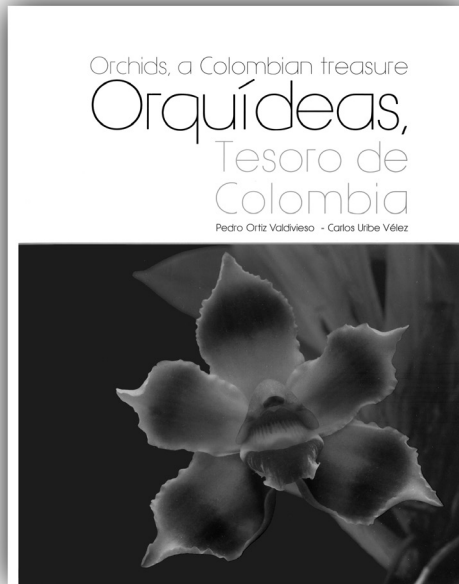


BOOK REVIEWS

Pedro Ortiz-Valdivieso† and Carlos Uribe Vélez. 2014. **Orquídeas, tesoro de Colombia / Orchids, a Colombian treasure. Tomo 1. A–D.** Da Vinci Publicidad y Medios, Bogotá. ISBN: 978-958-46-5329-1. Volume in 4^{to} (29 x 23 cm), hardcover with dust jacket. 398 pp., 888 colour photographs and 499 line drawings. Bilingual, Spanish and English. 210.00 US\$ / 178 €.



This impressive, large, solid and heavy hardcover book made of 398 pages printed on high-quality, semi-matte paper, is announced on the cover and the frontispiece as a work on the orchids of Colombia. One has to refer to the spine of the book, both on dust jacket and on the hardcover, to know that the volume is just the first release of a series including other two volumes to follow, to complete the monograph. This one, “*Tomo I*”, covers the genera between A (*Aa*) and D (*Dukeella*), dealing with 3848 species. The second volume is expected for the summer of 2015.

Colombia has not been stingy in terms of orchid books. Among the general works we have to cite at least the gorgeous volumes on microspermae from Mutis’ “*Flora de la Real Expedición Botánica del Nuevo Reino de Granada*” (1963–1995), “*Orquídeas colombianas / Colombian orchids*” by Mariano Ospina (1958), the multi-authored “*Orquídeas ornamentales de Colombia*” (1980), the renown series “*Native Colombian orchids*”, superbly edited

by Rodrigo Escobar in four volumes plus two supplements (1991–1994), “*Orquídeas de Colombia*” by Pedro Ortiz Valdivieso (1976) and his recent, mostly photographic “*Orquídeas - Especies de Colombia*” (2010). Colombian orchidology has also been enlighten by splendid books on more specific geographic areas of the country, like Guillermo Misas Urruta’s “*Orchids from the Serrania del Baudó, Chocó - Colombia*” (2006), “*Orchids in the mist: orchids of the cloud forests of southwestern Colombia*”, edited by Jorge E. Orejuela (2011), and the new “*Orquídeas del valle de Aburrá*” (2014) – a volume that we also review on this same issue of the journal –, with text by several authors and great photographs by Sebastian Vieira and other photographers, as well as on specific orchid groups, like Ortiz’s “*Las orquídeas del género Masdevallia en Colombia*” (2000) and Óscar Duque’s “*Orchidaceae Stelis Swartz: Compendium*” (2008), and on more specific topics, as Ospina’s “*Orchids and ecology in Colombia*” (1996) and the “*Libro rojo*

de plantas de Colombia. Vol. 6: Orquídeas, primera parte”, edited by E. Calderón-Sáenz (2006).

The new volume presented here represents the improved, hard printed version of a work previously presented in digital format with the title “*A gallery of Colombian orchids*”. It is the combination of a book originally envisioned and partly written by the late Father Pedro Ortiz-Valdivieso (1926–2012), author of a large number of scientific papers and books on the orchid flora of Colombia, and a detailed introduction on morphology, ecology, pollination, and natural habitats of Colombian orchids (plus a final glossary of Spanish and English terms) by surgeon orthopedist Carlos Uribe Vélez, who – according to the information provided on the book jacket – devoted his last twenty years to the discovery, study and cultivation of orchids. Uribe Vélez also gathered all the available photographic records (including a large number of his own photographs), complementing them with schematic and partially coloured sketches of most of the species of each genus.

The introductory chapters, which offer some general information on orchid morphology and ecology (including reproductive biology), are illustrated with good and useful photographs depicting orchid habitats, variation in flower shapes and sizes, and enlarged flower details to explain some of the terms used throughout the texts. Even though most of the arguments are not specific to the orchids of Colombia, the photographs invariably illustrate Colombian specimens, and the images of pollinators in action will be of some interest to the student of pollination biology.

According to the original plan of the book by Father Ortiz, and on the basis of the texts that he wrote for the second edition of his “Orquídeas de Colombia” (1995), for each genus the original authorship, indication of the type species, etymology, distribution, a botanical description and an essential bibliography are provided.

The illustrations consist in one or more full page photographs and other, smaller photographs of other recorded species. Ink illustrations of the flower, mostly partially coloured and sometimes accompanied by a sketch of some diagnostic details, are provided for most of the species. The drawings of the flowers are pretty crude and highly schematic, and they are reproduced so small to preclude any real utility for species identification. The quality of the photographs

is variable, but nonetheless it is adequate in most of the cases. Several of the photographs printed full page suffer however of an insufficient resolution and/or sharpness and they look quite blurred at the actual size. Close to each photograph and drawing a coloured dot indicates the climate (or perhaps the general range of temperature) where the plants grow.

A noteworthy point is that the photographs, even when they were taken by different authors with different photographic skills, depict nonetheless true Colombian plants and are therefore of real utility to understand the taxonomic concepts used by the junior author. So, for example, whilst the *Brassia caudata* on p. 133 is probably not the same species as the Jamaican type, it is however a real species from Colombia and therefore truly informative. In the same way, whilst one can debate about the use of the name *Cattleya aurea* versus *dowiana* subsp. *aurea*, the specimens illustrated on pages 180–181 do show some of the real variation exhibited by this taxon in Colombia.

The classification follows a mix a old and new taxonomic “schools”. So, for example, *Ada* is retained ad distinct from *Brassia*, *Bollea* as distinct from *Pescatoria*, *Cochlioda* from *Oncidium*, *Condylago* from *Stelis*, and *Diaenium* from *Comparettia*, while *Guarianthe* is treated under *Cattleya*, and the genus *Chondrohyncha* is treated in a broad sense, including *Aetheorhyncha*, *Benzingia*, *Daiotyla*, *Echinorhyncha*, *Euryblema*, *Ixyophora*, and *Stenotyla*, but not *Chondroscaphe* and *Cochleanthes*, which are treated independently instead. At the specific level, *Chondrorhyncha* no. 10 (p. 215) is correctly *Daiotyla xanthina*, while [*Chondrorhyncha*].*xanthina* (p. 216) is most probably a still undescribed species of *Daiotyla*. *Chondrorhyncha* sp. on p. 217 is almost surely a new *Euryblema* species. *Chaubardiella chasmatochila* is treated as different from *C. subquadrata*, so the true *C. subquadrata* is depicted under the synonymous name of *C. chasmatochila* (p. 208), while the photographs of *C. subquadrata* (p. 209) probably depicts an unnamed species. *Cischweinfia glicensteinii*, an invention by the late Eric A. Christenson from Costa Rica, is now sadly recorded also from Colombia. *Cochleanthes* sp. (p. 239, no. 3) is most surely a hybrid, albeit natural. *Dichaea pendula* is depicted under the synonymous

(and illegitimate name) *D. swartzii*, the congested form of *D. hystricina* is pictured as *D. selaginella*, and the infaustous name *D. muricata* is used for what it is probably the true *D. robusta*.

Apart from these few and very understandably mistakes, the book is a useful resource for the student of the Andean orchid flora. With an estimate diversity

of around six thousand species, the Orchidaceae of Colombia requires any honest effort to disclose its true composition. With the first step of their three-volumes work, Ortiz-Valdivieso y Uribe Vélez surely did a genuine contribution to this aim.

Franco Pupulin

Lankester Botanical Garden, University of Costa Rica

Marta Kolanowska. 2014. **Orchids of the Darién Gap**. Koeltz Scientific Books, Koenigstein, Germany. ISBN 978-3-87429-475-1. Hardcover, 348 pages, 259 line figures, 162 color photographs. English. 141.60 US\$ / 120 € approx.



The Pan-American Highway is a road interconnecting about 48000 km from Prudhoe Bay, USA to Ushuaia, Argentina. This road is continuous except at one point, the Darién Gap. This term refers to the interruption of the Pan-American Highway between Panama and Colombia. Large extensions of primary forest in the Panamanian province of Darién and the marshlands areas of Atrato river in the Department of Chocó in Colombia prevent the construction of a road link between the two countries. This region, still one of the most attractive for botanists because of its inestimable biodiversity has remained little explored until nowadays. The difficult terrain and the lack of roads added to the insecurity due to drug trafficking and guerrillas make the area intriguing and mysterious.

Biologically this region has been treated as Chocó-Darién-Western Ecuador hotspot while the term Darién Gap is mostly associated with the ground interruption of the Pan-American Highway.

Marta Kolanowska presents a compilation of 270 orchid species for the Darién Gap, defined by the author as the political division of the province of Darién in Panama plus the Colombian regions from Sapzurro to Brazon Supiqui [?] in the Caribbean of Colombia, the Pacific coast of Chocó from Punta La Tortuguera to the Bahía Colombia between Choco and Antioquia excluding Serranía del Baudo. A map showing author's delimitation of the Darién Gap is included.

This compilation is entirely based upon 1700 herbarium specimens and digitized records in

databases on internet from about 20 herbaria. The book did not include fieldwork results except for the few photographs of the author ostensibly taken in the study area. A foreword of the Darien Gap with notes on natural conditions and wildlife conservation as well as a review of the orchid records are presented. The book is organized alphabetically for taxa above genus, genera and species. A key to the genera and dichotomous keys for species identification are provided. Information on generitypes and type specimens and their associated synonymy are cited. All genera and species have morphological descriptions, accompanied by 258 line drawings by Natalia Ołędryńska mostly from perianth parts or just the lip. Most of the drawings are not strictly based on plants collected in Darien. The book includes illustrations copied or redrawn from taxonomic treatments published elsewhere and based on specimens collected outside the study area. Exsiccatae from Darien Gap are cited apart from the other specimens studied. Each morphological description is complemented by information on geographical distribution, habitat, ecology and brief taxonomic notes, sometimes avoiding discussions of recently published works that do not agree with the data presented by the author. One new species is described in the book as *Sobralia dariensis*. It is illustrated by a floral diagram and compared to *S. amabilis*.

The classification system mostly follows *Systema Orchidarium* by Dariusz Szlachetko and it is similar to that adopted by the same author in the two volumes of "Orchids of the Department of Valle del Cauca". Kolanowska again recognized Cyrtipediaceae as a separate family from Orchidaceae (then it should not be strictly included in a book on orchids). Six subfamilies are recognized among them Spiranthoideae, Tropidioideae and Vandoideae are not currently accepted by the majority of orchidologists. The same issue is present with the adoption of the subtribes Comporetinae, Cryptarrheninae, Dichaeinae, Ionopsidinae, Ornithocephaliinae, Trichocentrinae and Trichopilinae among others. The inclusion of *Hexisea*,

Nidema and *Scaphyglottis* in Ponerinae also opposes the phylogenetic evidence available.

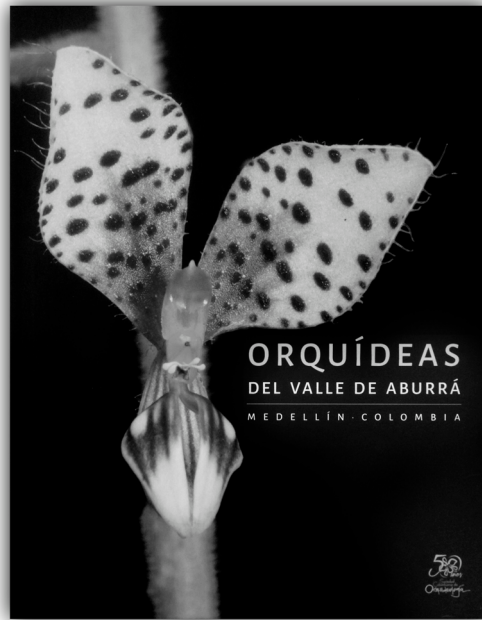
The book is complimented by 162 pictures that make the work colorful. However, as with the illustrations, most of the photographs are from specimens out of the Darien Gap. Despite being a significant effort, this book must be taken with caution especially for students entering in the taxonomy of orchids. The fact of using pictures or illustrations of specimens that are no native to Darien makes the taxonomic work less accurate and might introduce confusion. It is known that many species of orchids do not have such wide distributions. On the other hand the Darien region is biogeographically less akin to western Panama and Costa Rica and the north of Mesoamerica. A clear example is the *Cattleya dowiana*, a species native to the Caribbean region of Costa Rica and western Panama. The debate over whether populations from the Darien region and northern Colombia should be treated as a distinct subspecies of *C. dowiana* or as a distinct species under *Cattleya aurea* is still unresolved. It would have been helpful to clarify this if the author included at least photographs based on Darien specimens, however the photographs presented are based on plants from Costa Rica. Other examples are the pictures of the species complexes of *Specklinia (Empusella) endotrachys* (now splitted in 5 species with *S. endotrachys* endemic to Costa Rica), *Stelis (Unciferia) segoviensis*, *Sobralia powellii* and *Prosthechea vespa*, which likely correspond to other species that are not native to Darien.

This book is a good compilation of species to the regions of Darien and Choco. Especially the citation of herbarium specimens and localities can serve as a basis for future floristic projects in the area. It is definite that many species not yet recorded will be revealed, so this book can serve as a preliminary approach to the understanding of this highly diverse and challenging Neotropical region.

Diego Bogarín

Lankester Botanical Garden, University of Costa Rica

Orquídeas del Valle de Aburrá, Medellín, Colombia. Sociedad Colombiana de Orquideología. Panamericana Formas e Impresos S.A., Colombia, 2014. ISBN: 978-958-58263-1-1. 397 pages, 285 color plates. 56.00 US\$.



Last year the Colombian Orchid Society (Sociedad Colombiana de Orquideología) celebrated 50 years of existence, and in the midst of their celebrations published “Orquídeas del Valle de Aburrá”. This heavy production has a very carefully presented hardcover and is just shy of four hundred pages. However, it is its almost 300 color photographs that really make it impressive, especially because most of them are extremely beautiful.

The book starts off with a one page preface in which the mission of the society is given, together with an explanation as to how and why the work was conceived. Aburrá Valley in the sense of this book is said to cover “from Barbosa to the North, towards Caldas in the South, and from the sharp mountain edges of the East and West up to the river”. The orchid species included are those that are found in the area currently and in the past. This is established using bona fide collection data from diverse collections and collectors, some of them from the time of the expeditions of Humboldt and Mutis.

The preface is followed by the generalities section, which presents a brief but useful historical account of botanical exploration in Colombia and morphological recognition and characterization of orchids. The

taxonomy section shortly explains the authors’ line of thought behind the name usage in the book and gives an interesting description of the origin of plant classification and its use.

The rest of the book is dedicated to generously illustrating and describing each genus of the Orchidaceae that is or was to be found in Aburrá. Each genus includes brief discussions as to its taxonomy, generalities, distribution and habitat, and well as accounts on their conservation status and culture. The texts are useful for any orchid enthusiast, and help to understand the origin of many names and are rich in their details about the orchids themselves. Nevertheless, it is the photographs of the species treated here that really makes the book. Every genus includes at least one photograph, but most include a few. The species shown are those reported from the area (unfortunately they lack a voucher), and thus many overall rare species are depicted. We can only hope that the specimens depicted are indeed from the region. The authors account for some 390 species of orchids in the valley, distributed in more than 92 genera, making the region’s orchid flora quite rich.

Finally, a discussion as to the conservation status of

the orchids at Aburrá is presented, together with their worries about the future of this immensely diverse region. Useful maps of the regions and their protected areas are also given.

The use of generic names is mostly what we would call “old school” as none of more modern generic circumscriptions are followed. *Bractia*, *Fernandezia*, *Odontoglossum*, *Ophidion* and *Stellilabium* are recognized as distinct genera. Meanwhile, the genera *Erythrodes*, *Masdevallia*, *Maxillaria*, *Oncidium*, *Pleurothallis*, *Stelis* and *Trichosalpinx* are all kept in their “traditional sense”. The controversial *Ida* and *Neooreophilus* are notable exceptions, being the only recently proposed genera that made the cut. Species-level taxonomy has been done with due care, and the authors have made little mistakes. The most unfortunate mixups are perhaps the photographs of *Pleurothallis* [*Apoda-prorepentia*] *kateora* under *Jacquinella* sp. and of a species of *Psilochilus* under

Sauroglossum sp. Finally, the photographs labelled *Pleurothallis* [*Specklinia*] *costaricensis* are certainly not that and are most probably of an undescribed species, while the species labeled *Epidendrum difforme*, a species endemic to the Antilles, is more likely to be *Epidendrum chlorocorymbos*.

The book is a must have for all students of the Colombian flora, be it professionally or not. For those that love orchids in general and especially like little known ones depicted in high quality photography this book is quite a delight.

Orquídeas del Valle de Aburrá is presented as a book authored by the Sociedad Colombiana de Orquidología, and thus seems authorless. Nevertheless, credits should be given to 5 editorial committee members, 7 text authors, 1 reviewer, 14 photographers and 1 designer.

Adam P. Karremans

Lankester Botanical Garden, University of Costa Rica