RESEARCH NOTE

MOLECULAR PHYLOGENETIC RELATIONSHIP OF PARAGONIMUS PSEUDOHETEROTREMUS

Urusa Thaenkham and Jitra Waikagul

Department of Helminthology, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand

Abstract. A part of the mitochondrial cytochrome *c* oxidase subunit I (COI) gene and the nuclear ribosomal DNA second internal transcribed spacer 2 (ITS2) of a newly described lung fluke, *Paragonimus pseudoheterotremus*, were sequenced and compared with *P. heterotremus*, the species with a similar morphology. Pairwise distance of COI sequences revealed a genetic difference between *P. heterotremus* and *P. pseudoheterotremus* with a nucleotide difference of COI sequences between these two species of 10.6%. The constructed phylogenic tree with high bootstrap proportion suggested that *P. pseudoheterotremus* is a sister species of *P. heterotremus*.

Correspondence: Jitra Waikagul, Department of Helminthology, Faculty of Tropical Medicine, 420/6 Ratchawithi Road, Bangkok 10400, Thailand.

E-mail: tmjwk@mahidol.ac.th