

## **LifeWatch Data Grant 2014**

Filling the gaps in the World Register of Marine species (WoRMS)

*[Gastrotricha]*

## **Final Report**

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## 1. Data grant background

This data grant is issued in the framework of the LifeWatch project, to make the content of the group Gastrotricha within the World Register of Marine Species (WoRMS) more complete.

The aim of this grant project is to perform a further check and revision on the ca. 800 names present in the database; adding new names where necessary. Further, information on synonymies and new combinations will be provide as well as references of the original descriptions (possibly including a pdf copy of the manuscript).

## 2. Agreed deliverables (as specified in the Data Grant contract)

The data grant project will start April 1<sup>st</sup>, 2014 and will run until August 31<sup>st</sup>, 2014.

The following results are expected by the end of the contract:

- Addition of missing names to the World Register of Marine Species.
- Addition of synonymies, new combinations and references.
- Revision of 800 name records.

## 3. Results of the project:

- List of the concrete completed actions (# added , # revised, # corrected, etc).
- Explanation if needed.

**over 900 taxa re-checked;**

**74 taxa added (statistics from search action “created”);**

**93 taxa changed (statistics from search action “changed”)**

Reference of the original description has been provided for all major taxa (105 taxa in total from Subgenus to Order). About 90% of the original references have been specifically added to the worms literature source. All the original references (90% new and 10% already present in worms) have been linked to a pdf file (except one); a remote repository for these pdf files has been specifically created to shield worms from potential copyrights problems.

Yet, to reduce copyright and the weight (MBs) problem in several cases the pdf file linked to the reference includes only the relevant pages.

#### 4. (Brief) description of the work/methodology

The List of marine taxa has been compared with the checklist of marine Gastrotricha by Antonio Todaro ([www.gastrotricha.unimore.it](http://www.gastrotricha.unimore.it)) and with the work by Hummon & Todaro (2010) to look for discrepancies. As these three databases have been created independently with each other, their comparison would provide the better way to highlight potential errors. If discrepancies among lists were found, I turned to the original paper for solving the issue.

The List of freshwater taxa has been compared with the checklist of freshwater Gastrotricha by Antonio Todaro ([www.gastrotricha.unimore.it](http://www.gastrotricha.unimore.it)) and with the works by Schwank 1990, Kisielewski 1991 and Balsamo et al., 2009, to look for discrepancies. As infos in these four works have independent origin their comparison would provide the better way to highlight potential errors. If discrepancies among lists were found, I turned to the original paper for solving the issue.

Recently described taxa were checked and/ or included based on original papers.

#### 5. Problems encountered and how it was solved (or expected solutions).

In the worms database were present taxa that actually do not exist; this situation derived from error present in the online databases utilised as basis of record . Eg European register of marine species and/or UNESCO-IOC Register of Marine Organisms. I requested these incorrect taxa to be removed from the data base as they are not valid under the ICZN and may be source of confusion.

#### 6. Other: remarks, suggestions, other information, bibliography, ...

I also found somewhat difficult and time consuming the process of adding a new source i.e. a new reference, while preventing duplicates. If worms staff would recommend a specific layout, the same for all of the references, even if limited to the author(s) and year of publication could make this task easier.

#### Bibliography

Balsamo, M., d'Hondt, J. L., Pierboni, L. & Grilli, P. 2009. Taxonomic and nomenclatural notes on freshwater Gastrotricha. *Zootaxa* 1-19.

Hummon, W. D. & Todaro, M. A. 2010. Analytic taxonomy and notes on marine, brackish-water and estuarine Gastrotricha. *Zootaxa* 2392: 1-32.

Kisielewski, J. 1991. Inland-water Gastrotricha from Brazil. *Ann.Zool.(Warsaw)* 43 Supplement 2: 1-168.

Schwank, P. 1990. Gastrotricha. In: Schwoerbel, J. & Zwick, P. (Eds.), *Süßwasserfauna von Mitteleuropa, Band 3. Gastrotricha und Nemertini*. Gustav Fischer Verlag, Stuttgart, Jena, New York, pp. 1–252.

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