

# Metazoan parasites of mormyrid fishes from selected localities in South Africa

Wilmien J Luus-Powell, Willem J Smit & Iva Prikrylova

FISHP2

DSI-NRF SARCHI Chair (Ecosystem Health), Department of Biodiversity, University of Limpopo, South Africa; wilmien.powell@ul.ac.za

## INTRODUCTION

Freshwater elephantfishes from the Mormyridae are diverse in size, shape and distribution. Mormyrids are widespread in Afro-tropical river systems and comprises 22 genera with 229 species. Few parasite records for mormyrids exist from South Africa leading to long term research on the bulldog, *Marcusenius macrolepidotus* and southern churchill, *Petrocephalus wesselsi*.

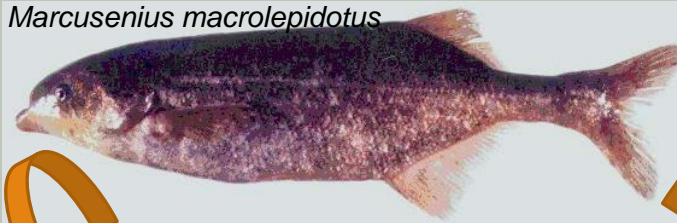
Pied kingfisher serving as final host for parasites.  
Photo credit: Prof GD Engelbrecht



## MATERIAL AND METHODS

Fish were collected by electro-shocking at selected localities in the Limpopo River System, South Africa. Parasites were preserved using standard techniques. Some samples were collected in 96% ethanol for future molecular work.

*Marcusenius macrolepidotus*

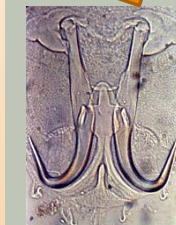


*Petrocephalus wesselsi*



## RESULTS

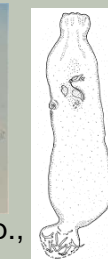
Parasites shared



*Mormyrogyrodactylus gemini*, skin



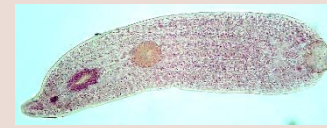
*Gyrodactylus* sp., skin



*Bouixella* sp. 1, gills



*Clinostomum* sp., body cavity



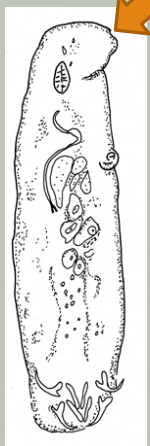
Diplostomid larva, eye



*Bouixella* sp., gills



*Procamallanus laeviconchus*, stomach



*Bouixella* sp. 2, gills



*Ichthyolepis africana*, intestine



*Sebekia wedli*, body cavity



*Neoergasilus japonicus*, fins



*Afrolernaea mormyroides*, gills



## DISCUSSION AND CONCLUSION

The findings resulted in the description of two new genera, three new species, and several new host and geographical records. There is still much research to be done on parasite diversity of mormyrid fishes considering the number of species and their distribution. Molecular analysis of parasites should be included for accurate identification of species. The two hosts co-existed in several localities but did not share many parasite species, with *M. macrolepidotus* showing higher diversity and species richness.

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