

LifeWatch Data Grant 2015

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

Hippoidea, Epicaridea, and Rhizocephala

Final Report

Christopher B. Boyko



1. Data grant background

This data grant was issued in the framework of the LifeWatch project, to make the content of the Hippoidea, Epicaridea, and Rhizocephala within the World Register of Marine Species (WoRMS) more complete. Most species within these groups (approximately 150 species of Hippoidea, 400 species of Rhizocephala, and 1150 species of Epicaridea) lacked data on the type locality and, especially for Epicaridea and some Rhizocephala, the type hosts. In addition, for almost none of the original descriptions the PDFs are available.

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

In order to improve the prior situation, these concrete actions were taken:

- Type localities will be completed for about 150 species of Hippoidea, 400 species of Rhizocephala and 1150 species of Epicaridea (including all synonyms) (about 1700 taxa in total).
- Type hosts will be completed for about 400 species of Rhizocephala and 1150 species of Epicaridea (including all synonyms) (about 1550 taxa in total).
- PDFs of original species descriptions will be added for about 150 species of Hippoidea, 400 species of Rhizocephala and 1150 species of Epicaridea (including all synonyms) (about 1700 taxa in total).

3. Results of the project:

- Type localities were completed for about 150 species of Hippoidea, 400 species of Rhizocephala and 1150 species of Epicaridea (including all synonyms) (about 1700 taxa in total).
- Type hosts were completed for about 400 species of Rhizocephala and 1150 species of Epicaridea (including all synonyms) (about 1550 taxa in total).
- PDFs of original species descriptions were added for about 150 species of Hippoidea, 400 species of Rhizocephala and 1150 species of Epicaridea (including all synonyms) (about 1700 taxa in total). Additional papers were added for genera where necessary (i.e., papers describing new genera but no new species).

In total, 192 taxa of Hippoidea were checked (121 accepted names), including all genera and subgenera, with corrections to other data fields (type species, habitat, etc.) also made.

In total, 467 taxa of Rhizocephala were checked (337 accepted names), including all genera and subgenera, with corrections to other data fields (type species, habitat, etc.) also made.

In total, 1567 taxa of Epicaridea were checked (1103 accepted names), including all genera and subgenera, with corrections to other data fields (type species, habitat, etc.) also made.

One newly described species of hippoid and three new genera and 10 new species of epicarideans, published on during the grant period, were added to the database. Adjustments to the taxonomy of several epicaridean species was made based on the recent publication of a revision by An et al. (2015) on Chinese caridean parasites.

4. (Brief) description of the work/methodology

Taxon entries were compared with the original publications in all cases (except a very few, see below) and data from the published type localities and type hosts (if applicable) was entered. Some small errors or omissions in habitat and nomenclatural issues (erroneous parentheses, etc.) were corrected as encountered. PDFs of all papers examined were uploaded (with a few exceptions, see below).

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

At present, data for only approximately six taxa remain incomplete, either because no copy of the original descriptions seem to be extant (at least none that I can locate, e.g., *Lophomastix tchangsii* Yü, 1935) or I am still awaiting delivery of the rare papers (e.g., *Diplothylacus sinensis* Keppen, 1877). More information for these few species will be added if/when it becomes available.

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