

## SHORT COMMUNICATION

### **A New Record of Antenna codlet *Bregmaceros atlanticus* Goode & Bean, 1886 (Bregmacerotidae: Gadiformes) from the Northeastern Mediterranean Coast of Turkey**

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#### **Abstract**

In this study, 5 specimens of antenna codlet *Bregmaceros atlanticus* Goode & Bean, 1886 were collected during purse seine fishing on 25 December 2010 at a depth 120 m from Iskenderun Bay. This is the first occurrence of *B. atlanticus* from Iskenderun Bay and third occurrence from Turkish waters that indicate possible establishment of the population of *B. atlanticus* in Turkish Marine waters.

**Key words:** Antenna codlet, *Bregmaceros atlanticus*, Iskenderun Bay, Northeastern Mediterranean, Turkey.

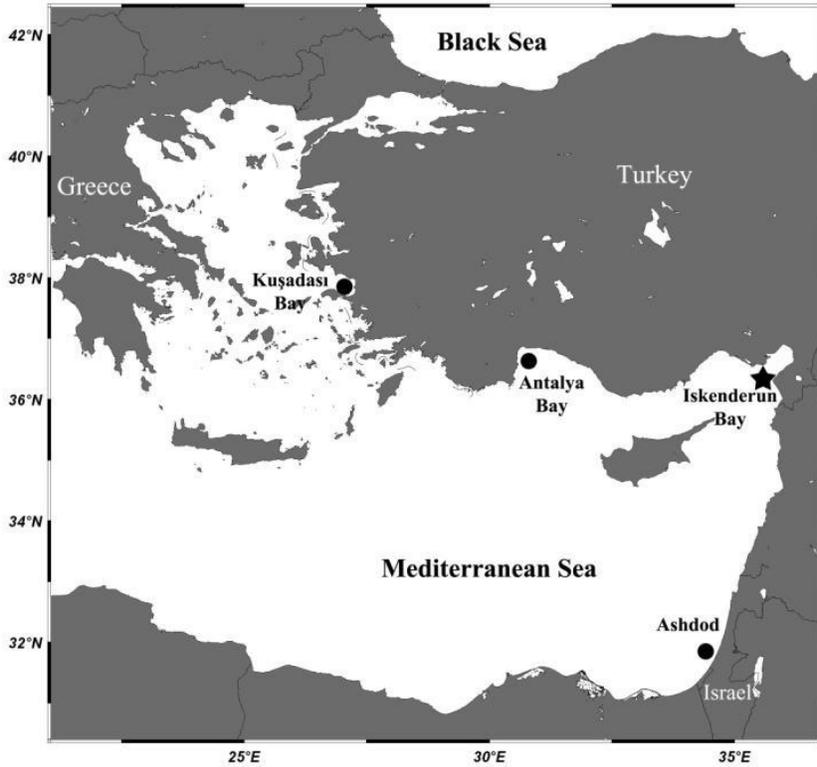
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#### **Introduction**

The family Bregmacerotidae is represented by single genus and 12 valid species, which are distributed in tropical and subtropical oceans and seas (Cohen 1973, 1986, Frose and Pauly 2010). Antenna codlet,

*Bregmaceros atlanticus* Goode & Bean 1886, is usually inhabits sandy, muddy bottoms at depths of over 1000 m (Cohen *et al.* 1990). In the western Mediterranean Sea, *B. atlanticus* was first mentioned from the Straits of Sicily (D'Ancona and Cavinato 1965), however Torii *et al.* (2003) implied that this record was doubtful. Subsequently, Yilmaz *et al.* (2004) reported two *B. atlanticus* specimens in the stomach content of *Saurida undosquamis*, which were caught from the Antalya Bay, the eastern Mediterranean Sea. Following, Goren and Galil (2006) based on four specimens observed from the Israel coast (Fig. 1). A recent record was given by Filiz *et al.* (2007) in the stomach content of *Trachurus trachurus* from the Kuşadası Bay, Aegean Sea. (Figure 1). The present study, five specimens of *B. atlanticus* were first time found by purse seine in the Mediterranean coast of Turkey (Figure 1).

*B. atlanticus* is mainly distributed in circumtropical regions (Eastern Atlantic; South Africa, Western Atlantic; New Jersey, USA and Gulf of Mexico to Guianas, Indo-Pacific; South Africa and Mozambique Channel and southern Japan), and probably entered to the Mediterranean Sea from the Atlantic Ocean via the strait of Gibraltar and settled in the Levantin Sea, which has subtropical characteristics (Masuda *et al.* 1984, Cohen 1986, Robins and Ray 1986, Smith 1986). On the other hand, Goren and Galil (2006) asserted that *B. atlanticus* was discharged in the Turkish Mediterranean coast (Aegean Sea) with ballast water. The occurrence and distribution of this species from the Straits of Sicily (D'Ancona and Cavinato 1965), the Aegean Sea (Yilmaz *et al.* 2004), coast of Israel (Goren and Galil 2006) and North-eastern Mediterranean Sea in this study suggest that the entrance of this species to the Mediterranean Sea is via migration. This is also supported with the collected number of individuals with different length composition in this study.



**Figure 1.** Map showing the capture sites of *B. atlanticus* in the Mediterranean Sea. Black circles and star represents previous and present records respectively.

A total of five specimens (102.0-70.7 mm, total length - 94.5-65.5 mm, standart length) of *B. atlanticus* were collected during the purse seine fishing on 25 December 2010 at a depth 120 m (coordinates: 35° 59' 088'' E, 35° 57' 099'' N) on sandy bottom from the Iskenderun Bay respectively (Figure 1). The specimens were pictured and preserved at 4% formalin and then deposited in the Museum of the Faculty of Fisheries, Mustafa Kemal University, Iskenderun-Hatay (MSM-PIS/2010-12) (Figure 2). Measurements were made with dial callipers and recorded to 0.1 mm.



**Figure 2.** *Bregmaceros atlanticus* captured from Iskenderun Bay, Turkey.

The body is somewhat long and low, the head small, and the nose fairly short. The eyes are big in the lateral, the mouth small terminal and inclined, and the jaws equal. The openness of the gills is fairly wide. The scales are cycloid and fall easily. The fins are composed of completely soft beams. There are two dorsal fins. The first one is right upon the head and is in the form a single, long beam. The second dorsal fin, the anal fin, is widely notched and extends towards the tail. The jugular ventral fin is composed of 5 long beams, one or two of which are longer than the others. Dorsal ray above head and dorsal fin with 53 (52) rays. Anal fin with 53 rays. Pectoral fin with 16 rays. 5th–6th anal and dorsal rays being longest. Origin of dorsal fin above insertion of anal fin. Head length 17.9%-19.1% of standart length, predorsal length 40.5%-41.0%, of standart length, preanal length 37.2%-40.4% of standart length, occipital dorsal ray length 24.8%-23.1% of standart length, longest pelvic ray length 55.5%-54.6% of standart length, longest anal ray length 19.7%-19.6% of standart length in first and five specimens respectively. Eye diameter 25.6%-27.5%, snout length 34.3%-25.1%, interorbital distance 36.9%-40.9%, of head length, in five specimens respectively.

The dorsal and lateral parts of the body are brownish and the ventral parts are silvery with dense pigmentation entirely along the dorsum. All counts and measurements taken from the five specimens agree with descriptions given by Cohen (1986). *B. atlanticus* can be easily distinguished from other Bregmacerotis by the dorsally concentrated dense pigmentation and dark chromatophores on the fin. *B. atlanticus* feeds on zooplankton and phytoplankton, especially crustaceans. Eggs and larvae are pelagic (Cohen 1986).

Present paper reports the first occurrence of *B. atlanticus* from the Iskenderun Bay the north-eastern Mediterranean Sea of Turkey that indicate possible establishment of the population of antenna codled *B. atlanticus* along Turkish coasts.

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## **Türkiye'nin kuzeydoğu Akdeniz sahillerinden *Bregmaceros atlanticus* Goode & Bean, 1886 (Bregmacerotidae: Gadiformes)'un yeni kaydı**

#### **Özet**

Bu çalışmada Iskenderun Körfezi'nden 25 Aralık 2010 tarihinde 120 m derinlikten gırgır avcılığı sırasında 5 adet *Bregmaceros atlanticus* Goode & Bean, 1886 bireyi toplanmıştır. Bu kayır İskenderun Körfezinden birinci ve Türkiye Denizlerinden ise üçüncü kayıttır, buda *B. atlanticus*'un Türkiye denizlerinde muhtemelen artık yerleşik bir tür olduğunun işaretini vermektedir.

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