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**Anatomia comparada e revisão taxonômica do gênero *Pareiodon*
Kner, 1855 (Siluriformes: Trichomycteridae), um peixe carniceiro da
bacia Amazônica**

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Dissertação apresentada à Faculdade
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RESUMO

A família Trichomycteridae é uma das principais representantes de Siluriformes neotropicais e apresenta ampla diversidade morfológica e ecológica, com membros que possuem marcantes especializações em seu modo de vida e alimentação. A subfamília Stegophilinae contém indivíduos de corpo alongado e hábito alimentar tipicamente baseado em muco e escamas. *Pareiodon*, membro de Stegophilinae, é um gênero considerado monotípico, sendo representado por *Pareiodon microps* Kner, 1855. A espécie é tida como amplamente distribuída na bacia amazônica e se apresenta como uma exceção em relação aos demais membros da subfamília no que diz respeito ao hábito alimentar. *Pareiodon microps* possui dieta baseada em pedaços arrancados de outros peixes moribundos ou mortos, sendo que essa dinâmica ecológica está associada a diversas características da região oral que foram alvo de nossas observações. Tendo em vista a ampla distribuição, a monotipia e o distinto hábito alimentar da espécie, nos propusemos a investigar a anatomia do grupo, a fim de contribuir com a compreensão de sua taxonomia e história evolutiva. A morfologia externa, osteologia, musculatura facial e o sistema da linha lateral foram escolhidos como alvo de nossas investigações. A escolha pelo complexo da musculatura facial se baseou na associação desses elementos com as atividades de forrageamento, respiração e captura de alimento. A comparação dos elementos da musculatura com outros representantes de Trichomycteridae revelou a existência de características exclusivamente presentes em *Pareiodon microps* e, adicionalmente, nossas observações sobre o comportamento da espécie indicam que tais características podem estar associadas à evolução do hábito carniceiro. O sistema da linha lateral se mostrou bastante conservado entre os representantes de Trichomycteridae analisados, mas a quantidade de sulcos presentes na linha medial do tronco apresentou potencial valor taxonômico. Adicionalmente, é levantada uma discussão acerca da presença de neuromastos superficiais na superfície ventral do tronco de alguns representantes de Trichomycteridae, condição não reportada previamente na literatura. Apesar da ampla distribuição, as características morfológicas são muito conservadas entre os indivíduos das bacias hidrográficas nas quais *P. microps* ocorre. Desta forma, a monotipia do gênero *Pareiodon* é confirmada pelas nossas análises. As diagnoses previamente atribuídas ao grupo foram revisitadas, sendo que a presença de um processo interno no dentário foi a única questionada. Adicionalmente, são propostas três novas diagnoses para *Pareiodon microps*, todas fundamentadas em singularidades da

musculatura facial e do sistema da linha lateral. Foi fornecida uma extensa descrição anatômica da espécie, com ênfase na osteologia e musculatura facial, acompanhada de discussões acerca da evolução do hábito carniceiro. As descrições e discussões realizadas buscam colaborar com a compreensão da espécie e da evolução do hábito carniceiro em Trichomycteridae.

Palavras-chave: Evolução, Fauna neotropical, Taxonomia, Miologia, Stegophilinae.

ABSTRACT

The family Trichomycteridae is one of the main representatives of neotropical Siluriformes and presents wide morphological and ecological diversity, with members displaying remarkable specializations in their way of life and feeding habits. The subfamily Stegophilinae contains individuals with elongated bodies and a feeding habit typically based on mucus and scales. *Pareiodon*, a member of Stegophilinae, is a monotypic genus represented by *Pareiodon microps* Kner, 1855. The species has a wide distribution in the Amazon basin and stands out from other members of the subfamily in terms of its feeding habits. *P. microps* has a diet based on pieces of other dying or dead fish, and this ecological dynamic is associated with several characteristics of the oral region that were the focus of our observations. Considering the wide distribution, monotypy, and distinct feeding habit of the species, our project aimed to investigate the anatomy of the group to contribute to the understanding of its taxonomy and evolutionary history. External morphology, osteology, facial musculature, and the lateral line system were chosen for our investigations. The choice of the facial musculature complex was based on the potential association of this elements with foraging, respiration, and food capture activities. Comparing the muscle elements with other representatives of Trichomycteridae revealed the existence of characteristics exclusively present in *Pareiodon microps* and potentially associated with the evolution of carrion feeder habits. The lateral line system was found to be highly conserved among the analyzed representatives of Trichomycteridae, but the number of grooves present in the trunk's medial line showed potential taxonomic value. Additionally, a discussion is raised about the presence of superficial neuromasts on the ventral surface of the trunk in family members, a condition not previously reported in the literature. Despite the wide distribution, morphological characteristics are highly conserved among individuals from all basins where the species occurs. Thus, the monotypy of *P. microps* is reinforced by our observations. Diagnoses previously attributed to the group were revisited, with the presence of an internal process on the dentary being the only one questioned. Additionally, three new diagnoses for the group are proposed, all related to facial musculature and the lateral line system. An extensive anatomical description of the species was provided, with emphasis on osteology and facial musculature, accompanied by discussions about the evolution of carrion-feeder habits. The descriptions and discussions aim to contribute to the understanding of the species and the evolution of feeding habits in Trichomycteridae.

Key words: Evolution, Neotropical fauna, Taxonomy, Myology, Stegophilinae.

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