

## **Taxonomy and biogeography of the shallow water Mysidacea of the Western Indian Ocean – taxonomic and biogeographical research by use of taxonomic databases**

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Up to date, a complete overview of the Mysidacea fauna for the Western Indian Ocean (WIO) was limited to species lists and overview reports on discrete regions, mainly due to lack of technology. The development of the Mysidlan database has made it possible to manage big amounts of information in a systematic and organized way.

The Mysidlan database was built in order to manage both ecological, morphological and biogeographical data on the Mysidacea. Relevant data on the shallow water Mysidacea of the WIO were collected from all the available (published) information of the region, including original information from the east coast of South Africa and the north of Mozambique.

The advantages of Mysidlan compared to other taxonomic databases are:

- all data are based on published information available (digitally) in the database
- full search possibilities
- interaction with all recent software is easy

The database consists of two parts: part 1 is containing systematic, morphological, ecological and biogeographical information and part 2 is presenting the collection of information sources.

With this new tool, a complete overview of the actual knowledge of the Mysidacea of the WIO is given; a biogeographical review is presented and a hypothesis on possible relationships between biogeographical and tectonic processes or water circulation patterns is proposed.

Next to these interpretations, identification keys were developed and taxa which need to be reviewed in the future, are indicated.

Broadening the current dataset into a database on the world Mysidacea fauna will enlarge the value of taxonomic databases like Mysidlan.