

A survey of gastrointestinal parasitic infection in free-living rhinoceros of the Kaziranga National Park

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Incidence of parasitic infection of captive rhinoceros have been recorded (Silberman and Fulton 1979, Fowler 1986). However, information on it in free-living rhinoceros is meagre. The present work provides information on parasitic fauna in the free-living rhinoceros at the Kaziranga National Park, Assam.

A total of 84 fresh faecal samples, voided at different dung heaps by individual rhinoceros were collected separately in sterile polythene bags from 11 different forest ranges of the park during January 1990. The forest ranges were- Mihimukh, Kathpura, Satibeel, Tantibeel, Diphulu, Bagari, Bimoli, Raumari tower, Amkathani, Borbeel and Baruntika. The faecal samples were collected at random. The samples were brought to the laboratory and were examined both by sedimentation and floatation techniques as per standard method.

Of the 84 samples examined, 52 samples were positive for different parasitic infection, the percentage of infection being 61.90 (Table 1).

The different parasites recorded were of the genera *Paramphistomum* (39), *Strongyle* (17), *Coccidia* (3) and *Anoplocephala* (2).

Two different types of helminthic infections were recorded. In these the load in infec-

tion ranged from light to heavy in *Paramphistomum* (46.42%). In *Strongyle*, (20.23%) it was light to moderate. *Coccidia* and *Anoplocephalid* eggs were recorded in 3.57 and 2.38% samples respectively.

Strongyle infection has been documented by, Silberman and Fulton (1979) and Chakraborty (1991), but the *Paramphistomum* infection in rhinoceros was scanty. Chakraborty (1991) recorded *Paramphistomum* sp. and 2 other varieties of unidentified conical flukes in the small intestine, and *Anoplocephala* species in intestine and bile-duct. *Anoplocephalid* eggs in rhinoceros were recorded by Chauhan *et al.* (1973). Jones (1979) and Chakraborty (1991) reported it to be a common parasite of rhinoceros.

The dung samples examined from the different ranges of Kaziranga National Park were limited in number to derive any conclusion about the incidence of parasitic infection in different ranges of the park. However, it can be speculated that parasitic infection towards the western side was higher than the eastern side. It might be because the western part of the park is a low lying area. During flood, snails and other intermediate hosts are washed away from the eastern side to the western part and the area becomes more endemic for parasitic infection.

Further extensive survey in different ranges of Kaziranga National Park, involving a large number of animals on seasonal basis, is essential to understand the implication of parasitism in free living rhinoceros.

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Table 1. Prevalence of parasitic infection in free-living rhinoceros in different ranges of Kaziranga National Park on the basis of faecal examination

Forest range	Number of animal		Ova of parasite
	examined	affected	
Mihimukh	40	28	<i>Paramphistomum</i> (21) <i>strongyle</i> (9) <i>coccidia</i> (2)
Kathpura	10	4	<i>Paramphistomum</i> (3) <i>strongyle</i> (1)
Satibeel	2	1	<i>strongyle</i> (1) <i>Anoplocephala</i> (2)
Tatibeel	2	2	<i>Paramphistomum</i> (2)
Diphalu	2	1	<i>Paramphistomum</i> (1)
Bagori	8	8	<i>Paramphistomum</i> (6) <i>strongyle</i> (4) <i>coccidia</i> (1)
Bimoli	2	1	<i>Paramphistomum</i> (1)
Rowmari Tower	4	1	<i>Paramphistomum</i> (1)
Amkathani	3	2	<i>Paramphistomum</i> (1) <i>strongyle</i> (1)
Barbeel	6	2	<i>Paramphistomum</i> (1) <i>strongyle</i> (1)
Baruntika	5	2	<i>Paramphistomum</i> (2)
	84	52	

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