

INTRODUCTION

Schilbe intermedius (Silver catfish) is a freshwater fish species from Schilbeidae and occurs abundantly within most river systems in the Limpopo Province of South Africa. This is an opportunistic omnivorous fish feeding on a wide variety of foods including small fish, insects, shrimps, snails, aquatic larvae, plant seeds and fruit. Silver catfish thus have the potential to be infested with a wide range of heteroxenous parasites.

MATERIAL AND METHODS

Parasitological surveys were conducted between 2009 and 2018 at four waterbodies within the Limpopo River System. The hosts (n = 485) were collected using gill nets and conventional fishing gear, dissected and examined for larval endoparasites. All parasites removed were fixed and preserved according to standard methods for each group.

RESULTS

Nine species, belonging to four different parasite groups were collected during this study. The trematode *Clinostomum ukolii* and nematode *Contraecaecum* sp. were recorded from all localities, with *Contraecaecum* sp. being the most dominant larval parasite to infest this fish. All other trematode and cestode larvae were only recorded from Phalaborwa Barrage and Nwanedi-Luphephe Dam. Pentastomid larvae from the genus *Alofia* were only found in fish from the Phalaborwa Barrage.

Parasite species	Site in fish	Sampling localities							
		LD		FBD		PB		NLD	
		P (%)	MI	P (%)	MI	P (%)	MI	P (%)	MI
Trematodes									
<i>Clinostomum ukolii</i>	Body cavity	32,5	6,4	10,4	1,8	5,0	1,2	35,8	9,6
<i>Diplostomum</i> type 1 metacercaria	Eye lens	0	0	0	0	0,8	4,0	3,3	1,8
<i>Diplostomum</i> type 2 metacercaria	Swim bladder	0	0	0	0	1,7	4,0	8,3	2,3
Unidentified digenean metacercaria type 1	Body cavity	0	0	0	0	8,3	4,3	11,7	14,1
Unidentified digenean metacercaria type 2	Behind eye	0	0	0	0	0	0	1,7	1,0
Cestodes									
Unidentified cestode larva	Body cavity	0	0	0	0	10,8	4,8	6,7	6,6
<i>Paradilepis scolecina</i>	Intestinal wall	0	0	0	0	0	0	4,2	1,8
Nematodes									
<i>Contraecaecum</i> larva	Body cavity	100	67,5	100	53,1	76,7	3,1	97,5	55,9
Pentastomids									
<i>Alofia</i> larva	Body cavity	0	0	0	0	6,7	1,8	0	0

LD = Loskop Dam, FBD = Flag Boshielo Dam, PB = Phalaborwa Barrage, NLD = Nwanedi-Luphephe Dam; P = Prevalence, MI = Mean intensity



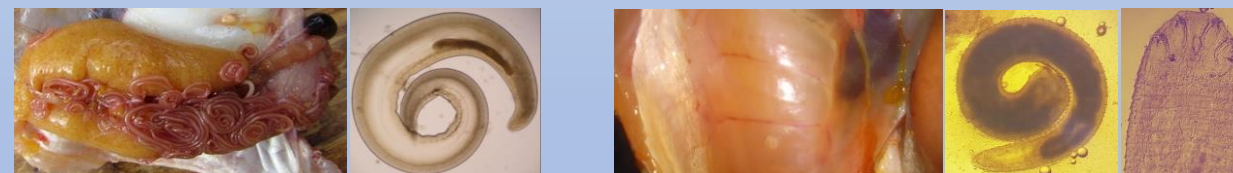
Clinostomum ukolii



Diplostomum type 1 *Diplostomum* type 2

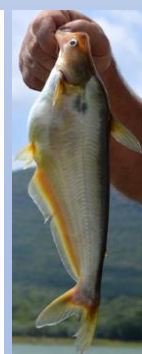


Paradilepis scolecina

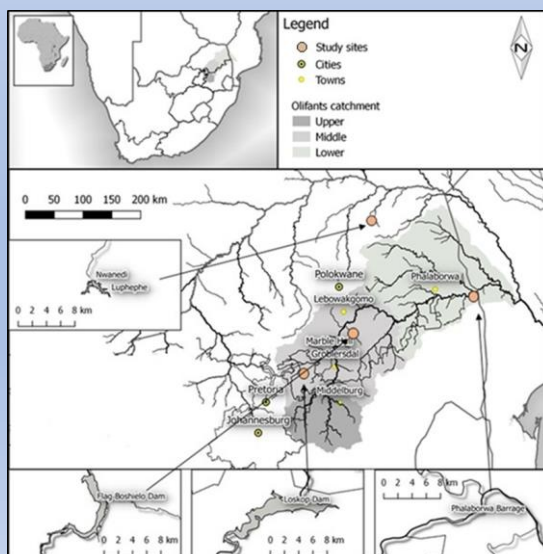


Contraecaecum sp.

Alofia sp.



S. intermedius



DISCUSSION AND CONCLUSION

Schilbe intermedius thus acts as intermediate host for a number of parasites making use of piscivorous birds and crocodiles as definite hosts. The variation in the presence of these larvae among localities as well as variation of infestation levels can be attributed to the presence and/or abundance of either the first intermediate or final hosts. This fish species serves as an important intermediate host for a number of parasite species.