

THE STUDY OF HISTOPATHOLOGICAL EFFECTS OF METACERCARIA  
INFECTION ON GILL OF *Akodoneta panchan*

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**THE STUDY OF HISTOPATHOLOGICAL EFFECTS OF METACERCARIA  
INFECTION ON GILL OF *Aplocheilus panchax***

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## ABSTRACT

This study was carried out to study the occurrence of metacercaria on gill of 53 blue panchax (*Aplocheilus panchax*) from estuarine area located around University Terengganu Malaysia (UMT). A total of 23 fishes were fixed for histopathological effect on gill while 30 fishes were conducted for identification of species and to determine prevalence and intensity of infection. The result showed *Aplocheilus panchax* in this estuarine area were infected with metacercaria from the genus *Echinochasmus*. Histopathological result revealed the most consistent sign of infection on gill of blue panchax was hyperplasia and cartilage proliferation. The cysts showed a preference for primary lamellae and for the secondary lamellae of each gill. It can be concluded that *Aplocheilus panchax* from estuarine area around UMT were heavily infected with *Echinochasmus* sp. with prevalence of 100% and mean intensities of infection is 167.5.

## ABSTRAK

Kajian ini telah dijalankan untuk menunjukkan kejadian metaserkaria terhadap insang ikan kepala timah (*Aplocheilus panchax*). Sebanyak 53 ikan kepala timah telah ditangkap dari kawasan estuarin yang mengelilingi Universiti Terengganu Malaysia (UMT). Sebanyak 23 ikan telah digunakan untuk mengkaji histopatologi terhadap insang manakala 30 ikan telah digunakan untuk identifikasi spesis dan menentukan prevalen dan min keamatan jangkitan. Keputusan menunjukkan bahawa *Aplocheilus Panchax* dari kawasan estuarin ini telah dijangkiti oleh metaserkaria dari genus *Echinochasmus*. Keputusan histopatologi mendedahkan bahawa kebanyakan insang ikan kepala timah menunjukkan simptom hiperplasia dan prolifirasi tulang. Sista metaserkari ini lebih menyukai menduduki pada lamela pertama dan lamela kedua pada setiap insang ikan. Di akhir kajian ini, boleh disimpulkan bahawa *Aplocheilus panchax* dari kawasan estuarin yang mengelilingi UMT telah dijangkiti oleh *Echinochasmus* dengan prevalen 100% dan min keamatan jangkitan sebanyak 167.5