



## Genetic Characterisation of Populations of White Grouper *Ephinephelus aeneus* from the Aegean and Mediterranean Coasts of Turkey Through Analyses of mtDNA

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### Abstract

To contribute to the understanding of the characteristics of *Ephinephelus aeneus* populations from the Turkish Marine waters, a molecular genetics study was conducted. The mtDNA ND5/6, 16SrRNA, COI, control and Cytochrome b regions of *E. aeneus* individuals from three localities (the Iskenderun Bay, Mersin Bay and Antalya Bay) in the Eastern Mediterranean and two localities (Mugla and Izmir) from the Aegean Sea were monitored to find the polymorphic regions of mtDNA. Genetic diversity and pattern of genetic differentiation among phylogeographic populations, bottleneck effect, haplotype diversity and structure, measure of genetic isolation by distance were examined throughout the sampled populations in order to be used for the implementation of conservation and management measures to protect and consolidate *E. aeneus* populations in the Turkish marine waters. This study was supported by TUBITAK (214O575).

### Keywords:

Population Genetics, White Grouper, *Ephinephelus aeneus*, mtDNA

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