

LÖTTERS, S., K. H. JUNGFER, F.-W. HENKEL & W. SCHMIDT (2007): *Poison Frogs. Biology, Species & Captive Husbandry*. – Frankfurt am Main (Edition Chimaira), 668 pp., 828 illustrations. ISBN 978-3-930612-62-8. EUR 98.00

With their interesting behaviour and fascinating reproductive strategies, poison frogs are rewarding study objects for both amateurs and ecologists/behaviouralists. In fact, it would be hard to imagine their absence from the terraria of today's anuran enthusiasts. It has therefore been quite curious that there used to be no comprehensive treatise on these animals. This gap has now been filled with the present book. The team of authors, STEFAN LÖTTERS, KARL-HEINZ JUNGFER, FRIEDRICH-WILHELM HENKEL, and WOLFGANG SCHMIDT, comprises experts on taxonomy, systematics, biogeography, field ecology, and passionate terrarium keepers who have all for decades been continually furthering our knowledge of dendrobatid frogs. Six of the species portrayed in the book have even been described by these authors elsewhere!

Covering about 668 pages and sporting more than 800 colour photographs, this treatise is organized in four major sections: the first part (pages 16 through 166) introduces the reader to the basics of the biology, biogeography, and ecology of dendrobatids and includes an overview of the new systematic arrangement and nomenclature suggested by GRANT et al. (2006). Because the latter has already led to substantial confusion, the authors also briefly outline the "old" taxonomy with its traditional classification of families, groups and genera in a separate Appendix. Recognized families, subfamilies and genera are provided with diagnostic information that will facilitate quick classification even by the layman, thanks to detailed instructions and numerous illustrations. Every taxon is portrayed with data on its type locality, etymology, diagnosis, distribution range, associated taxa and synonyms, as well as key literature. A paragraph of notes provides the reader with additional information and comments. The natural habitats and ways of life of these frogs are discussed in great detail, conveying an excellent impression of the complexity of their biocenoses and biological needs.

The second part (pages 167 through 266) deals in great detail with aspects of captive husbandry and breeding. A lot of attention is spent on the different types of terraria for different ecotypes and how to build and outfit them. Required terrarium technology, such as illumination and misting sys-

tems, are thoroughly discussed, as are dietary aspects and the farming of feeder animals. If you wish to breed poison frogs, you will find a wealth of useful hints on how to properly treat spawn and larvae, including a discussion of more demanding species such as the strawberry poison frogs of the genus *Oophaga*.

A richly illustrated part on diseases (pages 267 through 298) by Dr. F. MUTSCHMANN provides both amateurs and experts with valuable tools for the diagnosis and treatment of diseases and parasitoses. The collection of good optical microscopic photographs will be particularly helpful when it comes to identifying parasites.

The fourth part (pages 299 through 629) forms the core of the book and portrays in great detail the group of dendrobatid frogs and their individual species. Eighty-five species are discussed in separate accounts that are almost all lavishly illustrated. Photographs taken in the natural habitats of the animals and of their courtship and parental care behaviour are in many cases unique. Each species account contains information on the status of endangerment of the respective taxon according to the IUCN, its distribution range, natural habitat, provides a detailed description of the biology of this species, and how to keep and feed it in a terrarium. Additional information about subjects such as utilization of these animals by man, their toxicity, or discussions of peculiar distributional patterns are provided in separate paragraphs. A list of key literature sources is provided for each species, which should render further research easy.

Viewed all in all, the present volume surely represents the most comprehensive work on dendrobatids presently available, and it must be warmly recommended to everybody. There are only two minor points of criticism: in some chapters, literature sources would have been better placed right in the text rather than in the paragraph "Key literature" in order to more readily associate pieces of information and distinguish new information from what has been published before. This was in fact applied in some species accounts, but unfortunately not throughout. With the book having been published simultaneously in English and German editions, a few German words have slipped into the English version (e.g., in Info Box 1.4, p. 91 "als" and "oder"). These points of criticism do not diminish the quality of the book, however. As PETER WEYGOLDT rightly points out in his Foreword, it fills a large gap and produces a synoptic snapshot of knowledge gathered over more than thirty years

from the research, captive keeping and breeding of poison frogs. It has the potential of becoming *the* standard reference for dendrobatids!

B. MEANS, B. P. NOONAN, W. E. SCHARGEL & W. C. WHEELER (2006): Phylogenetic systematics of dart-poison frogs and their relatives (Amphibia, Athesphatanura, Dendrobatidae). – *Bulletin of the American Museum of Natural History*, **299**: 1-262.

### Reference

GRANT, T., D. R. FROST, J. P. CALDWELL, R. GAGLIARDO, C. F. B. HADDAD, P. J. R. KOK, D.

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The Deutsche Gesellschaft für Herpetologie und Terrarienkunde (DGHT) would like to thank the following colleagues who served as outside reviewers of submitted manuscripts in 2007. Their expertise and assistance greatly helped to improve the quality of the journal and is deeply appreciated. We also wish to express our gratitude to the Editorial Board (listed on the inside front cover) for their valuable cooperation and time.

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