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Expanding distribution and occurrence of the Indo-Pacific Stomatopod, *Erugosquilla massavensis* (Kossmann, 1880) on the Aegean coast of Turkey**T. ÖZCAN¹, A. S. ATEŞ² and T. KATAĞAN³**¹Department of Hydrobiology, Fisheries Faculty, Mustafa Kemal University, TR-31200 Iskenderun, Hatay, Turkey²Department of Hydrobiology, Fisheries Faculty, Çanakkale Onsekiz Mart University, TR-17100 Çanakkale, Turkey³Department of Hydrobiology, Fisheries Faculty, Ege University, TR-35100 Bornova-Izmir, Turkey

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Abstract

The indo-Pacific mantis shrimp, *Erugosquilla massavensis* was recently collected from Sigacik Bay, located on the Aegean coast of Turkey. It is the first record of the species along the Aegean coast of Turkey

Keywords: *Erugosquilla massavensis*; Crustacea Stomatopoda; Aegean Sea; Turkey.

The present study was conducted during a benthic survey along the southern Aegean coast of Turkey on 25th April 2007 (Fig 1). Four specimens of *Erugosquilla massavensis* (Kossmann, 1880) were collected by means of trawl over sandy-silt bottoms at a depth of between 150 and 200 m. The specimens were preserved in 4% formaldehyde and deposited in the Museum of the Faculty of Fisheries, Mustafa Kemal University, Iskenderun-Hatay. A total of 12 stomatopod species have been reported from the Mediterranean Sea, including two alien species namely: *Erugosquilla massavensis* (Kossmann, 1880) and *Clorida albolitura* (Ahyong &

Naiyanetr, 2000) (DOUNAS & STEUDEL, 1994; KATAĞAN *et al.*, 2004; AHYONG & GALIL, 2006; ÖZCAN *et al.*, 2008). Six of them occur on the Turkish coast (ÖZCAN *et al.*, 2008).

Erugosquilla massavensis is the first Red Sea stomatopod species reported from the Mediterranean Sea. Previous records of the alien species on the Mediterranean Sea coasts were from the Sea of Marmara and the Levantine coast of Turkey (KATAĞAN *et al.*, 2004; HOLTHUIS, 1961; GELDIAY & KOCATAŞ, 1969; KOCATAŞ & KATAĞAN, 1995), Palestine (STEUER, 1936), Egypt (STEUER, 1936;



Fig. 1: Geographical location and sampling station (black bullet) of *Erugosquilla massavensis*.

LEWINSOHN & MANNING, 1980), Israel (LEWINSOHN & MANNING, 1980), Syria (HASSAN & NOEL, 2007), Lebanon (HOLTHUIS, 1961; LEWINSOHN & MANNING, 1980), Cyprus (INGLE, 1963; LEWINSOHN & MANNING, 1980), Greece: Crete (DOUNAS & STEUDEL, 1994), Rhodes Island (GALIL & KEVREKIDIS, 2002), Karpathos (CORSINI & KONDYLATOS, 2006) and Libya (SHAKMAN & KINZELBACH, 2007). *Erugosquilla massavensis* is now reported as the first record for the Aegean coast of Turkey (Fig. 2).

It appears that the native mantis shrimp, *Squilla mantis*, has been displaced by the mantis shrimp *Erugosquilla massavensis* along the Levantine coast of Turkey. Displacement into deeper waters has also been reported off the Israeli coast (GALIL & ZENETOS, 2002; STREFTA-

RIS & ZENETOS, 2006; GALIL, 2007).

Although the non-indigenous species *Erugosquilla massavensis* has been recorded in the SE Aegean Sea (Karpathos, Rhodes), as well as from the Levantine coast of Turkey and the Sea of Marmara, to date it has been absent from the Turkish Aegean coast. The present finding of *E. massavensis* from the Aegean coast of Turkey expands its distribution range, confirming also that is one of the most successful Lessepsian migrant species in the eastern Mediterranean.

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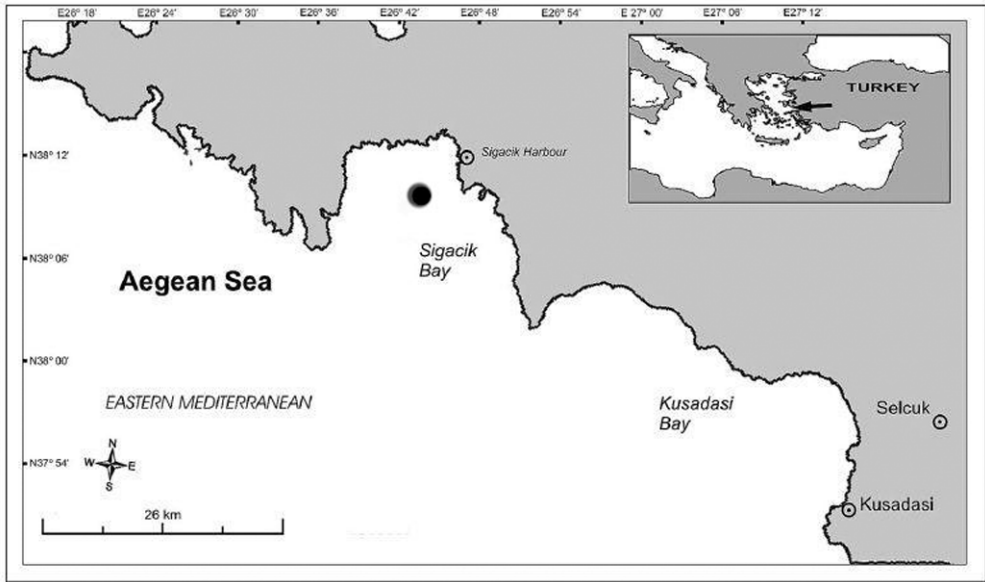


Fig. 2: *Erugosquilla massavensis* (♀, TL= 22.6 mm); dorsal view. (Photo: T.Ozcan).

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