the other Gesneriads

Taxonomy

Thad Scaggs

Taxonomy is the classifying animals and article we will look at hopefully in terms we important to have our you'll see, changes are are being done.

We all know how and other gesneriads

science of naming, describing and organisms and includes plants, microorganisms of the world. In this the taxonomy of Gesneriads, all understand and why it is so plants correctly labeled because as being made as more molecular studies

important it is to have our African violets correctly labeled if we want to enter them

in an AVSA-judged show. I'd like to be clear, as a lay person I've written this paper using research from scientific papers and studies that were very detailed so without going into molecular phylogenics, chromosome numbers and morpho-logical homoplasies (since admittedly I would be in way over my head), this is very basic information.

Not long after I began growing gesneriads other than African violets, I started learning about name changes of species and/or genera. Often it involves moving one or more species from one genus to another or changing a "holding name" to a species name. It can also be resurrecting a genus that all the species were transferred from to another genus, or creating a new genus. This has become even more frequent with the advances in DNA sequencing which has already reorganized many of the species and genera in our favorite plant family.

What's in a Name? When writing a paper or article there are specific ways to present names. When referring to genus, the first letter is uppercase and with species, all letters are lowercase with both names written in italics. Hybrids are written in standard script with 'single quotation marks', and unpublished and holding names are written with



Gloxinia sylvatica, now Seemannia sylvatica

"double quotation marks" until taxonomists have a published name for them. An example is *S. sp.* "Ibitioca" which is now *S. florianopolis*. One of the first articles or papers I read on taxonomy (and learned what it actually is) really piqued my interest in this study. It began with the genus *Gloxinia*. There had been 14 species in *Gloxinia*. Thirteen of those species were transferred out and 2 were transferred in. Of those transferred out, 4 were placed in the resurrected genus *Seemannia*, 3 placed in resurrected genus *Mandirola*, 1 each to new genera *Gloxinella* and *Gloxiniopsis*, 2 each to new genera *Nomopyle* and *Sphaerorrhiza* and 1 transferred to *Monopyle*. Of the two transferred into *Gloxinia*, *one* was from the genus *Anodiscus* and the other from *Koellikeria*.

A plant many of us grow or have grown, especially in the southern states, was *Gloxinia sylvatica*, which is now *Seemannia sylvatica*. If you are still growing it, change the label.

The preceding transfers of species also left significant changes down the line. For instance, they left well over a dozen and possibly many more changes to the genus of specific hybrids. For some, only the genus was changed, while others went from intergeneric to intrageneric and vice versa. A couple that I have grown, the Jim Roberts intergeneric hybrid *xGlokeria* 'Dragon Song' (*Gloxinia perennis x Koellikeria erinoides*) is now *Gloxinia* 'Dragon Song' after *K. erinoides* was moved to *Gloxinia*. Another, *Gloxinia* 'Medusa,' is now *Seemannia* 'Medusa'.



Gloxinia 'Dragon Song'

The genus *Alloplectus*, which few if any of us grow, also had many changes cited in the paper. This genus had approximately 40 species included in it until new research left 5, transferring 27 to genus *Glossoloma*, 4 transferred to *Crantzia* and the other species transferred to *Drymonia*. I didn't list all of the individual species, but if you would like to know them you can contact me for that information. Please keep in mind that the paper this information came from I received several years ago, so some of these transfers could have gone through new changes since then.

I think most of us are familiar with the changes made a few years ago to genera *Chirita, Chiritopsis, Hemiboeopsis, Primulina* and *Wentsaiboea*. Most of us were much more familiar with the genus *Chirita* than the others. When genera are merged together the first genus name that had been published and recognized takes precedence which would be *Primulina*. However, in the case of these genera, while the great majority, of over 300 species and even more now with the new discoveries that have been made in recent years were transferred to genus *Primulina*, approximately 50 were transferred to genus *Henckelia*, approximately 30 to *Microchirita*, approximately 20 to *Liebigia*, a few to both *Opithandra* and *Didymocarpus* and 1 or 2 each into

genera, *Briggssia*, *Codonoboea*, *Damrongia*, *Didymostigma*, *Hemiboea*, *Lysionotus*, *Monopyle*, *Oreocharis*, *Platystemma*, *Pseudochirita*, *Raphiocarpus*, *Rehmannia*. I am only giving approximate numbers because some of these species could be transferred in or out of the genus they were in at the time of the paper used in my research.

Sometimes it is hard for us lay people to keep up with many of the changes that are only published in taxonomic research papers.

There was a paper published in December 2015 redefining the genus *Streptocarpus*. This study which seems to have been accepted by botanists and taxonomists which was very technical and detailed (32 pages) reclassifies the genus *Saintpaulia*. According to this study, without going into tribes, sub tribes, clades and subclades, etc., it concludes the genus formerly known as *Saintpaulia* is now classified as *Streptocarpus* subgenus *Streptocarpella* section *Saintpaulia*, recognizing 10 species. Now this sounds like, and by taxonomic standards, would be a big change for *Saintpaulia*/African violets, though it really shouldn't change anything for AVSA or the authority they have for naming African violet hybrids. Any changes would be small and Dr. Jeff Smith has submitted a proposal to the AVSA Executive Committee about those minor changes to the First Class registration system for species. I'm sure we will be kept up-to-date by Dr. Smith and AVSA.

If anyone would like to see the research papers I've used in writing this article, feel free to contact me by email at <u>tascaggs@gmail.com</u>.