



THE CATCH CHARACTERISTICS OF PUFFERFISH SPECIES IN DIFFERENT FISHING GEARS IN THE AEGEAN AND MEDITERRANEAN COASTS OF TURKEY Fikret Öndes¹, Vahdet Ünal^{2*}, Yeliz Özbilgin³, Cengiz Deval⁴, Serpil Karan⁵, Cemal Turan⁵

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Abstract

The present study aimed to compare the catch amount of pufferfish species in different fishing gears and determine the monetary losses by pufferfish for fishers in the Aegean and Mediterranean coasts of Turkey based on face-to-face interviews. A total of 369 commercial and recreational fishers, in the coastal cities along the Aegean-Mediterranean Seas were used to gather data between the period of June - September 2017. A semi-structured questionnaire was used to get detailed information on the various catch characteristics and catch amount of pufferfish species in different fishing gears (hook, set net, longline, purse seine, and trawl) in different locations. Additionally, economic loss due to damaging fishing gears was estimated based on respondents' declarations to the relevant questions. Results showed that catch amount of pufferfish is higher around the Mediterranean coasts in comparison with the Aegean coasts of Turkey. The common pufferfish species was *Lagocephalus sceleratus* in the fishing gears in the Aegean Sea, whilst around Mersin Bay *Lagocephalus suezensis* was the most abundant pufferfish species based on the catch data. The highest catch amounts of pufferfish species were recorded in trawls and purse seines. Concerning the seasonal changes in catch amounts, the highest catch was determined in summer months for both commercial and recreational fisheries. Regarding the damages caused by pufferfish species in the small-scale fisheries (set net and longline) around Mersin Bay, 85% and 80% of commercial fishers claimed that pufferfish species damage their fishing gears and fish entangled to these fishing gears, respectively. In conclusion, pufferfish species (e.g. *L. sceleratus*) and their biological, ecological and socioeconomic characteristics should be studied and considered by fisheries management authority. Thus, the authority can take decision in order to mitigate their negative effects on not only fishers but also marine ecosystem. The limited outcomes generated in this study can be very useful to conduct more comprehensive future studies.

Keywords: Pufferfish, catch amount, Aegean Sea, Mediterranean Sea, Turkey