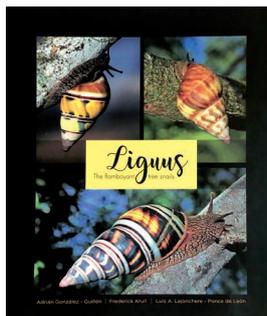


Book review

ABRAHAM S.H. BREURE

Royal Belgian Institute of Natural Sciences, Vautierstraat 29, 1000 Brussels, Belgium;
Naturalis Biodiversity Center, P.O. Box 9517, 2300 RA Leiden, The Netherlands;
ashbreure@protonmail.com



GONZÁLEZ-GUILLÉN, A., KRULL, F. & LAJONCHERE-PONCE DE LEON, L.A., 2018. *Liguus*. The flamboyant tree snails: 1-498 (+ 88 pages on accompanying CD). F. Krull, Tierra Verde. ISBN 978-0-9847140-5-6. Price US \$ 189.90 net (hardcover).

This is the third book on land snails by González-Guillén and the second one which is confined to a single genus, his previous books are entirely confined to Cuban species. For this book on the Orthalicidae tree snail genus *Liguus*, which is distributed from Hispaniola to Florida, Adrián González joined forces with Pete Krull and Luiz Lajonchère; the latter has published on this genus before. The book has 10 chapters with information on historical studies, collections, paleogeography, taxonomy of the Cuban, Floridan respectively Hispaniolan (sub)species and colour forms, biology and ecology, and finally conservation issues. The enclosed CD contains appendices to several chapters and the bibliography. There are 161 (unnumbered) plates of *Liguus* colour forms and hundreds of colour photos of live snails.

Liguus tree snails have caught the eye of shell collectors and artists since the beginning of the 17th century up until today. They have many different colour patterns and hybridisation between colour forms does occur, as well as gigantism and dwarfism. The result is an astonishing number of names for them, either officially or unofficially introduced which can be found in both museum and private collections. The book starts with a disclaimer “not deemed to be valid for the purpose of formal taxonomic nomenclature”. Although this seems a justified action, it is perhaps also too modest an action when one realises that 161 names are available for *Liguus* taxa (Appendix 11), plus several unofficial varieties and a bunch of manuscript names. The authors have neatly streamlined this chaos into five species (including *Liguus flamellus* and *L. blainianus*; if the biological species concept is applied only three remain: *Liguus fas-*

ciatus, *L. virgineus*, *L. vittatus*). The core of the book is thus the two taxonomic parts (Chapters 4 and 5: pp. 63-279 for Cuban taxa, and Chapters 7 and 8: pp. 304-421 for Floridan and Hispaniolan taxa respectively), in which the species, their subspecies and lineages are treated by giving for each the original publication, the type locality, the description, their distribution and remarks. The many Cuban taxa have not always been properly figured, and the authors have gone to a great effort to search for these specimens and photograph them to modern standards. Almost each taxon is beautifully illustrated on the plates which show 24 shells each, grouped in four rows. On several pages (pp. 73-74, 132, 198, 265, 304, 345, 411-412) maps are provided that help to understand how the subspecies and lineages are distributed. Several interspersed plates illustrate the living specimens of one or more morphs.

The introductory Chapters 2 and 3 present historical data, including iconography and collecting information. Many historical photos are included, and I spotted some that I have not seen before. A brief Chapter 4 presents the geological background needed to understand the current distribution. Chapter 6 bridges both taxonomical parts and brings up a question that several scientists have been struggling with: the connection between Cuban and Florida *Liguus* taxa. Although many unanswered questions remain, the authors suggest that *Liguus* baby shells were carried by hurricanes from Cuba to Florida. They also suggest that these were relatively recent (geologically speaking) events. Of course, these and other questions needs further confirmation and future molecular studies may hopefully at least partially solve them. The final two chapters (9 and 10) are devoted to the biology, ecology and conservation of these snails. In the first chapter data is compiled concerning life span, population density, predation, host plants and trees among others. The last chapter discusses habitat destruction, introduced predators, protection regulations and laws, protected areas and some suggestions for future conservation.

The appendices have been stored on an accompanying CD, which when I inserted it in my system appeared to contain one rar-file. After decompressing, a pdf-file of similar size was shown, which raises the question why it was com-

pressed anyway. The file has several appendices showing supplementary information, e.g., historical collecting field trips by U.S.A. malacologists to Cuba, the dispute concerning the holotype and 'type' locality of *Liguus fasciatus*, collectors mentioned on labels of Cuban *Liguus* shells, manuscript names and their current status, a list of available names, and additional ecological, anatomical, and conservation data. Together these form the first 58 pages. The final 30 pages are bibliographical references, a huge list in small print.

The authors justify this work in the introduction as "there has never been of book about *Liguus* that included every named form from the Cuban archipelago, peninsular Florida, and the island of Hispaniola". In fact they have made a revision of the genus which is easily readable for non-scientists and, together with the many high-quality

photographs, have done an amazing job. Are there no critical remarks to be made? Yes, but only a few. The plates are unnumbered and therefore no link is made between the text and the illustrations. In addition, no index has been provided which would have helped to easily locate both the scientific names and person names in the book and appendices. Both points make the book less useful as a reference work. While the authors say "word can fly but writings remain" (p. 497), they would have done better to replace the CD (soon outdated) with a more permanent alternative; the information in the appendices is too important not to have it readily available.

My overall impression is that this work will be seen as a hallmark for decades to come. The book will serve both amateurs and professionals and should not be lacking in any relevant library.