



What's In a Name?

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What's in a name? A lot if we are discussing orchids. This "Tips" column covers a subject that I usually avoid because it is both confusing and frustrating for new hobbyists trying to understand conversations about orchids. It seems, however, that every speaker I have heard lately references the "new names" that are being used and they do so with an air of frustration. So, let's try to clarify what this is all about and why knowing the name of an orchid or hybrid is still important.



Encyclia tampensis – photo courtesy of Ruben Sauleda

How do orchids get their names? Orchid species are named by botanists who know a great deal about the plants we call orchids; usually about one small group of orchids. When someone collects an orchid that looks "different" than what is known it is sent to a taxonomist, a person who knows plants in infinite detail. If the plant is really different than any plant previously known it is given a name, often one that reflects something about the flower, where the orchid was found or after the original collector. This is the specific name. The taxonomist then tries to place that plant with a group of other orchids closely related. This is the genus. So, the common Florida orchid *Encyclia tampensis* was first found near Tampa Florida, hence the specific name and placed in the genus *Encyclia*.

So what is the problem? First, the taxonomist can be wrong and the orchid could have already been described in a previous publication. The North American native *Epidendrum conopseum* recently was changed to *Epidendrum magnoliae* because that name was published earlier for the same species. Sometimes there is disagreement as to whether a new species is distinct enough to be called a species. Earlier, most large flowered cattleyas with one leaf per pseudobulb were all called *Cattleya labiata* with varietal names, e.g. v *trianaei*. Taxonomists now call them different species, but opinions change from time to time and so do the resultant species names. Eventually, most orchid names were accepted and standardized by commercial growers and hobbyists.

DNA analyses have changed the way we now view species. Instead of examining flower and plant structure, a portion of an orchid's DNA is analyzed and compared to other species. For the most part, taxonomists had the specific designation correct, but placement of a species into a particular genus was more problematic. Based on DNA



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similarity, some orchids were closer to a different genus than the original one in which they were placed. Placement of orchids into a genus was always a little controversial, so the results of these DNA analyses were not surprising. Expect additional revisions as more DNA analyses are completed.



The species *purpurata* has been moved from the genus *Laelia* to the genus *Cattleya*

The revision would not matter much if there were no hybrids. Hybrids of orchids from two different genera received a new hybrid genera name. The hybrid between *L. purpurata* and *C. mossiae* was named *Laeliocattleya Canhamiana*. The recent move of *L. purpurata* to the genus *Cattleya* means that the hybrid is now called *Cattleya Canhamiana* (note that hybrid names are capitalized and not in italics). Such a change would have been very difficult to record and track before computers came along, but now are possible with a few strokes of the keyboard. Hybridizers always knew that orchids in many genera were closely related because they readily made hybrid offspring. Now, the genus designation more closely reflects the genetic relationship.

Are name changes over? The simple answer is no. Current DNA analyses use only part of an orchid's DNA. When all of an orchid's DNA is analyzed, there may be more changes. Even if that does happen, you will always be able to find the new genus thanks to modern computer technology.