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Nomenclator Ciliophorum and Monograph of the Hypotricha, two works documenting the biodiversity of ciliates (Ciliophora)

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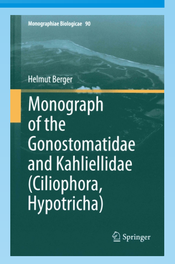
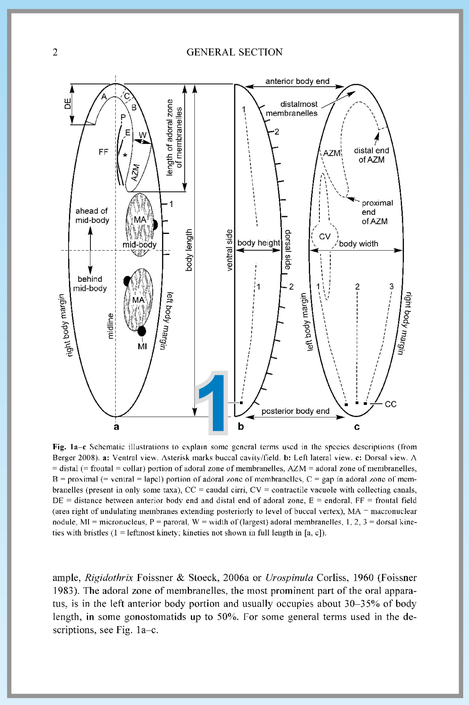
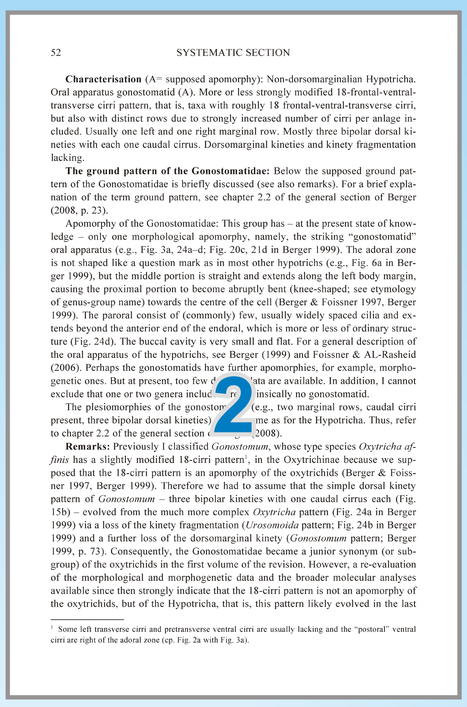
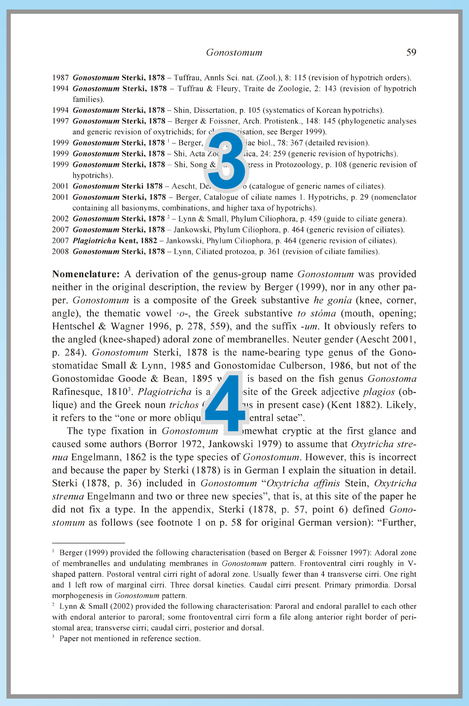


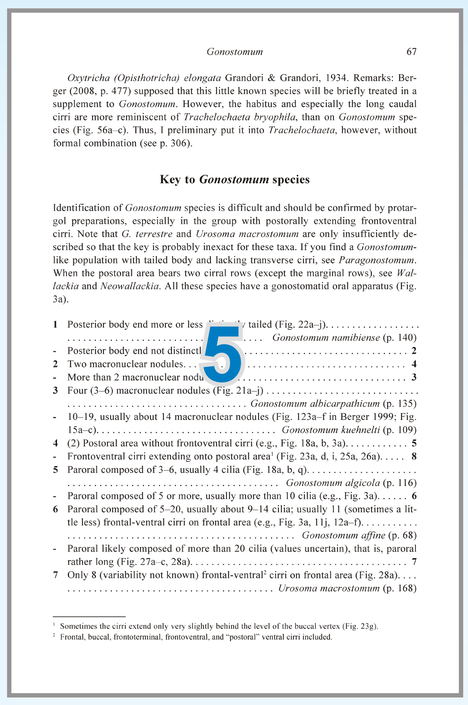
Monograph of the Hypotricha

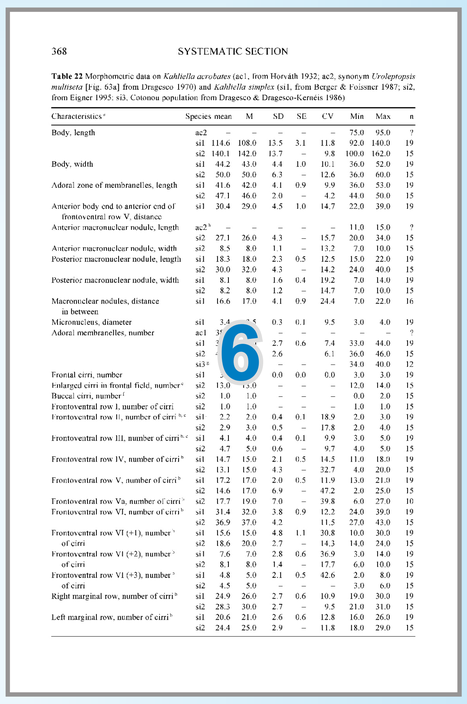
- ☺ Most detailed revision of hypotrichs ever published
- ☺ Detailed explanation of general and specific terms (1, 7)
- ☺ Characterization of each supraspecific group and discussion of ground pattern and taxonomic details and problems (2)
- ☺ Detailed list of synonyms (3)
- ☺ Derivation of each scientific name and discussion of nomenclatural problems (4)
- ☺ Easy to use key to each taxon, including hints to illustrations (5)
- ☺ Unified descriptions of species
- ☺ Summary of all morphometric characterizations available (6)
- ☺ Almost all illustrations ever published and many micrographs showing all important details are included; with detailed labelling (7, 8)
- ☺ Very comprehensive and exact list of references (9); in total about 5500 references
- ☺ Systematic index to all names mentioned; two-sided (10)
- ☺ Published in the renowned book-series *Monographiae Biologicae* (MB; Springer)
- ☺ 4 volumes already available (Oxytrichidae, MB 78, 1999; Urostyloidea, MB 85, 2006; Amphisiellidae and Trachelostylidae, MB 88, 2008; Gonostomatidae and Kahliellidae, MB 90, 2011); volumes 5 (Uroleptidae) and 6 (Spirofilidae, remaining groups, supplements to other groups, key to all taxa) in preparation
- ☺ Many other interesting details, e.g., listing of accession numbers of type slides and molecular data (if available)
- ☹ Expensive; however, 33% discount for Springer authors

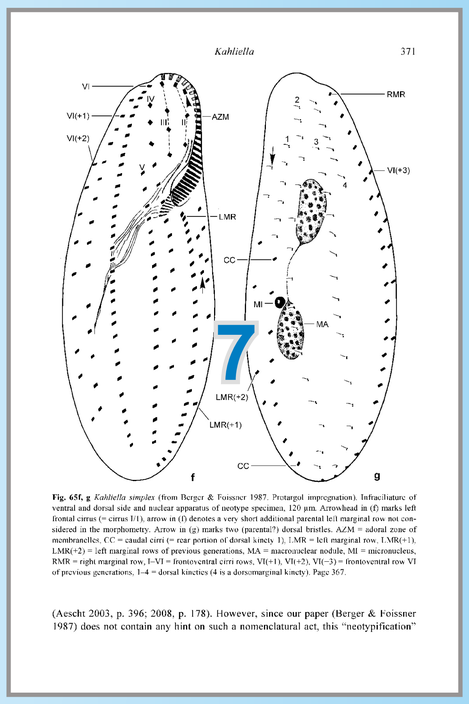


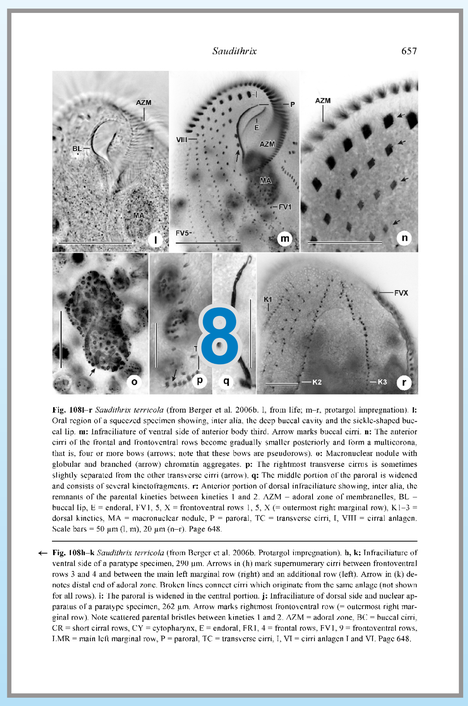


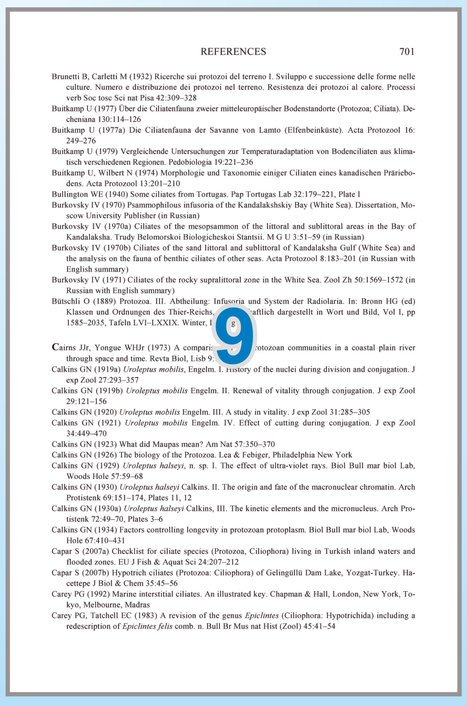


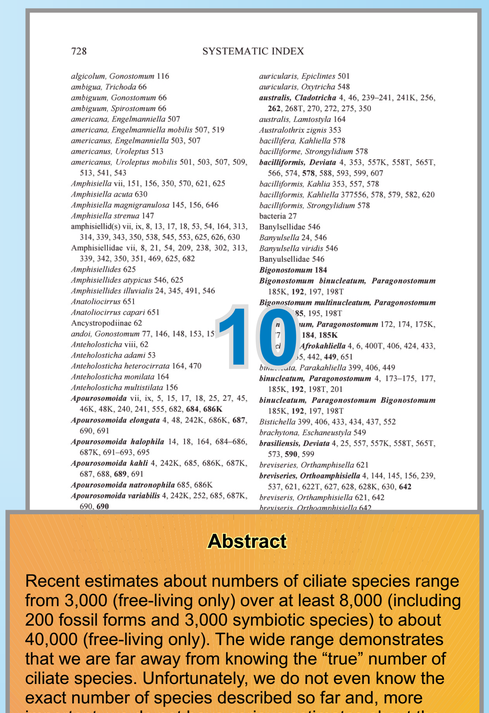






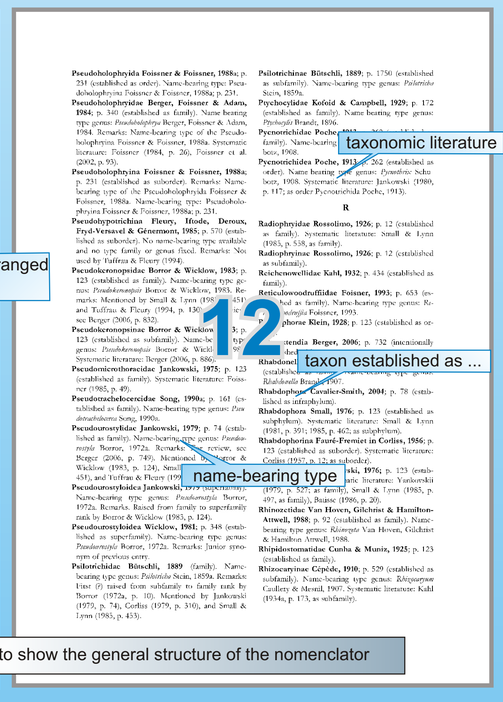






Nomenclator Ciliophorum

- ☺ Includes all (>99%) ciliate names (from morph to phylum, combinations) ever published (incorrect subsequent spellings usually not included) (11, 12)
- ☺ More complete and compact than Zoological Record
- ☺ Huge reference section; two-sided index
- ☺ Useful for all who deal with ciliates (taxonomists, ecologists, molecular biologists, editors, ...)
- ☹ Not yet available! (2014?)



Note: these are only incomplete sample pages to show the general structure of the nomenclator

Abstract

Recent estimates about numbers of ciliate species range from 3,000 (free-living only) over at least 8,000 (including 200 fossil forms and 3,000 symbiotic species) to about 40,000 (free-living only). The wide range demonstrates that we are far away from knowing the "true" number of ciliate species. Unfortunately, we do not even know the exact number of species described so far and, more important, we do not have serious estimates about the number of valid species due to lack of detailed revisions in many groups of ciliates. To overcome the first problem, the *Nomenclator Ciliophorum* is prepared. This catalogue will contain all ciliate names ever published: (i) basionyms of species; (ii) infrasubspecific taxa; (iii) combinations; (iv) genera; and (v) suprageneric taxa. Furthermore, important taxonomic papers are listed for each taxon, so that the nomenclator will be useful not only for taxonomists, but also for ecologists and molecular biologists who will benefit from such an index, for example, in that they can find the updated name (combination) of a certain organism easily. To estimate the valid number of species it is necessary to revise a group in detail. The *Monograph of the Hypotricha* (Springer) deals with a major group of ciliates, the hypotrichs, which are a core-group of the spirotrichs. Hypotrichs are widely distributed in limnetic and marine habitats, but also in soil. About 1000 nominal species have been described and it is estimated that 700 to 800 of them are valid. Four volumes are available (Oxytrichidae; Urostyloidea; Amphisiellidae and Trachelostylidae; Gonostomatidae and Kahliellidae) and volume 5 (Uroleptidae) will be published in 2013. The final volume is in preparation and deals, inter alia, with the "spiralled" genera, for example, *Hypotrichidium*, *Strongylidium*, *Spiretella*, *Chaetospira*. A key to all taxa revised in volumes 16 will be a major part of volume 6. When the monograph is complete, the hypotrichs will be the sole very large group of ciliates which is revised in detail. For further details, see www.protozoology.com/monograph.

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