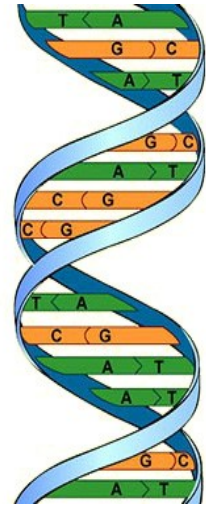


Why have so many Orchid names changed over the past few years??

Historical background

The Swedish Botanist, Carl Linnaeus proposed and developed a systematic method of classification of plants and animals between 1735 and 1759. His system was based on a structured division into kingdoms, phyla, classes, orders, families, genera and species. At the time, only 8 genera were recognised in the Family Orchidaceae. By 1800 Olof Swartz had classified Orchidaceae into 25 genera. In the 1830's, John Lindley, regarded as the father of Orchid taxonomy, recognised 4 sub-families and described 1980 species. Through the 1850's, he progressively published his *Folia Orchidacea* covering most of the orchid species known at the time. The basis of classification was floral and vegetative morphology with emphasis on the reproductive elements of the flowers as the primary determinant of genus and species. The Linnean System of classification continued over the next 150 years with many thousands of species being identified. Species names and, to a lesser extent, genus names changed from time to time as botanists/taxonomists refined the classification.



Along came DNA

In the 1950's, scientists developed techniques for the identification of deoxyribonucleic acid (DNA), a molecule that encodes the genetic instructions used in the development and functioning of all known living organisms. It was some years before access to DNA was available at affordable cost but by the 1980's, scientists were amassing DNA data for a large number of orchid species and anomalies were becoming apparent in the historical classifications by genera, based on genetic rather than morphological differences and similarities.

The Genera Orchidacearum Project

In the mid-1990's, a large group of scientists from many countries undertook the task of reassessing the classification of orchid species which now number in excess of 24,000. The project was placed under the auspices of the Royal Horticultural Society (RHS) with four eminent specialists, Alex Pridgeon, Phillip Cribb and Mark Chase of the RHS and Finn Rasmussen of the University of Copenhagen, as the principal authors of a publication in 6 volumes known as ***Genera Orchidacearum***.



Volume 1 covering the sub-families *Apostasioidae* and *Cypripedioidae* was published in 1999.

Volume 2 covering Part 1 of the sub-family *Orchidoideae*, namely, *Orchidoideae*, *Diuridoideae* and *Diseae*, appeared in 2001.

Volume 3 followed in 2003. It covered the remaining 105 genera in the sub-family *Orchidoideae* and all 15 genera in the sub-family *Vanilloideae*.

The remaining sub-family, *Epidendroideae*, is enormous and includes most of the epiphytic genera grown by hobbyists. Treatment of this sub-family has been spread across 3 Volumes, each in excess of 600 pages.

Volume 4, published in 2006, covers the first 210 genera including the sub-tribe *Laeliinae*, more commonly known as the Cattleya Alliance. It was the publication of this Volume that led to the major changes on the Cattleya Alliance.

Volume 5, published in 2010, covers 187 genera in the tribe *Cymbidieae* which includes sub-tribes *Cymbidiinae*, *Catasetiinae* and *Oncidiinae*. The re-classification of genera within *Oncidiinae* (the *Oncidium* Alliance) has resulted in widespread changes which have been implemented over the past couple of years.

Volume 6 is complete but not yet available. It covers the remaining tribes of the sub-family *Epidendroideae*, *Dendrobieae* and *Vandaeae*. The most significant outcomes for hobby growers in

Volume 6 (announced in advance of publication) are that the genus *Dendrobium* will **not** be split, *Doritaenopsis* has been moved into *Phalaenopsis* and *Ascocentrum* moved into *Vanda*.

All changes to classification by genera have been reviewed and confirmed by the Advisory Committee on Orchid Hybrid Registration (renamed the Orchid Hybrid Registration Advisory Group early in 2013). This group operates under the aegis of the RHS and includes representatives from a number of countries but excludes the authors of *Genera Orchidacearum*. In most cases, only the genus name changed, but in the circumstance where a species was moved to a genus which already had a species of the same name, the species was renamed. A notable example was *Odontoglossum crispum* which became *Oncidium alexandrae*. In other cases, the ending of a species name changed to reflect the gender of the genus name, for example, *Oncidium varicosum* became *Gomesa varicosa*.



Onc. alexandrae previously
Odm. crispum

Why Should We Accept the New Names?

The reclassification of species into different genera has caused a lot of angst amongst orchid nurseries and hobby growers. It is easy to understand that some people would want to disregard the changes and retain the original genus names. For some, the changes will have devalued knowledge acquired over many years. However, there are two internationally recognised registers, both maintained by the RHS. Orchid species are registered in the **Kew Monocot List** compiled between 2001 and 2006 and accessible on line. Hybrid registration was originally conducted by the Sander's Nursery in the UK between 1906 and 1960. The RHS took over the register in 1961 and maintains it on an on-going basis. It currently contains around 154,000 hybrids, growing at a rate of 3000 to 4000 per annum. Orchidwiz, which is now widely used as a reference medium for checking and tracking the names of species and hybrids, also uses the RHS registers. Any decision to disregard the registers will result in confusion about names., particularly as more hybrids are registered in the future. It is futile to resist the changes so we should accept them, correct our labels accordingly and get used to the new names.

Will the Name Changes Continue??

With the publication of Volume 6 of *Genera Orchidacearum* in the next few months, we can look forward to a period of relative stability. However, with hundreds of Taxonomists looking for material to publish, it is to be expected that, with the paucity of new species being discovered, existing species will be revisited, current names will be challenged and some will be changed, but we are unlikely to see a repeat of the broad scale changes that have occurred since 2006.

Acknowledgements

This article is based on lectures attended by the author at the 20th World Orchid Conference and subsequent discussions with some of the authors of *Genera Orchidacearum*, the RHS Registrar and the Curator of the Herbarium at Kew. Bill Lavarack kindly made his copies of *Genera Orchidacearum* available and he reviewed an early draft with some helpful suggestions.

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