

ANNALES



*Analí za istrske in mediteranske študije
Annali di Studi istriani e mediterranei
Annals for Istrian and Mediterranean Studies
Series Historia Naturalis, 32, 2022, 1*



UDK 5

ISSN 1408-533X
e-ISSN 2591-1783



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Annali di Studi istriani e mediterranei
Annals for Istrian and Mediterranean Studies

Series Historia Naturalis, 32, 2022, 1

KOPER 2022

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Založništvo PADRE d.o.o.

Izdajatelja/Editori/Published by:

Zgodovinsko društvo za južno Primorsko - Koper / Società storica del Litorale - Capodistria[®]

Inštitut IRRIS za raziskave, razvoj in strategije družbe, kulture in okolja / Institute IRRIS for Research, Development and Strategies of Society, Culture and Environment / Istituto IRRIS di ricerca, sviluppo e strategie della società, cultura e ambiente[®]

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e-mail: annales@mbss.org, **internet:** www.zdjp.si

Redakcija te številke je bila zaključena 30. 06. 2022.

**Sofinancirajo/Supporto finanziario/
Financially supported by:**

Javna agencija za raziskovalno dejavnost Republike Slovenije (ARRS) in Mestna občina Koper

Annales - Series Historia Naturalis izhaja dvakrat letno.

Naklada/Tiratura/Circulation: 300 izvodov/copie/copies

Revija Annales, Series Historia Naturalis je vključena v naslednje podatkovne baze / La rivista Annales, series Historia Naturalis è inserita nei seguenti data base / Articles appearing in this journal are abstracted and indexed in: BIOSIS-Zoological Record (UK); Aquatic Sciences and Fisheries Abstracts (ASFA); Elsevier B.V.: SCOPUS (NL); Directory of Open Access Journals (DOAJ).

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received: 2022-01-26

DOI 10.19233/ASHN.2022.11

OCCURRENCE OF *CUBICEPS GRACILIS* (NOMEIDAE) IN THE EASTERN MEDITERRANEAN SEA

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ABSTRACT

This paper reports an additional record of Cubiceps gracilis (Lowe, 1843) indicating the extension of the species' distribution into the eastern Mediterranean Sea. On 7 January 2022, a single specimen of C. gracilis was caught by bottom trawl at a depth of about 400 m off Antalya in the southern coasts of Turkey. This oceanic fish is still very rare in the eastern Mediterranean Sea. This is the fourth record of C. gracilis in the eastern Mediterranean Basin, the first after 2006.

Key words: Driftfish, additional record, measurements, Antalya

PRESenza DI *CUBICEPS GRACILIS* (NOMEIDAE) NEL MEDITERRANEO ORIENTALE

SINTESI

L'articolo riporta un nuovo ritrovamento di Cubiceps gracilis (Lowe, 1843), che indica l'estensione della distribuzione della specie nel Mediterraneo orientale. Il 7 gennaio 2022, un singolo esemplare di C. gracilis è stato catturato con una rete a strascico ad una profondità di circa 400 m, al largo di Antalya lungo le coste meridionali della Turchia. Questo pesce oceanico è ancora molto raro nel Mediterraneo orientale. Si tratta del quarto ritrovamento di C. gracilis nel bacino del Mediterraneo orientale, il primo dopo il 2006.

Parole chiave: Centrolofo alalunga, nuovo ritrovamento, misurazioni, Antalya

INTRODUCTION

The driftfish (or longfin cigarfish), *Cubiceps gracilis* (Lowe, 1843) is an oceanic, epipelagic and mesopelagic fish species. Its young sometimes associate in groups with medusae, while adults generally occur singly (Haedrich, 1986).

C. gracilis commonly occurs both in Canada (northwest Atlantic) and the northeast Atlantic as far south as about 20°N off the African coast, including

western Mediterranean (Froese & Pauly, 2021). It has recently expanded its distribution range throughout the Mediterranean, from Gibraltar to the Adriatic (Dulčić, 2002; Pešić et al., 2021), Antalya Bay (Golani et al., 2008), as well as the Bays of Sığacık and Fethiye in the Aegean Sea (Filiz et al., 2007; Irmak et al., 2007).

This paper presents a new and additional record of *C. gracilis* as a very rare species in the eastern Mediterranean Sea.



Fig. 1: *Cubiceps gracilis* caught off Antalya (ref. ESFM-PIS/2022-001, scale bar: 50 mm, photo: O. Akyol).
Sl. 1: Klatež, *Cubiceps gracilis*, ujet v vodah pri Antalyji (ref. ESFM-PIS/2022-001, merilo 50 mm, foto: O. Akyol).

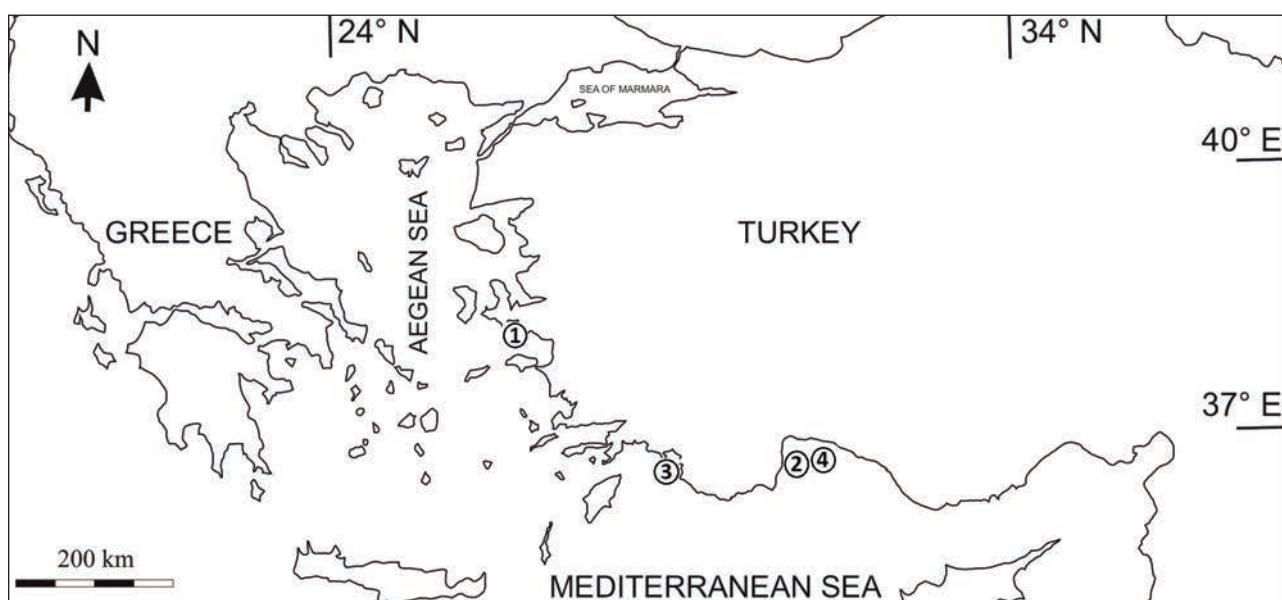


Fig. 2: Map showing records of *Cubiceps gracilis* in the eastern Mediterranean: (1) Sığacık Bay, Sept. 2005, (2) Gulf of Antalya, March 2006, (3) Fethiye Bay, July 2006, (4) Gulf of Antalya, Jan. 2022.
Sl. 2: Zemljevid z označenimi zapisima o pojavljanju klateža v vzhodnem Sredozemskem morju: 1) zaliv Sığacık, September 2005, 2) zaliv Antalya, Marec 2006, 3) zaliv Fethiye, Julij 2006, 4) zaliv Antalya, Januar 2022.

Tab. 1: Morphometric measurements as percentages of total length (TL%) and meristic counts recorded in the *Cubiceps gracilis* captured off Antalya.**Tab. 1: Morfometrične meritve, izražene kot delež celotne dolžine (% TL) in meristična štetja na primerku klateža, ujetega pri Antalyji.**

Measurements	Size (mm)	Proportion (TL%)
Total length (TL)	190	
Fork length (FL)	169	88.9
Standard length (SL)	155	81.6
Pre-dorsal fin length	54	28.4
Pre-anal fin length	90	47.4
Pre-pectoral length	46	24.2
Head length	46	24.2
Eye diameter	12	6.3
Preorbital length	9	4.7
Meristic counts		
1st Dorsal fin rays		XI
2nd Dorsal fin rays		I+22
Anal fin rays		II+20
Pectoral fin rays		20
Ventral fin rays		I+5
Weight (g)		61.2

Tab. 2: Records of *Cubiceps gracilis* in the eastern Mediterranean Sea.**Tab. 2: Zapisi o pojavljanju klateža v vzhodnem Sredozemskem morju.**

Area	Date	n	TL (mm)	Depth (m)	References
Sığacık Bay, Aegean Sea	11 September 2005	8	161-180	150-473	Filiz et al. (2007)
Gulf of Antalya	1 March 2006	2	165-167	250	Golani et al. (2008)
Fethiye Bay, Aegean Sea	17 July 2006	1	100*	10	Irmak et al. (2007)
Gulf of Antalya	7 January 2022	1	190	400	This study

* standard length SL

MATERIAL AND METHODS

On 7 January 2022, a single specimen of *Cubiceps gracilis* (Fig. 1) was captured by a bottom trawler at a depth of about 400 m in the Gulf of Antalya (Fig. 2) on the southern coasts of Turkey. The specimen was fixed in a 6% formaldehyde solution and deposited in the fish collection of Ege University, Fisheries Faculty (ESFM-PIS/2022-001).

RESULTS AND DISCUSSION

The specimen was measured to the nearest millimetre. It was 190 mm in TL and weighed 61.2 g. The morphometric measurements as percentages of total length (TL%) and the meristic counts recorded in *C. gracilis* are presented in Table 1. The specimen was identified via the combination of the following characters: two dorsal fins, the first with eleven spines, the second with one spine and 22 soft rays. Anal fin with two small spines, and soft ray portion with 20 rays. Long pectoral fin with 20 rays. Ventral fin with one spine and five rays. Scales on head extending forward almost to nostrils. Colour: brown and blackish. All measurements, counts, proportions, and colour patterns determined are in accordance with the descriptions of Haedrich (1986), Filiz et al. (2007), Golani et al. (2008), and Froese & Pauly (2021).

It is obvious that *Cubiceps gracilis* is gradually extending its range into the eastern basin of the Mediterranean. In fact, fishermen state that the species has been sporadically observed for a decade. The recent intermittent records of *C. gracilis* are shown in Table 2.

The maximum total length (TL) of *C. gracilis* is 107 cm, common TL length 18 cm (Froese & Pauly, 2021). Length at sexual maturity is 20 cm (Haedrich, 1986). The specimen in the present study must have been a juvenile since its length was inferior to 20 cm; by analogy, all the records in Table 2 are of juveniles as well. These records suggest that there may be a spawning-stock biomass of *C. gracilis* in

the eastern Mediterranean Sea. In conclusion, the oceanic fish *C. gracilis* is still very rare in the eastern Mediterranean Sea; in fact, the present is only the fourth record of the species in this region.

ACKNOWLEDGEMENTS

The authors thank Mr. Erkan Biçer for his bringing the fish our attention.

POJAVLJANJE KLATEŽA, *CUBICEPS GRACILIS* (NOMEIDAE), V VZHODNEM SREDOZEMSKEM MORJU

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POVZETEK

Avtorji poročajo o dodatni najdbi klateža, *Cubiceps gracilis* (Lowe, 1843), ki kaže na širjenje areala v vzhodno Sredozemsko morje. Sedmega januarja 2022 so v vlečno mrežo na južni turški obali pri Antalyji ulovili primerek klateža na globini približno 400 m. Ta oceanska riba je še vedno zelo redka v vzhodnem Sredozemskem morju, saj gre šele za četrto najdbo, prvo po letu 2006.

Ključne besede: klatež, nova najdba, meritve, Antalya

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