

# *kisumuensis* n. sp. (Digenea: Schistosomatidae) from murid rodents in the Lake Victoria Basin, Kenya and its phylogenetic position within the *S. haematobium* species group.

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## Abstract

*Schistosoma kisumuensis* n. sp. is described based on 6 adult males and 2 adult females collected from the circulatory system of 3 murid rodent species, *Pelomys isseli*, *Mastomys natalensis*, and *Dasymys incomitus*. Specimens were collected from a single location, Nyabera Swamp, in Kisumu, Kenya in the Lake Victoria Basin. This new species is morphologically similar to members of the *S. haematobium* group, currently represented by 8 species parasitizing artiodactyls and primates, including humans. *Schistosoma kisumuensis* differs from these species by producing relatively small *Schistosoma intercalatum*-like eggs (135.2 x 52.9 microm) with a relatively small length to width ratio (2.55). Comparison of approximately 3000-base-pair sequences of nuclear rDNA (partial 28S) and mtDNA (partial cox1, nad6, 12S) strongly supports the status of *S. kisumuensis* as a new species and as a sister species of *S. intercalatum*. The cox1 genetic distance between these two species (6.3%) is comparable to other pairwise comparisons within the *S. haematobium* group. Separation of the Congo River and Lake Victoria drainage basins is discussed as a possible factor favoring the origin of this species.