

# Genetic diversity and population structure of *Terapon jarbua* (Forskål, 1775) (Teleostei, Terapontidae) in Malaysian waters

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## Abstract

A background study is important for the conservation and stock management of a species. *Terapon jarbua* is a coastal Indo-Pacific species, sourced for human consumption. This study examined 134 samples from the central west and east coasts of Peninsular (West) Malaysia and East Malaysia. A 1446-bp concatenated dataset of mtDNA COI and Cyt *b* sequences was used in this study and 83 haplotypes were identified, of which 79 are unique haplotypes and four are shared haplotypes. Populations of *T. jarbua* in Malaysia are genetically heterogeneous as shown by the high level of haplotype diversity ranging from 0.9167–0.9952, low nucleotide diversity ranging from 0.0288–0.3434, and high  $F_{ST}$  values (within population genetic variation). Population genetic structuring is not distinct as shown by the shared haplotypes between geographic populations and mixtures of haplotypes from different populations within the same genetic cluster. The gene flow pat-