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The occurrence of adult *Setaria cervi*, a filarial worm of bovine hosts is reported for the first time from goats of Tripura (India). The report seems to be of veterinary significance since *Setaria* infection in abnormal hosts is known to cause some pathological manifestations. The possible source of infection to goats is discussed.

The thread nematode, *Setaria cervi* (Rudolphi, 1819; Baylis, 1936) (Gastrophilidae: Setariinae), though well known as a common parasite in the peritoneal cavity of cattle and buffalo, has also been sporadically reported from other herbivorous hosts such as horses (Gusta & Kalis, 1978) and goats (Trivastava *et al.*, 1965) from several parts of the world. Endrey's (1963) report on helminth infections in livestock in Assam also includes a record of *Setaria* species in goats but the date of this record is not indicated. In the survey reports (ref. Tables II & III, p. 541, 542) based on post-mortem and faecal examinations of goats

**FILARIAL INFECTIONS IN GOATS OF TRIPURA : OCCURRENCE OF SETARIA CERVI (RUDOLPHI, 1819) BAYLIS, 1936**

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During a survey conducted in Tripura, a north-eastern State of India, carried out in March, 1987, the survey of 132 goats at the abattoir in Agartala (Dishmapagar, 24°23'N—92°10'E) revealed the presence of *Setaria* spp. in the peritoneal cavity of five and three goats respectively. It is worth mentioning here that out of 450 cattle examined in a concurrent survey by the state, 92 (i.e. 20.4%) of them harboured *Setaria* species. The nematodes collected were fixed in 70% ethanol and cleared in a glycerin-alcohol solution. Detailed morphological features of the worms were identified as adults of *S. cervi* on account of the presence of a characteristically raised and dorsoventrally elongated peribuccal ring and a short conical tail possessing a pair of caudal appendages (Baylis, 1936).

The report seems to be of veterinary significance since in abnormal hosts like horses, sheep and goats, various pathogenic manifestations like cerebrospinal meningitis and lumber paralysis are known to occur on account of erratic migration of the juveniles of *Setaria* species (Innes & Shobe, 1953). The life cycle of most of the species of *Setaria* is unknown; however, for those where it is known, different species of mosquitoes such as *Aedes aegypti*, *A. rembosensis*, *Culex* species and *Anopheles* species are implicated as vectors of microfilariae in different hosts (Souleby, 1982). In the area under study, ticks are

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The occurrence of adult *Setaria cervi*, a filarioid worm of bovine hosts is reported for the first time from goats of Tripura (India). The report seems to be of veterinary significance since *Setaria* infection in abnormal hosts is known to cause serious pathogenic manifestations. The possible source of infection to goats is discussed.

The filaroid nematode, *Setaria cervi* (Rudolphi, 1819) Baylis, 1936 (Onchocercidae : Setariinae), though well known as a common parasite in the peritoneal cavity of cattle and buffaloes, has also been sporadically reported from other herbivorous hosts such as horses (Gupta & Kalia, 1978) and goats (Srivastava *et al.*, 1985) from several parts of the world. Endrejat's (1964) report on helminth infections in livestock in Assam also includes a record of *Setaria* species in goats but the basis of this record is not indicated. In the survey reports (ref. Tables II & III p.541,542) based on post mortem and faecal examinations of goats *Setaria* is not mentioned. The present communication is the first report on the occurrence of adult filarial nematode, *S. cervi* in goats of India.

During a survey of helminth parasite spectrum in the livestock of Tripura, a north-eastern State of India, carried out between April, 1986 to March, 1987, the autopsy of 152 goats at the abattoirs in Agartala (23°44'N—91°17'E) and Dharmanagar (24°23'N—92°10'E) revealed the presence of *Setaria* worm infections in the peritoneal cavity of five and three goats, respectively. It is worth mentioning here that out of 450 cattle examined in a concurrent survey in the state, 92 (i.e., 20.4%) of them harboured *Setaria* species. The nematodes collected were fixed in 70% ethanol and cleared in a glycerin-alcohol solution. On studying their detailed morphological features the worms were indentified as adults of *S. cervi* on account of the presence of a characteristically raised and dorsoventrally elongated peribuccal ring and a short conical tail possessing a pair of caudal appendages (Baylis, 1936).

The report seems to be of veterinary significance since in abnormal hosts like horses, sheep and goats, serious pathogenic manifestations like cerebrospinal nematodiasis and lumbar paralysis are known to occur on account of erratic migration of the juveniles of *Setaria* species (Innes & Shoho, 1953). The life cycle of most of the species of *Setaria* is unknown; however, for those where it is known, different species of mosquitoes such as *Aedes aegypti*, *A. pambaensis*, *Culex* species and *Anopheles* species are implicated as vectors of microfilariae in different hosts (Soulsby, 1982). In the area under study, cattle are

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maintained in close association with goats and it seems that the transmission of the infective stages to goats is probably accomplished from filaria-infected cattle of the area through *Anopheles* vector, of which as many as ten species are reported to occur in the region (Misra & Dhar, 1985). A further investigation deserves in this context on the incidence of animal filariasis in the region, together with an intensive study of the biology and ecology of its vectors. The study will gain significant informations needed prior to implementing any livestock management programme in this region.

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