

# DENDROBIUMS

I am the last person in the world to offer you advise or tell you what to do. This article does not do that. Its purpose is to present you with factual information so that you can make up your own mind. Please, if you notice a mistake, let me know and it will be corrected promptly.

The genus “Dendrobium” is one of the largest and most complex group and includes almost 1500 species that are diverse, grow under a wide range of condition and can be found from Australia to India to Vietnam to the Philippines. Many growers are of the opinion that this genus must be or should be divided into various genera. It is wise before you start spending money buying plants to find out first which Dendrobium species (or hybrids) grow best in your area.

Table 1, lists the groups (types) that I consider (MY CHOICE) to be the most important ones. Why? Because these species can be legally purchased, cultivated, have presentable flowers that last, can be seen in shows and are used to produce hybrids worth having.

Most growers divide the Dendrobium orchids into two groups: The Soft-Cane and the Hard-Cane Dendrobiums; however, nature thought life will be boring if everything was as simple and as easy as that. Today, Dendrobium species are divided into “groups” or “types” based upon various criteria (or toss of a coin). The boundaries are not always clear-cut and friendly arguments between those who claim to know, continue.

It is not a secret the “**Soft Cane**” Dendrobiums are by far the easiest to grow. You will find them listed under the “**Dendrobium Type**”. Some “experts” divide the group further based on their “water” requirements mostly during the winter and/or their cold tolerance also during the winter. Not really credible arguments as both require water in winter and both can tolerate temperatures almost close to 0°C. There is so much misinformation published and there are as many “definitions” as there are experts. Always remember this:

1. As the name suggests, the canes are soft and mostly of a “greenish” color; however, the color of some canes can be “purplish” or “yellowish-greenish”. The “yellowish-greenish” canes are or can look almost “translucent”.
2. The leaves are medium size, up to 15cm long and soft. The almost obovate leaves do not last beyond one season and normally will fall before, during or soon after flowering. All leaves will turn yellow before falling and show some signs of a fungal infection.
3. The thickness (diameter) of the canes is not homogenous and the canes are weak and require support to stand upright. Some are left to grow downwards.
4. Soft canes flower predominantly during springtime. The flowers appear from the Axil of the leaves (Axillary), in groups of up to four per node and are carried in short racemes. The flowering time can be brought forward by a month, or deferred by up to two months by simply manipulating (controlling) light and temperature.
5. Under the right conditions, soft canes produce a mass display of colorful flowers that last longer than most other orchid flowers. When the conditions are not right, Soft Canes produce numerous “keikis” and fewer flowers.
6. The flowers are relative large, delicate looking and last for about two weeks. The flowers of hybridized soft canes are larger, stronger, more colorful and last much longer.
7. Scales and mealy bug are the most common pest found on both, leaves and canes. Fungal diseases are common on leaves in autumn (just remove the leaves).

Soft canes grow on deciduous trees. During the summer there is plenty of shade but during the winter there is little or no shade. For this reason, the plants are very adaptable and can tolerate extreme temperatures from bellow 0°C to 30°C. Off course, they do love light and can tolerate full sun.

Unlike what you read in newsletters, Soft canes do need watering during winter. Most good growers keep their soft cane Dendrobiums fully exposed with very little or no cover from rain during winter. In fact, the best potting mix for soft canes is that, that retains moisture.

There is also a misunderstanding when it comes to fertilizing. Many growers will tell you: “Do not fertilize your soft canes from mid autumn (1<sup>st</sup> of April in Australia; 1<sup>st</sup> October in Europe and USA), till spring (after flowering). That is not a very good advice. For the soft canes to flower you must fertilize the plants during autumn until the buds appear using a ZERO nitrogen fertilizer. (N-P-K = 0 – X – X) where X= a number other than zero. (There are fertilizers on the market (0 – 20 – 20). From the moment the buds appear, you start using normal fertilizers again. It should be mentioned that Nitrogen encourages the production of “keikis” at the expense of flowers.

Another group I find rewarding is the “**Spatulata**” or “Antelope Type”. Each and every species of this group is different and requires different conditions to grow; however, they grow best in warm areas (like Vandas). The canes are hard and strong, grow upright, and can be from a few centimeters to over 2,5 meters tall. The leaves remain on the canes for a few years, the flower spikes are long and the flowers are long lasting. Try species that are easier to grow first. Hybrids are less sensitive.

Another group I like is the “**Callista**” group. The plants are easy to obtain and not difficult to grow. Warm summer, no too cold winter, average light, water and fertilizer requirements. The flowers may not be long lasting but are spectacular. These orchids are worth trying.

From the remaining Dendrobium species, choose the ones that you like best and you know you can grow in your area. Sometimes, it is better to pay extra and buy a mature flowering plant. If you buy seedlings, ask how long it will take for it to grow and flower. Some answers may surprise you.

Over the years many books about Dendrobiums have been published. I am not a book reader but I do have a small library. I buy books that are simple present facts, and have good photographs. I use them for quick answers or when I prepare myself for a serious search. One of the books I have and I like, is: “**Dendrobium and its relatives**”, by Bill Lavarack, Wayne Harris and Geoff Stocker. Published by Kangaroo Press, in 2000. (I have the first edition, in paperback published 2006)

Yamamoto Dendrobiums is unquestionably the world largest hybridized of Softcane dendrobiums. There are some good articles, pictures and info in the website:

<http://www.yamamotodendrobiums.com/>

Table 1: Dendrobium “Types” and the species assigned to each type. # = Popular species, Common names in brackets.

<b>Types</b>	<b>Species</b>	<b>Comments</b>
<b>Calcarifera</b>	<i>amethystoglossum</i>	
	<i>acruatum</i>	
	<i>auriculatum</i>	
	<i>chameleon</i>	
	<i>cummulatum</i>	
	<i>ionopus</i>	
	<i>fairchildae</i>	
	<i>gonzalesii</i>	
	<i>lanzifolium</i>	
	<i>papilio</i>	
	<i>sanguinolentum</i>	
	<i>serratilabium</i>	
	<i>spathilingue</i>	

**Callista**

#	<i>aggregatum</i>	Pendent inflorescences.
	<i>agrostophyllum</i>	(Buttercup Orchid)
	<i>amabile</i>	
	<i>brymerianum</i>	
#	<i>chrysotoxum</i>	
#	<i>densiflorum</i>	
#	<i>farmeri</i>	
	<i>griffithianum</i>	
	<i>harveyanum</i>	
	<i>jenkinsii</i>	
#	<i>lindleyi</i>	
	<i>luzonense</i>	
	<i>palpebrae</i>	
	<i>salaccense</i>	
	<i>schroederi</i>	
	<i>somae</i>	
	<i>sulcatum</i>	
#	<i>thyrsiflorum</i>	

**Calyptrochilus**

	<i>chrysopterum</i>
	<i>erosum</i>
	<i>lawesii</i>
#	<i>mohlianum</i>
#	<i>obtusisepalum</i>
	<i>rutrigerum</i>
	<i>subclausum</i>
	<i>trichostomum</i>
	<i>vannouhuysii</i>
	<i>wentianum</i>

**Dendrobium**

	<i>agreggatum</i>	Deciduous. No watering in winter.
	<i>albosanguineum</i>	
	<i>amoenum</i>	
#	<i>anosmum</i>	= Den. superbum
	<i>aphyllum</i>	
	<i>arachnites</i>	
#	<i>aureum</i>	= Den. heterocarpum
	<i>bensoniae</i>	
	<i>catenatum</i>	
	<i>chlorostylum</i>	
#	<i>chrysanthum</i>	
	<i>chryseum</i>	
#	<i>crassinode</i>	
	<i>crepidatum</i>	

*cretaceum*  
*crystallinum*  
*cuthbertsonii*  
*denneanum*  
*devonianum*  
*dixanthum*  
# *falconeri*  
*fanjingshanense*  
# *fimbriatum*  
# *findlayanum*  
*flexicaule*  
# *friedericksianum*  
*gibsonii*  
*gratiossimum*  
*henryi*  
*hancockii*  
# *heterocarpum* = Den. aureum  
*hookerianum*  
*laevifolium*  
*leptocladum*  
*linawianum*  
*lituiflorum*  
# *loddigesii*  
*lohohense*  
*menglaense*  
# *moniliforme*  
*monophyllum* (Lily-of-the-Valley Orchid)  
# *moschatum*  
# *nobile*  
*ochreatum*  
*okinawense*  
# *parishii*  
*pendulum*  
*pieradii*  
*platycaulon*  
*polyanthum*  
# *primulinum*  
*pulchellum*  
*regium*  
*rhodopterygium*  
*ruckeri*  
*scoriarum*  
*senile*  
*signatum*  
*stricklandianum*  
*stuartii*  
*superbum*

*tortile*  
*tosaence*  
 # *transparens*  
*vesiculosum*  
*virginalis*  
*wangliangli*  
 # *wardianum*  
*unicum*  
*xichouense*

**Dendrocoryne**

*aemulum* (Ironbark Orchid; Box Tree Orchid)  
*callitrophyllum*  
*falcorostrum* (Beech Orchid)  
 # *gracilicaule* (Orange and Brown)  
 # *jonesii* (Oak Orchid; Silver Orchid)  
 # *kingianum* (Pink Rock Orchid)  
 # *speciosum* (King Orchid; Rock Lily)

**Formosae**

# *bellatulum*  
*cariniferum*  
*chapaense*  
*christyanum*  
*cruentum*  
 # *dearei*  
 # *draconis*  
 # *formosum*  
*guangxiense*  
 # *infundibulum*  
*jamesianum*  
*longicornu*  
 # *lowii*  
*lueckelianum*  
 # *lyonii*  
 # *margaritaceum*  
*parthenium*  
 # *sanderae*  
*schrautii*  
 # *schuetzei*  
*senile*  
*sinense*  
*sinkawangense*  
*spectatissimum*  
*sutepence*  
*tobaense*  
*topperianum*

*trigonopus*  
*virgineum*  
*vogelsangii*  
*wattii*  
*williamsonii*  
*xanthophlebium*

**Latouria**

Erect inflorescence

# *aberrans*  
*alexandrae*  
*amphigenium*  
# *atroviolaceum*  
*bifalce*  
# *convolutum*  
*crutwellii*  
*engae*  
*eximium*  
*finisterrae*  
*forbesii*  
*johnsoniae*  
*kauldorumii*  
# *macrophyllum*  
*mooreanum*  
*polysema*  
*rhodostictum*  
# *spectabile*  
*tapiniense*  
*terrestre*  
*woodsii*

**Pedilonum**

*alaticaulinum*  
*aurantiroseum*  
*bracteosum*  
*bullenianum*  
*clacaratum*  
*caliculimentrum*  
*capituliflorum*  
*crematifolium*  
*limpidium*  
*fulgidum*  
*goldschmidtianum*  
*jacobsonii*  
*pseudoglomeratum*  
*puroureum*  
*secundum*  
*smillieae*

(Bottlebrush Orchid)

## **Phalaenanthe**

#	<i>affine</i>	
#	<i>bigibbum</i>	= Den. Phalaenopsis; (Cooktown Orchid)
#	<i>dicuphum</i>	
	<i>stiaenopsis</i>	
#	<i>williamsianum</i>	

## **Spatulata**

		= Antelope Type
#	<i>antennatum</i>	
	<i>bicaudatum</i>	
#	<i>canaliculatum</i>	(Onion Orchid)
	<i>carronii</i>	
	<i>cochlioides</i>	
	<i>conanthum</i>	
	<i>crispilinguum</i>	
#	<i>discolor</i>	(Golden Orchid)
#	<i>gouldii</i>	
	<i>hamiferrum</i>	
	<i>helix</i>	
#	<i>johannis</i>	
#	<i>lasianthera</i>	
#	<i>lineale</i>	
	<i>macranthum</i>	
	<i>magistratus</i>	
	<i>mirbelianum</i>	
	<i>mussauense</i>	
	<i>nindii</i>	
#	<i>stratiotes</i>	
#	<i>strebloceras</i>	
	<i>strepticeros</i>	
	<i>sylvanum</i>	
	<i>tangerinum</i>	
#	<i>taurinum</i>	
	<i>trilamellatum</i>	
	<i>wulaiense</i>	

## **Dockrillia**

	<i>bowmanii</i>	(Small Pencil Orchid)
	<i>brevicauda</i>	
	<i>calamiformis</i>	
	<i>casuarinae</i>	
#	<i>cucumerinum</i>	(Cucumber Orchid)
	<i>dolichophylla</i>	
	<i>fairfaxii</i>	
	<i>fuliginosa</i>	
	<i>lichenastrum</i>	(The Common Button Orchid)

	<i>linquiforme</i>	(Thumb-nail Orchid; Tongue Orchid; Button O.)
	<i>mortii</i>	(Wiry-stemmed Dendrobe)
	<i>nugentii</i>	
	<i>pugioniformis</i>	
	<i>racemosa</i>	
#	<i>rigida</i>	
	<i>schoenina</i>	(Pencil orchid)
#	<i>striolata</i>	(The Yellow Rock Orchid; Streaked Rock Orchid)
#	<i>teretifolia</i>	(Rat's-tail Orchid; Bridal Veil Orchid)
	<i>vagans</i>	
#	<i>wassellii</i>	

### **Other**

	<i>aduncum</i>	
	<i>bifance</i>	
	<i>bulbophylloides</i>	
	<i>chrysocrepis</i>	
#	<i>cinnabarinum</i>	
	<i>crumenatum</i>	(Dove Orchid; Pigeon Orchid)
	<i>distichum</i>	
	<i>ellipsophyllum</i>	
	<i>equitans</i>	
	<i>exile</i>	
	<i>grastidium</i>	
#	<i>hercoglossum</i>	
	<i>leonis</i>	
	<i>linguella</i>	
	<i>nemorale</i>	
	<i>ostrinum</i>	
	<i>prenticei</i>	
	<i>scopulum</i>	
	<i>tenellum</i>	
#	<i>tetragonum</i>	(Tree Spider Orchid)
	<i>toressae</i>	(The Mica Orchid)
	<i>trantuanii</i>	