

Parasitic infections in wild animals of Kerala

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A wild animal is typically host to a whole community of parasites of different species. Wild animals harbour numerous parasites in their free living stage, but seldom lead to harmful infection unless stressed (Gaur et al., 1979). Arora (1994) described a detailed account of infections and parasitic diseases of mammals, reptiles and amphibians in India. The present communication reports the parasitic infections in various wild animals of forests of Kerala.

Faecal samples of Sloth bear (5 nos), Gaur (12 nos), Nilgiri Thar (5 nos), Porcupine (2 nos) Sambar deer (15 nos) and Wild boar (8 nos) were collected from Periyar Wildlife Sanctuary. Faecal sample from one leopard was collected from Muthanga forest of Wayanad district. All samples were collected from rectum during post mortem examination of dead animals and were preserved in 10 percent formalin until processed. They were processed for concentration of ova by centrifugation and sedimentation technique. A drop of sediment was examined under low power objective of light microscope. The ova were identified based on Soulsby (1982).

Results of faecal sample examination were shown in the Table 1. Out of 48 samples examined, 16 showed parasitic ova. Most of them had mixed infection.

Strongyle ova were the most common ova detected. Strongyle ova seen in wild boars were presumed due to *Stephanurus dentatus*, since many worm specimen of this species was also frequently observed in internal organs of the same animals. Similarly, the strongyle ova detected in leopard could be due to the hook worm *Galocnchus perniciosus*.

In sambar deer, an ovum similar to *Fasciola* was observed. But the occurrence of *Fasciola*, in domestic ruminants is still equivocal in the state.

Eventhough, the death in many cases could not directly attributed to parasitism, the parasites definitely predisposes many other diseases. The parasitic burden and its relationship with the host have been successfully used by modern scientists in the control of wildlife pests and predators in our forests and agricultural system. Most of the parasites are reputed for their abundance and have great impact in maintaining the stability of various ecosystems (Sharma, 2003).

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Table. 1. Parasitic ova detected in various wild animals

Animal	Number of samples examined	Number of sample positive	Ova detected
Sloth bear (<i>Melursus ursinus</i>)	5	1	Strongyloid
Gaur (<i>Bos gaurus</i>)	12	4	Strongyle
Nilgiri tahr (<i>Nilgiritragus hylocrius</i>)	5	1	Strongyloid
Porcupine (<i>Hystrix indica</i>)	2	1	Trichuris
Sambar deer (<i>Rusa unicolor</i>)	15	4	<i>Eimeria</i> oocyst, <i>Fasciola</i> (?), <i>Trichuris</i> , Strongyle
Wild Boar (<i>Sus scrofa</i>)	8	4	<i>Ascaris suum</i> , Strongyle, Strongyloides, Spirurid, Coccidian oocysts, cyst of <i>Balantidium coli</i>
Leopard (<i>Panthera pardus</i>)	1	1	Isospora, <i>Ancylostoma</i> sp.

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