



Tripp-Valdez, M.A., F.J. García de León, **S. Ortega García**, D. Lluch-Cota, J. López-Martínez & P. Cruz (2010). Population genetic structure of dolphinfish (*Coryphaena hippurus*) in the Gulf of California, using microsatellite loci. Fisheries Research, 105(3): 172-177. DOI: 10.1016/j.fishres.2010.03.023

Population genetic structure of dolphinfish (*Coryphaena hippurus*) in the Gulf of California, using microsatellite loci

Miguel A. Tripp-Valdez, Francisco J. García de León, Sofía Ortega García, Daniel Lluch-Cota, Juana López-Martínez & Pedro Cruz

We assayed genetic variations at five microsatellite loci of dolphinfish captured at five sites in 2005 and eight sites in 2006 to detect genetic population structure of dolphinfish *Coryphaena hippurus* in the Gulf of California and surrounding waters. Results show high genetic variation, similar to other pelagic fishes with large populations. Pairwise F_{ST} values and hierarchical AMOVA detected subtle but significant spatial and temporal heterogeneity, mainly in samples of 2005 and some of 2006. However, Bayesian assignment analysis failed to detect genetic differentiation, which was also supported by the Mantel test and gene flow estimates among the sampled sites. This suggests that, despite the slight heterogeneity detected in this region, the dolphinfish forms a single panmictic population with high genetic variation and gene flow.

Palabras clave: Biomasa, population structure, microsatellite, Dolphinfish

Para obtener copia del documento contacta con el autor (sortega@ipn.mx) o con el personal de la biblioteca (bibliocicimar@ipn.mx).