



First report on occurrence of *Babesia* infection in Nilgai *Boselaphus tragocamelus* from central India

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Babesiosis, a tick-borne infectious haemoprotazoan disease of cattle, buffaloes, sheep, goats, equines, dogs, cats and wild mammals, is caused by intra erythrocytic piroplasms of the genus *Babesia*. Generally, this disease is characterized by pyrexia, haemolytic anaemia, haemoglobinuria, jaundice and death. Although sufficient literature is available on babesiosis in domestic animals, meagre information is available on the infection in wild animals. This is an attempt to document the first report of *Babesia* infection in a Nilgai (*Boselaphus tragocamelus*) from Aarmori, Gadchiroli district, central India.

A male Nilgai (approximately 6-7 years) belonging to forest area of Gadchiroli district was presented for post mortem examination to the Nagpur Veterinary College, Nagpur. Heart blood smears were prepared, stained with Leishman's stain and examined microscopically.

At necropsy the lesions found were enlarged spleen, congestion of liver and kidney and pale mucous membranes indicating severe anaemia which are in agreement with Radostits et al. (2000) who also reported dark brown discolouration of the liver in acute infection of *Babesia*. The blood smear examination revealed *Babesia* sp. organisms. Babesiosis has been recognized in many wild animals such as Jackal, Zebra, Reindeer, Spotted Deer, Square-lipped Rhinoceros, Bandicoot (Tripathy et al. 1983), Wild Cat (Mudaliar et al. 1950), and Leopard (Baviskar et al. 2007). A male Mithun (*Bos frontalis*), of Nandankanan Biological Park,

Bhubaneswar, Orissa was also found positive for *Babesia* sp. and successfully treated with two doses of Diminazine aceturate (Tripathy et al. 1983). Lingard & Jennings (1904) described spontaneous piroplasmosis in deer belonging to Bareilly area in Uttar Pradesh. Hilpertshauer et al. (2006) conducted a survey of the occurrence of ruminant *Babesia* sp. in Switzerland in which they identified *Babesia* sp. organisms from ticks from wild ruminants (Deer, Roe Deer and Chamois) by PCR. The animals was kept in confinement for some period which may have led to stressful condition, which is in consonance with the findings of Penzhorn (2006) who have discussed development of clinical babesiosis in the Black Rhino under stressful conditions like confinement after capture. Disease management views all over the world seem to be changing and diseases among wild animals are being recognized as an important obstacle in wildlife conservation and management. Babesiosis is a widely distributed disease, occurring from the tropics to the Arctic and reports of this disease in wide variety of wild animals are increasing and needs special attention from the management point of view.

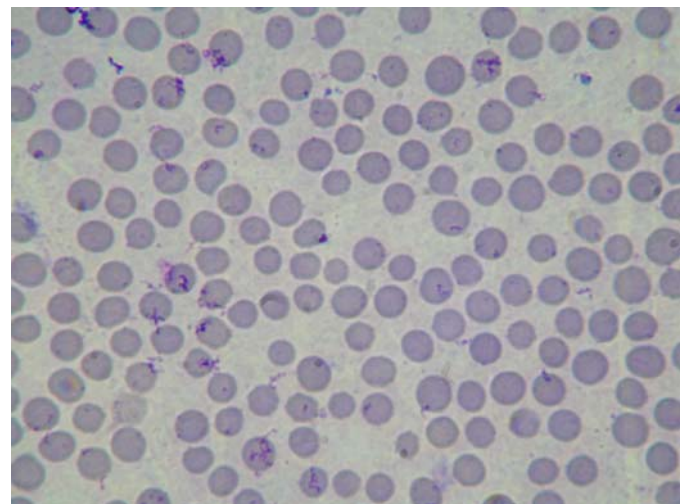


Image 1. *Babesia* in the red blood cells of *Boselaphus tragocamelus*

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