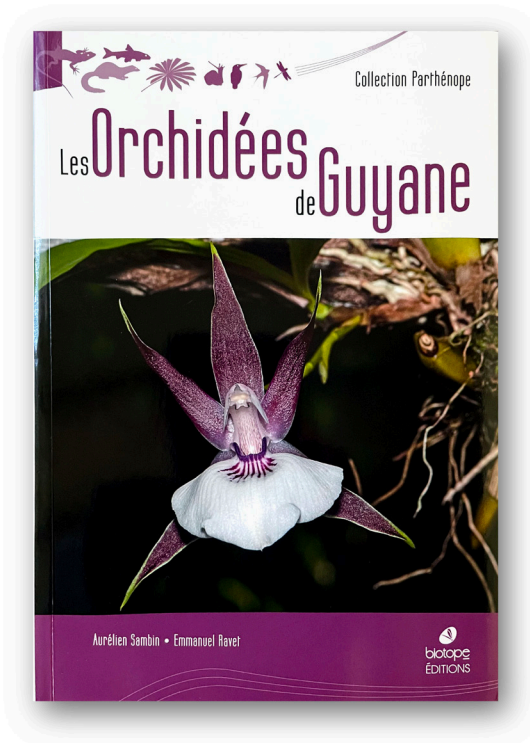


## BOOKS

**Les Orchidées de Guyane**, by Aurélien Sambin and Emmanuel Ravet. Mèze, France, Éditions Biotope (Collection Parthénope), 2021. ISBN: 978-2-36662-248-5. Volume in octavo, 24 × 16.8 cm, 669 pp., hundreds of color photographs and black and white drawings. In French. Paperbound. 69,00€. Ordering: <https://leclub-biotope.com/fr/>



*Les Orchidées de Guyane* is a book with many merits. First of all, the two authors are specialists who, combining their skills, add more than thirty years of activity in the study and documentation of the French Guiana Orchids. Sambin created and directed the Guiana Botanical Garden, where he gathered the largest living orchid collection in the whole country. Ravet, with a particular interest in the scent of orchid flowers, has gathered in over twenty years of research a rich collection of photographs of native species, often taken in the field, many of which illustrate this beautiful book. Secondly, as it was legitimate and right to expect from two authors living in the country of study, the orchids included in their book were actually

documented in French Guiana, which represents a huge advantage for the specialist and the enthusiast specifically interested in the floristic composition of the South American country. Last but not least, the book is a very complete catalog of the Guianese orchid flora.

In a beautiful volume of almost 700 pages, which, however, has been designed to be “almost” portable, the authors present 357 species of orchids, inventoried so far in the French Guiana area, for the most part, collected and documented expressly for this book, partly through the study of the historical collections of French Guiana herbaria and the natural history museum collections of continental France.

According to a somewhat classical structure, the book begins with a chapter dedicated to French Guiana, in which the geographical situation, the topography, the climate, and the salient aspects of the vegetation and orchid habitats of the South American country are treated. It is a relatively short chapter, of about ten pages, but well-illustrated and which offers the essential hints to a first approach to the geographical complexity and the consequent floristic richness of French Guiana. This is followed by a chapter specifically dedicated to the threats affecting the local orchid flora and the protective measures necessary to preserve it for the future. A short list of 13 species gathers those officially protected by a ministerial decree, now twenty years old.

The third chapter of the book, succinct but well-illustrated, is dedicated to describing the general morphological characters of orchids, with a brief note on their pollination. Of particular interest are a couple of excellent photographs depicting a fly removing the pollinarium from *Specklinia grobyi*. The fourth chapter presents a dichotomous key for identifying the genera of orchids of French Guiana, which leads to the identification of 120 genera. The key is obviously aimed at a specialist reader, but this is, I would say, inevitable for any type of dichotomous key dedicated to Orchidaceae, which necessarily requires prior knowledge of some details of plant morphology and of the terminology used to describe it, to be used with success. Some of the genera, such as *Apedium*, *Mapinguari*, or *Rhinorchis*, to name a few, will be less familiar to the reader, especially the non-specialist one because they have been used less frequently and have received less general acceptance in the field of botany.

With the fifth and more substantial (almost 600 pages) chapter of this treatment, the individual presentation of the genera begins, offered according to the systematic arrangement proposed by Chase *et al.* (2015), with a dichotomous key to Guianese species, followed by the treatment of individual species. In the case of large genera, as for example, *Epidendrum*, the key is organized by phylogenetic “groups”, and the species are treated accordingly to allow for easier comparison among closely related taxa. For each of the species, the name of the taxonomic authority is presented as well as the bibliographic details relating to its publication, the basonym with its original

publication date, data on the collection location of the type specimen, and, when necessary, a list of synonyms. The description of each taxa follows, generally based on French Guiana material, where their morphometric characters are indicated. Only some of the taxa could not be identified to the species level, and they are therefore presented as related to known species (aff.) or as “sp.” when the authors suspect they are taxonomic novelties. Mode of growth, size, density, and local geographic distribution, notes on the scent of flowers and phenology, complete the presentation of each individual species.

All the species, and this is certainly a great merit of the volume, are presented with one or more illustrations, in most cases photographs (many of them *in situ*), but often accompanied by useful floral diagrams prepared by the main author based on local material. In the rare cases where a photograph was not available, the authors present an illustration, often taken by the original protologue. As far as I can understand, since I am not a specialist in the flora of the Guyanas, the identifications seemed to me in most cases to be completely ascertained. I would just point out that the two photographs of *Cochleanthes guyanensis* on p. 293 depict in my opinion, two different species, as well as the photographs of *Mormolyca rufescens* (pp. 376–377). I also suspect that the photograph of *Trichocentrum fuscum* in the inset of page 271 could represent a different taxon. The photographs of *Dichaea pendula* (pp. 302–303) show a species completely different from what has been treated under this name for the flora of Costa Rica (Pupulin 2010), but considering that the type of *Limodorum pendulum* is exactly from French Guiana, I guess we will have to reconsider the application of this name in the Costa Rican flora...

With very rare exceptions, the photographs are of excellent quality, frequently offered in numerous different views for each species, almost always with an additional image of the habit, and allow for an easy identification of the treated species. In several cases, they also offer a clue about the variation of the species: a look at the photographs of *Pescatoria violacea* on pp. 322–323 should convince you about my impression. Out of the hundreds of photographs, I could only spot a couple that were printed upside-down (i.e. *Kegeliella houtteana*, on p. 419). The volume ends with a short

glossary, biographical references (reduced to a minimum), and an index of scientific names.

Taken this volume as a whole, it presents an extraordinarily illustrated catalog of the orchids of French Guiana, by force of things uncomplete considering the difficulty of exploration of a country that is still largely covered by virgin forests, but absolutely complete as to our current botanical knowledge. Noteworthy is the relative scarcity of documented Pleurothallids, of which only 63 species were recorded, compared to 41 species in *Epidendrum* alone. *Les Orchidées de Guyane* is an instrumental reference work, both for the naturalist interested in the flora of the Guyanese region as well as for the specialist. This treatment occupies an area of botanical knowledge that other recent works on these same regions had not covered, in my opinion, in a sufficiently rigorous way. The work of Sambin and Rovet will for a long time represent an essential reference work on the

French Guiana region, and I believe it should not be missing in any library specializing in Neotropical flora and orchid systematics.

*Franco Pupulin*

Lankester Botanical Garden  
University of Costa Rica

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