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The infraciliature of the Karyorelictean Ciliates

Kentrophoros fistulosus (Fauré-Fremiet) and Remanella

multinucleata (Kahl), WILHELM FOISSNER, Universität Salzburg,
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The ciliary pattern of most karyorelictean ciliates is

poorly known, possibly because most are very fragile and thus difficult to preserve and to stain. Using a new fixative consisting of 5 parts glutaraldehyde (25%), 5 parts saturated, aqueous mercuric chloride, 3 parts aqueous osmium tetroxide (2%), and 1 part glacial acetic acid, we obtained well-preserved specimens from most genera which could be stained excellently with Wilbert's protargol technique. The infraciliature of Kentrophoros consists of dikinetids throughout. The anterior dikinetids of the right side are specialized, i.e. more closely spaced and have both basal bodies ciliated, oblique axes, and nematodesmata-like fibres forming some sort of basket. These specializations are considered to be vestiges of an oral infraciliature. The somatic and oral infraciliature of Remanella likewise consists of dikinetids throughout which have both basal bodies ciliated or only the anterior or posterior ones, depending on the region of the cell. Both, <u>Kentrophoros</u> and <u>Remanella</u> have two unique derived characters, viz. a specialized ciliary row at the dorsolateral margin of the body and a curious circ ular kinety extending along the margin of the left side. This organization is very similar to that known from Loxodes, the sole freshwater karyorelictean ciliate genus. It is thus concluded that these three genera have a common ancestor.

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Christian Gottfried Ehrenberg (1795-1876), an Outstanding Taxonomist and Monographer, WILHELM FOISSNER, Universität Salzburg, Hellbrunnerstrasse 34, A-5020 Salzburg, Austria.

The 200th birthday of C. G. Ehrenberg was celebrated on occasion of the 14th scientific meeting of the German Society of Protozoologists in his native town, Delitzsch in Germany. Three invited speakers (Corliss, Hausmann, Foissner) enlightened various aspects of his colourful personal and scientific curriculum. I tried to answer the question why Ehrenberg is still "a must" for protozoan taxonomists and micropaleontologists. First, Ehrenberg described and redescribed more than thousand species in two giant monographs, viz.
"Die Infusionsthierchen als vollkommene Organismen" (1838) and "Mikrogeologie" (1854). Most of his new species were confirmed by later investigators because they were well described and figured. In fact, Ehrenberg was, like his great successors, Friedrich Stein (1818-1885) and Alfred Kahl (1877-1946), a blessed artist and meticulous observer who figured only that what he saw (which is more difficult than most people think!). Second, Ehrenberg was a true monographer, i. e. collected and critically evaluated the immense amount of data which had accumulated between 1700 and 1854. This information was chronologically listed and carefully discussed for all species described and redescribed. His lists of synonyms and references are in fact invaluable and thus served as "starting point" for all later revisers. Last not least, Ehrenberg was extremely busy, a prerequisite of most great, enduring achievements!

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The Ciliate Atlas: Volume IV Available Now! HELMUT BERGER ¹, WILHELM FOISSNER ¹, HUBERT BLATTERER ², and FRITZ KOHMANN ³, ¹Universität Salzburg, Institut für Zoologie, Hellbrunnerstrasse 34, A-5020 Salzburg, Austria, ²Amt der Oberösterreichischen Landesregierung, Unterabteilung Gewässerschutz, Stockhofstrasse 40, A-4020 Linz, Austria, and ³BfG, Koblenz, Germany.

This 540 page book is the last volume of our treatise. The general section contains (1) an easy to use picture key (74 pages) for beginners and non-specialists to all 300 taxa described in Vols. I-IV; (2) a picture key to silverline systems; (3) the saprobiological classification of all species; (4) a tabular ecological characterization (biomass, food, salinity, preferred type of water and habitat, community) of all species; (5) a description of important freshwater ciliate communities (14 plates); (6) a taxonomic and nomenclatural comparison of our species list with that of SLADECEX et al.; (7) a nomenclatural summary; and (3) a glossary to the morphology of ciliates. In the systematic section the morphology and ecology of 60 species of the Gymnostomatida. Pleurostomatida, Suctoria, and Loxodes are described in detail. Vols. I and II, out of print since 1993, were reprinted. Thus the complete series, all together 2068 pages and 6153 figures, is available! The ciliate atlas can be ordered from the Wasserwirtschaftsamt Deggendorf, Postfach 2060, D-94460 Peggendorf, Germany. Price per Volume about 100 German Mark. Supported by the Österreichischen FWF (Projekt P8924-Bio) and the Bayerisches Landesamt für Wasserwirtschafts.