

## Short Communication

# Stonefish *Synanceia verrucosa* Bloch & Schneider, 1801 (Actinopterygii: Synanceiidae): the first record in the Syrian coast and the fourth in the Mediterranean

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**Abstract:** Fish species introduction into the Mediterranean Sea is constantly increasing, and this is what worries biologists especially after the arrival of poisonous species. In this paper, *Synanceia verrucosa* is recorded for the first time in the Syrian marine waters, filling the gap of its distributions between north and south of the eastern Mediterranean.

*Article history:*

Received 27 November 2019

Accepted 24 December 2019

Available online 25 December 2019

*Keywords:* Synanceiidae, *Synanceia verrucosa*, Mediterranean, Syrian marine waters.

## Introduction

Synanceiidae family (Stonefishes) has nine genera and 36 species (Carpenter and Niem, 1999; Carpenter and De Angelis, 2016) characterizing by its warty skin and frightening shape. The stonefish of *Synanceia verrucosa* has a deadly poison in the bases of the fin spines and capable of burying itself in the sand to camouflage and grab prey. Before 2010, no individual was recorded in the Mediterranean Sea (Froese and Pauly, 2019) but, it was recorded from Palmakhim (Edelist et al., 2011), then from Iskenderun bay in 2012 at (Bilecenoglu, 2012) and for third time from Tyr coast in 2014 (Crocetta et al., 2015). It has not been recorded yet in the European and African coasts of the Mediterranean Sea (Bearez et al., 2017; El Sayed Haroun and Karachle, 2017; Froese and Pauly, 2019). In this paper, *S. verrucosa* is recorded for the first time in the Syrian marine waters, filling the gap of its distributions between north and south of the eastern Mediterranean.

## Materials and Methods

On 12 October 2019, during a field trip in the marine waters facing Lattakia city, Syria (35°31'5.97"N, 35°42'48.57"E), a specimen of *S. verrucosa* was collected using longline, with assistance of fishing

boat (9.5 m, 19HP). The specimen was identified according to Carpenter and Niem (1999), and the morphometric measurements (length to the nearest mm, weight to the nearest g) and meristic counts were recorded. The specimen was then photographed, preserved into 7% formaldehyde, and placed at the Biological Laboratory of the High Institute of Marine Research (Tishreen University - Lattakia, Syria) as a reference sample (unnumbered yet).

## Results and Discussions

A single specimen of stonefish, *S. verrucosa* Bloch & Schneider, 1801 was caught at ~15 m depth off Lattakia coast (Fig. 1). It has a large body and a warty skin. The mouth is upward with a deep pit behind and a smaller one below of eye. The pectoral, ventral and caudal fins are large and strong, with severe sharp spines, allowing them to move the sand and deposit the body. The body is completely covered with spots of various colours, especially light orange and brown. The meristic characters are D, XIII-7; A, III-6; P, 18; V, 6; C 11. The morphometric measurements are shown in Table 1.

*Synanceia verrucosa* is a tropical fish, spreads from the Red Sea and East Africa to French Polynesia, north to the Ryukyu and from Ogasawara islands, south to

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Figure 1. *Synanceia verrucosa*, caught on 12 October 2019 from the Syrian coast.

Queensland of Australia (Carpenter and Niem, 1999; Froese and Pauly, 2019; Eagderi et al., 2019). It had been recorded in the eastern part of the Mediterranean Sea, as a lessepsian fish species (Edelist et al., 2011; Bilecenoğlu, 2012). The specimen recorded in this study provides an evidence of changes in the Mediterranean environment (Ibrahim, 2009; Alshawy et al., 2019g, a; Hussein et al., 2019; Ibrahim et al., 2019a). This species had not been recorded in the Syrian marine waters (Alshawy et al., 2019c). *Synanceia verrucosa* possesses the poisonous spines that have a deadly effect on humans since it inhabits the swimming areas and thus imposing a threat to human life. In addition, presence of such species in these new environments is hazardous because of exploiting the available food and habitats (Katsanevakis et al., 2014; Alshawy et al., 2019e). The Mediterranean Sea had received a number of similar species in the recent years (Hallom et al., 2014; Alshawy et al., 2019e, b; Ibrahim et al., 2019b), and requires further studies to determine the resulting environmental, economic and health impacts. This necessitates building regional and international capacities for mutual cooperation (Vallerga et al., 2003; Drago et al., 2004; Hussein et al., 2011; Alshawy et al., 2019d) to develop plans of actions to mitigate the negative effects of these species in the

eastern Mediterranean (Hussein et al., 2011a, b, Alshawy et al., 2019f, Hussein et al., 2019).

#### Acknowledgements

The authors thank the Higher Commission for Scientific Research (Damascus), Tishreen University and the High Institute of Marine Research (Lattakia) who provided the financial and logistic supports to this work.

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