

MOLECULAR IDENTIFICATION OF LARVAL TREMATODE IN INTERMEDIATE HOSTS FROM CHIANG MAI, THAILAND

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Abstract. Snail and fish intermediate hosts were collected from rice fields in 3 districts; Mueang, Mae Taeng and Mae Rim of Chiang Mai Province during April-July 2008. For identification of larval trematode infection, standard (cracked for snail and enzymatically digested for fish) and molecular methods were performed. The results showed that three types of cercariae were found, pleurolophocercus, cotylocercous, and echinostome among 4 species of snail with a prevalence of 29, 23 and 3% respectively. *Melanoides tuberculata* snail was the most susceptible host for cercariae infection. Four species of metacercariae, *Haplorchis taichui*, *Stellantchasmus falcatus*, *Haplorchoides* sp and *Centrocestus caninus*, were found with a prevalence of 67, 25, 60 and 20%, respectively. The Siamese mud carp (*Henicorhynchus siamensis*) was the most susceptible fish host for *H. taichui*, and half-beaked fish (*Dermogenys pusillus*) for *S. falcatus* metacercariae infection, whereas *Haplorchoides* sp and *C. caninus* were concomitantly found in *Puntius brevis*. HAT-RAPD profile confirmed that pleurolophocercus cercariae found in *Melanoides tuberculata* from Mae Taeng District belonged to *H. taichui* and in *Tarebia granifera* from Mueang District were *S. falcatus*.

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