

RESEARCH NOTE

MOLECULAR EVIDENCE OF *SPIROMETRA ERINACEIEUROPAEI* INFECTION IN SNAKES *PTYAS KORROS* FROM LAO PDR AND THAILAND AND FROGS *HOPLOBATRACHUS RUGULOSUS* FROM MYANMAR

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Abstract. Sparganosis is a parasitic disease in humans and animals caused by plerocercoid larvae (spargana) of the genus *Spirometra*. *Spirometra erinaceieuropaei* is the major causative agent of the disease in Asian countries. However, molecular evidence of the causative parasite species in animals remains lacking. A total of 19 spargana specimens were obtained from frogs, *Hoplobatrachus rugulosus*, collected from Myanmar and snakes, *Ptyas korros*, from Lao PDR and Thailand. A partial sequence of mitochondrial cytochrome c oxidase subunit1 gene (*cox1*) was amplified, sequenced, and the phylogenetic relationship was constructed using maximum likelihood method. Results revealed that the level of nucleotide variations in the partial *cox1* sequence (429 bp) among the spargana ranged 0-3.5%, with 15 variable sites. Phylogenetic analysis indicated that all spargana specimens were *S. erinaceieuropaei*. This is the first report of *S. erinaceieuropaei* in *P. korros* from Lao PDR and Thailand and *H. rugulosus* from Myanmar. The results emphasize the need for prevention and control of sparganosis in these regions.

Keywords: *Spirometra erinaceieuropaei*, *Hoplobatrachus rugulosus*, *Ptyas korros*, cytochrome c oxidase subunit1, spargana, sparganosis

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