



## CHARACTERISTICS OF FISHING GEARS AND METHODS PROPOSED FOR COMBATING SILVER-CHEEKED TOADFISH *LAGOCEPHALUS SCCELERATUS* (GMELIN, 1789)

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### Abstract

The silver-cheeked toadfish *Lagocephalus sceleratus* (Gmelin, 1789) is highly toxic and the worst invasive species in the Mediterranean. This species negatively affects to small scale fisheries such as damage the gear and fishes caught in the net. Some researchers report that this species, which is prohibited from landing and fishing because of its toxicity, necessary to be caught in a controlled manner and its stocks must be constantly monitored. Due to the strong jaw structure and sharp teeth's, the fishing gears to be used in the catching should be carefully selected. This study was carried out in Gökova Bay and Datça-Bozburun Peninsula jointly by experienced fishers and some fishing technologists between 2012-2013 under United Nations Development Program-Global Environment Fund-Small-Grant project code numbered TUR/SGP/OP5/STAR/BD/13/02. The aims of the study are a) to determine the fishing methods that can be used in catching, b) to present the technical details of the gears and c) contributing to the withdrawal of *L. sceleratus* from the ecosystem by encouraging its fishing. A small scale fishery catalog published by FAO's was accepted as reference for technical details and Microsoft Visio program was used for drawings. As a result, it has been determined that fyke nets, handline, longline (bait and without bait) and purse seine (when schooling) can be used for the catching of this species in the region. Considering sharp and strong jaw structure, hooks should be long shank and thick material. It is also important that using steel wire Ø 0.40-0.50 in snood section of handline and longline fishery. It is thought that using surrounding nets such as purse seine can be appropriate for the certain time of the year especially spawning season of the species. In addition, High Modulus Polyethylene material can be used in surrounding nets bend section where the fish collected.

**Keywords:** *Lagocephalus sceleratus*, silver-cheeked toadfish, pufferfish, fishing gears