

Morphological observations of *Troglodytella abressarti* (Entodiniomorphida, Troglodytelliidae) from the lowland gorilla (*Gorilla gorilla gorilla*)

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SUMMARY

The ciliates belonging to the family Troglodytelliidae, a member of the order Entodiniomorphida which are largely found in the alimentary tracts of hooted animals, inhabit the large intestine of gorillas. This ciliate family is peculiar to the primates, but its phylogenetical position in the order Entodiniomorphida remains unclear. We examined the morphological characteristics of troglodytellid ciliates obtained from fecal specimens of the lowland gorilla using the light and scanning electron microscope. All of the ciliates present in the specimens could be identified as *T. abressarti*. The buccal infraciliary bands of *T. abressarti* were revealed using the pyridinated silver carbonate impregnation method. We found that these bands were composed of three parts: adoral polybrachykinety, perivestibular polybrachykinety and paralabial kineties. We did not find a ciliary band on the vestibulum. The morphological characteristics of the infraciliary bands were very similar to those of ciliates of the family Cycloposthiidae, which are mainly found in the Perissodactyla (the odd-toed ungulates which include horses, tapirs and rhinos). In addition, we also found that *T. abressarti* possessed a skeletal plate and non-retractable somatic ciliary bands; both these characteristics also occur in the family Cycloposthiidae. These similarities between the two families suggest that the family Troglodytelliidae is closely related to the family Cycloposthiidae.