INCIDENCE OF GASTRO-INTESTINAL PARASITES IN NILGIRI TAHR (*HEMITRAGUS HYLOCRIUS*) OF ERAVIKULAM NATIONAL PARK, KERALA

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In many parts of the world, the protection of wildlife has been undertaken through establishment of parks and zoological gardens. Eravikulam National Park (10°10'-10°20'N and 77°-77°10'E) is situated in Devikulam Taluk of the Idukki District, Kerala and was established to protect the Nilgiri Tahr (*Hemitragus hylocrius*). It was started as a sanctuary in 1975 and later in 1978, was declared a National Park considering its ecological, faunal, floral, geo-morphological and zoological significance. It covers an area of 97km^2 of rolling grasslands and high level sholas and is surrounded by tea plantations of Kannan Devan Tea of Tata group. About 5km^2 area of the Park is set aside for the public where the goats are also seen.

Incidence of parasitic infection in wild and zoo animals is of great importance and had been reported by Chauhan *et al.* (1973), Modi *et al.* (1997) and Parsani (2001). Helminth parasitic infection in free-living wild animals had been reported by Chakraborty and Islam (1993; 1996). So, the present study was undertaken to assess the incidence of parasites among the Nilgiri Tahr which are exposed to the area used by human beings.

Thirty-two faecal samples of the Nilgiri Tahr were collected from different points of the tourist zone of the park in clean sterile containers. The samples were fixed in 10% formalin and brought to the laboratory for direct examination. On concentration and centrifugation in saturated salt solution as per Georgi (1985), the samples were screened for helminthic eggs.

Prevalence of parasitic infection among Nilgiri Tahr is given in table 1. The percentage of infection among 32 samples was 75 % (24 samples). Only Strongyles were present in all the positive samples. Sixteen samples (66.67%) were having less severe occurrence of Strongyles (+), whereas eight samples (33.33%) were having moderate occurrence (++).

Gaur *et al.* (1979) made an extensive study on the prevalence of helminth parasites in wild and zoo animals in Uttar Pradesh and recorded more occurrences of Strongyles on those animals. Chakraborty and Islam (1996) reported a higher incidence of Strongyles among free-living herbivores of Kaziranga National Park. Reddy *et al.* (1992) observed only 42.35% parasitic infection in the free-ranging animals at Bannerghatta National Park, Bangalore while, Chakraborty and Islam (1996) had reported 40.35% incidence in free ranging animals in Kaziranga National Park. In Eravikulam National Park, it seems that certain groups of Nilgiri Tahr have selected the tourist zone area as their home tract because of the availability of leftover food and feeling of safety in this area. The high incidence of parasitic infection among the herd may be due to its concentration in tourist zone area. As there is chance of intermingling of goats of tourist zone area and core area, the probability of infection being carried over to the other population needs to be ascertained by further extensive study.

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Table 1. Incidence of parasitic infection among Niigiri Tahr at Eravikulam National Park.

Species	Number of samples		%	Type of parasitic infection			
	Examined	Positive	positive	Cestode	Nematode	Trematode	Severity of infection
Nilgiri Tahr	32	24	75	-	Strongyle	-	+ = 16 (66.67%); ++ = 8 (33.33%)

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