

First record of the dotted grouper *Epinephelus epistictus* (Temminck & Schlegel, 1843) (Perciformes, Serranidae) in Malaysia

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Abstract

Five specimens of *Epinephelus epistictus* (Temminck & Schlegel, 1843) were collected from a major landing site located on the west coast of Peninsula Malaysia during a fish faunal survey on 23 August 2017. The present study extends the distribution range of *E. epistictus* southwards from Andaman Sea to the Strait of Malacca. Species identification was confirmed by colour pattern and DNA barcoding (567 bp of cytochrome C oxidase I) of all *E. epistictus* specimens and nine closely related *Epinephelus* species. The interspecies genetic distance ranged from 0.002–0.245. This study also presents, for the first time for Malaysia, data on length-weight relationships and otolith measurements. It contributes to a better understanding of taxonomy, and phylogenetic and genetic diversity of *E. epistictus*.

Keywords

DNA barcoding, new record, otolith aspect ratio, phylogenetic and genetic diversity, taxonomy