

# TREMATODE INFECTIONS OF THE FRESHWATER SNAIL FAMILY THIARIDAE IN THE KHEK RIVER, THAILAND

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**Abstract.** The freshwater snail family Thiaridae was studied at five different locations: water sources for the Khek River, Thailand. Snail samples were collected by hand using counts per unit of time sampling method between December 2004 and October 2005. The physico-chemical quality of the water changed with the seasons and affected the sampling areas during both the dry season and the flood season. A total of 9,568 snail samples comprised of 14 species were found. These were 284 *Tarebia granifera*, 24 *Melanoides tuberculata*, 86 *Thiara scabra*, 3,295 *Paracrostoma pseudosulcospira pseudosulcospira*, 736 *P. paludiformis paludiformis*, 3,266 *P. paludiformis dubiosa*, 117 *P. morrisoni*, 304 *Brotia (Brotia) binodosa binodosa*, 1,250 *B. (Brotia) microsculpta*, 146 *B. (Senckenbergia) wykoffi*, 1 *B. (Brotia) pagodula*, 5 *B. (Brotia) binodosa spiralis*, 5 *B. (Brotia) insolita* and 49 *B. (Brotia) manningi*. The cercariae were investigated using shedding and crushing methods where they were categorized into two types and five species. The first type, Parapleurolophocercous cercariae, were comprised of *Haplorchis pumilio* Looss, 1899 and *Centrocestus formosanus* Nishigori, 1924. The second type, Xiphidiocercariae were comprised of *Acanthatrium hitaense* Koga, 1953, *Loxogenoides bicolor* Kaw, 1945 and *Haematoloechus similis* Looss, 1899. The cercarial infection rates in the above 5 species were 0.1% (5:9,568), 0.2% (15:9,568), 0.3% (24:9,568), 0.4% (37:9,568) and 0.1% (5:9,568), respectively. Five species of snails were susceptible to trematode infections. They were *T. granifera*, *M. tuberculata*, *T. scabra*, *P. paludiformis paludiformis* and *B. (Senckenbergia) wykoffi*; infections were found in 26.1% (74:284), 33.3% (8:24), 1.2% (1:86), 0.3% (2:736) and 0.7% (1:146), respectively.

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