



SPATIO-TEMPORAL DISTRIBUTION OF PUFFERFISH SPECIES IN THE ANTALYA BAY, EASTERN MEDITERRANEAN

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Abstract

Samples were collected in May, August, October 2014 and February 2015 over 6–10 consecutive days per month. For each research trip, three transects were considered: two transects were located in the region open to fishing, while the other one was in the protected area. There were five fixed trawling stations along each transect, located at depths of 10, 25, 75, 125 and 200 m over the inner part of the continental shelf. Sampling was carried out on board R/V “Akdeniz Su” (26.5 m) of the Fisheries Faculty of Akdeniz University. A polyethylene otter trawl net with 44 mm mesh size and 17.5 m wing spread was used to collect fish. Towing speed was around 2.5 knots and duration was about 30 min. All sampling was conducted during daylight hours between sunrise and sunset. The catch of each haul was sorted and identified according to species level or to the lowest possible taxon. Environmental parameters examined included physical, chemical, biological and geological data. Seawater samples were collected at each station by casting a polyethylene Nansen bottle before or after trawling. Hydrographical parameters were profiled at the surface, at the subsurface, according to the Secchi disk depth, and close to the bottom. After collection, water temperature, salinity, density, dissolved oxygen and Ph values were immediately recorded through a portable multiparameter probe. A total amount of 68 hauls were performed throughout the study. Observed temperature, salinity and density values showed clear seasonal variations. Four pufferfish species belonging to Tetraodontidae family and a total of 147 fish species belonging to 69 families were caught during this study. During the surveys, 69 specimens of *L. sceleratus*, 92 specimens of *L. spadiceus*, 747 specimens of *L. suezensis* and 48 specimens of *T. flavimaculosus* caught from the 68 successful hauls.

Keywords: Tetraodontidae, pufferfish, Mediterranean, Antalya Bay.