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Short communication

First Mediterranean record of the Indo-West Pacific mantis shrimp, *Clorida albolitura* Ahyong & Naiyanetr, 2000 (Stomatopoda, Squillidae)

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Abstract

To date, only one species of Erythrean stomatopod, *Erugosquilla massavensis* (Kossmann), has been reported from the Mediterranean Sea. We report the first appearance of a second Erythrean stomatopod species from the Mediterranean coast of Israel, *Clorida albolitura* Ahyong & Naiyanetr, on 24 May 2006.

Key words: Clorida albolitura, Stomatopoda, Squillidae, Mediterranean, Red Sea, alien species

Since opening in 1869, the Suez Canal has acted as a corridor for marine species dispersal between the Red and Mediterranean Seas. As a result, over 300 species from the Red Sea have become established in the Mediterranean, including the stomatopod *Erugosquilla massavensis* (Kossmann) (Galil et al. 2002). On 24 May 2006, benthic surveys off Ashdod, Israel (31°53.505'N, 34°32.962'E) conducted by the second author aboard the RV Shikmona collected two specimens of the stomatopod, *Clorida albolitura* Ahyong & Naiyanetr, 2000, previously unknown from the Mediterranean Sea. The two specimens (2 females, total length 50, 42.6 mm), are deposited in the collections of the National Institute of Water and Atmospheric Research (NIWA) and the National Collections, Tel Aviv University (TAU AR 27816), respectively.

Clorida albolitura (Figure 1) is distinguished from its congeners by the following combination of characters: eyestalk inflated, cornea bilobed but markedly narrower than stalk; rostrum wider than long; dorsal processes of antennular somite with short, triangular apices; raptorial claw dactylus with 5 teeth; mandible with palp; lateral process of fifth thoracic somite produced to a short slender spine; lateral process of sixth and seventh thoracic somites rounded posterolaterally; abdominal somites 2–5 with unarmed submedian carinae; telson inter-mediate teeth with crenulate to tuberculate margins; telson ventral surface without carinae or tubercles flanking postanal carina.

Though species of *Clorida* may be difficult to identify, the here newly reported *C. albolitura* is the only species of the genus known from the

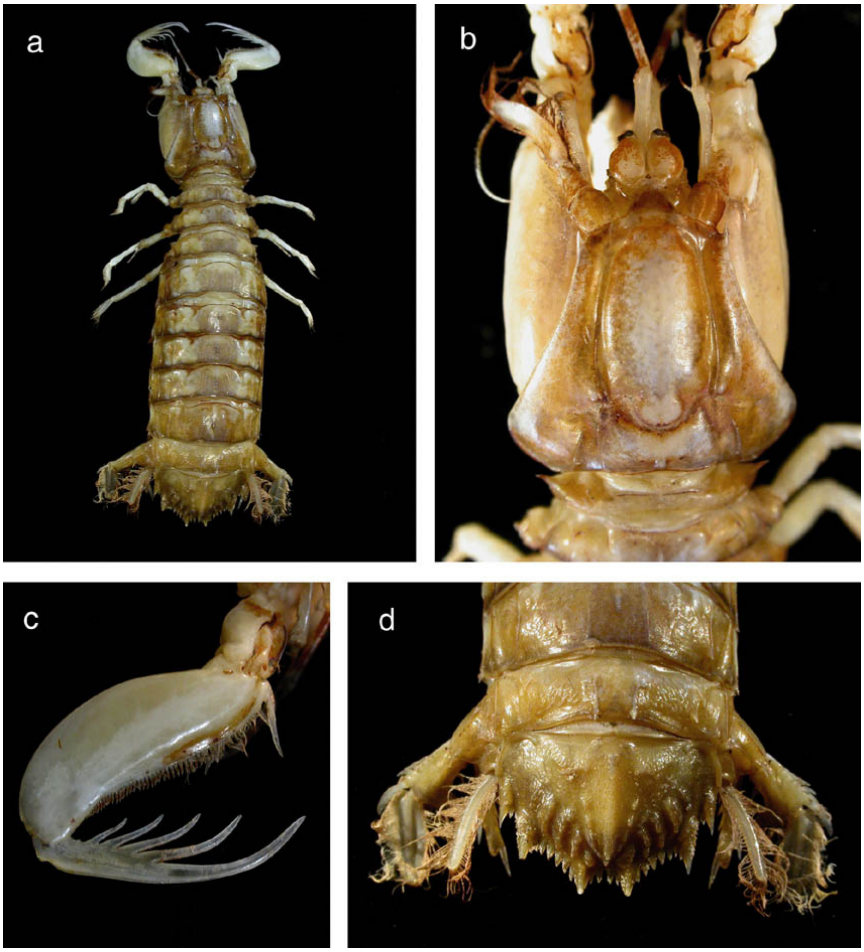

Figure 1. *Clorida albolitura* Ahyong & Naiyanetr, 2000, female, 50 mm, Ashdod, Israel, Mediterranean Sea (NIWA 25034). (a) dorsal view, (b)cephalothorax, (c) right raptorial claw, (d) tailfan (photo by S.T. Ahyong)

Mediterranean Sea. Thus, *C. albolitura* can be immediately distinguished from all other Mediterranean stomatopods by the distinctive flask-shaped eye in which the cornea is bilobed but distinctly narrower than the stalk. In all other Mediterranean stomatopods, the cornea is as wide as or wider than the stalk.

Clorida albolitura is predatory and burrows in sandy-mud substrates at depths of 31–110 m (Ahyong 2001). The Mediterranean specimens were collected at 55 m on a meadow of *Antedon mediterranea* Lamarck (Echinodermata).

Prior to the present study, eleven species of stomatopod were known from the Mediterranean Sea, with five from the eastern Levant: *Squilla mantis* (Linnaeus), *Erugosquilla massavensis* (Kossmann), *Rissoides desmaresti* (Risso), *R. pallidus* (Giesbrecht), and *Nannosquilloides occultus* (Giesbrecht) (Froglia and Manning 1989, Froglia 1992). *Clorida albolitura*, now also recorded from the eastern Mediterranean Sea, otherwise ranges from Taiwan and Australia to the western Indian Ocean (Ahyong 2001). The species is already known from the Red Sea, including the Gulf of Suez, and its arrival in the Mediterranean Sea is almost certainly due to passage via the Suez Canal. The maturity of both specimens suggests that a population exists in the eastern Mediterranean Sea, but whether it is presently adventive or already established is unknown.

Clorida albolitura is only the second species of Erythrean stomatopod to enter the Mediterranean. *Erugosquilla massavensis*, the first Red Sea stomatopod to arrive in the Mediterranean, was first noted from Alexandria,

Egypt, by Steuer (1936) under the name *Squilla africana* Calman. Since then, *E. massavensis* has been recorded from Israel, Lebanon, Egypt, Cyprus, Crete, Rhodes Island and Turkey (Lewinsohn and Manning 1980, Galil and Kevrekidis 2002, Katağan et al. 2004). *Erugosquilla massavensis* is now the dominant eastern Levantine stomatopod and is abundant at depths of 20–40 m. It is a relatively large species, attaining a total length in excess of 200 mm, and is sufficiently abundant to be of potential commercial interest. *Clorida albolitura* is a smalller species than *E. massavensis*, reaching 75 mm in length. Whether or not *C. albolitura* follows a similar invasion pattern to that of *E. massavensis* remains to be seen.

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