Biodiversity survey of freshwater fishes within Gorongosa National Park, Central Mozambique

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Abstract

Gorongosa National Park is a conservation area located in Central Mozambique, with a rich diversity of species and landscapes, and actually an example of successful restoration of biodiversity in Africa, destroyed by civil war and poaching. This Park is situated at the southernmost extension of the East African Rift System, within the Urema drainage basin, that is a major sub-catchment of the Pungwe River that support a diversity of fish and other organisms. Many studies are being developed to document the rich diversity of flora and fauna, however most of this research is centred on terrestrial biodiversity. In order to cover this lack of information on aquatic biodiversity, comprehensive surveys were performed in November 2021 and July-August 2022, to establish an inventory of the freshwater fishes of the park applying an integrative taxonomic approaches by using a combination of molecular, morphological, ecological, geographical data to solve some of the species-level taxonomic problems. A total of 36 species of freshwater fishes belonging to 15 families were recorded, where the Cyprinidae was the most dominant family, being represented by 10 species. Taxonomic revision and genetic analysis are on going for some species collected particulary for *Chiloglanis neumanni, Labeobarbus marequensis, Enteromius and Marcusenius macrolepidotus*, in other to determine whether they potentially represent new species or are conspecific with the lineages identified in the Upper Pungwe. The Gorongosa National Park remains under sampled and thus its aquatic biodiversity is poorly documented. There is need for setting up a long-term research program to undertake fine-scale geographical surveys to inventory the aquatic fauna of this park and its surrounding areas for better conservation and management of the freshwater systems within the Urema Basin.

Key words: Biodiversity, Freshwater fishes, Barcoding, Gorongosa National Park.