

## ORCHID NOMENCLATURE

The conventions for naming orchids are set out in the International Code of Botanical Nomenclature.

These are based on a hierarchical classification system. Below are the most important taxa below the family level.

### **Family**

(name ends in ~aceae ,thus – Orchidaceae)

#### **Sub-family**

(name ends in ~oideae)

The large orchid family is broken down into sub-families, eg *Cypripedoideae*, *Spiranθοideae*

#### **Tribe**

(name ends in ~eae)

Sub-families, in turn, are broken down into tribes, eg tribe *Oncidiinae*.

#### **Sub-tribe**

(name ends in ~inae)

A sub-tribe contains a collection of genera and their species, eg the sub-tribe *Lycastinae* includes *Anguloa*, *Bifrenaria*, *Lycaste*, etc.

#### **Genus**

(plural 'genera')

A group of closely related species, eg *Paphiopedilum*.

#### **Species**

(plural 'species')

A naturally occurring interbreeding group within the genus, eg *P. callosum*.

## ORCHID CLASSIFICATION

or

### why DO they keep changing the names???

The orchid family (Orchidaceae) is usually considered to be the largest family of flowering plants with around 30,000 species and perhaps 900 different genera. There are few regions in the world where orchids are not found and, in order to survive under vastly different climatic conditions, there is great diversity in the growth habit and form of orchids.

For many years taxonomic botanists have been studying this group of plants to identify the bloodlines or evolutionary relationships between the species and groups of plants. In the early days botanists depended largely on 'the plant's gross morphology - it's growth habit and size, appearance of the roots, leaves, inflorescences, flowers, fruit, etc. and microscopic features (cell structure, pollen, seed and embryos). More recently botanists have been exploring the genetic makeup of plants<sup>1</sup> using sophisticated scientific processes.

This information has led to new insights into the relationships between groups and hence, changes to the names or classification of some orchids. A recent example is the change of the Brazilian laelias to the genus *Cattleya* based on DNA evidence that shows they have more in common with *Cattleya* than they have with the Mexican *Laelia*.

Sometimes the research shows that groups of plants previously thought to be related have enough differences to warrant a division and the creation of a new genus or species. This is the reason *Dendrobium speciosum* is now *Thelychiton speciosus*.

It was fairly common in the early days of orchid collecting to find a species with two different names. This was due to plants being collected or described by two different botanists who thought they each had a distinct plant. The south-east Asian slipper orchid, *Paphiopedilum appletonianum*, was given that epithet by Gower in 1893 but was also described in 1895 as *P. wolterianum* by the German botanist, Fritz Kraenzlin.<sup>2</sup>

When botanists discovered they were the same species the first name was deemed correct according to the International Code of Botanical Nomenclature and the second and/or later names are considered synonyms.

Many orchids have a number of synonyms and I have been caught more than once buying several of the same species only to find I already have it in my collection under a different name. For example, I have *Cym. dayanum*, *C. simonsianum* and *C. sutapense* but, in fact, I have three plants of *C. dayanum* as the other two names are synonyms. Similarly, I have *C. aloifolium*, *C. pendulum* and *C. simulans*. All *C. aloifolium*! In my enthusiasm for expanding my collections of species cymbidiums and laelias I have often fallen into this trap. I'm not sure whether orchid sellers deliberately use synonyms to trap unwary species collectors or whether it is done in ignorance. I now take my list with me but, be warned. *Caveat emptor* - let the buyer beware!

**Lynne Phelan**

<sup>1</sup> Growing Orchids in Cool Climate Australia, p 110.

<sup>2</sup> Orchids at Kew, p 81