Short Communication

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Second Record of Atlantic Lizardfish, *Synodus saurus* (Linnaeus, 1758), from the Northern Aegean Coast of Turkey

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Abstract: A single specimen of *Synodus saurus* was caught on 29 May 2014 in the Güneyli Bight. This paper presents the first record of *S. saurus* in the Gallipoli Peninsula. It is the second finding of the Atlantic lizardfish for the northern Aegean coast of Turkey.

Keywords: *Synodus saurus*, Gallipoli Peninsula, Northern Aegean Sea

Introduction

The Atlantic lizardfish *Synodus saurus* (Linnaeus, 1758) is an epibenthic subtropical fish belonging to the family Synodontidae. It is distributed in the Mediterranean Sea, the eastern Atlantic from Morocco to Cape Verde, including the Azores, and in the western Atlantic from Bermuda and the Bahamas to the Lesser Antilles. *Synodus saurus* is commonly found on sandy bottoms, primarily at depths of less than 50 m with occasional records at 400 m (Sulak 1986). This paper presents the first record of *S. saurus* in the Gallipoli Peninsula, which is the second record of the Atlantic lizardfish for the northern Aegean coast of Turkey.

Material and Methods

A single specimen of *Synodus saurus* was caught by fishermen using gillnets. It was caught on 29 May 2014 in the Güneyli Bight (lat 40º 30′ 45″ N, long 26º 40′ 38″ E), Gallipoli Peninsula (Northern Aegean Sea, Turkey) at a depth of less than 30 m (Fig. 1).

Once in the laboratory of the Faculty of Marine Science and Technology, Çanakkale Onsekiz Mart University, the specimen was identified following Mater *et al.* (2009). In addition, it was photographed, some measurements and meristic characters were measured. The specimen was then fixed and preserved in 6% formalin solution. The sample was deposited at Çanakkale Onsekiz Mart University, Piri Reis Marine Museum, Çanakkale (PRM-PIS 2014-0074) (Fig. 2).

Results

Some morphometric and meristic characters are given in Table 1. The head is short, the upper surface is strongly rugose. The inter-orbital space is wide, while the eye is moderate in size. There are scales between the lateral line and the middle of the dorsal fin base. The anal fin base is short and the pectoral fin is falling far short of the level of the dorsal fin insertion.

Discussion

In the different areas of the Mediterranean basin, *S. saurus* has been observed by Golani (1993) from Israel (Eastern Mediterranean), Merella *et al.* (1997) from the Balearic Islands (Western Mediterranean), Abdallah (2002) from Egypt (Eastern Mediterranean), Esposito *et al.* (2009) from the Southern Tyrrhenian Sea (Central Mediterranean).

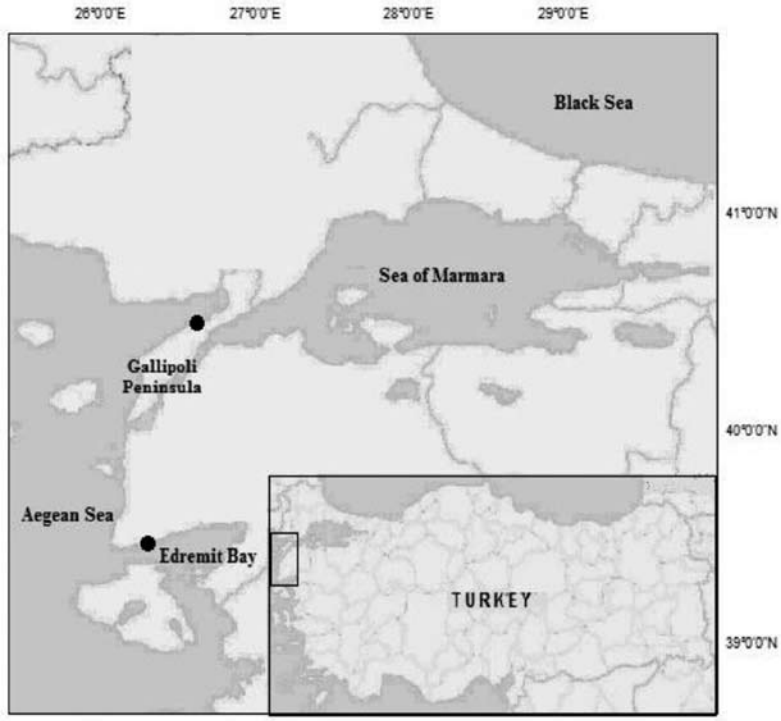

Fig. 1. Capture localities of *Synodus saurus* (indicated by a full dot) for the Northern Aegean Sea

This species was reported by Papaconstantinou *et al*. (1994) from the Northern Aegean Sea, by Labropoulou, Papaconstantinou (2000) from the Northern Aegean and the Thracian seas, by Lamprakis (2004) and Lamprakis *et al.* (2008) from the Thracian Sea from the northern Aegean coast of Greece. As for Turkish waters, Mater *et al.* (2009) reported its distribution in the Aegean Sea, but provided no precise locality information. Based on this paper, the species was included in the checklists of Turkish fishes (Bilecenoglu *et al*., 2002; Fricke *et al*., 2007). In addition, Cengiz *et al.* (2012) gave a list of 152 species belonging to 51 families from the Gallipoli Peninsula, but reported no information concerning the occurrence of *S. saurus*. Only a single specimen was recorded from the northern Aegean coast of Turkey in Edremit Bay (Artuz 2004).

Climate change controls the rate of change in the geographical distribution of marine species or populations in the sea. Climate variability also affects directly fish recruitment, a key process for fisheries. Changes in marine currents, derived from atmospheric climate variability, may modify transport and survival of larvae and juveniles, as well as the distribution and abundance of phytoplankton and zooplankton. Changes in seawater temperature and salinity may also affect the physiology and distribution ranges of fish migration routes, due to changes in prey abundance and distribution (Papaconstantinou 2014). These changes may affect the status of the Turkish marine fauna and give rise to the occurrence of rare species in the Northern Aegean Sea.

Table 1. Morphometric measurements and meristic counts of the single specimen of *Synodus saurus* (Linnaeus, 1758) captured from the Northern Aegean Sea (Turkey)

Morphometric characters	
N	1
Total length (mm)	280.0
Fork length (mm)	250.0
Standard length (mm)	240.0
Weight (g)	225.0
Anal length (mm)	29.00
Eye diameter (mm)	7.40
Body depth (mm)	47.23
Head length (mm)	40.00
Dorsal fin length (mm)	37.23
Pectoral fin length (mm)	8.76
Meristic characters	
Dorsal fin rays	I – 11
Anal fin rays	10
Pectoral fin rays	12
Pelvic fin rays	8
Lateral line	58

Although the presence of *S. saurus* does not clearly indicate that there is an established population in the northern Aegean coast of Turkey, these findings together with previous information (Artuz

Fig. 2. *Synodus saurus* and its dorsal fins, captured in the Güneyli Bight, Gallipoli Peninsula (Northern Aegean Sea, Turkey)

2004) suggest that the species, even if rarely, inhabits the northern Aegean coast, its spread into the area is not a single event and could re-occur in different sections of the Northern Aegean in the future. If that would be the case, we can speculate that *S. saurus* may have the potential to adapt successfully to the changing environmental conditions. Currently, this occurrence may be the base for future monitoring of a possible spreading of this species.

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