Occurence of *Setaria cervicapra* in Sambar Deer (*Rusa unicolor*) from Periyar Tiger Reserve, Thekkady, Kerala, India

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Introduction

Sambar deer (*Rusa unicolor)* is the largest deer species under the family *Cervidae,* native to South Asia and Southeast Asia, highly adapted to a wider variety of forest types and environmental conditions. They are predominantly forest dwellers venturing out into the open mainly at night and late dusk or early dawn and usually rest in the daylight hours.

Parasites may harbored by wild animals, however they may not lead to harmful infections unless the hosts are stressed and can then cause active disease and death in wild animals and can also become a source of infection for domestic animals (Gupta *et al*., 2011). The present communication reports the occurrence of *Setaria cervicapra*, a filarid nematode recovered from the peritoneal cavity of a sambar deer.

Materials and Methods

During the month of June, 2011 the death of a sambar deer was reported from Periyar Tiger Reserve, Thekkady. During postmortem examination of the carcass, a few round worms were found in the peritoneal cavity. They were collected in 10 per cent formalin solution and brought to the Department of Veterinary Parasitology, College of Veterinary and Animal Sciences, Pookode, Wayanad for identification. The nematodes were dehydrated in ascending grades of alcohol and then cleared in creosote (Spraker *et a*l., 2003) specimens were mounted using DPX and photographs were taken. The species identification was performed based on Nama *et al*., 2004.

Results

The worms were milk-white in colour. The mouth of the nematode was surrounded by a chitinous ring which showed dorso-lateral prominences (Fig. 1). In males, spicules were unequal and the caudal end was blunt with small spherical protuberance. Twenty three pairs of caudal papillae were also observed at the tail end of the male worm (Fig. 2). In females, two small ellipsoidal lateral protuberances were noticed at caudal end (Fig. 3). The worms were identified as *Setaria cervicapra* based on Nama *et al*., 2004.

Fig. 1. Anterior end showing chitinous ring with dorsolateral prominences.

Discussion

Previously the occurrence of *S. cervicapra*, a filarid nematode inhabiting abdominal cavity of ungulates was reported from north India (Nama *et al*., 2004). However, based on available literature, there were no reports

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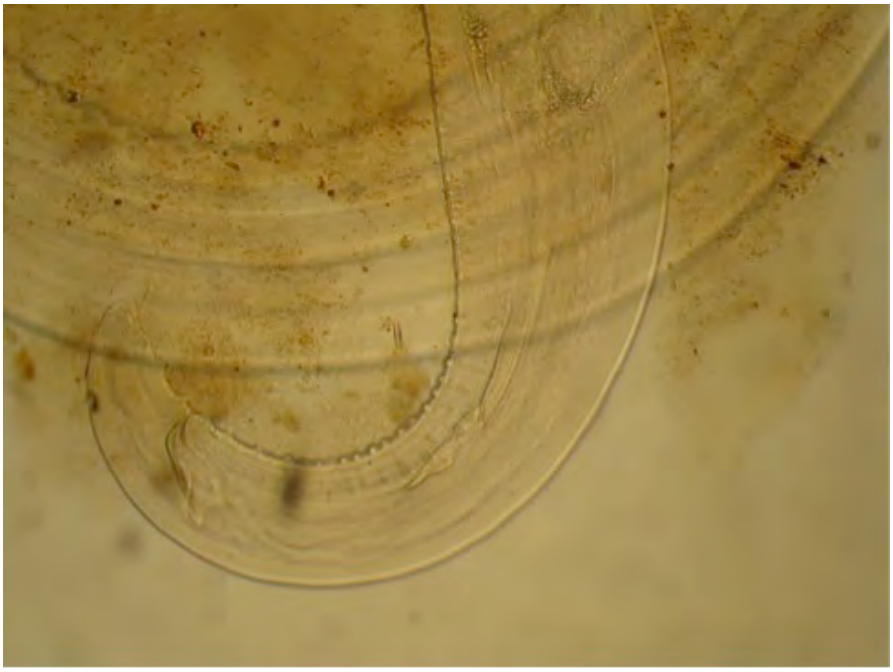

Fig.2. Male tail end showing 23 pairs of caudal papillae.

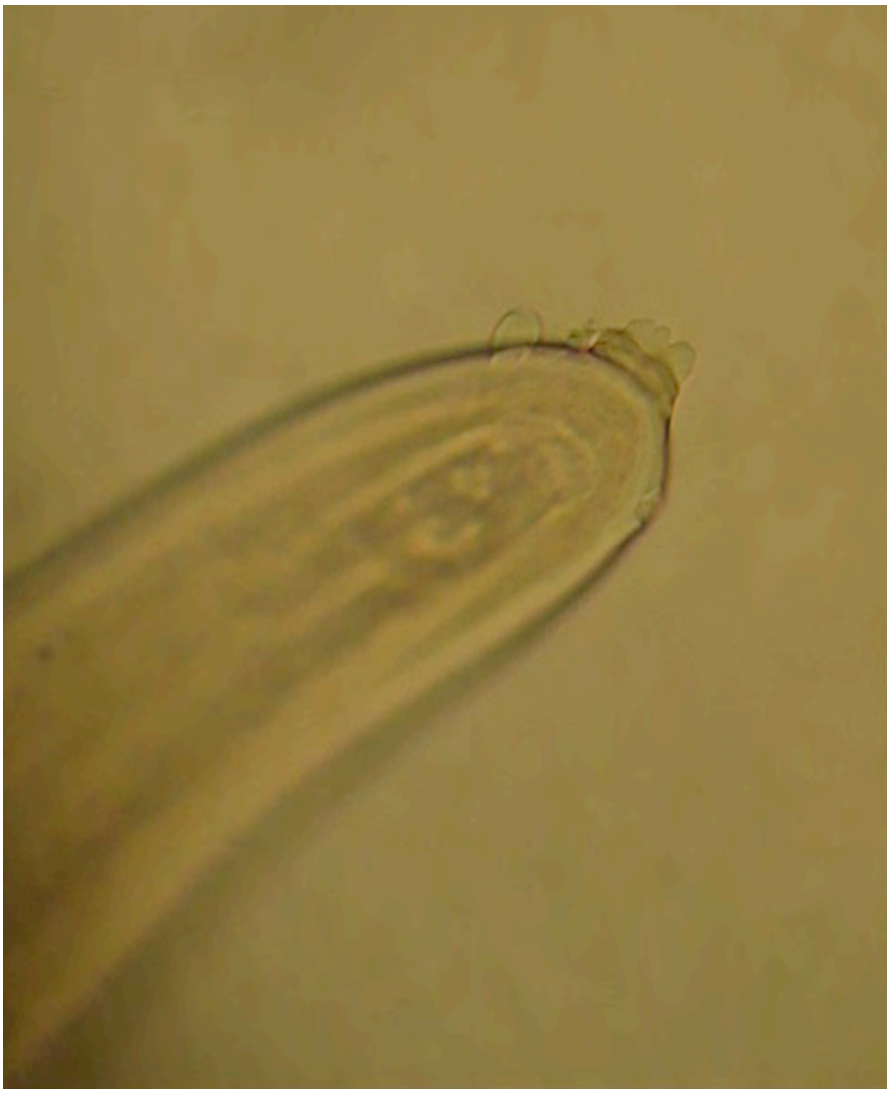

Fig. 3. Female tail end showing two small ellipsoidal lateral protuberances.

on the presence of the parasite from South India. William *et al*., 1987 detected the presence of *S. yehi* in sambar deer in Florida. Usually, adults of *Setaria* sp. occurring in the peritoneal cavity are considered to be nonpathogenic but sometimes immature forms can migrate to central nervous system and cause neurologic disturbances. It is probable that almost any filaroid nematode parasitizing animals can, under appropriate circumstances, infect humans and undergo some degree of development (Orihel and Eberhard, 1998).

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