

Study of *Eleutheronema tetradactylum* populations in the Persian Gulf using microsatellite markers

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Abstract:

Fourfinger Threadfin in shallow coastal waters with sandy or muddy bottom and into the lives of the rivers. The fish in the coastal areas of tropical and subtropical areas of the environment. The family of 7 genera and 35 species have been identified in the warm waters. Persian Gulf fish are apart from the economic elite. Sampled using boats equipped with fishing hooks gill net and sometimes in the Persian Gulf was. And was amplified using the number six position. The highest number of alleles observed in the samples and place Eletet2 Bushehr (5 alleles) and the lowest in the province is the place Eletet16.0 and the samples (one allele). Ho Eletet16.0 samples collected in the range of the lowest position of the province and the province is the highest position Eletet16.0. Shannon index Eletet2 highest position in the province) 1.494 (and its lowest position in the province Eletet17 (0.637) is. AMOVA tests based on risk level 0.01 differences between samples (%76), the difference between the groups (regions) (%0), differences between regions (%24) was calculated. similar genetic criteria Nei, (1972) The province of Khuzestan and Bushehr specimens (0.486) and genetic distance between samples of Khuzestan and Bushehr (0.615) exists. In the present study, heterozygosity at the highest position in the province of Bushehr is Eletet2. The highest observed heterozygosity (H_o), 0.923 is the position Eletet16.0 and Bushehr specimens. The amount of heterozygosity observed in this study is more indicative of the amount expected heterozygosity genetic variability due to fish migration in the near and far and free access to water (high gene flow) is. The results suggest that it is probably a fish population in the areas of Fourfinger Threadfin conventional fisheries management perspective there is any, is the same.

Keywords: Fourfinger Threadfin, *Eleutheronema tetradactylum*, Persian Gulf, Microsatellite