

AUTOECOLOGICAL STUDIES ON THE THALASSINIDEA (CRUSTACEA,
DECAPODA) OF THE PATRAS GULF AND IONIAN SEA (GREECE)

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Abstract. Nine species of Thalassinidea (Crustacea, Decapoda) are reported from the Patras Gulf and Ionian Sea, from 166 sites. Data are given about their distribution, bathymetry and sediment type.

Résumé. On a trouvé 9 espèces des Thalassinidea (Crustacea, Decapoda) dans le golfe de Patras et Mer Ionienne dans 166 sites. Des données sur leur distribution, bathymétrie et la nature du sédiment sont citées.

The group of Thalassinidea is represented by 16 species in the Mediterranean. Their horizontal and vertical distribution is not sufficiently known, partially due to the confusion on their systematics. The aim of this study is to contribute to the knowledge of the Thalassinidea fauna of the area under study adding information on their depth and substrate preferences. The study area includes 166 stations from the infralittoral zone along the Patras Gulf, Ionian coasts of Peloponnese, Zakynthos and Kefallonia islands. Samples were taken with a Foster's anchor dredge at depths 5 and 15m during the summers of 1981 and 1982.

Juvenile forms and adults of 9 species were identified, the most abundant of which were :

- Callinassa truncata Giard & Bonnier, 1890, occurring at 17 stations distributed along the South Patras Gulf, Ionian Sea and around Kefallonia island. It can be seen, in fig. IA, that the species occurred mostly at 5m depth, preferring sandy substrates with low mud percentages. So far the species has been recorded sparsely in the Mediterranean and the only reference about the depth of its occurrence, is from Lagardere (1966) for some Atlantic Ocean individuals at depths 44-57m.

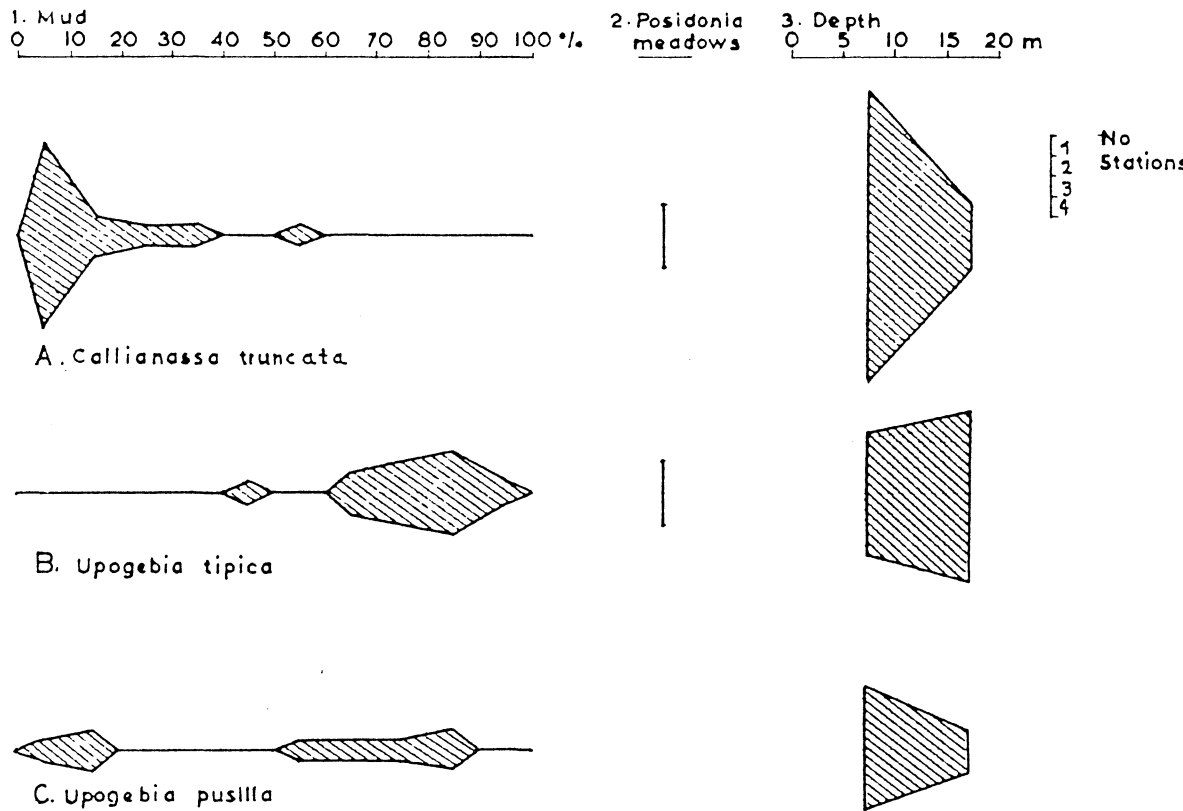


Fig. 1. Distribution of the stations at which *Callianassa truncata* (A) , *Upogebia tipica* (B) , and *Upogebia pusilla* (C) occurred according to percentage of mud, presence in *Posidonia* meadows and depth.

- Upogebia typica (Nardo, 1869), at 14 stations mainly in the Patras Gulf. The species prefers substrates with high percentages of mud but it was also present in Posidonia meadows.

It was almost equally found at depths 5 and 15m (fig. 1B). The closely related species Upogebia pusilla (Petagna, 1792) seemed to live in a wider range of substrates (fig. 1C) than U. typica but it preferred shallower waters.

More restricted was the distribution of:

- Upogebia deltaura (Leach, 1815), present at 4 stations, only in the Patras Gulf, in a variety of substrates from sand with high percentage of pebbles (62%) to muddy sand, at depths 5 and 15m. U. deltaura seemed to be replaced by a closely related species, not yet described which is suggested to be a clear Mediterranean one (de Saint Laurent, personal communication). The latter showed the same vertical distribution and similar substrates but it was also present in Posidonia meadows. No comparison with other references in the Mediterranean is feasible because of their minor morphological differences, not yet cleared out.

- Gouretia serrata (Gouret, 1887), present only at 2 stations, at depths 5 to 15m, in pure sand. It usually occurs at greater depths (Holthuis & Gottlieb 1958, Stevcic 1979), although it has been recorded at similar depths from the Adriatic Sea (de Saint Laurent & Bozic, 1976)

The occurrence of the rest 3 species, namely Callianassa pontica, Jaxea nocturna, Callinax lobata, was more or less accidental, being found at one station only.

- Callianassa pontica Czerniavsky, 1884, found at the depth of 7m, in sandy silt (55% mud), in Kefallonia. Its absence can be justified by the fact that the species normally lives at shallower waters (Kattoulas & Koukouras 1974, de Saint Laurent & Bozic 1976).

- Jaxea nocturna Nardo, 1847, in sandy mud 15m deep, in the Ionian Sea. The presence of only one juvenile suggests the occurrence of the species in deeper waters as it is known from the bibliography.

- Calliax lobata (de Gaillande & Lagardère, 1966), in sandy mud. The species was recorded from the Patras Gulf for the first time by Thessalou-Legakis (in press), after its description (de Gaillande & Lagardère, 1966) in Toulon and its vertical distribution seems to be extended to 15m, whereas its substrate agrees with that of its authors.

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