

ARTYFECHINOSTOMUM MALAYANUM (LEIPER, 1911) MENDHEIM, 1943 FROM A SMALL INDIAN CIVET (*VIVERRICULA INDICA*)

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Subsequent to the first report of *Artyfechinostomum sufrartyfex* by Lane, 1915 from an Assamese girl, several scientists have recorded this fluke not only from more humans but also many non-human animals such as pigs, white rats, honey badgers, dogs and cats (Reddy & Varma, 1950; Srivastava, 1964; Dubey, *et al.*, 1969; Mohandas, 1971; Agarwal & Pande, 1972; Premavati & Pande, 1974). Other species of the genus reported are *A. indicum* (Bhalerao, 1931) Mendheim, 1943 from *Uromastix hardwickii*, *A. mehrai* Jain, 1960 from rats (experimental) and human beings, *A. paradoxuri* Baugh, 1962 from palm civet, *A. varanum* Simha and Deshpande, 1964 from monitor lizard and *A. munshi* Deodhar *et al.*, 1967 from dogs. Leiper (1911) recorded *Echinostoma malayanum* from human beings. This species was later found to infect pigs, house shrews and experimentally white rats, white mice and hamsters (Liekian Joe, 1963). Padmavati and Pande (1974) stated that *E. malayanum* is to be renamed as *Artyfechinostomum malayanum* and be the type species of the genus *Artyfechinostomum*. They have also synonymised all the species of the genus including *A. sufrartyfex* with *A. malayanum*.

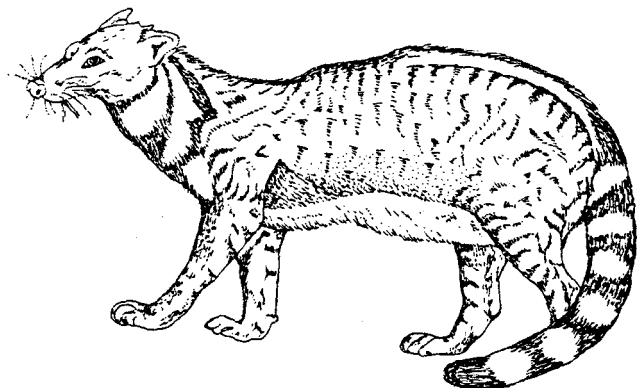
The present report deals with the finding of *A. malayanum* from a new host, the Small Indian Civet. The civet was under the custody of an animal Welfare activist who rescued it from another place because of inhuman treatment. Till then the animal was kept in his house at Trichur, Kerala for nearly five months. The animal was fed with banana, milk, cooked rice. It consumed food regularly until one day, when the animal became suddenly dull and showed anorexia. The civet died within few days. Postmortem examination revealed the presence of about 58 mature and nearly mature flukes in the intestine which showed severe enteritis. The flukes were processed and stained by acetic alum carmine to study the morphological features.

The flukes were elongated, slightly tapering anteriorly and possessed a head collar with 37-41 collar spines in two alternate rows of which 4-5 were corner spines on either side. The flukes measured 5.89-7.14 mm in length and 1.3-1.6 mm in width. Oral sucker 0.147-0.162 x 0.147-0.183 mm and the ventral sucker fairly large and 0.367-0.892 x 0.294-0.714 mm. Pharynx was almost equal in size to oral sucker and the oesophagus was 0.235 mm long. Testes were tandem and with 7-9 prominent lobes. Anterior one was 0.606-0.749 x 0.642-0.765 mm and posterior 0.749-0.911 x 0.612-0.711 mm. The cirrus sac was club shaped and located behind the ventral sucker. Ovary anterior to testes, nearly oval and 0.214-0.249 x 0.285-0.392 mm. Eggs on an average measured 0.147 x 0.073 mm. The vitelline glands were seen extending from middle region of ventral sucker to posterior extremity and the follicles united behind the testes.

The flukes were identified as *Artyfechinostomum malayanum* from the above features and based on the amended diagnosis furnished by Premavati and Pande, 1974. The Small Indian Civet (*Viverricula indica*) is reported as a new host for this trematode which is also of public health significance.

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