

Observations on the burrowing behaviour of the Dwarf Blasop, *Torquigener flavimaculosus* (Osteichthyes: Tetraodontidae) along the coast of Fethiye, Turkey

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Abstract. A previously unreported burrowing behaviour of the Red Sea migrant fish *Torquigener flavimaculosus* was observed for the first time in the Mediterranean Sea (Fethiye Bay, Turkey). The burrowing response, preceded by an escape swimming, is explained as an anti-predator adaptation by the species. It left only the eyes and a portion of the back exposed.

Kurzfassung. In der Bucht von Fethiye an der türkischen Mittelmeerküste wurde beobachtet, wie sich der Fisch *Torquigener flavimaculosus*, ein Einwanderer aus dem Roten Meer, im Untergrund eingrub, bis nur noch die Augen und ein Teil des Rückens aus dem Boden ragten. Diesem Verhalten waren fluchtartige Schwimmbewegungen vorausgegangen. Diese Verhaltensweisen werden als Anti-Prädatorenverhalten interpretiert.

Key words. Tetraodontidae, *Torquigener flavimaculosus*, burrowing behaviour, Lessepsian migration, Mediterranean Sea, Turkey.

The Dwarf Blasop, *Torquigener flavimaculosus* Hardy & Randall, 1983, is a Lessepsian (Red Sea migrant) fish which was first encountered in the Mediterranean Sea in the Haifa Bay on the Israeli coast (GOLANI 1987). It is mainly distributed in the western Pacific Ocean, with records from the Red Sea, Gulf of Aden, Gulf of Aqaba, Suez Canal, Kenya, Oman, Seychelles and Zanzibar (HARDY & RANDALL 1983, GOLANI 1987). The species is characterised by an inflatable body, small dorsal and anal fins located posteriorly in position, wide-based pectoral fin, round head with blunt snout, two large beak-shaped teeth in each jaw, and dorso-laterally positioned elongated eyes (GOLANI et al. 2002). The combination of the following characters distinguishes the species from all Mediterranean tetraodontids: a distinct chin, two branched lateral lines, truncated caudal fin, two rooted body spines, and a mid-lateral line of small brownish/greenish spots separating the dark back from the white belly.

For a number of Lessepsian fish, species importance and biomass in the source area are not necessarily correlated with abundance in the target area (GOLANI 1993, 1998). Almost 20% of the Lessepsian migrant fishes in the Mediterranean are represented by single or a few specimen records, despite their abundance in the source area. The Dwarf Blasop is a good example of this. Studies have shown a considerable biomass of the species along the Eilat shores, Gulf of Aqaba (GOLANI 1993), whereas only four specimens have been recorded from the Mediterranean Sea (GOLANI 2002).

The first underwater observation of *T. flavimaculosus* along the Mediterranean coast of Turkey was made on 1 December 2002, at Dalyan Bay off the Fethiye shore, where the species was recorded by a video camera. Another specimen was photographed at the same locality on 28 December 2002 (Fig. 1) (BILECENOĞLU 2003). Recently, on 30 October 2004,