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Research article

The First Karyological Analysis of the Sixbar Grouper *Epinephelus sexfasciatus* (Valenciennes, 1828) (Perciformes, Epinephelinae)

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Abstract This study examines for the first time of karyotypic analysis and chromosomal characteristic of nucleolar organizer regions/NORs of *Epinephelus sexfasciatus*. The fish samples were collected from Andaman Sea, Phuket province, southern Thailand. The chromosomes were investigated using conventional Giemsa's staining and Ag-NORs banding techniques. Fish chromosome preparations were conducted by squash technique from kidney. The results showed that the diploid chromosome number of *E. sexfasciatus* was $2n=48$ and the fundamental number (NF, number of chromosome arms) was 48. The type of chromosomes included 24 large telocentric and 24 medium telocentric chromosomes. After Ag-NOR banding technique, single pair of NORs was observed on the short arm of medium telocentric chromosome pair 23. The idiogram shows gradually decreasing length of the chromosomes. A size difference of the largest and the smallest chromosomes is approximately two folds. The karyotype formula could be inferred as: $2n(48) = 2n(48) = L^{t24} + M^{t24}$.

Keywords: Chromosome, *Epinephelus sexfasciatus*, Karyotype, Sixbar grouper,

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