

Names and Naming

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What's In a Name?

There are two different but related sets of rules for plant nomenclature. Plants growing in their native habitat are named under The International Code of Botanical Nomenclature (ICBN), and plants cultivated and hybridized by humans are named under the rules of The International Code of Nomenclature for Cultivated Plants. We'll deal here with aspects of species names first, then hybrid names and naming, and then we'll cover some of the more arcane aspects of the name game.



Paphiopedilum glaucophyllum

Let's take a species *Paphiopedilum* and look at its name: *Paph. glaucophyllum*. It may also be written as Paph. glaucophyllum. In this system of binomial nomenclature (genus and species) established by Carl von Linne (Linnaeus) in 1753, *Paph.* is the abbreviation for *Paphiopedilum*, the genus of the plant named by Pfitzer in 1886. Up to this time, *Paphiopedilum* had previously been considered as part of the genus *Cypripedium*, and some species had also been described under the genus names *Menophora*, *Stimegas* and *Cordula*, but under a complex set of taxonomic rules, *Paphiopedilum* was

accepted as the conserved (valid in use) name by the International Botanical Committee in 1959. The species epithet, *glaucophyllum*, was named by J.J. Smith in 1906. In technical literature, the species would be listed as *Paph. glaucophyllum* J.J. Smith. The name *glaucophyllum* originates from the Latin 'glaucus' referring to blue-green color, and 'phyllus' referring to a kind of leaf (*Paph. glaucophyllum* has a fine layer of whitish 'dust' on its leaves which tends to give them a duller blue-green color).

The first rule for proper written presentation of the binomial name for a species is that it be either italicized or underlined. Secondly, the genus name is always capitalized, while the species (note that "species" is both singular and plural) name is always lower case. In the past, if the species was named in honor of a person, then it was also capitalized, but this practice is now discouraged and it is considered proper to always use lower case for the species epithet.

Now let's complicate the species name a bit. Here is a photo of *Paph. glaucophyllum* var. *moquettianum* 'Candor Rose Gold' AM/AOS. This is considered by some taxonomists as a variety of *Paph. glaucophyllum*, but others consider it as a valid, autonomous species and would refer to it as *Paph. moquettianum* 'Candor Rose Gold' AM/AOS. (The taxonomy and taxonomists dealing with *Paphiopedilum* are a completely different subject to be dealt with in another chapter, is only touched on here to show areas where agreement is not universal.) You will first notice that the rules for presentation of the species name are the same with the addition of the varietal name also in italics (or underlined) and lowercase.

'Candor Rose Gold' is the cultivar epithet or, as I prefer, the clonal name of a specific plant

of this species. Only vegetative propagations (divisions) of the actual plant (or clones or "meristems" in the case of plants that can be laboratory cloned such as *Phalaenopsis*, but this is not really applicable to the slipper orchids as they are not easily or commercially cloned at this time). The clonal name is always enclosed in single quotes, and should not be latinized but rather what is referred to by the International Orchid Commission as a "fancy name". Clonal or cultivar names are assigned by the owner of the plant to identify it, and its vegetative propagations. They are required for awarded plants, but should also be assigned to any plant used for breeding or with special characteristics, or horticulturally superior qualities. However, it should be pointed out that anyone can apply a clonal name to any plant, so it does not in any way guarantee the quality of a plant. There seems to be a trend, unethical in my opinion, of some persons to assign clonal names to unbloomed seedlings to increase their worth and salability. If you receive a plant with an assigned clonal name it is unethical and improper to change it with only one exception that will be explained more fully later, and that is in the case of a genetic mutation that significantly alters the phenotype (physical characteristics) of the flower. In addition to always being enclosed in single quotes and presented as a "fancy name", there are a few additional rules to properly assigning a clonal name. It must be unique from any other published clonal names for that species (or hybrid as the clonal name rules apply equally for both). The first word must be capitalized as should any subsequent additional words in it unless normal custom of the language dictates otherwise. A maximum of three words is allowed and must not include any taxonomic terminology such as "genus", "variety", "form" or any latinized descriptive terms, etc. There are a number of practices in clonal name assigning that are not strictly prohibited but are strongly advised against. These include the use of numerals and many but not all abbreviations. It is suggested that anyone assigning clonal names to their plants read all the fine print on cultivar epithets in "The Handbook on Orchid Nomenclature and Registration".



Paphiopedilum glaucophyllum var. *moquettianum* 'Candor Rose Gold' AM/AOS

AM/AOS added after the name of the plant indicates that it has received an Award of Merit from the American Orchid Society. A list of award abbreviations is appended to this chapter. More information on the judging process will be presented in a separate chapter. It is important to note that the award is only to this clone and its vegetative propagations (divisions), not to any of its offspring. So if a label reads (*Paph. glaucophyllum* var. *moquettianum* 'Candor Rose Gold' AM/AOS x self) or (*Paph. glaucophyllum* var. *moquettianum* 'Candor Rose Gold' AM/AOS x sib) or *Paph. glaucophyllum* var. *moquettianum* ('Candor Rose Gold' AM/AOS x 'Eureka' AM/AOS) or (*Paph. glaucophyllum* var. *moquettianum* 'Candor Rose Gold' AM/AOS x *Paph. anything*), none of these plants carries the clonal name or award of the parent. They may in themselves eventually be awarded, but they will have to be awarded on their own merit, and assigned their own unique clonal name.

Naming a hybrid

Now let's take our plant of *Paph. glaucophyllum* var. *moquettianum* 'Candor Rose Gold'



Paphiopedilum adductum

AM/AOS and cross it with *Paph. adductum* 'Candor Wildwood' HCC/AOS. The cross, if unregistered, would be listed capsule parent first and pollen parent second separated by an "x" as (*Paph. glaucophyllum* var. *moquettianum* 'Candor Rose Gold' AM/AOS x



Paphiopedilum Bianka 'Candor Autumn Tapestry' AM/AOS

Paph. adductum 'Candor Wildwood' HCC/AOS). As it happens this cross has already been made and flowered, and was named as *Paph. Bianka* by H. Doll in 1990. It should be noted at this point that if the reciprocal cross were made, that is (*Paph. adductum* x *Paph. glaucophyllum*) it will still be considered the same cross and named *Paph. Bianka*. The same applies if the cross is made with different parental clones, any cross of either *Paph. glaucophyllum* or *Paph. moquettianum* with *Paph. adductum*, regardless of clones used, or which was capsule and which was the pollen parent, will be *Paph. Bianka*. Also note that if a plant of *Paph. Bianka* is selfed or

crossed with another plant of *Paph. Bianka*, the resultant progeny will also be considered *Paph. Bianka*. The flower pictured is *Paph. Bianka* 'Candor Autumn Tapestry' AM/AOS. As you can see, there are a few different rules for writing hybrid names. First, they are not italicized or underlined, and secondly, all words are capitalized. The same rules apply for the clonal name and award for hybrids as for the species.

Again, please note that the hybrid name *Paph. Bianka* would also apply if the cross was with *Paph. glaucophyllum*, rather than with *Paph. moquettianum*. This is because the International Registration Authority for Orchid Hybrids recognizes only the nominate species for registration. Figuring out which species are currently considered valid for registration purposes and which are considered synonyms can be daunting. There is a listing of synonyms published in "The Handbook on Orchid Nomenclature and Registration" and updates are published as addenda to the new hybrid lists, but confusion can still exist. Part of the problem is the result of the balance between scientific and horticultural purposes. Many times old names are conserved in the registry for horticultural stability, while at other times the registry seems slow to accept new concepts. It is our opinion that the registry needs to be a bit more responsive to the horticultural side of things, and in cases like the present example, *Paph. glaucophyllum* and *Paph. moquettianum* should be accepted separately for hybrid registration purposes regardless of the taxonomic position, since they impart different phenotypic qualities to their offspring.

How does one register a new orchid hybrid? First of all, one needs to have flowered the hybrid. Then one has to understand that the right to register a new orchid hybrid is reserved for the person who made the hybrid (the originator as defined as the owner of the capsule bearing plant at the time of the cross) or the person he assigns that right to. If one is not the originator

but has made a good faith but unsuccessful effort to discover the originator, then it may be possible to register the cross as "originator unknown". If one is not the originator, but flowers the plant, it is possible to ask permission of the originator to name the plants. Some hybridizers will grant permission, while others generally like to name their own crosses. In some cases, hybridizers are willing to allow others to register their crosses, but retain the right of approval of the chosen name. If you request permission in writing of the originator and they do not respond within 3 months, then it is considered consent, by default, to register the hybrid. If the originator refuses permission, but does not register said hybrid within 9 months of the refusal, then the refusal lapses and the hybrid may be registered without the originators permission. Of course the easiest route is to be the originator.

The next step is to obtain a registration form, which must be an original as supplied by the Registrar's office, as photocopies or otherwise duplicated forms are not accepted. These can be obtained directly from the Registrar (see appendix) or from many national orchid societies. The form needs to be filled out completely and submitted along with the appropriate fee and, if the hybrid is between two natural species, a photograph of the hybrid flower is also required . One must supply two possible grex names for the hybrid in case the Registrar rejects one. The same rules apply to grex names as stated earlier for clonal names, with the addition that they cannot start with a single letter (for example the hybrid Paph. S Gratrix would not be accepted under current rules, but remains as it was named before the single letter rule was established). There are a number of other recommendations for naming and reasons that the Registrar may reject a hybrid name, so it's very desirable to obtain and familiarize yourself with the rules in "The Handbook on Orchid Nomenclature and Registration".

Botanical Latin

Probably the most certain thing about pronouncing Botanical Latin is that no matter what you say or do, someone will disagree. The second most certain thing is that if you are serious about Botanical Latin then you need to spend about \$40 to obtain W. T. Stearn's "Botanical Latin". And the best advice is an admonition from the expert W. T. Stearn: "Botanical Latin is essentially a written language How they are pronounced really matters little provided they sound pleasant and are understood by all concerned...". It is also sort of silly arguing over the English pronunciation of Botanical Latin when the English pronunciation of English words varies so tremendously, not just from English speaking country to country, but even within an English speaking country. We'll discuss the "rules" of Botanical Latin in another chapter.

Hierarchical Nomenclature for our species example

Category	Ending	Example as Cited in Text
Kingdom		Plantae
Division	-phyta	Magnoliophyta
Subdivision	-phytina	Magnoliophytina
Class	-opsida	Liliopsida
Subclass	-idea	Liliidae
Order	-ales	Orchidales

Suborder	-ineae	Orchidineae
Family	-aceae	<i>Orchidaceae</i>
Subfamily	-oideae	<i>Cypripedioideae</i>
Tribe	-eae	<i>Paphiopedileae</i>
Subtribe	-inae	<i>Paphiopedilinae</i>
Genus		<i>Paphiopedilum</i>
Subgenus ¹		<i>Paphiopedilum</i>
Section ¹		<i>Cochlopetalum</i>
Subsection ¹		
Species ¹		<i>Paphiopedilum glaucophyllum</i>
Subspecies ¹		
Variety ¹		<i>Paphiopedilum glaucophyllum</i> var. <i>moquettianum</i>
Form ¹		
Cultivar (Clone) ²		<i>Paphiopedilum glaucophyllum</i> var. <i>moquettianum</i> 'Candor Rose Gold'
Award ³		<i>Paphiopedilum glaucophyllum</i> var. <i>moquettianum</i> 'Candor Rose Gold' AM/AOS

1. There is no universal agreement among contemporary taxonomists dealing with the Slipper Orchids at these levels.
2. Assigned by the owner under the rules of The International Code of Nomenclature for Cultivated Plants
3. Granted by and under the rules of an awarding body, usually an orchid society, in this case The American Orchid Society.

Abbreviations (awards)

FCC	First Class Certificate
AM	Award of Merit
HCC	Highly Commended Certificate
CCM	Certificate of Cultural Merit
CCE	Certificate of Cultural Excellence
AQ	Award of Quality
AD	Award of Distinction
JC	Judges Commendation
CBR	Certificate of Botanical Recognition
CHM	Certificate of Horticultural Merit
GM	Gold Medal

SM	Silver Medal
BM	Bronze Medal
CBM	Certificate of Botanical Merit

Abbreviations (some awarding societies)

AOS	American Orchid Society
OSSEA	Orchid Society of South East Asia
RHS	Royal Horticultural Society
RHT	Royal Horticultural Society of Thailand
OSSA	Orchid Society of South Africa
ODC	Orchid Digest Corporation
JOS	Japan Orchid Society
HOS	Honolulu Orchid Society
DOG	Deutsche Orchideen-Gesellschaft
JOGA	Japan Orchid Growers Association
OSROC	Orchid Society of the Republic of China (Taiwan)

Registrar Address:

The International Orchid Registrar
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