

First record of brown comber *Serranus hepatus* (Linnaeus, 1758) for the Black Sea

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Abstract: One female specimen of *Serranus hepatus* (Linnaeus, 1758) (Perciformes, Serranidae) was captured off the Black Sea coast of Turkey by bottom trawl at a depth of 80–90 m on 23 March 2012. This is the first record of this species for the Black Sea.

Key words: *Serranus hepatus*, brown comber, Black Sea

The brown comber, *Serranus hepatus* (Linnaeus, 1758), is an Atlanto-Mediterranean species that occurs along the coast of the eastern Atlantic Ocean from Portugal to the Canary Islands and Senegal, as well as throughout the Mediterranean Sea. It inhabits sandy, muddy bottoms and sea grass meadows at depths ranging from 30 to 100 m (Tortonese, 1986; Golani et al., 2006). The species is very common in trawl catch compositions off the Adriatic and the Aegean Seas, and it is considered as discard by fishermen, probably because of its relatively small size (Dulčić et al., 2007; Bilecenoğlu, 2009). *S. scriba* and *S. cabrilla* are 2 species of the genus *Serranus* that inhabit the Black Sea (Bilecenoğlu et al., 2002; Keskin, 2010). Here, we present the first record of *S. hepatus* from the Black Sea, thus extending the known distribution range of this species.

Sampling was performed by the bottom trawl vessel *Dursun K* (mesh size 22 mm) during a fisheries monitoring survey off Şile (41°18'384"N, 29°37'120"E and 41°18'468"N, 29°44'302"E) (Figure 1) from 80–90 m depth contours in March 2012. The specimen is preserved in the zoological collection of the Faculty of Fisheries, Rize (FFR, 02111) (Figure 2).

A single female specimen of brown comber was recorded during the survey on 23 March 2012. Tortonese (1986) was used to identify the specimen. The fish was 87 mm in total length and 9.41 g in weight. The body was fusiform and brownish. There were 4 vertical dark bands on the lateral side of the body, and 3 yellow lines below the eye extending toward the opercular edge of the head. There was a black blotch in the middle of the dorsal fin.

The pelvic fins and the base of the anal fin were blackish. The meristic and metric characters used for identification are as follows: D (dorsal fin): XIV + 8; A (anal fin): III-6; P (pectoral fin): 14; V (pelvic fin): VI-5; LL (lateral line): 49; total length (TL): 87 mm; standard length (SL): 66 mm; SL in TL: 75%; head length in SL: 39%; body depth in SL: 36%; predorsal length in SL: 40%; prepelvic length in SL: 35%; preanal length in SL: 66%; pelvic fin length in SL: 21%; caudal peduncle height in SL: 8%; snout length in SL: 7%; anal fin length in SL: 13%; pectoral fin length in SL: 26%; eye diameter in SL: 7%.

The brown comber is a typical component of the biodiversity of the Aegean Sea and the Sea of Marmara, and it is one of the species discarded in trawl and beam trawl surveys (Dulčić et al., 2007; Bilecenoğlu, 2009). Mediterraneanization, the extension of Mediterranean fauna to the Black Sea, is an ongoing process and new records of Mediterranean-originated fauna for the Black Sea have been given by some scientists in recent years (Engin et al., 2007; Kovacic and Engin, 2009). A recently published review concerning Black Sea fish fauna showed that 62.73% of the fishes were of Atlantic–Mediterranean origin (Keskin, 2010). The establishment process from the Mediterranean to the Black Sea follows the Dardanelles and Bosphorus Straits, and from there to the southwestern Black Sea. Long-term ecological acclimatization in the environment of the Sea of Marmara could make the process effective, and self-sustaining populations of the brown comber could occur in the Black Sea basin (Oğuz and Öztürk, 2011). Because we sampled only one specimen from the

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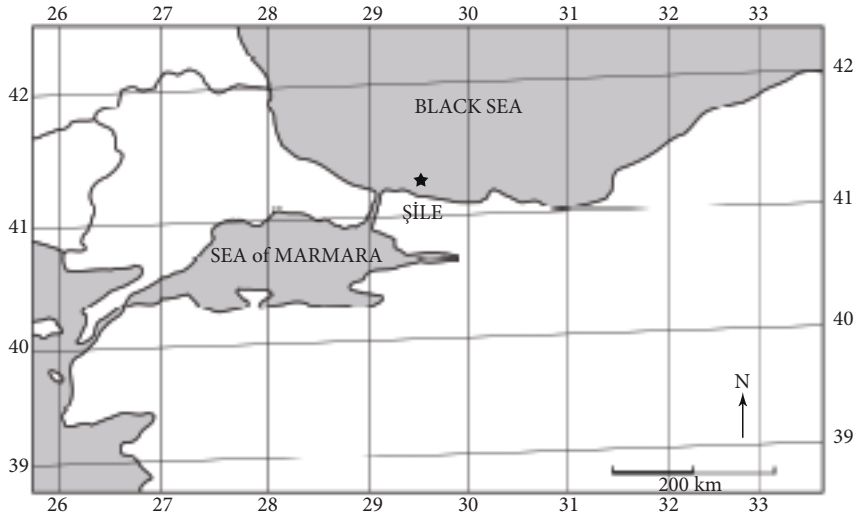


Figure 1. Map showing the sampling area.



Figure 2. Specimen of *Serranus hepatus* captured off Şile in March 2012 (scale bar: 1 cm).

area, further confirmation is required to determine the significance of this observation. Additional records of *S. hepatus* from the Black Sea basin will answer the question of whether this occurrence is casual or whether it heralds a new range of the species.

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