

# Etymologists loose amongst the Orchids

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PLANT LOVERS AND AMATEURS devoted to special horticultural groups often ask the understandable question: "Why do botanists need to use long technical names for plants instead of common names?" This query is frequently coupled with another, equally understandable: "What do these Latin and Greek terms mean, anyway?"

It is easy to answer the first of these questions. Common names of plants naturally change from language to language. They often vary in the same language in different countries or even from one part of a country to another. Then again, many species are known, even in the same locality, by several or more distinct names. Common names, therefore, may be a constant source of inaccuracy in scientific research and of confusion in horticulture. A technical name compounded from Latin or Greek by a taxonomic botanist when an unknown plant is first described represents an epithet which, used correctly, can apply to no other plant. Botanists, horticulturists, amateurs and anyone else interested in communicating botanical information — whatever part of the world they inhabit, whatever language they speak — may know with precision what plant they are discussing if they employ its technical name. Herein lies the outstanding merit of our system of scientific nomenclature: it provides us with an exact means of communication.

We might well heed the wise words of that outstanding botanist and horticulturist Prof. Oakes Ames when, in regard to the value of technical botanical names, he wrote the following.

There seems to be a strange necessity for most unprofessional garden lovers to use the so-called common names of plants, although these often cause confusion. For example, forty different species of plants are known as mahogany. Hemp, also, is a most confusing term, because it includes Manila hemp (a banana), sisal hemp (a century plant), New Zealand hemp (a species of *Phormium*), bow-string hemp (which some garden lovers boldly and correctly call *Sansevieria*), and finally the true, or classical hemp (*Cannabis sativa*) from which we obtain hempen cloth and twine, the intoxicating substance known as hashish, and the hallucinating narcotic referred to in modern times as *marijuana*.

Why the Greek or Latin names give so much trouble is a mystery to the professional, especially so when he hears the uninitiated using glibly such terms of *Chrysanthemum*, *Poinsettia*, *Gerbera* and *Camellia*. These scientific names are far preferable to common names because they eliminate confusion and are the same for every part of the world. They present few difficulties and when used correctly they have dignity and definiteness, something that cannot be said of such cumbersome names as: "Southern Small White Orchis" or "Crippled Crane-fly Orchis".

To answer the second question is not so easy. Any search for the origin and meaning of scientific names is bound to be fraught with absorbingly interesting excursions into etymology and botany. Technical nomenclature might soon lose much of its frightening complexity for many people if they occasionally would indulge in a study of the meaning of the names applied to our favourite plants. It would become clear that these scientific names, far from being a complication, often actually represent simplicity itself. Sometimes, as in the case of *Cypripedium* for the Lady's Slipper, it would show that the scientific epithet means exactly the same as the common name, being a simple translation, as it were, into Latin or Greek.

Education in modern times, perhaps unfortunately, lays far less stress on the classics than in former periods. The earlier botanists were, almost to a man, provided with a thorough foundation in the languages, history and mythology of

ancient Rome and Greece. Consequently, they enjoyed a facility in creating, from the Latin and Greek, names, often highly euphonious, for the new plants which they encountered and described. Sometimes a clear explanation of the reason behind a new technical name might be offered; as often as not, however, the original description carried no analysis of a new name. Classical training was often so much a part of the botanist's very being that the need or advisability of giving the etymological derivation of a new term never occurred to him.

Botanical publications, such as floras and monographs of genera, frequently include a translation of the technical names employed. But a translation is often not enough. Morphological and other peculiarities of the plant which suggested a given name are sometimes recondite, obscure or open to interpretation only by a taxonomic specialist.

Our botanical literature might well be appreciably enriched if a translation and analysis of botanical names were more consistently offered. It is not always an easy task, even for the specialist, to unearth the real origin and meaning of many scientific epithets. Yet, the horizons opened by this phase of our botanical research are often so wide that almost any amount of dedication and pains invested in its study are surely repaid manyfold.

The widespread interest amongst orchidophiles in the meaning of technical names is shown by the number of requests for information of this kind which are received every year at the Orchid Herbarium of Oakes Ames in the Botanical Museum of Harvard University. Attempts to answer these queries often entail extensive research and have brought out the need for a dictionary or glossary to which orchid fanciers and scientists alike may go for authoritative information regarding the background of the botanical nomenclature of the *Orchidaceae*.

Four years ago, Dr. Arthur Stanley Pease, Pope Professor of Latin, Emeritus, at Harvard University, and I began jointly to prepare a list of all generic names in the *Orchidaceae* with a philological analysis of each term and a discussion of the reason, botanical or otherwise, for the epithet. This list, which includes well over 1000 names, is now nearly completed and will be published in book form. The work has had many absorbingly interesting facets and has shown that the imagination and poetic and artistic feelings which have gone into the compounding of orchid names are fully commensurate with the beauty and fantasy of this most remarkable of plant families. A few examples from amongst the most interesting, curious and imaginative will illustrate the fascinating stories that the names of orchid genera tell.

Perhaps the most poetically artistic epithet amongst the orchids is *Oberonia*, named in 1830 by the English orchidologist John Lindley. The name cleverly calls attention to an epiphytic habit. Lindley explained it as follows: "As Oberon, that little King of the Dryads, prince of the northern hobgoblins, rides about the branches of the trees, hiding his many-formed countenance amongst the leaves, so our little herbs, not less changeable in form, lurk in the forests of India and ride triumphantly in their leafy chariot."

More than most of his colleagues, Lindley was wont to use the names of Greek and Roman goddesses or nymphs or classical figures in baptizing his orchid genera. *Erycina* he dedicated to Aphrodite of Mt. Eryx, and *Laelia* was named probably for one of the Vestal Virgins. *Lacaena* he derived undoubtedly from one of the names of Helen of Troy, while *Ione* commemorates the Greek sea-nymph of this name. Other botanists followed the same custom. Rafinesque called upon a host of nymphs in christening orchid genera. Don dedicated the genus *Pleione* to Pleione, mother of the Pleiades; and Presl, in the epithet *Elleanthus*, commemo-

rated Helen, daughter of Athamar and Nephrele, whose name is perpetuated also in the Straits of Hellespont. In *Lysias*, Salisbury was probably honouring an Attic orator, Lysias, whose famous speech "Against Panoleon" was given in defense of a man charged with the destruction of a sacred olive tree.

Orchids, curious in growth as well as in form, fired the imagination of ancient peoples. They were superstitiously thought to possess magical and medicinal properties. The name of the family itself — *Orchidaceae* — is derived from *Orchis*, a generic epithet derived from the Greek word for "testicle", in allusion to its characteristic testiculate tubers. Because of these tubers, many orchids were thought to possess aphrodisiac properties. *Satyrium* comes from the ancient Greek word *satyriou*, meaning "man-orchis", which, in turn, is derived from the Satyri, rural demigods of Greek mythology. Linnaeus used the term *Ophrys* for a genus of orchids. The name comes from the Greek for "eyebrow" and was applied by Pliny to a two-leaved plant — the identity of which is not known but which may have been *Listera ovata* — employed by the ancients to blacken eyebrows or hair. The interesting generic epithet *Entaticus* was taken from the Greek name for a stimulating plant of unknown identity and refers to a medicinal virtue once ascribed to the orchid with which it was associated.

The numerous names of geographical origin which have been used in orchidological nomenclature are interesting: *Philippinia*, from the Philippine Islands; *Caucaea*, from Cauca, a State in Colombia; *Hammarbya*, in allusion to Hammarby, summer home of Linnaeus near Upsala, Sweden; *Papuaca*, from the Island of Papua in Malaysia; *Hakoneaste*, referring to Mt. Hakon in Japan; *Itaculumia*, from Serra do Itaculum, Brazil; Nienokuea, the name of a mountain on the Ivory Coast, Africa; *Lemuranthe*, in reference to the "Lemur Region", a phytogeographically significant palaeographic land-mass, including Madagascar and India.

Some orchids are named for their season of flowering, such as the New Zealand *Earina*, from the Greek *earinos* ("vernal"). Others derive their names from the growth habit or the habitat which they prefer. The names of two of the largest genera, *Epidendrum* ("upon trees") and *Dendrobium* ("living on trees"), refer to the epiphytic habit. Similarly, the epithets *Phloeophila* ("lover of bark") and *Epicladium* ("upon branches") indicate this habit of growth. The large genus of small epiphytic orchids, *Stelis*, was so named by Swartz from a Greek word signifying "mistletoe" which grows parasitically on a tree. Reichenbach named a genus of very small, creeping orchids *Meiracyllium*, from the Greek *meirakyllion*, for "little stripling". An Australian orchid has been called *Rimacola* from two Latin components which mean "dwelling in clefts", because the haunts of the plant are "wet crevices and . . . damp ledges of sandstone cliffs". And the usual woodland habitat of a terrestrial orchid of the Dutch East Indies is described by the term *Silvorchis*.

Common names have sometimes been Latinized directly or have been translated to form the technical generic epithet. *Vanda* comes from the Sanskrit name of an orchid in Bengal and India. Swartz adapted *Vanilla* from the vernacular name in Spanish, *vainilla*, meaning "little pod", in reference to the long, slender, pod-like fruits. *Sumupia* is apparently from a native name used in Nepal. Hooker, in creating the name *Peristeria* from the Greek *peristerion*, for "little dove", had reference to the vernacular name Dove Plant, in allusion to the fancied likeness to a dove of the column and beaked anther within the erect lateral lobes of the lip.

Resemblance to or connection with animals may often underlie a vernacular or technical orchid name. Some of the interesting technical epithets in this category

derive from the striking structural variations characteristic of the family. It is at once obvious that *Arachnites*, from the Greek for "spider", must have a spider-like flower; not so obvious, however, is the derivation of *Cyanaeorchis* (sometimes erroneously analyzed as "blue orchid", in spite of its having a yellow flower) from the name of the Greek water-nymph, Cyane, and referring to an aquatic habitat. The beautiful, horticulturally important *Phalaenopsis* was named by Blume because of the supposed likeness of the flower to many species of certain tropical



—— "Nature breeds  
Perverse, all monstrous, all prodigious things,  
Abominable, unutterable, and worse  
Than fables yet have feigned, or fear conceived,  
Gorgons, and hydras, and chimeras dire."

MILTON.

AN ALLEGORICAL DRAWING BY LADY GREY OF GROBY used as the tailpiece in Bateman's famous elephant-folio book "The Orchidaceae of Mexico and Guatemala" (1843). It is "a most ingenious device, compounded of divers Orchidaceous flowers, which, with very gentle violence, have been induced to assume the attitudes in which they appear below. . . . The hag came forth, broom and all, from a flower of *Cypripedium insigne*; her attendant spirits are composed of *Brassia Lanceana*, *Angraecum caudatum*, *Oncidium Papilio*, &c. &c.; two specimens of *Cycnoches* sail majestically on the globe below, on the right of which crawls *Megacolinium falcatum*. In the centre stands a desponding *Monachanthus*; on the left a pair of *Masdevallias* are dancing a minuet, while sundry *Epidendra*, not unlike the 'walking leaves' of Australia, complete the group."

moths, *phalaen* in Greek. In *Myrmecophila*, from the Greek for "ant-loving", we see emphasized a characteristic of some orchids: the habitation of the pseudobulbs by ants. The curious shape of the tip of the column and its appendages and the resulting resemblance to a bird's head suggested to Hooker the name *Ornithocephalus* ("bird-head"), while a similar epithet *Ornithochilus* ("bird-lip") tells us that the bilobed labellum with its lobes divaricate and vertical resembles a bird in flight. The North American *Tipularia* was named by Nuttall from the Latin word *tippula* or "water-spider", in allusion to the very long, slender and irregular spur on the lip which gives the whole flower a fancied resemblance to the well known aquatic insect. And Reichenbach saw in the graceful *Polycycnis* (from the Greek for "swan") a resemblance to tiny swans.

Botanists often dedicate plants to their colleagues, to princes or other royal patrons, to collectors of note or to friends. Here we see the horticulturally supreme *Cattleya*, honouring William Cattley, Esq. (died 1832), one of the earliest English horticulturists successfully to cultivate orchids.

Lindley commemorated in *Miltonia* the Earl Fitzwilliam, Viscount Milton (1786-1857), a patron of horticulture and of orchidology; while the Right Honorable Philip Henry, Earl Stanhope, who, in 1829, was president of the London Medico-Botanical Society, is memorialized in Frost's *Stanhopea*. Many are the other notables remembered in our orchid nomenclature, so many that we may here mention but a few.



Joao Barbosa-Rodrigues

The genus *Brassavola* was dedicated to Antonio Musa Brassavola (1500-1555), papal physician and professor of medicine at Ferrara, Italy. *Huntleya* was named by Bateman in compliment to the Rev. Mr. J. T. Huntley, an enthusiastic English orchidist of the early part of the 19th Century. Both *Barbosella* and *Rodriguezella* are dedicated to the active Brazilian orchidologist of the last century, Dr. João Barbosa-Rodrigues (1842-1909). Schweinfurth and Allen, in creating the generic epithet *Oakes-Amesia*, called attention to the outstanding services to botany and horticulture of Prof. Oakes Ames (1874-1950) of Harvard University, founder and endower of the Orchid Herbarium of Oakes Ames. *Humboldtia*, *Rolfca*, *Ridleya* and *Ridleyella*, *Warscewiczella*, *Lindleyella*, *Neocogniauxia*, *Neobenthamia*, *Schlechterella* and scores of others give us a kaleidoscopic survey of the great who have contributed in sundry ways to the advance of orchidology.

Knowing the extraordinary beauty and bizarreness of orchid flowers, we cannot wonder that botanists have been quick to call attention to this in their naming of new genera. *Calanthe*, from the Greek, means simply "beautiful flower". Barbosa-Rodrigues expressed his admiration for the beauty of an orchid genus by naming it *Paradisanthus* or "flower of heaven". When he described *Mormodes*, Lindley said that the strange flowers represent "the most astonishing deviations from ordinary structure and the most startling variations from what appears to be the rule in other parts of the organic world"; and Fenzl named *Mormolyca* from the Greek word for hobgoblin because of the bizarre appearance and colouration of the flower when seen from the side. *Gorgoglossum* from the Greek *Gorgo* ("the grim one") alludes to the excessively fimbriate margin of the lip and petals and the fancied resemblance of these parts to the snake-covered head of the Gorgon.

Botanists are not without a sense of humor and often like to play tricks with names, to compound them from various previous epithets or to make an anagram. Williams made up *Epidanthus* from the first part of *Epidendrum* and adding *anthus* or "flower", in order to indicate a close relationship with the genus *Epidendrum*. Garay took *Physothallis* from *Physosiphon* and *Pleurothallis*, thus emphasizing the intermediate character of the new genus. Similarly, Schlechter's *Epilyna* comes from *Epidendrum* and *Evelyna*, because it resembles the former in habit and the latter in floral structure. *Nabaluia* is an artificial name created by Ames from Mt. Kinabalu, British North Borneo, and Summerhayes points out that his *Rangaeris* is a "near anagram of *Aerangis*, of which it was first published as a section".

By far the greater number of orchid genera have names which draw attention to some peculiar characteristic of their morphology. These names are numbered in the hundreds, so we can consider but a few examples. They range from the very simple and obvious to highly complex and recondite ones. We would all recognize, for example, that *Saccolabium* (Latin, "bag-lip") has, as an outstanding feature, a bag-like or saccate lip; that the lip of *Odontochilus* (Greek, "tooth-lip") is tooth-like or fimbriate along its margin; that *Dichaea* (Latin, "two-ranked") bears its leaves distichously; that the leaves of *Palmorchis* resemble those of some of the *Geonoma*-like palms; or that *Phaius* (Greek, "swarthy") has predominantly brownish flowers. Likewise easy to understand is that *Lepanthes* (Greek, "scale-flower") is so called because of the minute scale-like flowers of most species or that Robert Brown created *Pleurothallis* (Greek, "rib-branch") in reference to the many leaf-bearing stems arising caespitously in the majority of the species. *Maxillaria* (Latin, "jaw-bone") is, however, not quite so clearly understood, until study tells us that Ruiz and Pavón meant to emphasize the yawning flowers which might be likened to a gaping dog's jaw or to the fancied resemblance, in some species, of the column and lip, as seen from the side, to the jaws of an insect. Even more

obscure, until some imagination is used, could be Blume's *Nephelaphyllum* (Greek, "cloud-leaf"), which is descriptive of the cloudy or hazy opaqueness on the upper surface of the leaves.

Some of the names referring to morphological characters, however, are complicated in the extreme, and, unless the author of the name himself gave an explanation, their analysis often poses problems. Lindley, for one, liked these names. An example is his *Helcia*. Fortunately, he offered an explanation for *Helcia*, deriving it from the Latin term for "horse-collar" because the hollow, hairy pit at the base of the lip, when seen from the front, looks, together with the anther and column, "like an old-fashioned head-dress peeping over one of those starched high collars, such as ladies wore in the days of Queen Elizabeth, or through a horse-collar decorated with gaudy ribbons".

We have not, in some cases, been able to arrive at a sure explanation, and in a few we have failed completely to find any logical analysis. Robert Brown, for example, never explained the origin and significance of his *Herminium*. It may have come from a Geek word for "bed-post" and be descriptive of the stunted staminodia which stand on each side of the anther like posts of an old-fashioned bed; or it may refer to the resemblance of the inflorescence to a carved bed-post; or, again, it is possible that we have here an allusion to the shape of the tubers which might be likened to the knobs on posts of antique beds. The name could equally well have been derived from a Latin word meaning "white like ermine" in reference to the prevailing whiteness of the flowers. It seemed to Lindley to be connected with Hermes, the Greek name of the god Mercury, and to represent "an unexplained name of Linnaeus, mentioned in his *Philosophia Botanica* under the head of words derived from the titles of divinities: from which it is to be supposed that it had some reference to the god Mercury . . .".

One of Lindley's own names may be cited here in connexion with difficulty of analysis: *Oeonia*. This epithet, which he never explained, could be drawn from a Greek word meaning "everlasting", in allusion to a presumed long period of flowering; or from the Greek *aionos* (a bird of prey) in reference to the spreading perianth parts with the horizontal, hood-like, three-lobed lip which makes the flower resemble a bird in swooping flight.

Without a doubt, the most perplexing orchid name is one which has two other peculiarities: it is the shortest epithet for any genus of the orchids, and it will always stand at the head of any alphabetic list of genera. I refer to Reichenbach's *Aa*, a genus split off from the South American *Altensteinia*. Reichenbach gives no inkling of his reason for creating such an odd name. Professor Oakes Ames always maintained that Reichenbach, whose propensity towards the unusual was well known, desired in fact to have a genus of his making ever at the start of any alphabetical list and so hit upon the idea of a two-syllable name composed only of the letter *A*. When Garay was in Vienna, he was told that Reichenbach had created *Aa* by taking the first and last letters of *Altensteinia*. In his work on the orchids of Brazil, the late Professor F. Hoehne stated that the genus commemorated a Dutchman, Pieter van der Aa. He failed to state what van der Aa had done to warrant a connexion with orchids. Nor did he give his authority for deriving the generic name from this source, but it may be Pfeiffer (*Nomenclator* (1873) p. 1) who suggested this possibility with a question mark. In response to my enquiry, Dr. Frans Verdoorn of the Biohistorisch Institut der Rijksuniversiteit te Utrecht writes: "Petrus (or Pieter) van der Aa (1659-1733) was an erudite editor-printer-publisher at Leiden. You will find most of the botanical works which he issued in vol. 2 of Nissen's *Botanische Buch Illustration*. He is supposed to have done par-

ticularly some editorial work on the *Icones Arborum . . . Herbarum* (cf. Nissen) which Pritzell, Ed. 1 (not Ed. 2) lists sub (Petrus van der Aa). All other refs. I have about P. v.d. Aa refer to his publishing activities." So, unless Reichenbach gave his reasons in a letter which has not been published, there is probably no way for us to be certain, but, taking into account the eccentricities ascribed to this great botanist, I rather favour the explanation which Ames transmitted to me verbally.

It was Tomlinson who said: "We are anxious to get names to things; when we have named them, we feel we know them." How much more intimately would we feel that we know our orchids were we to understand the stories behind their names. — *Botanical Museum of Harvard University, Cambridge, Massachusetts.*

## Through the Letter Slot

### Collecting Orchids in Wilds

*Dear Editor:*—Last Sunday my wife and I set off by Land Rover early in the morning from Anna Regina into the Tapakuma Lake where we picked up a young half-Ameridian who often assists me on my orchid collecting jaunts, (and one Amerindian).

We continued along a white sand road recently cut through the forest to the Tapakuma River.

From here we paddled down the river in a corial (hollowed out tree trunk) and went up the narrow Turu Creek where I had not collected before. The number of species was small but occurred in fair quantity in the case of *Zygopetalum rostratum* which was in bloom. We found *Paphinia cristata*, in some places just above the water level of the creek, *Gongora atropurpurea*, *Coryanthes maculata*, *Rodriguesia candida*, an unidentified *Epidendrum*, *Epidendrum nocturnum*, *Brassavola cucullata*, *Catasetum scurra*, *Dichaea* and some other botanicals.

On the way back we collected a number of *Diacrium bicornutum* which in some cases formed large collars around the upper portion of trunks of Marishballi trees (*Licania* sp.), two of which we cut down. They were heavily infested with ants for after the caterpillars which attack virtually every pseudobulb after it has flowered and leave it a hollowed cylinder, the ants move in. Apparently the sucrose content of the pseudobulb has to be just right, which is after flowering, as I have never found a young pseudobulb damaged by these caterpillars.

Two days later I had cause to travel up the Supernaam River which is on the left bank of the Essequibo River. This time we travelled

in a small launch as far as a Creek known as the Kairuni. Unfortunately, there was practically no time for collecting but I managed to obtain *Peristeria pendula*. One plant was nearly three feet high and weighed over a pound. It was in flower carrying many speckled blooms.

I could see Bolleas and other orchids high up on the trees which in the Kairuni Creek are covered with mosses and bromeliads. It is a small shallow swift-flowing stream, the water a lovely rich amber color against the white sand of the stream bed. The humidity was very high but the air cool and every scent seemed to hang on the air—a true epiphytic paradise to which I shall return as soon as the opportunity offers.—*Adrian Thompson, British Guiana.*

### Oncidium Seed Wanted

*Dear Editor:*—Have been a member for four years now and still look forward to each new Bulletin. When it comes, my husband always makes some remark about not getting any housework out of me until I read it. That is not so, with five sons (two years to thirteen years) to feed and clothe. Because of them (I would not give them up for all the orchids in the world!), my orchid collection has not grown very fast.

I have decided to make a collection of *Oncidium*. If possible, I would like to get all the species that there are. Was thinking that one way would be by raising them from seed.

Any members having *Oncidium* seed or who will have some in the future, I would like them to write me how I could obtain some.—*Mrs. Eda Fae Brown, Box 37, 9723 King Road, Parma, Michigan.*