

A New Species of *Haematoloechus* Looss, 1899 (Digenea: Plagiorchioidea) Infecting The Lung of Crab-Eating Frog *Fejervarya cancrivora* from Indonesia

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Abstract

*Haematoloechus* Looss 1899 is a species-rich genus with 70 described species of lung flukes of anurans with a worldwide distribution. Distinguishing among the species morphologically is problematic due to their high intraspecific variability, and molecular methods are still rarely used. Here we proposed a new species of the genus *Haematoloechus*, parasitic of the common rice frog *Fejervarya cancrivora* from Indonesia. The new species resembles morphologically more closely to *H. singaporensis* in most morphometric features, as well as in having the same extension of longitudinal extra-caecal uterine loops that reach almost midlevel of body. However, the new species is distinguished notably by (1) the presence of an esophagus, which is absent in *H. singaporensis*; (2) the smooth oval shape of ovary, versus an ovary with four unequal lobes in *H. singaporensis*; (3) the number and distribution of clusters of vitelline follicles in the forebody, which is limited to four clusters of follicles lateral to each cecum in *H. singaporensis* versus 2-4 extra-caecal and 1-6 intra-caecal clusters in the new species. In addition, phylogenetic analysis of the 28S rRNA gene and the Internal Transcribed Spacers (ITS) and mitochondrial COI gene demonstrate that Indonesian specimens form a species-level lineage in the phylogeny of *Haematoloechus*. However, the lack of molecular data for *H. singaporensis* prevents us from confirming the validity of our species at the molecular level.