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HIGH HAPLOTYPE DIVERSITY IN *COLEPS* (CILIOPHORA: PROSTOMATIDA) POPULATIONS

To date the awareness of the population structure in eukaryotic microbes is very limited. This is exemplified in the scarce knowledge about the genetic Variation of ciliates, which contribute to a great extent to the biological diversity and biomass of freshwater ecosystems. The aim of our study was to find a suitable marker System and to elucidate the genetic variation of the common planktonic ciliate *Coleps* (Prostomatida). We employed sequence analyses of the mitochondrial Apocytochrome *b* gene. The analysis of over 100 *Coleps* isolates from a young lake in Germany revealed an unexpectedly high genetic variation of the two dominant *Coleps* species, highly exceeding previously reported values for other ciliates. Furthermore, these two species were found to exclude each other throughout the season. During spring and early summer the mixotrophic *C. spetai* dominated and a few individuals of a third species were detected, the autumn isolates exclusively consisted of the aposymbiotic, heterotrophic *C. hirtus hirtus*.