

FIRST RECORD OF PIGNOSED ARROWTOOTH EEL, *DYSOMMA BREVIROSTRE* (ACTINOPTERYGII: ANGUILLIFORMES: SYNAPHOBANCHIDAE), FROM THE AEGEAN SEA

İlker AYDIN, S. Can AKÇINAR*, and Ozan SOYKAN

Faculty of Fisheries, Ege University, Bornova, Izmir, Turkey

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Abstract. In 2008, a specimen of a pignosed arrowtooth eel, *Dysomma brevirostre* (Facciola, 1887), was caught by a bottom trawling operation at Sigacik Bay (Aegean Sea), Turkey. Total length (TL) and weight of the fish were 23.2 cm and 2.00 g, respectively. This study reports the first record of *D. brevirostre* from the Aegean Sea and logs a new species for the Turkish Ichthyofauna.

Keywords: Synphobranchidae, pignosed arrowtooth eel, *Dysomma brevirostre*, Eastern Mediterranean, Aegean Sea, Turkey, first record

Synphobranchids (Synphobranchidae) are benthic eels consisting of 10 genera and 32 species (Nelson 2006). The pignosed arrowtooth eel, *Dysomma brevirostre* (Facciola, 1887), is distinguished from the other members of the family by its bulbous snout, heavily ornamented with papillae, and lack of pectoral fins. It has been recorded from the North Eastern Atlantic, along the south coast of Portugal (Marques and Saldanha 1998) and the Madeira Islands (Blache et al. 1970); in Miami waters in the Western Atlantic (Böhlke and Robins 1968), and in Hawaiian waters in the Central Pacific (Smith and Castle 1981). Moreover, the larvae of *D. brevirostre* have been found in the Eastern South Atlantic off the coast of Cabinda, Congo and Gabon (Blache et al. 1970).

The species was observed several times along the Mediterranean (Fig. 1). However, a small number of specimens have been obtained from the previous studies. The occasional findings have been associated with the ability of this species to evade the sampling gear (e.g., trawl nets and dredges) because of its body shape and size, as well as, its possible low population density (Sion et al. 2008). Sion et al. (2008) suggested that the species would probably spread throughout the basin due to its wide distribution (in tropical and subtropical areas) and its pelagic larval dispersion (Sion et al. 2008).

The objective of this study is to report the first record of *D. brevirostre* for the Aegean Sea and for Turkish marine ichthyofauna.

In April 2008, one specimen of *D. brevirostre* was collected during bottom trawling at 220–300 m depth range,



Fig. 1. Distribution of previous findings of *D. brevirostre* in the Mediterranean and the new record in the Aegean Sea: 1 Facciola (1887); 2 Trotti (1948); 3 Stefanescu et al. (1990); 4 Morales-Nin et al. (2003); 5 Ragonese et al. (2001); 6 Sion et al. (2008); 7 Golani (1996); 8 This study

off Sigacik Bay (southern Aegean Sea, Turkey, Fig. 2). The trawling operation started at lat 38°2'06" N, long 26°41'17" E and ended at lat 37°56'29" N, long 26°48'49" E. The fish was fixed in 4% formalin and preserved at the Mugla University Faculty of Fisheries Museum (MUSUM-PIS-463). The measurements were carried out to the nearest 0.1mm by a calliper and meristic counts were made using a stereomicroscope. The taxonomic key of Smith (2002) was used to identify the specimen.

The specimen collected has a total length and weight of 23.2 cm and 2.00 g, respectively.

* Correspondence: Dr S. Can Akçınar, Ege Üniversitesi, Su Ürünleri Fakültesi, Bornova-Izmir, Turkey 35100, phone: +90 (232) 343 40 00 ext. 5347, e-mail: can.akcinar@ege.edu.tr or cakcinar@gmail.com

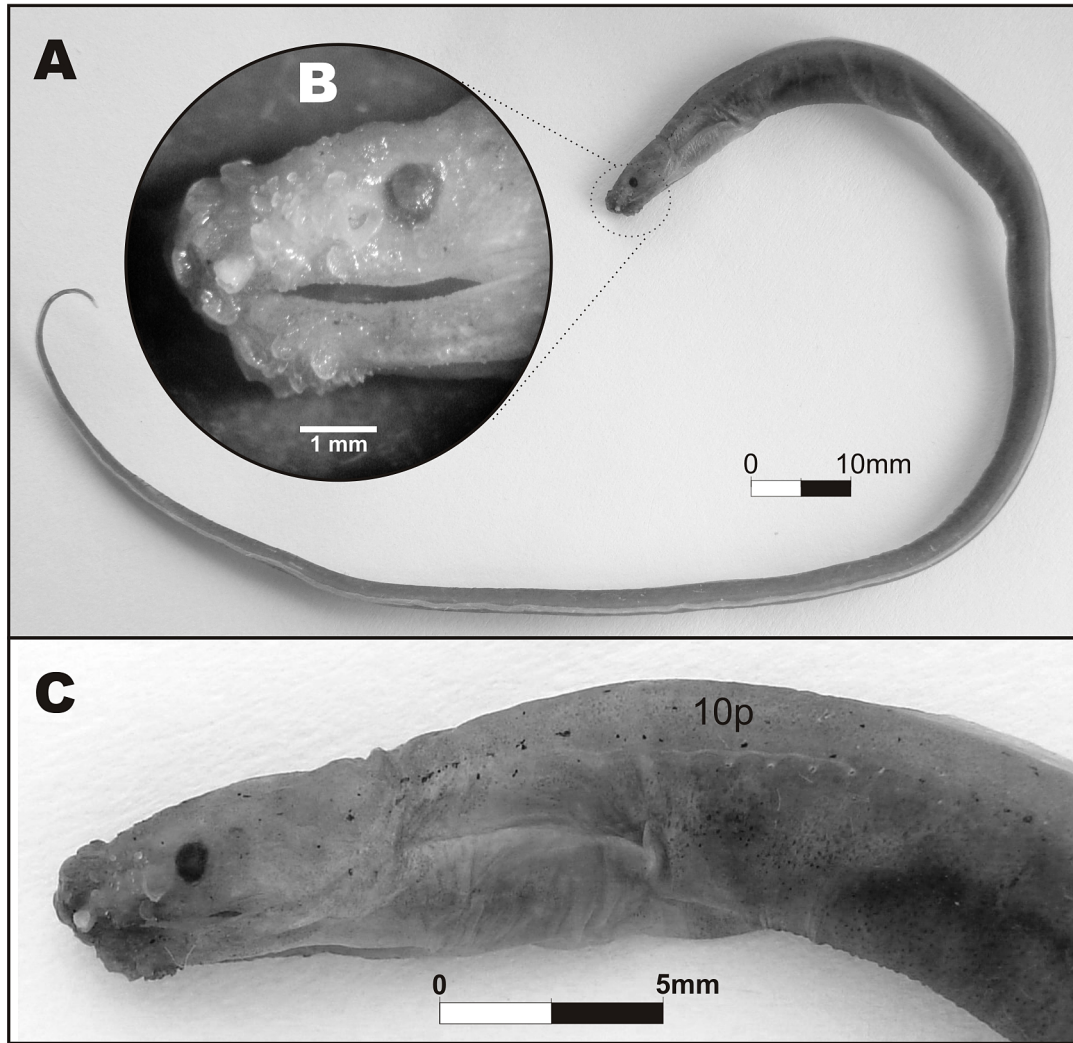


Fig. 2. *D. brevirostre* caught in Sigacik Bay, Aegean Sea; **A** the entire specimen; **B** papillose snout with distinctive anterior and posterior nostrils; **C** lateral line pores (10 p)

Table 1

Morphometric measurements and parameters of *Dysomma brevirostre*

Character	Value			
	in mm	in %SL	in %PAL	in %HL
Total length (TL)	232	—	—	—
Head length (HL)	15.9	6.9	36.6	—
Head width	2.8	1.2	6.5	17.6
Head height	3.9	1.7	9.0	24.5
Max eye diameter	0.7	0.3	1.6	4.4
Inter-orbital width	1.9	0.8	4.4	11.9
Pre-orbital length	3.4	1.5	7.8	21.4
Post-orbital length	12.5	5.4	28.8	78.6
Upper jaw length	4.9	2.1	11.3	30.8
Lower jaw length	4.4	1.9	10.1	27.7
Jaw length	5.5	2.4	12.7	34.6
Pre-dorsal length	21.9	9.5	50.5	—
Pre-anal length (PAL)	43.4	18.8	—	—
Gill opening length	1.1	0.5	2.5	6.9

TL = total length; PAL = pre-anal length; HL = head length.

Its brown body was covered with a various tiny black spots. Confluent dorsal, caudal and anal fins were pale coloured. Its papillose snout had conspicuous nasal openings (Fig. 2B). The main morphometric measurements and their percentages of the total length (TL), pre-anal length (PAL), and head length (HL) are given in Table 1. There were pores on the lateral line. The main morphological measurements and their relationships are consistent with the previous findings by various authors (Supino 1905, Grassi 1913, Böhlke and Robins 1968, Blache et al. 1970, Smith and Castle 1981, Saldanha and Bauchot 1986, Sion et al. 2008).

Although recent findings of the species are mostly confined to the Western Mediterranean and Western Ionian Sea, there is another record from Israeli coast of the Eastern Mediterranean (Golani 1996). The scarcity of observations could be due to the sampling method or its low population density. The easternmost record (Golani 1996) and the specimen caught in the Aegean Sea (Fig. 1) support the opinions of Sion et al. (2008) concerning the spreading of the species throughout the basin. However; it could also indicate that the species has already spread along the Mediterranean basin (Fig. 1).

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