Comparing the By-catch Composition of Shrimp Trawlers in Bushehr and Hormozgan Provinces

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Abstract

The present study was performed to compare by-catch composition, CPUE and length frequency of fish caught in industrial shrimp trawlers in Hormozgan and Busher waters during 2013. In Hormozgan, catch composition included 13.77% shrimp, 86.24% by-catch (71.51% discards and 14.73% incidental catch). CPUE of shrimp, incidental catch and discard were estimated 55.81, 59.70 and 290.63 kg. h⁻¹ respectively. In Bushehr, catch composition also included 6.52% shrimp, 93.48% by-catch (12.66% discards and 80.81% incidental catch). CPUE of shrimp, incidental catch and discard were also computed 3.45, 6.40 and 42.75 kg. h⁻¹ respectively. Fifty-seven species belonging to 43 families were similar in by-catch composition in Hormozgan and Bushehr waters. Length frequency was recorded for 12 fish caught species in Bushehr and 14 species in Hormozgan. In terms of Descriptive statistics, mean length of the fish caught in Hormozgan was smaller than in Bushehr, but it was significant for Carcharhinus dussumieri, Pennahia macrophthalma, Scomberomorus commerson, Trichiurus lepturus and Netuma thalassina (Mann–Whitney U test, P<0.05). Multidimensional Scaling showed 93% dissimilarity in by-catch assemblages of bottom trawlers from Bushehr and Hormozgan waters.

Keywords: By-catch, Industrial tawler, Shrimp, Hormozgan, Bushehr.