

ANNALES

Anali za istrske in mediteranske študije
Annali di Studi istriani e mediterranee
Annals for Istrian and Mediterranean Studies
Series Historia Naturalis, 35, 2025, 2





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Series Historia Naturalis, 35, 2025, 2

ISSN 1408-533X
e-ISSN 2591-1783

UDK 5

Letnik 35, leto 2025 številka 2

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Založništvo PADRE d.o.o.

Založnika/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®**Sedež uredništva/Sede della redazione/
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e-mail: annalesSHN@nib.si, internet: www.zdjp.si

Redakcija te številke je bila zaključena 6. 12. 2025.

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

Javna agencija za znanstveno-raziskovalno in inovacijsko dejavnost Republike Slovenije (ARIS)

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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FIRST SUBSTANTIATED RECORD OF BLACKFISH *CENTROLOPHUS NIGER*
(CENTROLOPHIDAE) FROM THE SYRIAN COAST
(EASTERN MEDITERRANEAN SEA)

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ABSTRACT

A specimen of blackfish, Centrolophus niger (Gmelin, 1789), was caught on 13 April 2025 by trawl gear at a depth of 30 m off Baniya, Syria (eastern Mediterranean Sea). The specimen, measuring 281 mm in total length and weighing 195 g, is the first confirmed record of C. niger recorded to date in the coastal waters of Syria. Its description, including morphometric measurements and meristic counts, is provided in this study. This finding fills a distributional gap in the Levant Basin and suggests a viable population may be present in the region.

Key words: *Centrolophus niger*, distribution, population, extension range, Levant Basin

PRIMA SEGNALAZIONE CONFERMATA DELLA RICCIOLA DI FONDALE
CENTROLOPHUS NIGER (CENTROLOPHIDAE) AL LARGO
DELLA COSTA SIRIANA (MEDITERRANEO ORIENTALE)

SINTESI

Un esemplare della ricciola di fondale, Centrolophus niger (Gmelin, 1789), è stato catturato il 13 aprile 2025 con una rete a strascico a una profondità di 30 m al largo di Baniya, in Siria (Mediterraneo orientale). L'esemplare, che misura 281 mm di lunghezza totale e pesa 195 g, è il primo esemplare confermato fino ad oggi di C. niger nelle acque costiere della Siria. Lo studio fornisce la sua descrizione, comprese le misurazioni morfometriche e i conteggi meristici. Questa scoperta colma una lacuna nella distribuzione nel bacino del Levante e suggerisce che nella regione potrebbe essere presente una popolazione vitale.

Parole chiave: *Centrolophus niger*, distribuzione, popolazione, estensione dell'areale, bacino del Levante

INTRODUCTION

The blackfish, *Centrolophus niger* (Gmelin, 1788), is a teleost species widely distributed in temperate and warm-temperate marine waters and typically found at depths between 200 and 400 m (Haedrich, 1986). It displays a near-circumglobal distribution – from the Atlantic Ocean (including the western Baltic Sea and North Sea) to the Mediterranean Sea, as well as the Indian and Pacific oceans (Haedrich, 1990) – but is notably absent from the northern Pacific (Fricke et al., 2025). This pelagic, mesopelagic, and epibenthic deep-water species inhabits the edge of the continental shelf. While larvae occur in the plankton, juveniles and

young adults commonly associate with pelagic medusae or floating objects such as boxes or barrels, and feed on jellyfish, crustaceans, sparids, and small fishes (Carpenter & De Angelis, 2016). Little is known about the species' reproductive biology, a notable exception being the thorough study by Kennedy et al. (2024) on specimens collected in Icelandic waters.

C. niger is one of the four species in the family Centrolophidae recorded to date in the Mediterranean Sea, where it has been mostly reported in western basins (Haedrich, 1986). More recently, its range has expanded into the central Mediterranean (Capapé et al., 2017; Hattour & Koched, 2017; Ben Amor et al., 2018) and eastward into the Adriatic

Tab. 1: Morphometric measurements (in mm and as percentages of standard length, %SL), meristic counts, and total body weight (in grams) of the *Centrolophus niger* specimen from Baniyas, Syria, compared with records from other marine areas. SL = standard length.

Tab. 1: Morfometrične meritve (v mm in kot odstotki standardne dolžine, %SL), meristično štetje in skupna telesna teža (v gramih) osebk vrste *Centrolophus niger* iz Baniasa v Siriji v primerjavi z zapisi iz drugih morskih območij. SL = standardna dolžina.

References	MSL 1/2025		Ayas et al., 2018		Hattour & Koched, 2017		Ben Amor et al., 2018	
Capture area	Syria		Türkiye		Tunisia		Tunisia	
Measurements	mm	SL%	mm	SL%	mm	SL%	mm	SL%
Total Length	281	122.1	51.9	119.5	801	114.5	271	130.9
Fork Length	262	113.9	47.6	109.6	750	107.2	226	109.2
Standard Length	230	100	43.4	100	699	100	207	100
Body Depth	60	26	10.8	24.8	147	21	93	44.9
Head Length	57	24.7	10.3	23.7	186	26.6	57	27.5
Eye Diameter	11	4.7	2.1	4.8	38	5.4	15	7.2
Snout Length	170	73.9	2.3	5.2	31	4.4	23	11.1
Pre-dorsal length	67	29.1	18.4	42	254	36.3	102	49.3
Pre-pectoral length	60	26	-	-	178	25.4	71	34.3
Pre-pelvic length	62	26.9	11.5	26.4	165	23.6	-	-
Pre-anal length	134	58.2	23.8	54.8	399	57	167	80.7
Meristic counts								
Dorsal fin	IV +34		D, V-37-41		VI+36		V+38	
Anal fin	III+23		III, 20-24.		III+23		III+21	
Pectoral fin rays	20		-		21		22	
Pelvic fin	6		-		I+5		5	
Total body weight Gram	195		-		-		195.9	

Sea (Dulčić & Lipej, 2002; Mersinaj, 2024) and the Aegean Sea (Akyol, 2008; Ceyhan & Akyol, 2011; Cengiz et al., 2019, 2023). To date, *C. niger* has not been recorded in the Black Sea or Marmara Sea (Bilecenoğlu et al., 2014). In the southern Mediterranean, *C. niger* has been recorded off the Egyptian coast (El Sayed et al., 2017), with juvenile forms also reported from Algeria (Dieuzeide et al., 1955). Its presence has also been documented in the Levant Basin, including Iskenderun Bay (Türkiye), Raouché in Beirut (Lebanon), and Isreal (Golani, 2005; Ergüden et al., 2012; Farrag, 2016; Badredine & Bitar, 2020). Previous studies indicated an absence of the species from the Syrian coast (Saad, 2005; Ali, 2018), but recently, during investigations regularly conducted in this area, a specimen of blackfish was collected. The present study provides a description of the specimen and discusses this unusual finding.

MATERIAL AND METHODS

The present study follows the methodology for reporting first records of fish species as outlined by Bello et al. (2014). On 13 April 2025, a single specimen of *Centrolophus niger* was captured off the coast of Baniyas, Syria (35°06'14.4" N, 35°53'08.0" E; Fig. 1) using a trammel net at a depth 30 m. The morphometric measurements recorded to the nearest millimeter and expressed as percentages of standard length (SL), along with meristic counts and total body weight (in grams) are presented in Table 1. The specimen was preserved in 10% buffered formalin and deposited in the Ichthyological Collection of the Marine Sciences Laboratory, Faculty of Agriculture, Tishreen University, under reference number MSL 1/2025.

RESULTS AND DISCUSSION

The blackfish specimen (MSL 1/2025) measured 281 mm in total length (TL), 230 mm in standard length (SL), and weighed 195 g (Fig. 2). It was identified as *C. niger* based on the following combination of morphological characters: body elongate, slightly compressed, with a long and compressed caudal peduncle, maximum body depth approximately 30% SL; head small, brownish to bluish-black, with pores visible in the naked skin; snout obtuse and rounded, slightly longer than the eye diameter; mouth small with small and sharp teeth distributed on jaws in a single row, no teeth on palate; operculum thin, fine denticulations on edge of preoperculum; 19 gill rakers on first gill arch; median fin spines weak, hardly distinguishable from rays; a single continuous dorsal fin usually behind the beginning of pectoral fins, dorsal fin spines

plus soft rays 40, (IV+34), anal fin beginning a little behind mid-body, anal fin spines plus soft rays 24 (III+22), pectoral fin pointed rays 21, pelvic fins inserted under the base of pectoral fins, connected to the abdomen by a small membrane and folding into a shallow groove; caudal fin broad, moderately forked. Median and pelvic fins darker than the body, lateral line very slightly arched anteriorly then straight, extending onto the caudal peduncle.

The general morphology, morphometric measurements, meristic counts, and coloration of the present specimen are consistent with previous descriptions of *C. niger* (Haedrich, 1986; Fischer et al., 1987; Carpenter & De Angelis, 2016; Ben Amor et al., 2018; Cengiz et al., 2019). This confirmation supports the inclusion of *C. niger* in the documented ichthyofauna of Syrian waters.

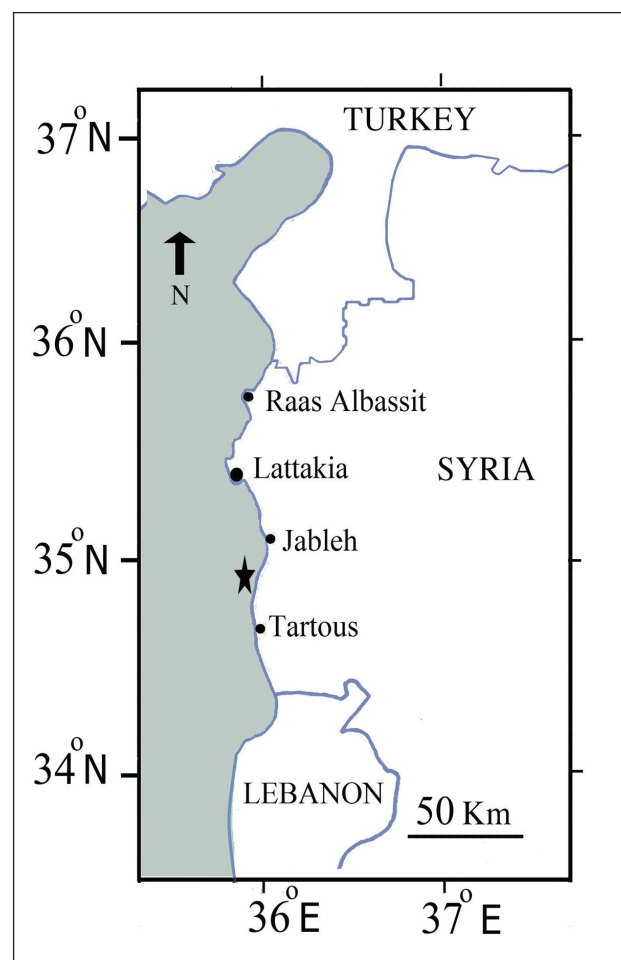


Fig. 1: Map of the Syrian coast indicating the capture site of *Centrolophus niger* (black star).

Sl. 1: Zemljevid sirske obale z oznako lokalitete, kjer je bil ulovljen primerek vrste *Centrolophus niger* (črna zvezda).



Fig. 2: Specimen of the *Centrolophus niger* caught off Baniyas. Scale bar = 50 mm.
Sl. 2: Primerek vrste *Centrolophus niger*, ulovljen pri Baniasu. Lestvica = 50 mm.

This finding represents the first substantiated record of *C. niger* in the area, filling a known distribution gap along the Levant Basin shore and suggesting a viable local population may be established. It also constitutes additional evidence of the species' range expansion within the Mediterranean Sea, likely influenced by climate change and the resulting alterations in the environmental characteristics of the region's marine waters (Ben Rais Lasram & Mouillot, 2009). The phenomenon was previously suggested by Ben Amor et al. (2018), who noted a migration of the fish from northern to southern Tunisian marine waters. Conversely, the reported capture of the species off Iceland remains questionable (see Kennedy et al., 2024). The fact that such atypical records have been reported in this northern region locally suggests the possibility of local environmental changes – a hypothesis that cannot be entirely dismissed.

Throughout the Mediterranean Sea *C. niger* is considered rare even in the regions where it has been reported. This rarity is likely due to the fact that the species inhabits deep areas that are poorly exploited by commercial fisheries. Furthermore, misidentification with closely related species cannot be ruled out, and due to the species' low commercial value, small specimens are probably discarded at sea after capture. In this context, dedicated monitoring studies are needed to assess the continued presence of this rare fish and its potential breeding sites. This study will contribute to future studies on fisheries management and biodiversity conservation in Syria and broader Levant Basin.

ACKNOWLEDGEMENTS

The authors wish to thank three anonymous referees for their helpful and valuable comments on the paper allowing to enlarge and improve its scientific quality.

PRVI POTRJEN ZAPIS ČRNUHA, *CENTROLOPHUS NIGER* (CENTROLOPHIDAE), S SIRSKE OBALE (VZHODNO SREDOZEMSKO MORJE)

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ABSTRACT

Avtorji poročajo o primerku črnuha, *Centrolophus niger* (Gmelin, 1789), ki je bil ulovljen 13. aprila 2025 z vlečno mrežo na globini 30 m pri Baniji v Siriji (vzhodno Sredozemsko morje). Primerek, ki je v dolžino meril 281 mm in tehtal 195 g, je prvi potrjeni zapis o pojavljanju vrste *C. niger* v obalnih vodah Sirije. Avtorji podajajo njen opis, vključno z morfometričnimi meritvami in merističnim štetjem. Ta ugotovitev zapolnjuje vrzel v razširjenosti te vrste v Levantskem bazenu in nakazuje, da je v regiji morda prisotna viabilna populacija.

Ključne besede: *Centrolophus niger*, razširjenost, populacija, razširjanje areala, Levantski bazen

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