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SHORT COMMUNICATION

Record of reticulated leatherjacket, *Stephanolepis diaspros* Fraser-Brunner, 1940 (Tetradontiformes: Monacanthidae) from Izmir Bay, Aegean Sea, Turkey

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Abstract

A specimen of lessepsian *Stephanolepis diaspros,* 177 mm in total length, was caught on 27 October 2014 by a commercial trammel net off Urla coast in Izmir Bay on sandy bottom at a depth of 6 m. This record is not only the first one but also the fifth lessepsian fish species found in Izmir Bay in the northern Aegean Sea.

Keywords: Reticulated leatherjacket, *Stephanolepis diaspros,* lessepsian, Izmir Bay, Aegean Sea

Monacanthidae family (filefishes) is very closely related to Balistidae and they are often combined; the family consists of 95 species, mainly found in tropical regions. From this family, only onee species, reticulated leatherjacket, *Stephanolepis diaspros,* of the Red Sea origin, has been reported from the Mediterranean (Golani *et al.* 2006).

Stephanolepis diaspros Fraser-Brunner, 1940 lives inshore along algae-covered rocky habitats to the depth of 20 m. They feed on small rock-dwelling organisms, especially small invertebrates that are plucked from rocks (Golani *et al.* 2006; Froese and Pauly 2014). Young individuals feed also in open water on sandy and muddy substrates (Golani *et al.* 2002). *S. diaspros* entered through the Suez Canal into the eastern and central Mediterranean, reaching Tunis and southern Italy, although originally its distribution included the Red Sea and the Arabian Gulf (Tortonese 1986; Froese and Pauly 2014). The first Mediterranean record was from Palestine (Steinitz 1927).

S. diaspros is well-known from the eastern Mediterranean (Ben-Tuvia 1971; Golani 1996; Katsanevakis *et al.* 2009). Nowadays, it reached to the Adriatic Sea (Dulčić and Pallaoro 2003), Gulf of Palermo, Sicily (Catalano and Zava 1993), Maltese waters (Borg 2009) and Tunisia (Ben Amor and Capapé 2008; Zouai-Ktari and Bradai 2011). It seems rather rare in the northern Mediterranean and common in the southern and eastern areas.

On 27 October 2014, a specimen of *S. diaspros* (Figure 1) of 177 mm in total length (TL) was captured by a commercial trammel net of 64 mm stretched mesh size, off Urla coast (38°21´N-26°48´E) in Izmir Bay on sandy bottom at a depth of 6 m (Figure 2). The specimen was measured to the nearest millimeter and fixed in 10 % formaldehyde solution and deposited in the Ichthyological Collection of Ege University, Fisheries Faculty with the catalogue number: ESFM-PIS/2014-011.

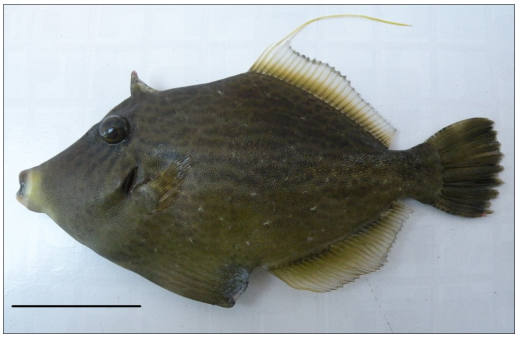

Figure 1. Reticulated leatherjacket *Stephanolepis diaspros* (ref. ESFM-PIS/2014-011), captured off Urla, Izmir Bay. Scale bar = 50 mm (Photo: O. Akyol)

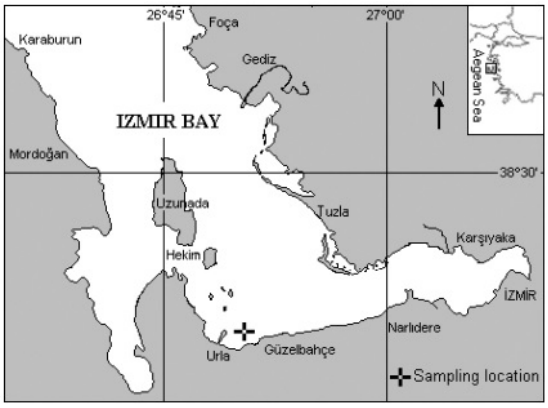

Figure 2. Sampling location of *Stephanolepis diaspros* in Izmir Bay, NE Aegean Sea

It was identified as follows: body deep and compressed, first dorsal fin includes of a single spine, second dorsal ray of the second dorsal fin has a filament and caudal fin rounded with two dark bars. Description, measurements and percentage in total length (Table 1), made on this new specimen of *S. diaspros* are in total accordance with those in Tortonese (1986), Golani *et al*. (2002 and 2006), Froese and Pauly (2014).

The oldest record of *S. diaspros* in the Turkish waters belongs to Gücü *et al.* (1994) who reported eight specimens (77-206 mm TL) from Mersin and Iskenderun Bay, the northeastern Mediterranean coasts of Turkey, during 1983-1984 trawl surveys. Successively, three specimens (100-145 mm TL) during 1991-1994 (Torcu and Mater 2000); two specimens (161-172 mm TL) during 1994-1996 (Başusta and Erdem 2000); 207 specimens (71-130 mm TL) during 1997-1998 (Taşkavak and Bilecenoğlu 2001); 52 specimens (73-142 mm TL) during 2001-2003 (Sangun *et al.* 2007) and 56 specimens (8-135 mm TL) during 2007-2008 (Ergüden *et al.* 2009) were collected in the same areas.

Table 1. Morphometric measurements in mm and as percentage of total length (TL%) and counts recorded in *Stephanolepis diaspros*, captured off Urla, Izmir Bay

Measurements	**mm**	**TL%**
Total length	177	100.0
Standard length	151	85.3
Maximum body depth	67	37.9
Predorsal fin length	85	48.0
Prepectoral fin length	45	25.4
Preanal fin length	87	49.2
Head length	45	25.4
Eye diameter	10	5.6
Preorbitary length	32	18.1
Counts		
1st dorsal fin ray	I	
2nd dorsal fin rays	30	
Anal fin rays	30	
Pectoral fin rays	13	
Caudal fin rays	10	

In the Aegean Sea, *S. diaspros* was first reported for the first time in 1943 (Tortonese 1947). Since then *S. diaspros* has been well established in the southern Aegean Sea for many years. Consecutive records are as follows; Rhodes, Greece (Papaconstantinou 1990), Cretan waters, Greece (Peristeraki *et al.* 2006), Gökova Bay, Turkey (Öğretmen *et al.* 2005), coasts of Datça-Bozburun Peninsula, Turkey (Öz *et al.* 2007), Paros and Antiparos Islands, Greece (Lefkaditou and Petrakis 2010), Gulf of Seranikos, Greece (Eleftheriou *et al.* 2011), Sikinos Island, Greece (Nicolaidou *et al.* 2012).

This thermophilic species probably shifted towards northern latitudes due to the changing hydrologic conditions. A recent report (EastMed 2010) notified that the North Aegean cold water fauna and the Central-South warm water fauna were changing positions, moving northwards; seven of the early introduced lessepsian species, including *S. diaspros*, had been signaled along the northeastern Aegean coasts. Really, frequency of occurrence of lessepsian fish species in the boat-seine hauls during 2008-2009 in the Hellenic coastal zone were computed as 5.6 % for the northeastern Aegean Sea, whereas it was 60.9 % in Gulf of Evoikos, the southwestern Aegean Sea (Lefkaditou *et al.* 2010). Henceforth, *S. diaspros* appears in the Northern Aegean Sea, but very rare.

Reaching Izmir Bay by a lessepsian species *S. diaspros* is not unexpected since there is the northernmost record from the Adriatic Sea (Dulcic and Pallaoro 2003). However, this short report confirms the first occurrence of *S. diaspros* in the Bay of Izmir, Aegean Sea. Moreover, *S. diaspros* has been added to the list of lessepsian fish in the Bay as the fifth fish species following *Saurida undosquamis, Lagocephalus sceleratus, Siganus luridus* and *S. rivulatus*. Besides, this study has added new information to the list of 79 uncommon and rare fishes in the area, all of which have been recorded over the past 45 years (Akyol *et al.* 2011; 2013).

İzmir Körfezi'nden (Ege Denizi, Türkiye) dikenli çütre balığının *Stephanolepis diaspros* Fraser-Brunner, 1940 kaydı

Özet

27 Ekim 2014 tarihinde 177 mm total boyda bir Lesepsiyen *Stephanolepis diaspros* bireyi İzmir Körfezi Urla açıklarında ticari bir fanyalı ağla, kumluk 6 m derinlikten yakalanmıştır. Bu ihtiyolojik not şimdiye dek sadece İzmir Körfezi için ilk kayıt değil aynı zamanda körfez için beşinci Lesepsiyen balık türü kaydıdır.

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