x 0.25 cm; Inside: red-purple (RHS

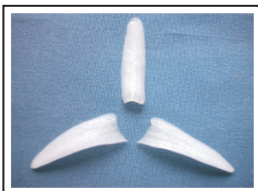
71A) at base & margins, purple (RHS 75D) at apex; Outside: white at base & apex, red-purple (RHS 71A) at margins.

Mentum/spur length : 0.6 cm.

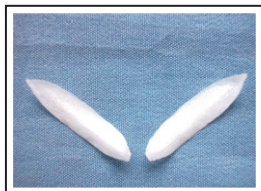
### *Dendrobium secundum*



General appearance of flower



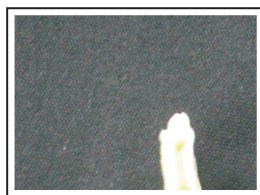
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 3.5 x 3.6 cm.

Sepal size & color : Dorsal sepals: 2.2 x 0.7 cm; Lateral sepals: 2.2 x 0.6 cm; white.

Petal size & color : 2.3 x 0.5 cm; white.

Lip size & color : 2.6 x 2.2 cm; white (RHS – 155C).

Lip callus : present (3)

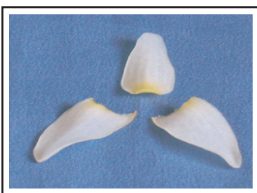
Column size & color : 0.4 x 0.2 cm; white (RHS – 155C).

Mentum/spur length : 0.5 cm.

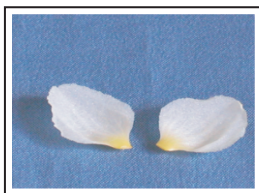
## *Dendrobium thyrsoiflorum*



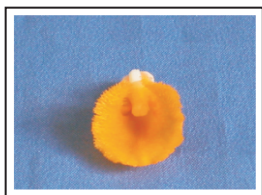
General appearance  
of flower



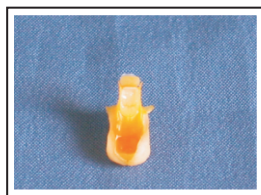
Color & shape of dorsal  
& lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 3.1 x 4.4 cm

Sepal size & color : Dorsal sepal: 1.9X1.0cm; Lateral sepals: 2.1X1.1cm, yellow (RHS- 10B) at base & white at apex & margins.

Petal size & color : 1.8X1.6 cm, yellow (RHS- 10B) at base & white at apex & margins.

Lip size & color : 2.3 X2.5 cm; Inside: yellow-orange (RHS- 23C); Outside: yellow-orange (RHS 21A)at base & (RHS-23C) at apex & margins.

Lip callus : absent.

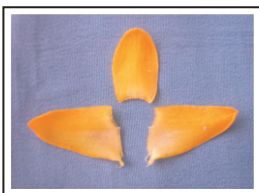
Column size & color : 0.4 x 0.3 cm, yellow-orange (RHS-23A)

Mentum/spur length : 0.6 cm.

## *Dendrobium ruckeri*



General appearance  
of flower



Color & shape of dorsal  
& lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 2.2 x 3.2 cm.

Sepal size & color : Dorsal sepal: 1.4 x 0.8 cm; Lateral sepals: 1.6 x 0.9 cm, yellow (RHS- 11B) at base, and yellow (RHS- 13A) at apex and margins respectively.

Petal size & color : 1.4 x 0.5 cm; yellow (RHS-11C, 13A & 13B) at base, apex & margins respectively,

Lip size & color : 1.2 x 1.9 cm; yellow (RHS- 13D & 13A) at base & apex respectively, margins of apical lobe yellow (RHS13A) & margins of lateral lobes red-purple (RHS- 70D) with greyed-purple (RHS-186A) stripes both inside & outside.

Lip callus : present.

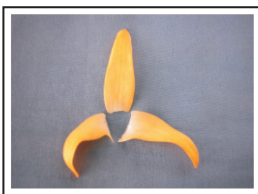
Column size & color: 0.5 x 0.3 cm; Inside: white (RHS- N 155D); Outside: white: (RHS- 155C) with red-purple (RHS- 70A) streaks at base.

Mentum/spur length : 1.4 cm.

## *Dendrobium heterocarpum*



General appearance  
of flower



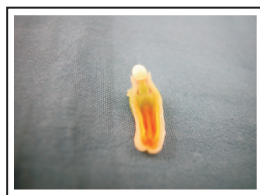
Color & shape of dorsal  
& lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 5.5 X 6.5 cm.

Sepal size & color : Dorsal sepal: 3.5 x 1.1 cm; Lateral sepals: 3.2 x 1.1 cm, yellow (RHS- 4D) at base, and yellow-orange (RHS- 14A & 14C) at apex and margins respectively.

Petal size & color : 3.2 x 1.4 cm; yellow (RHS-4D) at base, & yellow-orange (RHS- 14B & 14C) at apex & margins respectively.

Lip size & color : 3.0 x 2.3 cm; yellow (RHS- 4A) at base and yellow-orange (RHS- 14C) at apex & margins with greyed-red (RHS- 178A) stripes inside.

Lip callus : absent.

Column size & color : 0.6 x 0.3 cm; Inside: white (RHS- N 155C) at apex & margins, yellow –green (RHS- 144C & 144D) at inside base & outside base respectively with two white (RHS155C) stripes inside.

Mentum/spur length : 0.9 cm.

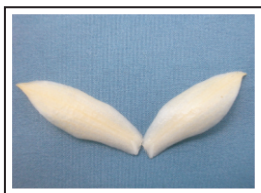
## *Dendrobium williamsonii*



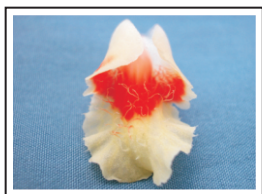
General appearance  
of flower



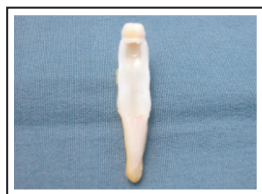
Color & shape of dorsal  
& lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 4.0 x 6.2 cm.

Sepal size & color : Dorsal & Lateral sepals: 3.3 x 1.1 cm; yellow (RHS-8D) at base & margins and yellow (RHS- 8A) at apex.

Petal size & color : 3.3 x 1.2 cm; yellow (RHS- 11D) at base & margins and yellow (RHS- 11B) at apex.

Lip size & color : 3.5 x 3.0 cm; white (RHS- N 155D) at base, and yellow (RHS- 8C & 8D) at apex & margins respectively.

Lip callus : present.

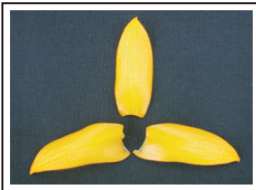
Column size & color : 1.0 x 0.6 cm; white (RHS- 155D).

Mentum/spur length : 1.7 cm.

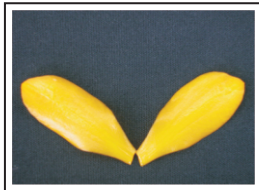
## *Dendrobium ochreatum*



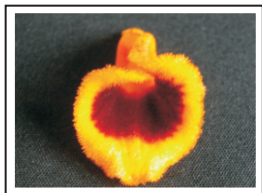
General appearance of flower



Color & shape of dorsal & lateral sepals



Color & shape of petal & lateral sepals



Color & shape of Lip



Column color & anther cap

Flower size : 3.5 x 4.7 cm.

Sepal size & color : Dorsal & Lateral sepals: 2.8 x 1.1 cm; Inside: yellow-orange (RHS- 17B) at base & margins & (RHS- 17A) at apex.

Petal size & color : 2.8 x 1.2 cm; yellow-orange (RHS- 17B).

Lip size & color : 3.0 X 2.5 cm; Inside: yellow-orange (RHS- 17A); Outside: yellow-orange (RHS-17A) at base & margins & (RHS- 17B) at apex.

Lip callus : present.

Column size & color : 0.7 x 0.3 cm; yellow-orange (RHS- 17D) inside & (RHS- 17C) outside.

Mentum/spur length : 0.7 cm.



## *Dendrobium farmeri*



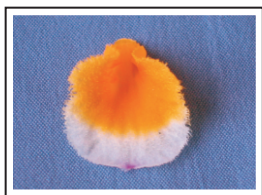
General appearance  
of flower



Color & shape of dorsal  
& lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 3.0 x 4.5 cm.

Sepal size & color : Dorsal sepal: 1.9 x 1.0 cm; Lateral sepals: 2.3 x 1.0 cm; Inside: white (RHS- N 155D) at base & apex and purple (RHS- 75A) at margins; Outside: white (RHS- N 155D) at base & apex of lateral and purple (RHS-75A) at base & apex of dorsal sepal, and margins of both dorsal & lateral sepals.

Petal size & color : 2.0 x 1.5 cm; white (RHS 155C) at base, purple (RHS- 75A) at apex, margins white (RHS- 155C) towards base and purple (RHS- 75A) towards apex.

Lip size & color : 2.2 x 2.0 cm; yellow-orange (RHS- 17A & 17C) at inside base & outside base respectively, white (RHS- 155C) at apex, yellow orange (RHS- 17A & 17C) at margins towards base & white (RHS- 155C) at margins towards apex.

Lip callus : absent.

Column size & color : 0.5 x 0.3 cm;; yellow-orange (RHS- 17A,

17B) inside & outside respectively.

Mentum/spur length : 0.4 cm

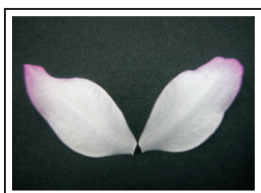
### *Dendrobium transparens*



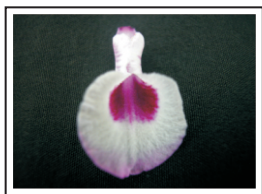
General appearance  
of flower



Color & shape of dorsal  
& lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 4.0 x 6.5 cm.

Sepal size & color : Dorsal sepal: 3.2 x 0.7 cm; Lateral sepals: 3.4 x 0.7 cm; White at base & apex and Purple-violet (RHS- N 82D) at margins.

Petal size & color : 3.3 X 1.2 cm; white at base, purple-violet (RHS- N 82A) at apex, margins white towards base and purple-violet (RHS- N 82A) towards apex.

Lip size & color : 3.6 x 1.8 cm; purple-violet (RHS- N 81A & N 82B) at base & apex respectively, margins white towards base & purple-violet (RHS- N 82A) towards apex, with purple-violet (RHS- N 81A) blotch at centre of apical lobe and stripes at lateral lobes.

Lip callus : present.

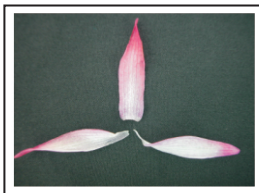
Column size & color : 0.5 x 0.3 cm; white at base & margins and purple-violet (RHS- N 81D inside, N 81B Outside) apex.

Mentum/spur length : 0.9 cm

### *Dendrobium falconeri*



General appearance of flower



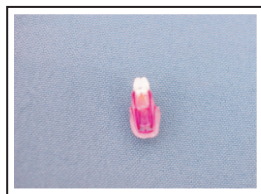
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 5.4 x 6.0 cm

Sepal size & color : Dorsal sepal: 3.0 x 0.8 cm; Lateral sepals: 3.1 x 0.8 cm; red-purple (RHS- 69D) at base and purple (RHS- N 78A & N 78D) at apex & margins respectively.

Petal size & color : 3.1 x 1.5 cm; white (RHS- N 155D) at base and purple (RHS- N 78A & 76A) at apex & margins respectively.

Lip size & color : 3.0 x 2.0 cm; purple (RHS- N 78A) at base & apex and white (RHS- N 155D) at margins.

Lip callus : absent.

Column size & color : 0.5 x 0.3 cm; Inside: purple (RHS- N 78A) at base & margins and white (RHS- 155D) at apex;  
Outside: red-purple (RHS- 69B, 69D & N 78A) at base, apex & margins respectively with 2 purple (RHS- N 78A) bands inside and red-purple (RHS- 69B) shades at outside base.

Mentum/spur length : 0.5 cm.

### *Dendrobium amoenum*



General appearance  
of flower



Color & shape of dorsal  
& lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 4.0 x 4.5 cm.

Sepal size & color : Dorsal sepal: 2.4 x 0.7 cm; Lateral sepals: 2.5 x 0.7 cm; white (RHS- N 155D) at base & margins and purple-violet (RHS- N 81A) at apex.

Petal size & color : 2.5 x 1.0 cm; white (RHS- N 155D) at base & margins and purple-violet (RHS- N 81A) at apex.

Lip size & color : 2.9 x 1.5 cm; purple-violet (RHS- N81A & N 81 B) at inside base & outside base respectively and white

(RHS- N 155A) at apex & margins of both inside & outside with yellow-green (RHS N144A) blotch at apical lobe and purple-violet (RHS- N 81A) stripes at lateral lobes.

Lip callus : present.

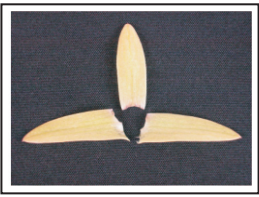
Column size & color : 0.4 x 0.2 cm; white (RHS- 155C) throughout with greyed-green (RHS 193A) base at outside.

Mentum/spur length : 0.8 cm.

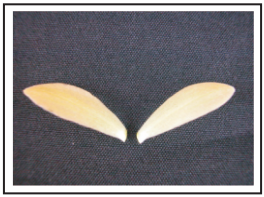
***Dendrobium macrostachyum***



General appearance of flower



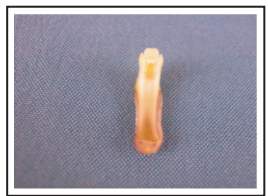
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 2.5 x 3.4 cm.

Sepal size & color : Dorsal sepal: 2.0 x 0.6 cm; Lateral sepals: 2.2 x 0.6 cm; yellow-green (RHS- 145C) both inside and outside.

Petal size & color : 1.9 x 0.6 cm; yellow-green (RHS- 145C) both inside and outside.

Lip size & color : 2.6 x 1.6 cm; white (RHS- 155D) at base and green-yellow (RHS- 1C) at apex & margins with red-purple (RHS- 59A) nerves.

Lip callus : present (3).

Column size & color : 0.5 x 0.25 cm; green yellow (RHS- 1D)

Mentum/spur length : 1.1 cm.

### *Dendrobium bicameratum (bulboflorum)*



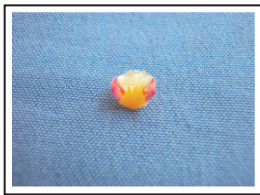
General appearance of flower



Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 1.1 x 1.1 cm.

Sepal size & color : Dorsal sepal: 0.7 x 0.5 cm; Lateral sepals: 0.7 x 0.6 cm; red-purple (RHS- 59C) at base & apex and yellow-green (RHS- 145D) at margins.

Petal size & color : 0.7 x 0.4 cm; red-purple (RHS- 59C) at base & apex and yellow - green (RHS- 145D) at margins.

Lip size & color : 0.5 x 0.6 cm; yellow-green (RHS- 154C) at

base, apex and margins of apical lobe yellow-green (RHS 151A) & lateral lobes red-purple (RHS- 58A).

Lip callus : Absent.

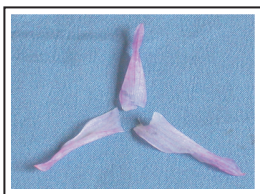
Column size & color : 0.3 x 0.2 cm; Inside: red-purple (RHS- 64A) at base & margins, white (RHS- 155D) at apex; Outside: yellow-green (RHS-145D) at base, and white (RHS- 155D) at apex & margins.

Mentum/spur length : 0.5 cm.

### *Dendrobium devonianum*



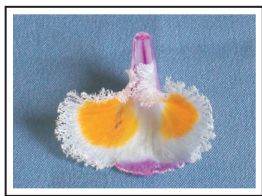
General appearance of flower



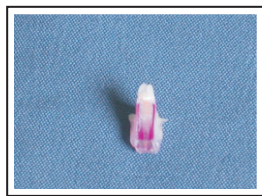
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 3.5 x 3.8 cm.

Sepal size & color : Dorsal sepal & Lateral sepals: 2.2 x 0.7 cm; white (RHS- N 155D) at base and purple-violet (RHS- N81A & N 81B) at apex & margins respectively with purple-violet (RHS- N 81B) stripes both inside & outside.

Petal size & color : 2.2 x 1.0 cm; white (RHS- N 155D) at apex

& margins and purple-violet (RHS- N 81A) at apex of both inside & outside.

Lip size & color : 2.5 x 2.8 cm; purple-violet (RHS-N 81A) at base & apex and white (RHS 155A) at margins of both inside & outside with purple-violet (RHS- N 81A) blotch at apex & streaks at base and two orange-yellow (RHS- N 25C) blotch at middle part of apical lobe.

Lip callus : Absent.

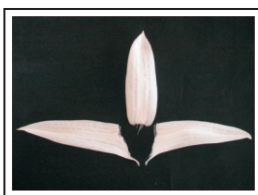
Column size & color : 0.4 x 0.3 cm; Inside: purple –violet (RHS- N81 A) at base & margins and white (RHS-155D) at apex; Outside: white (RHS- N 155D) at base & apex and purple –violet (RHS- N81 A) at margins.

Mentum/spur length : 0.5 cm.

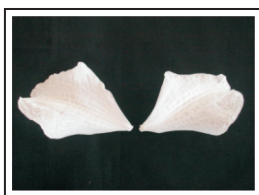
### *Dendrobium formosum*



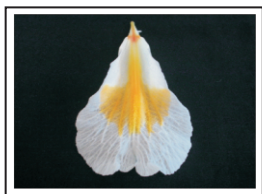
General appearance of flower



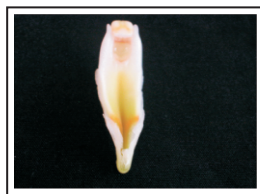
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap



Flower size : 9.0 x 10.2 cm.

Sepal size & color : Dorsal sepal: 5.0 x 1.5 cm; Lateral sepals: 5.2 x 1.5 cm; white with green (RHS- 143A) apex.

Petal size & color : 6.0 x 4.2 cm; white.

Lip size & color : 7.0 x 4.6 cm; white with yellow-orange (RHS 21B) blotch at centre of apical lobe.

Lip callus : present (3).

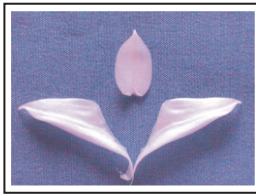
Column size & color : 1.0 X 0.8 cm; white.

Mentum/spur length : 2.0 cm.

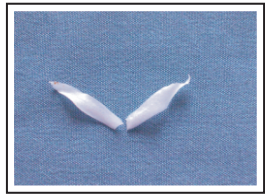
### *Dendrobium longicornu*



General appearance of flower



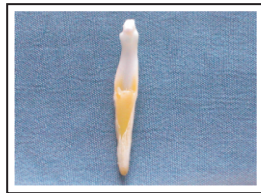
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 2.5 x 3.2 cm.

Sepal size & color : Dorsal sepal: 1.5 x 1.0 cm; Lateral sepals: 2.0 x 1.0 cm; white.

Petal size & color : 1.5 x 0.4 cm; white.

Lip size & color : 2.7 x 2.3 cm; Inside: yellow-orange (RHS-17A) at base and white at apex & margins; Outside: green-white (RHS 157A) at base and white at apex & margins with yellow-orange (RHS-17A) stripes inside.

Lip callus : present (5)

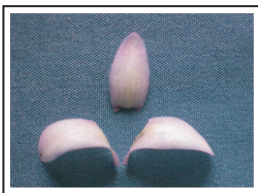
Column size & color : 0.5 x 0.3 cm, white.

Mentum/spur length : 2.3 cm.

### *Dendrobium cumulatum*



General appearance of flower



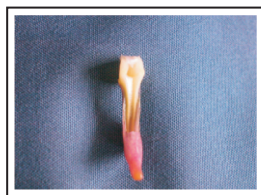
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 2.2 x 3.3 cm.

Sepal size & color : Dorsal sepal: 1.4 x 0.6 cm; Lateral sepals: 1.6 x 0.7 cm; Inside: white (RHS- N 155D) at base & apex and purple (RHS- 75D) at margins; Outside: purple (RHS- 75B) at base, apex & margins.

Petal size & color : 1.6 x 0.9 cm; purple (RHS- 75B, 75A &

75D) at base, apex and margins respectively of both inside & outside.

Lip size & color : 2.4 x 1.4 cm; yellow-white (RHS- 158B) at base, purple (RHS- 75A) at apex and white (RHS- N 155D) at margins.

Lip callus : absent.

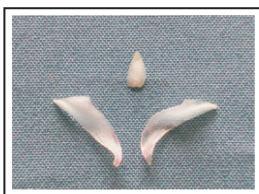
Column size & color : 0.5 x 0.3 cm; yellow-white (RHS- 158A).

Mentum/spur length : 1.7 cm.

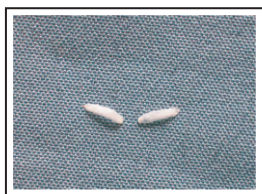
### *Dendrobium terminale*



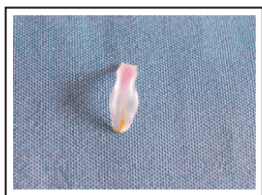
General appearance of flower



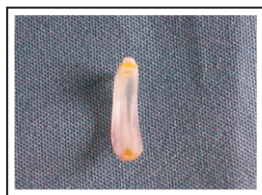
Color & shape of dorsal & lateral sepals



Color & shape of petal



Color & shape of Lip



Column color & anther cap

Flower size : 1.1 x 1.0 cm.

Sepal size & color : Dorsal sepal: 0.5 x 0.2 cm; Lateral sepals: 0.5 x 0.3; Inside: white (RHS- 155B); Outside: red-purple (RHS- 70B) at base and white (RHS- 155B) at apex & margins.

Petal size & color : 0.4 x 0.1 cm; white (RHS- 155B).

Lip size & color : 1.1. X 0.7 cm; red-purple (RHS- 70B) at base, yellow (RHS- 2C) at apex and white (RHS- 155B) at margins.

Lip callus : Absent.

Column size & color : 0.2 x 0.2 cm; white (RHS- 155B).

Mentum/spur length : 1.0 cm.