

LETTER TO THE EDITOR

**BOVIENIA SERIALIS INFESTATION IN THE CATFISH
(CLARIAS MACROCEPHALUS)**

SIR: The catfish (*Clarias spp.*) is known to be infested with caryophyllid cestodes (Zaman and Leong, 1986). However, the cestode *Bovienia serialis* having a prevalence of less than 5.0% in areas studied, is not among the common parasites of the catfish in Malaysia (Furtado and Tan, 1973). We wish to report our observation of a heavy infestation of the catfish (*Clarias macrocephalus*) with *B. serialis*.

Thirty three catfish kept in an ornamental pond (12 ft wide, 10 ft long and 3 ft deep) were observed to be swimming sluggishly. They had severely distended abdomen and did not struggle when caught. Twenty six of the fish were killed by pithing and were later dissected and their visceral organs examined for endoparasites. Cestodes found were removed, fixed in 70% alcohol, stained with acetoalum carmine, dehydrated through a series of alcohols, cleared in clove oil and mounted in Canada balsam. Sections of the intestines were fixed in 10% phosphate-buffered formalin, processed using routine methods, sectioned at 5 µm and stained with haematoxylin and eosin.

The intestines of each of the dissected fish were choked with cestodes ranging in number from 42 to 65 (mean = 58). The cestodes were later identified as *Bovienia serialis* using standard taxonomic procedures. The intestinal mucosa of the fish did not show any significant gross and histopathology.

The heavy cestode infestation did not appear to have caused lesions in the intestinal wall and was therefore not the primary cause of the clinical problem. However, it may have caused intestinal obstruction and deprivation of the fish to the digested nutrients. The primary problem in the fish was more likely that of a respiratory distress as a result of the poor water quality ($\text{NH}_3 > 2 \text{ mg/l}$; pH = 6; dissolved oxygen = 2 mg/l). The water which had been brought in from a nearby stream was static since the pond did not have any inlet or outlet. The feeding of the fish with termite infested barks and raw chicken intestines in the previous week had obviously aggravated the water pollution problem.

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