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Stomatopod Crustacea from the Island of Crete

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- FOSTER, B. A. (prepared). Dispersion of early-stage phyllosoma larvae of the spiny lobster, *Jasus edwardsii*, after hatching in a marine reserve in New Zealand. (MS to A. B. MacDiarmid).
- FOSTER, B. A. (prepared). Barnacles indicate direction of drift of wrecked trimaran (the Rose-Noelle incident). (MS to M. R. Gregory).
- FOSTER, B. A. (prepared). New species of barnacles (Cirripedia, Thoracica) of the subfamily Scalpellinae and family Verrucidae for the New Zealand region. (MS to New Zealand Journal of Marine and Freshwater Research).
- FOSTER, B. A., S. SCHMIDT & L. CARR (prepared). Winter occurrence of zooplankton in surface waters of McMurdo Sound, Antarctica. (MS to S. Schmidt).
- FOSTER, B. A. (in preparation). *Tesseropora atlantica* (Cirripedia: Thoracica) insular in Pacific. (MS to W. A. Newman, 1993).
- FOSTER, B. A. (in preparation). Contributions to the Ross Sea Ecosystem. (MS to S. Schmidt).

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STOMATOPOD CRUSTACEA FROM THE ISLAND OF CRETE

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During several biological investigations along the continental shelf of the Island of Crete from 1988 to 1991, conducted with the R/V "Philia", an interesting collection of stomatopod Crustacea was obtained from soft substrates in depths ranging from 10 to 200 m. Bottom samples were taken with Smith-McIntyre grabs, Charcot-Picard dredges and Agassiz trawls. Additional specimens were caught with a bottom trawl with a 22-mm stretched mesh cod end. A total of more than 400 sampling stations was made in the area; those sampling sites where stomatopod specimens were recorded are shown in fig. 1.

Frogliola & Manning (1989) in a check-list, enumerated the ten known Mediterranean stomatopod species. Lewinsohn & Manning (1980) in a thorough study registered all the known information on the stomatopod fauna of the Eastern Mediterranean and recorded 5 species from Israel, Lebanon, Cyprus and the south-east coast of Turkey. These species were: *Nannosquilloides occultus*, *Oratosquilla massavensis*, *Rissoides pallidus*, *Rissoides desmaresti* and *Squilla mantis*. A sixth species, *Pseudosquillopsis cerisii* (Roux, 1828), apart from a very old record from the south coast of Peloponese (Guérin, 1832), has not been reported from the eastern Mediterranean. During our research in Crete we found two more species (*Allosquilla africana*, *Parasquilla ferussaci*) which increases to 8 the number of the known species from the eastern basin.

The seven species found in the Cretan continental shelf are the following:

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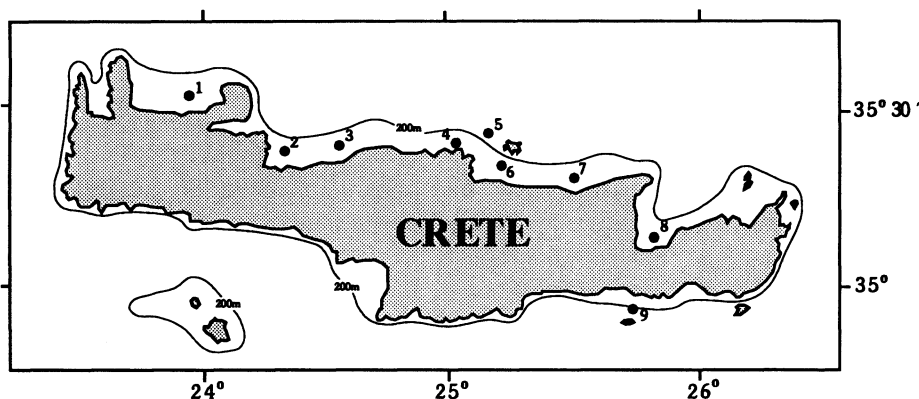


Fig. 1. Map of the Island of Crete indicating the sampling stations.

Allosquilla africana (Manning, 1970), st. 6, Iraklion Bay, Smith McIntyre grab, 160 m, clayey silt, 7 September 1991, 1 (juvenile) female, 11 mm. The Cretan specimen is characterised by a distinctly bilobed cornea, a cordiform rostral plate with blunt apical spine, ten teeth on the dactylus of the claw; the posterior armature of the telson is identical to that of the specimen from the Adriatic Sea described by Froglija & Manning (1986). The only previous records of the species in the Mediterranean concern two specimens collected in the Adriatic Sea (Manning & Froglija, 1979; Froglija & Manning, 1986). The present specimen is the first to be collected outside the Adriatic; this suggests that this species can be expected to occur throughout the Mediterranean.

Nannosquilloides occultus (Giesbrecht, 1910), st. 8, Mirabellou Bay, Smith McIntyre grab, 20 m, silty sand, 7 May 1987, 1 female, 21 mm. In the Eastern Mediterranean it has been found at the Aegean coast of Turkey (Kocatas, 1981) and the coast of Israel (Lewinsohn & Manning, 1980).

Parasquilla ferussaci (Roux, 1830), st. 3, Rethymnon Bay, trawl, 50 m, 28 August 1989, 1 female, 70 mm. This rather rare species has been reported from several localities in the western Mediterranean Basin and the eastern Atlantic (Froglija & Manning, 1989). This is the first report of this species from the eastern part of the Mediterranean.

Oratosquilla massavensis (Kossmann, 1880), st. 7, Mallia Bay, trawl, 60 m, 11 July 1991, 1 male, 72 mm. This successful Lessepsian migrant is now the most dominant large stomatopod in the eastern Levantine coasts (Por & Dimentman, 1989). In 1980, Lewinsohn & Manning noted that since only temperature could be a barrier in the distribution of this Indo-West Pacific stomatopod "... it will be interesting to follow the further spread of this species, if that occurs". One year later Kocatas (1981) confirmed its presence at the south-west coast of Turkey, in a locality facing Rhodes Island. The "arrival" of this large squillid in Crete, until now the most western limit of its distribution in the Mediterranean, is possibly related to the extended length of its pelagic larval period which in

general is proved to be proportional to the size of the settling postlarvae and adults (Reaka & Manning, 1987).

Rissoides desmaresti (Risso, 1816), st. 4, Agia Pelagia embayment, Smith McIntyre grab, coarse sand with biogenic detritus, 15-18 m, 5 females, 43-48 mm, 1 juvenile, 14 mm; st. 1, Chania Bay, trawl, 3 males, 3 August 1991, 4 females, 45-53 mm. Regardless of size all examined specimens resemble the description given by Lewinsohn & Manning (1980) for specimens from Israel, especially in the relative length of the antennular peduncle, the shape of the propodus and the slenderness of the teeth of the claw. In the eastern Mediterranean *Rissoides desmaresti* has been reported from the south coasts of Peloponese (Guérin, 1832), from Israel and Cyprus (Lewinsohn & Manning, 1980) and from Izmir Bay (Kocatas, 1981).

Rissoides pallidus (Giesbrecht, 1910), st. 5, Iraklion Bay, Agassiz trawl, 190 m; silty clay, 1 female, 32 mm; st. 2, off Georgioupolis coast, trawl, 105 m, 4 August 1991, 1 male, 38 mm. The only previous record from the eastern Mediterranean is that from off the coasts of Israel (Lewinsohn & Manning, 1980).

Squilla mantis (Linnaeus, 1758), st. 7, Mallia Bay, Charcot-Picard dredge, 30 m, silty sand with *Caulerpa prolifera*, 1 September 1990, 1 female, 125 mm; st. 3, Rethymnon Bay, trawl, 1 female, 175 mm; st. 1, Chania Bay, 3 females, 109-117 mm, 3 males, 77-120 mm; st. 2, off Georgioupolis coast, trawl, 105 m, 4 August 1991, 4 females, 125-134 mm, 4 males, 133-150 mm; st. 9, Ierapetra coasts, trawl, 70 m, 4 August 1989, 1 female, 98 mm. *Squilla mantis* inhabits the entire Mediterranean and it has also been reported from the Atlantic coast of southern Europe, Canary Islands, and West Africa from Morocco to southern Angola.

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