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Biomass and Catch Per Unit of Area Estimation and Distribution Pattern of Largehead hairtail (*Trichiurus Lepturus*) from Northcoast of the Gulf of Oman

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Abstract

Trichiurus lepturus is considered as one of the most economically important marine fish and consumed as food in many countries. With increasing population growth, sustainable management is essential for continuing exploitation of this species.The current study was conducted to assess the amount of biomass and Catch Per Unit of Area (CPUA) as well as to determine the distribution pattern of *Trichiurus Lepturus* as one of the most important and commercial fish species in the north coast of the Gulf of Oman. Samples were collected from 94 trawl stations selected at stratified random procedure. The study area was stratified to five layers (A to E) covering the depth layers of 10-20, 20-30, 30-50 and 50-100 m. The catch rates of CPUA and biomass of *T. Lepturus* were estimated 4778.3 kg/nm^2 and 2220.2 tons, respectively. The highest value of biomass for *T. Lepturus* was recorded in Chabahar to Ramin (D strata, 861.8 tones) in the east coast of Chabahar and the lowest value (105.9 tones) was estimated for stratum A (west coast of Chabahar). The highest value of biomass (1634.5 tones) was observed at 50-100 depth layer. On the other hand, the highest CPUA (1604.8 kg/nm^2) was recorded in stratum D and the lowest CPUA (456.4 kg/nm^2) was recorded in stratum A. The highest value of CPUA (701.5 kg/mn^2) was observed at 50-100 depth layer. It was concluded that stratum B and D are the best fishing area as per higher density and distribution of *T. Lepturus* and depth of distribution deeper than 50 m.

Keywords: Abundance, Biomass, Distribution, *Trichiurus Lepturus*

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