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Cytogenetic analysis of Black Shark Minnow, *Labeo chrysophekadion* (Bleeker, 1850) (Cypriniformes: Cyprinidae) in Thailand

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Abstract

In the present study, we investigated the karyotype and chromosomal characteristic of nucleolar organizing regions (NORs) in *Labeo chrysophekadion* from Mae khong River, Nong Khai Province, Thailand. The metaphase chromosomes were prepared from kidney cells of five male and five female fish. Conventional and Ag-NOR staining techniques were applied to the chromosomes. Karyological analysis revealed that $2n= 50$ and $NF= 86$. The karyotype of *L. chrysophekadion* comprising five pair of metacentric, three pairs of submetacentric, ten pairs of acrocentric and seven pairs of telocentric chromosomes. Thus, the chromosome formula could be suggested as $2n= 50, 10m+ 6sm+ 20a+ 14t$. There are two pairs of NOR-bearing chromosomes which are located at the telomeric position of the short arm of the acrocentric chromosome pair 12 and 13. The chromosome characters between male and female fish cannot be distinguished by conventional and silver staining. The number of active NORs in metaphase cell varies between two and four among the observed metaphase cells in the same sample.

Keywords: Black Shark Minnow, *Labeo chrysophekadion*, Karyotype, Chromosome, NOR