

Occurrence of *Apletodon dentatus bacescui* (Murgoci, 1940) (Gobiesocidae) and *Coryphoblennius galerita* (Linnaeus, 1758) (Blenniidae) at the central Black Sea coast of Turkey

***Apletodon dentatus bacescui* (Murgoci, 1940) (Gobiesocidae) ve *Coryphoblennius galerita* (Linnaeus, 1758) (Blenniidae)'nın Türkiye'nin Orta Karadeniz Kıyılarındaki Varlığı**

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Abstract: Two fish species (*Apletodon dentatus bacescui* and *Coryphoblennius galerita*) were collected from Sinop coasts, which were previously not recorded from the central Black Sea coasts of Turkey. Morphometric and meristic characteristics of the species are presented.

Key words: *Apletodon dentatus bacescui*, *Coryphoblennius galerita*, Black Sea

Introduction

The Black Sea has historically been one of the most biologically productive regions in the world (Ivanov and Beverton, 1985; Mee, 1992). Although it has 168 species of fish (Zaitsev and Mamaev, 1997), there are only a few species of commercial importance and the supply of fishes is limited, because intensive fishing, industrialisation and urbanisation have caused the most favoured species to decline (Anonymous , 1989; Kideys, 1994). In addition, several places are

heavily polluted due to numerous industrial, sewage and agricultural wastes reaching the Black Sea through some rivers such as Dnieper, Danube, Odessa and Kherson (Mee, 1992; Ereemeev *et al.*, 1995; Cociasu *et al.*, 1996). The dumping of wastes in the Black Sea provides a significant source of metal and nutrients input (Ereemeev *et al.*, 1995; Cociasu *et al.*, 1996).

In terms of the number of species, the Black Sea fauna has not suffered a decline in biodiversity in the recent decades (Zaitsev and Mamaev, 1997). However, few data are available on the fishes of the Turkish Black Sea Coast (e.g. Akşıray, 1954, 1987; Slastenenko, 1955-1956; Fischer *et al.*, 1987; Kara *et al.*, 1991; Öztürk *et al.*, 1995; Mater and Meriç, 1996; Bilecenoglu *et al.*, 2002; Mater *et al.*, 2003) and this in itself imposes a need for detailed investigation.

This study reports two species hitherto unrecorded from Sinop coasts, which were obtained during faunal studies carried out along the central Black Sea coast of Turkey.

Materials and Methods

Fish samples were collected by a dredge at depths down to 3 m. The samples were transferred to labelled jars and fixed with 4-6% formalin. Identification of the species was made according to keys presented by Zander (1986) and Briggs (1986). Morphometric measurements were determined by a caliper of 0.05 mm accuracy and the meristic counts were made under a stereomicroscope (x10 magnification). Samples were kept in the laboratories of Sinop Fisheries Faculty.

Results

Species accounts for *Apletodon dentatus bacescui* (Fig.1) and *Coryphoblennius galerita* (Fig. 2) are given below.



Figure 1. *Apletodon dentatus bacescui* (26.2 mm total length)

A single specimen was collected from *Cystoseira facies* at a depth of 3 m, at Hamsaroz vicinity (Sinop) on 17 May 2000. Morphometric measurements are given in Table 1. Meristic characteristics are determined as follows: Dorsal finrays 7, anal finrays 7, pectoral finrays 21, caudal finrays 14. A very small sized fish (maximum length up to 40 mm) with rather short snout. Body moderately depressed anteriorly, with head more or less triangular in dorsal outline. Scales absent. Pelvic fins incorporated into prominent adhesive disc located on the ventral body surface. Color of live specimens is very variable, depending on each population adapted to its habitat (Hofrichter and Patzner, 2000). Specimens living beneath marbled substrates are generally pale to whitish, whereas, those on coralligenous habitats vary reddish to purple. Preserved specimens are homogenously light brown, with no marking on the body.

Table 1. Morphometric measurements of *Apletodon dentatus bacescui*.

Measurements	Unit (all in mm)
Total length	26.18
Standard length	21.07
Head length	6.39
Head width	4.99
Ventral disc length	3.40
Eye diameter	1.17
Interorbital distance	1.75

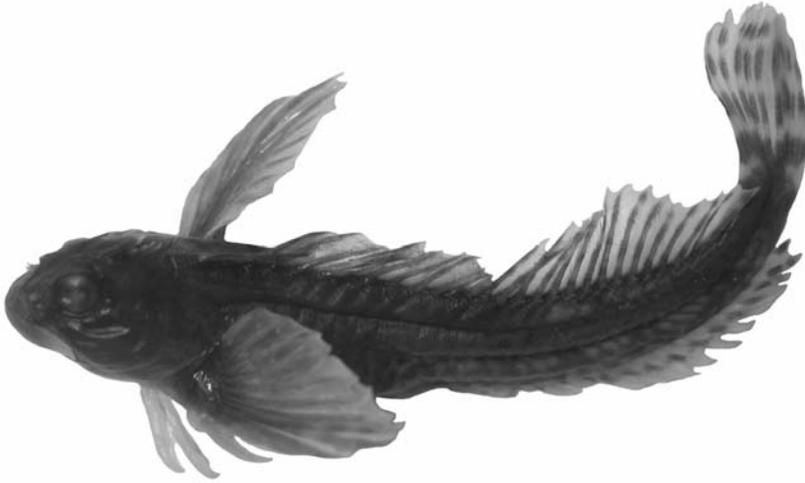


Figure 2. *Coryphoblennius galerita* (46.1 mm total length)

A single specimen was captured at a depth of 1 m from Hamamönü, Sinop, on 30 April 2000. Morphometric measurements are given in Table 2. Meristic characteristics are determined as follows: Dorsal finrays XIII+16, anal finrays II+18, pectoral finrays 12, pelvic finrays I+3. Gill membranes united, forming fold across isthmus. Skin without scales. Pelvics jugular and forked into two parts. Teeth in the lower jaw are canine, all joined by a ligament. The upper jaw includes more than 50 teeth. The fleshy fringed tentacle on nape followed by several smaller tentacles. Color of specimens is light brown with dark vertical bars on the body.

Table 2. Morphometric measurements of *Coryphoblennius galerita*.

Measurements	Unit (all in mm)
Total length	46.11
Standard length	40.05
Head length	10.27
Snout length	2.80
Predorsal length	10.05
Preanal length	23.41
Eye diameter	2.41
Interorbital distance	1.23

Discussion

All counts and measurements of *C.galerita* and *A.dentatus bacescui* agree with descriptions of Zander (1986) and Briggs (1986), respectively.

The family Gobiessocidae includes 7 species belonging to 5 genera in the Mediterranean Sea (Quignard and Tomasini, 2000). Members of the family are characterized by their very small sizes (largest species attains only up to 75 mm total length, (Briggs, 1986)), depressed heads and adhesive discs located on the ventral side of the body. *Apletodon dentatus* is a very rare species of the Mediterranean Sea (Hofrichter and Patzner, 2000), which has two subspecies throughout its distribution range. The subspecies *A.dentatus bacescui* was reported only from the Romanian coasts of Black Sea (Briggs, 1986), thus it constitutes a new record for Sinop coasts. *A. dentatus bacescui* can be distinguished from the other Mediterranean subspecies (*A.dentatus dentatus*) by its shorter snout, shorter sucking disk length and higher number of dorsal fin rays.

The family Blenniidae is represented by 8 genera and 21 species in the Mediterranean Sea (Quignard and Tomasini, 2000). Most blenniids are small sized fishes with total lengths less than 10 cm, characterized by their slimy skin without scales, one long dorsal fin and one long anal fin, jugular pelvic fins forked into two parts, and highly developed social and spawning behaviour (Zander, 1986). Among 18 blenniid species known from Turkish coasts, 10 exists in the Black Sea (Bilecenoglu et al., 2002). Previous records of *C. galerita* from the Black Sea are confined to the western and north-western part (Zander, 1986), and the species is recorded for the first time from Sinop coasts. The genus *Coryphoblennius* is monotypic, and can be distinguished from other Mediterranean blenniids by the following combination of characters; united gill membranes, upper jaw with more than 50 teeth, triangular fleshy tentacle on nape.

Özet

Sinop kıyılarından, daha önce Türkiye'nin orta Karadeniz kıyılarından rapor edilmeyen iki balık türü (*Apletodon dentatus bacescui* ve *Coryphoblennius*

galerita) elde edilmiştir. Türlerine ait morfometrik ve meristik özellikler sunulmuştur.

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