

Projektleitung: **BERGER Helmut**
(*project leader*)

Projektnummer: **P 26974-B25**
(*project number*)

Projekttitle: Monographie der Familie Euplotidae Ehrenberg, 1838 (Ciliophora, Spirotrichea)
(*Project title*)

III. KURZBERICHT ÜBER DEN PROJEKTFORTSCHRITT im vorangegangenen

Kalenderjahr (Deutsch oder Englisch)

>*Short report on the project's progress for the last calendar year (German or English)<*

Kurzbericht zum Kalenderjahr 2016
(*Short report for the calendar year*)

FWF-Project Monograph of the family Euplotidae Ehrenberg, 1838 (Ciliophora, Spirotrichea) (1 person, 3 years, 20 h/week).

The family Euplotidae is a time-honoured taxon of spirotrichous ciliates already established by Ehrenberg (1838). As already implied in the previous report (year 2015), not the whole group can be revised in detail, but only the genus *Euplotoides* Borror & Hill, 1995 (type species *E. patella* (Müller, 1773)) is treated thoroughly (Berger 2017/18). The revision comprises 16 valid species, including *Euplotes harpa*, which is obviously closely related with *Euplotoides* according to gene sequence data. However, in total the revision deals with 42 nominal species and subordinate taxa (subspecies, varieties, forms) described so far. The 26 invalid taxa are either junior synonyms of the valid species or species indeterminata. Almost 70 redescriptions have to be classified as insufficient. About 2000 references deal with *Euplotoides* species. For example, for *Euplotoides patella* more than 550 faunistic records from the literature are listed in detail, arranged according to the continents.

For *Euplotes eurystomus marinus* Agamaliev a new species has to be established (*Euplotoides caspicus* Agamaliev spec. nov. [this name is disclaimed for nomenclatural purposes ICZN 1999, Article 8.3]). At the end of 2016, I found a serious problem with taxonomic online-only papers in The Journal of Eukaryotic Microbiology, an important protistological journal where we have published two papers resulting from previous FWF-projects (Chen et al. 2016; Shao et al. 2014). Since we have forgotten the ZooBank registration in the work itself, the new names and nomenclatural acts made therein are not available (ICZN 2012). About 40 papers, including one dealing with euplotids (Fotedar et al. 2016), are concerned with this problem. For that reason and since nomenclature is a major topic in the monograph of euplotids, a paper covering in detail ZooBank registration was prepared (Berger et al. 2017). To increase the number of entries dealing with ciliates in the ZooBank database, for all nominal taxa treated in the present monograph the ZooBank registration number will be provided.

References

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- Berger H., Chen L., Lyu Z., Shao C., Al-Farraj S. A. & Song W. (2017): Corrigendum to “Morphology, cell division, and phylogeny of *Uroleptus longicaudatus* (Ciliophora, Hypotrichia), a species of the *Uroleptus limnetis* complex by Chen et al. 2016”. J. Eukaryotic Microbiol., R1 submitted.
- Chen L., Lv Z., Shao C., Al-Farraj S.A., Song W. & Berger H. (2016): Morphology, cell division, and phylogeny of *Uroleptus longicaudatus* (Ciliophora, Hypotrichia), a species of the *Uroleptus limnetis* complex J. Eukaryotic Microbiol., 63: 349-362.
- Fotedar R., Stoeck T., Filker S., Fell J.W., Agatha S., Al Marri M. & Jiang J. (2016): Description of the halophile *Euplotes qatarenensis* nov. spec. (Ciliophora, Spirotrichea, Euplotida) isolated from the hypersaline Khor Al-Adaïd Lagoon in Qatar. J. Euk. Microbiol., 63:578-590.
- ICZN (1999): International Code of Zoological nomenclature. International Trust for Zoological Nomenclature, London.
- ICZN (2012): Amendment of Articles 8, 9, 10, 21 and 78 of the International Code of Zoological Nomenclature 2012. Bull. zool. Nom., 69:161-169.
- Shao C., Li L., Zhang Q., Song W. & Berger H. (2014): Molecular phylogeny and ontogeny of a new ciliate genus, *Paracladotricha* salina n. g., n. sp. (Ciliophora, Hypotrichia) by Shao et al. 2014. J. Eukaryotic Microbiol., 61: 371-380.
- More details on project see project website: https://www.protozoology.com/monograph_euplotidae/index.htm