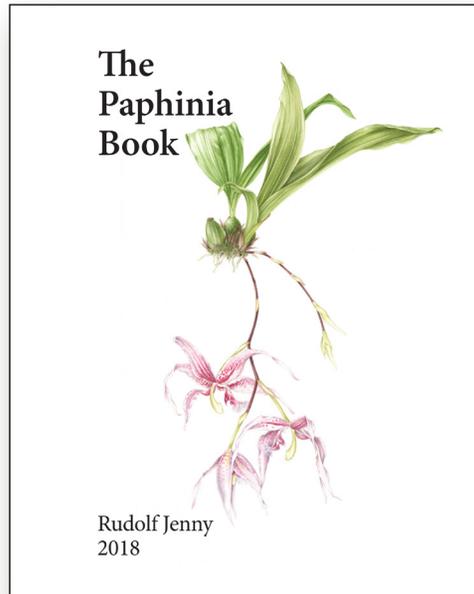


## BOOKS

**The Paphinia Book**, by Rudolf Jenny. Printed for the author by Imprenta Mariscal, Quito, Ecuador, 2018. Volume in large octavo (22.0×27.4 cm; 8.7×29.1”), 231 pages, hundreds of color and black and white illustrations, and color photographs. Hardbound, with dust jacket. 168.00 Euro / US\$ 210.00 at Koeltz Botanical Books.



I must confess I have a weakness for orchid monographs. Just plain, I like the idea of having a book to browse, among whose pages I will eventually find the correct name for an orchid flower that I hold in my hands. Paraphrasing Henry Oakeley’s introduction to his first *Guide to Lycaste and Anguloa*, it is nice to know that the species you are trying to identify is either there or is a new thing... I also have a fondness for the books illustrated with prodigality, with a profusion of color pages, because to the pleasure of knowledge they add amazement and admiration for the bizarre diversity of natural beauty.

Now, one can imagine how to put together a “book” on a large orchid genus, with the over hundred species of *Cattleya* (*sensu lato*), the hundred or so species of *Paphiopedilum*, the seventy species of *Vanda*, the sixty taxa included in *Cymbidium*, the fifty species of *Phalaenopsis*, and also on the forty or so taxa accepted for *Phragmipedium*. In fact, these genera have been monographed several times. An

orchidologist has however only feeble chances to see a richly illustrated monograph, shaped like a book, on small genera of ten or fifteen species.

With his *Paphinia Book*, Rudolf Jenny succeeded in bringing together both aspects of a useful and pleasant lecture, creating a real book of 230 pages on an orchid genus of just a few more than a dozen species... If only for this reason, his work deserves to be widely praised.

But, of course, this is not the only reason to review and praise Jenny’s monograph on *Paphinia*. This solid book takes advantage of the author’s recognized photographic skills, as well as of his passion for the historical aspects of orchidology, supported by a legendary personal library. Not only, under the “General” chapter, the history of *Paphinia* is accompanied by excellent images of old book pages, herbaria specimens, and portraits of the relevant figures in the discovery of this orchid genus, but virtually all the accepted species are illustrated with

ancient plates and botanical drawings which add a touch of historical scent to the modern photographs, and considerably broaden the reader's appreciation of the natural variation of individual species. Just to give you a few examples, *Paphinia cristata* is illustrated with eleven plates (plus 4 pics), taken from journals like the *Botanical Register*, *The Botanist*, *Curtis's Botanical Magazine*, *Flore des Series* and *Lindenia*, books like *Icones Plantarum Tropicarum*, Warner and Williams' *Orchid Album* and *Venezuelan Orchid Illustrated*, and unpublished illustrations from Reichenbach's and Senghas' herbaria, and John Day's Scrap Book. Six published historical illustrations, plus four sketches and a specimen reproduced from different herbaria, accompany the three color pics of *P. grandiflora* (and its synonym, *P. grandis*). Ten color photographs illustrate the variability of the Ecuadorian *P. herrerae*. *Paphinia rugosa* and its variety *kalbreyeri* have the record of illustrations, with seven unpublished and one published illustration spanning from 1877 to 1892 (mostly full age), and twelve color photographs!

For all the treated species, the original illustrations (when extant) and the protologues of the single species (together with those of the synonymized taxa) are also reproduced at the original size to be easily consulted. Photographs of the flower and the habit (in most cases), and macrophotographs of the lip, mostly taken by the author in his private plant collection, are presented for each taxon in a way that facilitates species comparison. I particularly like this style of monograph, which presents its conclusions together with most of the materials that support the taxonomic decisions. It is a transparent style which allows the reader to form his own idea about the identity and circumscription of the species, and to understand the taxonomic approach adopted by the author. Finally, when available, photographs of the habitats are also shown under the specific treatments, together with images of the original collectors and the botanists who described the species, to underline the human history behind the nomenclatural history of orchids.

The monograph recognizes 15 species of *Paphinia*, plus one variety and one form. Thirteen other *Paphinia* names, both at the specific or varietal

rank, are reduced under the synonymy of the 17 accepted taxa (including the subspecific taxa).

Chapters on Morphology (including General, Sepals & Petals, Column, Pollinaria and Anther, Lip, Lip-callus, Lip appendices, in this order), a species Checklist, Distribution, and Habitat precede the systematic treatment, arranged in alphabetical order by species. Particularly worthy of mention is an extensive chapter on the pollination biology of *Paphinia* (pp. 198–213), written by the Heiko Hentrich, a worldwide recognized expert in the reproductive biology of Stanhopeinae orchids. A profound discussion on *Paphinia* pollination mechanism and on floral scent (with a lot of personal observations by the author himself and other experts, like Günter Gerlach), make this chapter a very useful addition to the scientific literature about the pollination syndrome by male euglossine bees. Chapters on *Paphinia* hybridization (lavishly illustrated), the etymology of all the species, a selection of useful literature, and the index of names, conclude the book.

The *Paphinia Book* surely represents an authoritative monograph of the genus. From a taxonomic point of view, I just want to address a few points that could be improved. First of all, the treatment lacks a taxonomic key to the species, which would have rendered easier finding a particular taxon without the necessity of browsing through the entire book, scrutinizing the iconographic material. Secondly, some species have not been explicitly typified, as should be expected by a monographic work. So, for example, *Paphinia grandiflora* should have been formally lectotypified (and its synonyms *P. grandis* and *P. nutans* should have been typified as well), and *Paphinia posadarum* should have perhaps deserved to be neotypified, as according to the author both the holotype and the isotype are apparently missing from their respective herbaria. Finally, the author accepts and maintains in his treatment both the subspecific ranks of *varietas* and *formae* [i.e., *Paphinia neudeckeri* f. *mocoaensis* (R.Jenny) O.Gruss and *P. cristata* f. *modiglianiana* (Rchb.f.) O.Gruss, versus *P. levyae* var. *angustisegmenta* Garay], without expliciting his criteria about the meaning of the taxonomic categories utilized in the book. One would have preferred to have, also in this

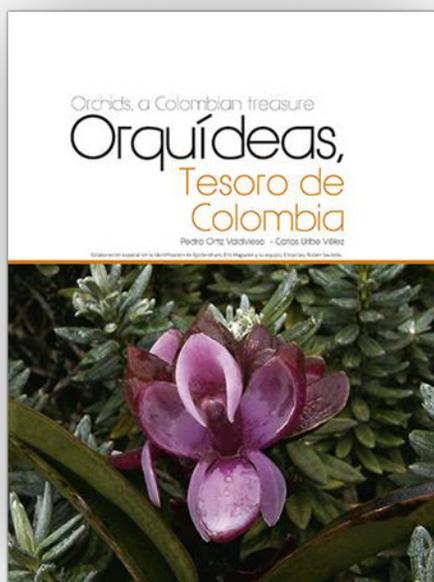
particular case, a final word about the systematic ranking of the concerned taxa.

I want to warmly recommend this beautiful monograph not only to insiders, who will certainly use it for their botanical activities, but also to the many fans of this magnificent group of plants and to

the simple lovers of natural beauty, since in the pages of this book they will find certainly a variety of things to feast their eyes on.

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**Orquídeas, tesoro de Colombia / Orchids, a Colombian treasure. Tomo 2. E–H.**, by Pedro Ortiz-Valdivieso† and Carlos Uribe Vélez. 2018. Da Vinci Publicidad y Medios, Bogotá. ISBN: 978-958-48-1585-9. Volume in 4to (29×23 cm), hardcover with dust jacket. 400 pp., 887 color photographs and 431 colored and line drawings. Bilingual, Spanish and English. 210.00 US\$ / 178 €.



In reviewing the first volume of this series three years ago (Pupulin 2015), I noted that the author expected to have the present volume in press for the summer of 2015, but writing, producing, editing, printing and binding a superb book as this *Tomo 2* takes its time... As well as its predecessor, the new release is a large, solid and heavy hardcover book provided with a dust jacket, and printed on high-quality, semi-matte paper.

The derivation of this work from a previous treatment by the same authors presented in digital format, its concept and organization, as well as the choice to mix Uribe Vélez's mostly excellent photographs with the sometimes schematic floral

sketches prepared by the late Father Ortiz, have been discussed in the review of the first volume (Pupulin 2015), to which I refer the interested reader.

In this second volume of the work, the generic treatment is preceded by an extensive chapter on orchids and philately in Colombia, written by Antonio Raad Aljure and profusely illustrated with photographs taken by Uribe Vélez in the author's stamps collection, The chapter highlights over sixty years of history of stamp emission in Colombia, since 1947 – with the first six orchids species – until 2011, with a philatelic sheet devoted to Colombian biodiversity, which features flowers of *Odontoglossum luteopurpureum*.

Volume 2 of “Orchids, a Colombian treasure” only covers 23 genera, from *Elleanthus* to *Habenaria*, but it includes the mammoth *Epidendrum*, a true *crux orchidologorum*, as well as the diverse and difficult *Encyclia* and *Gongora*.

The task of documenting, identifying and naming the 709 species of *Epidendrum* illustrated in the 220 pages devoted to this genus has been entrusted to the care of Eric Hágsater and his group of researchers, including Elizabeth Santiago and the late Luis Sánchez, ostensibly the undisputed specialists in the systematics of *Epidendrum*. The size of the effort of sorting out the over one thousand species of *Epidendrum* recorded for Colombia may be appreciated by the fact that some 20 taxa are exclusively known through the quite crude drawings of the type specimens made by Schlechter in the 1920s, and another 300 or so species simply lack any visual record of their identity. Even more indicative of the difficulty of the task is that 16 of the photographs (2%) are identified as “cf.” (the way to say, in botanical jargon, that it is *probably* the given species), and almost 70 (*ca.* 10%) as “aff.”, which means “similar but not the same”: another way to say that, with good probability, it is a still unpublished species. In five or six cases, the photographs are identified with a name already assigned but still unpublished (*sp. nov. ined.*), and in as many cases simply as “sp.”: a delicate abbreviation to say that you do not know... If it were you or me, this would be quite normal, but being the final answer of a well researched judgement by Hágsater’s study group, it means that the taxonomy of Colombian *Epidendrum* must be *very* difficult! And this, in turn, is by itself a very good reason to find a place in the library for this book, as who knows for how many years to come this would be the best visual reference to identify species of *Epidendrum* in the flora of Colombia.

Rubén Sauleda and Claudia Helena Gutiérrez took charge of the chapter on *Encyclia* (pp. 48–69). Twenty-three species are illustrated in 36 photographs and 16 sketches, while only 7 of the taxa recorded from Colombia are missing any visual records. There are a few perplexing things in the treatment. *Encyclia belizensis* is photographically recorded by three very different morphs (one of which, in my opinion, is a form of *E. diota*), and I strongly suspect that the name

of Colombian populations is misapplied, as it seems difficult to explain such a broad disjunction between the populations of northern Nicaragua and those of Colombia (the species has never been recorded for the floras of Costa Rica and Panama). *Oestlundia luteorosea*, which DNA data show more closely related to *Prosthechea* than to *Encyclia* (Higgins *et al.* 2003), is here treated as belonging to the latter genus. The variation of *Encyclia cordigera* is presented in four photographs, one of which depicting an unpublished variety “alba”, together with the purple-lipped form, provided with dark brown sepals and petals, which is unknown to the north of Panama. Also included are two pics of a white-lipped form, striped with purple in front of the lip callus, identified as *E. macrochila*, a taxon originally described from Mexico and the only “species” of the *E. cordigera* group recorded in Costa Rica. As the profusion of names, both at the specific and varietal levels, applied to morphs of this group show (see, for example, Withner 1998), and the inconsistencies in distributional patterns confirm, the recognition of *E. macrochila* as a species distinct from *E. cordigera* based on flower color and the results of selfing and hybridizing (Sauleda & Esperon 2016), without a careful study of genetic and morphological variation within and among populations through the whole distribution range of the group, can not resolve the taxonomy of *Encyclia cordigera*.

The chapter on *Gongora* alone occupies 40 pages, with 84 photographs and 27 sketches. Out of the 50 names published to name the diversity of the genus in Colombia, only *G. dilaniana*, *G. lagunae*, *G. leucochila*, *G. passiflorolens*, and *G. unicolor* (less than 10%) are not depicted in the book, which make of it an essential visual reference for this difficult group of orchids in the northern Andes. Nevertheless, as it is unfortunately common with *Gongora*, the identification of the species seems largely tentative. So, for example, the three photographs referred to *G. arcuata* probably depicts three different taxa, and the same is true for the five entries of *G. catilligera* (*G. aff. catilligera* on page 350 could well be an altogether new species). The photograph of *G. charontis* and those of *G. dressleri* depict, in my opinion, the same species. Judging by the long claw of the lip of *G. claviodora* (352), this name seems likely misapplied to Colombian populations. Finally,

a small bunch of 4 photographs (p. 380) illustrated *Gongora* spp., at least two of which effectively seem different from any other known species in the genus.

I found of particular interest the chapters on *Galeandra* (8 pages, 22 illustrations) and *Gomphichis* (6 pages, 20 illustrations), as both are rarely illustrated in profusion and with such a completeness; the book includes images of all the 12 species of *Galeandra* and all but one the taxa recorded in Colombia for *Gomphichis*.

As a minor methodological fault, the genus *Guanchezia* is illustrated by a single photograph by Gustavo Romero, which undoubtedly depicts a Venezuelan specimen, so that we still lack any visual evidence of the occurrence of *Guanchezia* in Colombia.

The authors accept the genus *Expedicula*, which most workers in the Pleurothallidinae treat today as a synonym of *Lepanthopsis* (Karremans 2016), but the two photographs of *Expedicula* on page 317, *E. apoda* and *E. sp.*, obviously depict true species of *Pleurothallis* (*P. caucensis* and *P. cf. crescentilabia* respectively). Finally, whilst *Frondiaria caulescens* is correctly illustrated in the color photographs, Father Ortíz' sketch on page 322 does not depict a flower of *Frondiaria*, but most probably one of the genus *Crossoglossa*.

There is no doubt that, dealing with probably the most diverse orchid flora over the planet, the work by Uribe Vélez has epic proportions. The effort to make the series as complete as possible as an iconographic record of this extraordinary diversity has to be praised,

and make its minor faults negligible in front of its utility. The second volume of "Orchids, a Colombian treasure" is a treat for the eyes and a challenge for the mind, and it deserves a place in any serious orchid library. However, I seriously doubt that this *magnus opus* could be completed in the three volumes originally scheduled, and I guess that several more tomes will be released to cover the remaining genera, included between I and Z. I say it with a pinch of pleasure, savoring the waiting of the next volumes.

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