

Maximum size of *Dentex dentex* (Sparidae) in the Aegean Sea

Ege Denizi'nde *Dentex dentex* (Sparidae)'in maksimum boyutu

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ABSTRACT

A huge specimen of *Dentex dentex* (870 mm TL) was caught on 10 December 2019 by an angler from the Bay of Sığacık, İzmir, at a depth of 148 m. The specimen

has the maximum size throughout the Aegean Sea.

Keywords: Size, measurement, handline, Sığacık Bay

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ÖZET

Dentex dentex (870 mm TL)'in çok büyük bir bireyi 10 Aralık 2019 tarihinde Sığacık Körfezi'nden (İzmir) 148 m derinlikte bir oltacı tarafından yakalanmıştır. Bu örnek Ege Denizi için *D. dentex*'in kaydedilmiş maksimum boyudur.

Anahtar Kelimeler: Boyut, ölçüm, olta, Sığacık Körfezi

1. INTRODUCTION

Common dentex, *Dentex dentex* (Linnaeus, 1758) is marine, benthopelagic fish species, and it inhabits rocky ground to 200 m, more common 15-50 m (Bauchot and Hureau, 1986; Golani et al., 2006; Froese and Pauly, 2019). It feeds on fish, mollusks and cephalopods (Froese and Pauly, 2019). It is gonochoric, some specimens are hermaphroditic (Bauchot and Hureau, 1986). In the Mediterranean, reproduction occurs between March and May in areas near coast (Froese and Pauly, 2019). Common dentex is highly prized fish but too uncommon to be considered commercially important food fish (Golani et al., 2006). According to fishbase, its maximum size is 100 cm TL, and maximum published weight is 14.3 kg (Froese and Pauly, 2019).

Distribution is Mauritania, Senegal, Canary Islands and Madeira, exceptionally to British

Isles, common south of 40°N (Spain, North Africa) in the Mediterranean and Black Sea (very rare) (Bauchot and Hureau, 1986; Froese and Pauly, 2019). Carpenter and Russell (2014) stated that *D. dentex* was vulnerable in IUCN Red List, and its population trend was unknown. This paper reports a new maximum size of *Dentex dentex* for the Aegean Sea.

2. MATERIAL AND METHODS

On 10 December 2019, a huge specimen of *Dentex dentex* with a total length (TL) of 870 mm (Figure 1) was captured from rocky bottom of Cılga cove, Sığacık Bay (Coordinates: 38°05'57"N - 26°36'47"E) at a depth of 148 m. This specimen was caught by fluorocarbon handline (diameter: 0.50 mm) with live cuttlefish bait by an angler.



Figure 1. *Dentex dentex*, caught from Sığacık Bay, Aegean Sea (Photo: O. Akyol)

3.RESULTS AND DISCUSSION

The specimen was measured to the nearest millimetre (Table 1). All measurements, counts, and color patterns determined are in accordance with the descriptions of Bauchot and Hureau (1986), Golani et al. (2006) and Froese and Pauly (2019).

In the Aegean Sea, *D. dentex* has been reported since 1995 in various articles,

especially on length-weight relationship studies (Table 2). Relatively, abundance of the fish seems uncommon. Therefore, *D. dentex* is a high commercially valuable fish in the area. As seen that this ichthyologic note presents the unique largest size of *D. dentex* throughout the Aegean Sea. There is a gap of knowledge on *D. dentex* and it needs further studies to better understanding its bio-ecology.

Table 1. Morphometric measurements as percentage of total length (TL%) and meristic counts recorded in *Dentex dentex*, captured from Sığacık Bay, Aegean Sea.

Measurements	Size (mm)	Proportion (TL%)
Total length (TL)	870	
Standard length (SL)	763	87.7
Pectoral fin length	153	17.6
Pre-dorsal fin length	280	32.2
Pre-anal fin length	460	52.9
Pre-pectoral length	248	28.5
Head length	227	26.1
Eye diameter	27	3.1
Preorbitary length	95	10.9
Meristic counts		
Dorsal fin rays		XI+12
Anal fin rays		III+8
Pectoral fin rays		15
Ventral fin rays		I+5
Weight (g)		9275

Table 2. Successive records of *Dentex dentex* from the Aegean Sea

Area	n	Length	L _{min} - L _{max} (mm)	References
Euboikos Gulf, Greece	22	FL	109-300	Petrakis and Stergiou (1995)
Aegean Sea, Greece	16	TL	136-236	Moutopoulos and Stergiou (2002)
Gökçeada, Turkey	22	TL	168-615	Karakulak <i>et al.</i> (2006)
Izmir Bay, Turkey	17	FL	178-297	Özaydın <i>et al.</i> (2007)
Gökova Bay, Turkey	39	TL	150-365	Ceyhan <i>et al.</i> (2009)
Güllük and Gökova, Turkey	97	TL	180-770	Aydın and Sümer (2010)
S Aegean, Turkey	97	TL	137-329	Bilge <i>et al.</i> (2014)
Sığacık Bay, Turkey	1	TL	870	This study

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DISCLOSURE STATEMENT

The author declare that there is no conflict of interest.

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