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Occurrence of *Pterois miles* in the Island of Kefalonia (Greece): the Northernmost Dispersal Record in the Mediterranean Sea

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Abstract
Pterois miles (Bennett, 1828) is one of the worst aquatic invaders in history and its rapid dispersal in the Mediterranean Sea raise serious concerns for local biomes. On April 2019, one adult specimen was caught by gillnets close to the shoreline of the island of Kefalonia, Greece. This occurrence, confirmed by DNA barcoding, represents the northernmost record of the species in the Mediterranean Sea, up today, suggesting that the Ionian Sea corridor facilitates fast dispersal of ecological versatile species such as *P. miles* to higher latitudes.

Keywords Devil firefish · *Pterois miles* · Northward dispersal · Kefalonia island · Mediterranean Sea

Introduction

Devil firefish *Pterois miles* (Bennett, 1828) is considered as one of the most invasive fish species both in western Atlantic coast (Schofield et al. 2015) and in Mediterranean Sea (Kletou et al. 2016). After the documentation of the first record collected from Israel in 1991 (Golani and Sonin 1992), its invasion chronology suggests fast and widespread colonisation towards eastern and western Mediterranean following anticlockwise route (Fig. 1): Lebanon and southern coast of Cyprus (Bariche et al. 2013), southern coast of Turkey (Turan et al. 2014), Greece (island of Rhodes, Corsini-Foka and Kondylatos, in Crocetta et al. 2015), Tunisia (Ounifi Ben Amor and Ghanem, in Dailianis et al. 2016) and Italy (southern coast of Sicily, Azzurro et al. 2017).

Concerning Greece, the species has spread from the island of Rhodes, northward and westward to the southern part of the Aegean Sea (islands of Simi, Crete, Nisyros, Karpathos, and recently (November 2018) it was spotted by divers in the continental part of the country (close to the south-western coast of the Peloponnesus peninsula) (ELNAIS 2018). Therefore, the aim of the present communication is to: a) document the early detection of *P. miles* from the island of Kefalonia, in the eastern part of the Ionian Sea and b) urge authorities and all relevant stakeholders to take immediate action and promote control measures.

Materials and Methods

One adult specimen (Fig. 2) was caught by local fisherman with combined gillnets-trammel nets (GTN) of 400 m length, on 4 April 2019 (08:00 h), at a depth of 12–15 m. The location was close to Antisamos bay (38°16′12″N, 20°40′58″E) in the eastern coast of the Kefalonia island (eastern Ionian Sea, Greece, Fig. 3). Surface temperature in the area was measured with digital thermometer. The specimen was delivered to the local Fisheries Department in Argostoli, where it was photographed. Subsequently, total length (TL, cm) and total weight (TW, g) were measured and the specimen was deep-freezed. Efforts were made to distinguish it at species level, based on comparative descriptions of *Pterois* spp. by Schultz (1986), Allen and Erdmann (2008) and Froese and Pauly (2019).

Genetic identification (DNA barcoding) was performed by PCR amplification of the mitochondrial cytochrome oxidase I (COI) gene marker under the

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