# **ZOOSYMPOSIA**



# Micromolluscs: Methodological Challenges — Exciting Results

Proceedings from the micromollusc symposium of the 16<sup>th</sup> UNITAS Malacologica World Congress of Malacology July 15–20, 2007 in Antwerp, Belgium

# DANIEL L. GEIGER & BERNHARD RUTHENSTEINER (EDS)





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Cover. Live snail, *Cingula cingillus* (Montagu, 1803), from Erquy, Brittany, France. Approximately 3 mm in size. Photograph Daniel L. Geiger.—Capture from interactive 3D model of *Omalogyra atomus* (Philippi, 1841) with digestive system and transparent body-outline (see Baeumler *et al.* this volume).—Scanning electron micrograph of the minute (3 mm) clam *Yoldiella philippiana* (Nyst, 1844) showing soft parts (see Sasaki this volume).

#### **Editors' Preface**

The present volume contains the proceedings from the symposium *Micromolluscs: Methodological Challenges – Exciting Results* held during the 16th UNITAS Malacologica World Congress of Malacology in Antwerp, Belgium, July 15–20, 2007. For the purpose of this volume, micromolluscs were defined as molluscs no larger than 5 mm. Such forms play an important role in a variety of research fields, such as origin, phylogeny or biodiversity of the phylum. It is widely recognized that the small molluscan fauna is incredibly diverse and replete with significant discoveries to be made, yet few people work on micromolluscs as they are perceived as being difficult to deal with. The former aspect has been demonstrated by the landmark study of Bouchet et al. (2002), while Geiger et al. (2007) provided a first manual for many aspects of working with these small organisms. The world of micromolluscs is still wide open, as is shown here. The contributions cover a wide spectrum of scientific aspects ranging from methodological assessments, case studies, to review articles. We aim at encouraging working with micromolluscs and showcasing that the types of discoveries that can be made are well worth the slightly greater effort expended.

A second goal of this volume is to demonstrate that timely publication of symposium proceedings is possible. We both have experience as authors and editors with the *Zootaxa* rapid publication model. As *Zootaxa* is focused on taxonomic contributions, we were excited to learn about the new outlet *Zoosymposia* by the same publisher, Magnolia Press, open for any zoological symposium contributions. With this inaugural volume for the *Zoosymposia* series, we have also ventured into new technological terrain. We believe that this is the first time for user-interactive 3D models to be incorporated into a peer-reviewed electronic publication in biomedical research.

We would like to thank the conference organizer Jackie L. van Goethem and his team for accommodating the micromolluse symposium during the conference, and for ensuring a smooth operation. We also thank Zhi-Qiang Zhang and Magnolia Press for guidance and support during the preparation of the volume. Many reviewers provided timely evaluations of manuscripts, and we thank the authors for turn-around of manuscripts within tight deadlines. Christine Thacker kindly proof-read all manuscripts.

Daniel L. Geiger (Santa Barbara)

Bernhard Ruthensteiner (Munich)

#### References

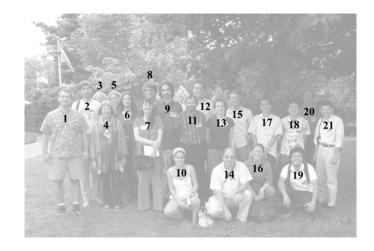
Bouchet, P., Lozouet, P., Maestrati, P. & Héros, V. 2002. Assessing the magnitude of species richness in tropical marine environments: exceptionally high numbers of molluscs at a New Caledonia site. *Biological Journal of the Linnean Society*, 75, 421–436.

Geiger, D.L., Marshall, B.A., Ponder, W.F., Sasaki, T. & Warén, A. 2007. Techniques for collecting, handling, and preparing small molluscan specimens. *Molluscan Research*, 27 (Special Issue), 1–50.

## **Group Photo\***



- 1. Daniel L. Geiger.
- 2. Diego G. Zelaya.
- 3. Jon-Arne Sneli.
- 4. Carole S. Hickman.
- 5. Christiane Todt.
- 6. Heike Kappes.
- 7. E. Moorkens.
- 8. Christopher Schander.
- 9. Peter Barry.
- 10. Esther Gil Mansilla.
- 11. Bernhard Ruthensteiner.
- 12. Thomas Kunze.
- 13. Katharina M. Jörger.
- 14. Oscar Garcia Alvarez.
- 15. James A. Turner.
- 16. Timea P. Neusser.
- 17. Kazunori Hasegawa.
- 18. Hiroshi Fukuda.
- 19. Takuma Haga.
- 20. Christopher L. Garvie.
- 21. Takenori Sasaki.



\*Neither all symposium participants are in the photo, nor did all participants contribute to this proceedings volume. Photograph by Christine E. Thacker.

### Micromolluscs: Methodological Challenges — Exciting Results

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