



## Analytic taxonomy and notes on marine, brackish-water and estuarine Gastrotricha

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### Abstract

Marine Gastrotricha, both Macrodasysida and Chaetonotida, are the subject of an analytic review, citing taxonomic status of names, authorships of taxa, and those responsible for changes, in accordance with the International Code of Zoological Nomenclature, 4<sup>th</sup> ed. (1999). Notes are included with regard to taxonomic usage so as to guide workers in the future. Among the proposed novelties are: within Macrodasysida, to restrict the family Lepidodasyidae Remane, 1927 to the genus *Lepidodasys* Remane, 1926, and to establish a new family, Cephalodasyidae with *Cephalodasys* Remane, 1926 as its type-species to house the remaining genera and species that have been contained in the polyphyletic family Lepidodasyidae. *Hemidasys agaso* Claparède, 1867 is considered extinct, and the new name *Tetranchyroderma antenniphorum* is proposed for *Tetranchyroderma antennatum* Luporini, Magagnini & Tongiorgi, 1973; in addition, five species are here considered to be *species inquirendae*: *Dactylopodola weilli* d'Hondt, 1965, *Paradasys nipponensis* Sudzuki, 1976, *Macrodasys indicus* Kutty & Nair, 1969, *Tetranchyroderma forceps* d'Hondt & Balsamo, 2009 and *Turbanella plana* (Giard, 1904b). Among Chaetonotida: the *Xenotrichula velox*-species group Ruppert, 1979 and the *Xenotrichula intermedia*-species group Ruppert, 1979 were given each the rank of subgenus. *Chaetonotus pleuracanthus* Remane, 1926 is rejected as a synonym for *Chaetonotus marinus* Giard, 1904; *Chaetonotus somniculosus* Mock, 1979 is transferred to the genus *Halichaetonotus*, the new name *Halichaetonotus euromarinus* is proposed for *Halichaetonotus spinosus* Mock, 1979, and *Xenotrichula carolinensis* Ruppert, 1979 is re-established. *Heteroxenotrichula variocirrata* d'Hondt, 1966 is here considered to be *species inquirenda*.

**Key words:** Gastrotricha, Macrodasysida, Chaetonotida, new family, new subgenus, new species, taxonomy, marine, brackish-water, estuarine

### Introduction

With the field of meiofauna research in a mode of rapid change and an exponential increase of electronically disseminated nominal lists of the world biota, we felt that it was time for an authoritative review of the taxonomic status of marine and brackishwater/estuarine Gastrotricha, along with the author that was responsible for changes, and reasons why changes have been made; our intent is not to provide a complete taxonomic history from the 18<sup>th</sup> century onward, but to establish correct 21<sup>st</sup> century taxonomic usage. Each of us has produced lists before (see Todaro 2008, Hummon 2009b), but with greater responsibility on us for our published stand, this list is probably more conservative than either of us would otherwise be, as it has been drafted using the International Code of Zoological Nomenclature (ICZN) recommendations as a guideline. With more than 550 taxa and over 110 papers to consider, several of which belong to the “grey” literature and some of uncertain publication date, absolute perfection would be difficult to reach. However, we strive for at least ninety-five percent accuracy. Where we have given a source or date, we welcome friendly changes and hope to incorporate them as we continue forward; we also welcome those who differ with us on facts or interpretation to correct or update us by use of print medium, which should meet the criteria of scientific literature (i.e., peer reviewed papers).