

Abstract

A total of 247 samples from five species of freshwater snails collected from three sampling sites at Khao Wang Khamen, Kanchanaburi Province were examined for the presence of trematode cercariae. Using crushing method and lived microscopic observation, nine thiarid snails were found to carry two morphotypes of cercariae: furcocercous and one-tailed cercariae, giving the overall cercaria infection rate of 3.64%. Genomic DNA was extracted from cercariae individually isolated from the nine infected mollusks. Amplification and nucleotide sequencing of ribosomal DNA, giving the amplicons of about 2,900–3,300 bp, were conducted. Using BLAST search tool and sequence alignment analysis, the examined cercariae were divided into three groups: (1) five cercariae relating to transversotrematid flatworm; (2) one belonging to lecithodendriid fluke; and (3) three assigning to *Centrocestus* trematode.

Keywords: cercaria, flatworm, fluke, metacercaria, molecular technique, mollusk