

LifeWatch Data Grant 2015

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

Cucullanidae

Final Report

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1. Data grant background

The project was funded to complete the WoRMS database in regard to Cucullanid nematodes. The taxonomy and systematics of cucullanid nematodes have changed significantly over the last few decades and this has not been reflected in WoRMS database. Also only less than third of species were listed in the database.

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

- The available information for about 60 species of cucullanids already present in WoRMS will be reviewed and updated.
- More than 100 new cucullanid species available in the literature will be added to WoRMS either as new additions or synonyms.
- For all cucullanid species (current and newly added), the species validity will be updated, synonymy will be resolved and data will be completed on environments, hosts, etc.

3. Results of the project:

All work was carried out in an Excel spreadsheet provided by WoRMS team. As it may be seen the submitted spreadsheet contains a total of 230 taxon names and the relevant information (based on their availability). Therefore about 170 taxa were added to the database either as new addition or as synonymy.

4. (Brief) description of the work/methodology

The first step was to do an extensive literature review and get access to all publications. The oldest publication found, dates back to 1777 where Muller described genus *Cucullanus* for the first time.

The next step was to make a list of all taxa and their relevant information, and check them versus information available in the WoRMS database.

All new set of data in Excel spreadsheet has been provided and submitted to the WoRMS team to be added to the database.

When the above mentioned data were added to the database I will be going through the online version of the WoRMS database for final polishing and any other amendment if necessary.

5. Problems encountered and how it was solved (or expected solutions).
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The major issue was and is that there is no standard way of describing a new species over the time (from 1777 to date) and among all taxonomists therefore there are several new species that essential information such as location and number for type specimen are unknown.

Another issue was that many of these articles are in other languages than English, for example they are written in Latin, German, French and Russian. This made it difficult to extract all the data. As much as possible some data, such as those related to hosts' scientific names were extracted from these articles written in other languages, mainly because scientific names stand out but other than that it is possible that other information such as locality has been mentioned, but due to my lack of skill in those languages it has been missed out.

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