



Zootaxa 2948: 1–103 (2011)
www.mapress.com/zootaxa/

Copyright © 2011 · Magnolia Press

Monograph

ISSN 1175-5326 (print edition)

ZOOTAXA

ISSN 1175-5334 (online edition)

ZOOTAXA

2948

Catalogue of Recent and fossil “worm-snail” taxa of the families Vermetidae, Siliquariidae, and Turritellidae (Mollusca: Caenogastropoda)

RÜDIGER BIELER¹ & RICHARD E. PETIT^{1,2}

¹ Department of Zoology, Field Museum of Natural History, 1400 Lake Shore Drive, Chicago, Illinois 60605, U.S.A.;
email: rbieler@fieldmuseum.org

² 806 St. Charles Road, North Myrtle Beach, South Carolina 29582, U.S.A.;
email: r.e.petit@att.net



Magnolia Press
Auckland, New Zealand

Accepted by D. Geiger: 17 May 2011; published: 8 Jul. 2011

RÜDIGER BIELER & RICHARD E. PETIT

Catalogue of Recent and fossil “worm-snail” taxa of the families Vermetidae, Siliquariidae, and Turritellidae (Mollusca: Caenogastropoda)

(*Zootaxa* 2948)

103 pp.; 30 cm.

8 July 2011

ISBN 978-1-86977-751-7 (paperback)

ISBN 978-1-86977-752-4 (Online edition)

FIRST PUBLISHED IN 2011 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: zootaxa@mapress.com

<http://www.mapress.com/zootaxa/>

© 2011 Magnolia Press

All rights reserved.

No part of this publication may be reproduced, stored, transmitted or disseminated, in any form, or by any means, without prior written permission from the publisher, to whom all requests to reproduce copyright material should be directed in writing.

This authorization does not extend to any other kind of copying, by any means, in any form, and for any purpose other than private research use.

ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

Table of contents

Abstract	3
Introduction	3
Scope	5
Authors' names, authorship and synonymies/chresonymies	7
Dating	8
Conventions employed in the genus group list	8
Conventions employed in the species group list	8
Some statistics	9
Acknowledgements	9
Names above superfamily level	11
FAMILY group names	11
GENUS group names	12
SPECIES group names	22
Taxa notes	69
Summary of new nomenclatural acts	73
Synopsis of valid and available worm-snail genera	73
References	75
Literature notes	101

Abstract

The taxonomy of the uncoiling “worm-snails” belonging to the marine gastropod families Vermetidae, Siliquariidae and Turritellidae is notoriously confused and their nominal species frequently mixed (in the literature as well as in type specimen collections) with members of superficially similar tube-building polychaete worms or members of unrelated molluscan groups. A long history of introducing and using infrasubspecific names and the rampant employment of homonymous names for unrelated taxa had contributed to a system that became unworkable. The current catalogue researches nearly 1,500 names that have been cited in conjunction with Recent and fossil taxa worm-snail taxonomy (six names above family-group level, 18 family-group names, 195 genus-group names, 1,278 species-group names). Each name's validity and availability (in the sense of the I.C.Z.N. Code) was investigated and current placement within or outside the mentioned worm-snail families is suggested. 560 species-group names are interpreted as available for members of the worm-snail groups here under discussion. Of these, approximately 280 species-group names are available for extant taxa. Various formal First-Reviser actions are taken to resolve priority issues. The type species for *Tulaxoda* Blainville, 1828 is herein designated to be *Serpulorbis polyphragma* Sasso, 1827, making *Tulaxoda* an objective junior synonym of *Thylacodes* Guettard, 1770. *Magilus* Montfort, 1810 is declared a *nomen protectum* over *Campulotus* Guettard, 1770, a *nomen oblitum*. Recurring nomenclatural issues and those too complex to treat within the regular catalogue entries are discussed in 22 taxa notes. The catalogue is fully referenced in 766 literature titles and eight associated literature notes.

Key words: Nomenclature, taxonomy, biodiversity, *Vermicularia*, Tenagodidae, marine, polychaete

Introduction

Diversion from the regular, tightly wound, helical type of shell coiling is not uncommon among gastropods, with various groups displaying degrees of uncoiling (e.g., Architectonicidae, Hydrobiidae, Caecidae). In a few groups of sessile suspension-feeding gastropods this uncoiling is induced by contact with substratum, by crowding situations, and the need to keep the shell aperture unimpeded and in feeding position in a rapidly changing environment. This allogenic derailing (Seilacher & Gunji 1993) of normal spiral growth produces a more or less irregular shell form convergent (and often confused) with that of serpulid polychaete worms. Among modern caenogastropods, this irregular growth pattern is a hallmark of the families Vermetidae, Siliquariidae, and of certain members of the Turritellidae (genus *Vermicularia*), with the latter two families closely related (Morton 1953). Vermetids differ from the others in anatomical features such as the presence of a pair of pedal tentacles involved in mucous-net feeding, and the fact that even the earliest post-larval whorls derail from a regular helical coiling pattern and attach to the substratum. Most siliquariids live in close association, often embedded, with sponges and their shells usually have