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# BENTHIC FAUNA OF THE EVVOIA COAST AND EVVOIA GULF

## III. NATANTIA (CRUSTACEA, DECAPODA)

by

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**Summary:** *This is a study of NATANTIA (Crustacea, Decapoda) of the benthic fauna of the Evvoia coast and Evvoia Gulf. A total of 82 stations have yielded 24 species of NATANTIA, 5 of which, namely: Plesionika edwardsii (Brandt), Lysmata seticaudata (Risso), Synalpheus hululensis (Coutière), Processa mediterranea (Parisi) and Philocheras echinulatus (Sars) are recorded for the first time as belonging to the fauna of Greece.*

### Introduction

Within the limits of our effort towards a better knowledge of the largely unknown benthic fauna of Greece, the Laboratory of Zoology of the Aristotelian University of Thessaloniki has initiated in 1970 a search programme including the coast and the gulf of Evvoia. The area under investigation is almost totally unexplored.

The present paper refers to the Natantia collected from the 82 stations of the area investigated, which consist of a total of 24 species. Five of the above species are recorded for the first time as belonging to the Greek fauna, while two of these five, namely: *Processa mediterranea* (Parisi) and *Philocheras echinulatus* (Sars), have not - to the best of our knowledge - been found reported anywhere in connection with East Mediterranean (east of 20° E.). The presentation of each of the species is accompanied by a detailed account of all existing information about its distribution in Greek waters and other information of ecological nature.

For some of the collected Decapoda, we have asked Prof. L. B. Holthuis' opinion, who had graciously offered to assist us, and in this paper we would like to thank him for his kindness. We also express our appreciation and thanks to Mr. Stelios Koroneos who helped us in the collection of the material.

MATERIAL AND METHODS

The 24 species found were among the 232 individuals collected from the 82 stations investigated. The above species were mostly kept in 80% alcohol with a small amount of glycerine and they are in the Museum of the Laboratory of Zoology of the University of Thessaloniki. The collection was done by means of free diving and the use of fishing boats, fishing nets and dredge.

## NATANTIA

### PENAEIDAE

#### **Aristaeomorpha foliacea** (Risso, 1827)

*Aristaeomorpha foliacea*, Belloc, 1948, App. B p. 71. - Holthuis & Gottlieb, 1958, p. 15.

Material: N.E.$_{79}$, 1 ♀. L of carapace, 75 mm. Collected from the Circalittoral zone, at a depth of 140 m, from a mud bottom.

Greece: Aegean Sea (BELLOC 1948). North of Crete, 36° 25′ N 24°2′ E. (HOLTHUIS & GOTTLIEB 1958).

#### **Aristeus antennatus** (Risso, 1816)

*Aristeus antennatus*, Belloc, 1948, App. B p. 71.

Material: N.E.$_{80}$, 1 ♂; N.E.$_{81}$, 1 ♂. Lm of carapace, 65 mm. Collected from the Circalittoral zone, at a depth of 80-120 m, from a mud bottom.

Greece: Aegean and Ionian seas (BELLOC 1948). We have failed to find any other reports which have reported that this species is found in Greece.

#### **Solenocera membranacea** (Risso, 1816)

*Penaeus (Solenocera) siphonoceros*, Steindachner, 1891, p. 439, 443.
*Solenocera membranaceum*, Holthuis & Gottlieb, 1958, p. 14.

Material: S.E.$_{77}$, 3 ♂ 10 ♀; N.E.$_{79}$, 1 ♂ 4 ♀; N.E.$_{80}$, 2 ♂ 3 ♀; N.E.$_{81}$, 2 ♂ 4 ♀. Lm of carapace ♂, 36 mm. Lm of carapace ♀, 35 mm. Collected from the Circalittoral zone, at a depth of 70-100 m, from a mud bottom.

Greece: Southeast and east of Peloponnesus, 36°5′30″ N 23°9′30″ E, 36°7′ N 23°28′ E & 36°40′30″ N 23°51′ E; Northwest of Crete, 35°59′ N 22°56′ E (STEINDACHNER 1891, HOLTHUIS & GOTTLIEB 1958).

**Penaeus kerathurus** (Forskål, 1775)

*Penaeus caramote*, Athanassopoulos, 1926, p. 1. - Belloc, 1948, App. B p. 71.

*Penaeus trisulcatus*, Tortonese, 1947, p. 18. - Bini, 1965, p. 275.

*Penaeus kerathurus*, Holthuis & Gottlieb, 1958, p. 15-16, fig. 1. - Holthuis, 1961, p. 4.

Material: Numerous individuals from stations $S.E._{78}$ and $N.E._{79}$. Lm of carapace ♂, 60 mm. Lm of carapace ♀, 50 mm. Collected from the Circalittoral zone, at a depth of 80-150 m, from a mud bottom.

Greece: Thermaikos and Amvrakikos (Preveza) Gulfs (Athanassopoulos 1926). Rhodes (Maldura 1938, Tortonese 1947). The Dodecanese (Belloc 1948). Greece (Holthuis & Gottlieb 1958). Porto Lagos, Thraki (Holthuis 1961). Gulfs of Thermaikos and Evvoia (Koukouras 1972). Thermaikos Gulf (Georgiadis & Georgiadis 1974).

**Parapenaeus longirostris** (Lucas, 1846)

*Parapenaeus longirostris*, Belloc, 1948, App. B p. 71. - Holthuis & Gottlieb, 1958, p. 18. - Geldiay & Kocatas, 1968a, p. 9-11, fig. 5.

Material: Numerous individuals from stations $S.E._{79}$, $S.E._{80}$ and $S.E._{81}$. Lm of carapace ♂, 60 mm. Lm of carapace ♀, 65 mm. Collected from the Circalittoral zone, at a depth of 60-130 m, from a mud bottom.

Greece: Ionian Sea (Belloc 1948). East of Peloponnesus 37°0′ N 24°28′ E, 36°59′ N 24°29′ E & 36°58′ N 24°18′ E (Holthuis & Gottlieb 1958). Thermaikos and Evvoia Gulfs (Koukouras 1972).

**Sicyonia carinata** (Brünnich, 1768)

*Sicyonia sculpta*, Athanassopoulos, 1917, p. 32.

*Sicyonia carinata*, Holthuis & Gottlieb, 1958, p. 22.

Material: $V._{68}$, 1 ♂. L of carapace, 20 mm. Collected at the Infralittoral zone, at a depth of 5 m, from a sand and mud hottom with large pebbles, from water of low salinity.

Greece: Phaleron, Saronikos Gulf (Athanassopoulos 1917). East of Peloponnesus, 37°49′ N 23°27′ E. (Stephensen 1923). Thermaikos Gulf (Georgiadis & Georgiadis 1974).

**PASIPHAEIDAE**

**Pasiphaea sivado** (Risso, 1816)

*Pasiphaea sivado*, Guérin, 1832, p. 43. - Pesta, 1918, p. 64, fig. 19-20. -

Zariquiey Alvarez, 1957, p. 20-32, pl. i-iii fig. 1-4.

Material: N.E.$_{79}$, 4 ♂ 3 ♀; N.E.$_{80}$, 3 ♂ 3 ♀; N.E.$_{81}$, 2 ♂ 8 ♀. Lm of carapace ♂, 21 mm. Lm of carapace ♀, 20 mm. Collected at the Circalittoral zone, at a depth of 80-150 m, from a mud bottom.

Greece: Island of Sapientza, Messinia; Astros; Argolikos Gulf; Island of Naxos (GUERIN 1832). Korinthiakos Gulf, 38°10′ N 22°35′ E; In the North of the island of Ikaria, 37°52′ N 26°22′ E (STEPHENSEN 1923). West Saronikos Gulf (VAMVAKAS 1970, 1971).

**PANDALIDAE**

**Plesionika edwardsii** (Brandt, 1851)

*Parapandalus narwal*, Heller, 1863, p. 245, pl. 8 fig. 7-8.

*Plesionika edwardsii*, Holthuis & Gottlieb, 1958, p. 53. - Zariquiey Alvarez, 1968, p. 109-110, fig. 45.

Material: N.E.$_{79}$, 1 ♀ ovigerous, with approximately 1,500 eggs. L of carapace, 73 mm. Collected from the Circalittoral zone, at a depth of 80 m, from a mud bottom.

Greece: This is the first time that this species have been found in the Greek fauna. The only previous report in connection with East Mediterranean has been made for the Natanya-Herzliya area of the Coast of Israel (HOLTHUIS & GOTTLIEB 1958). In the rest of the Mediterranean it has been known to exist in the gulf of Taranto (FOREST 1967) and the coasts of Algeria, Spanish Morocco, Spain and France (ZARIQUIEY ALVAREZ 1968).

**Pandalioa brevirostris** (Rathke, 1843)

*Pandalus brevirostris*, Heller, 1863, p. 247, pl. 8 fig. 9.

*Pandalina brevirostris*, Pesta, 1918, p. 76, fig. 24. - Holthuis & Gottlieb, 1958, p. 114.-Zariquiey Alvarez, 1968, p. 115-116, fig. 2e, 47. - Vamvakas, 1971, p. 204.

Material: N.E.$_{79}$, 1 ♂. L of carapace, 7 mm. Collected at the Infralittoral zone, at a depth of 40 m, from a mud bottom.

Greece: East of Peloponnesus, 36°59′ N 24°29′ E (HOLTHUIS & GOTTLIEB 1958). West Saronikos Gulf (VAMVAKAS 1971). Gulf of Thessaloniki (Thermaikos) (KOUKOURAS 1972).

Remarks: The specimen collected presents various minor deviations in a number of characters.

**HIPPOLYTIDAE**

**Hippolyte inermis** (Leach, 1815)

*Hippolytus brullei*, Guérin, 1832, p. 41-43, pl. xxvii fig. 2.
*Virbius viridis*, Heller, 1863, p. 286, pl. 10 fig. 3.
*Hippolyte inermis*, Holthuis & Gottlieb, 1958, p. 113. - Zariquiey Alvarez, 1968, p. 119-121, fig. 3b, 4d, 5c-d, 49a, 51b-c, 52f.

Material: S.E.$_{77}$, 1 ♀. L of carapace, 6 mm. Collected at the Infralittoral zone, at a depth of 20 m, from a sand and mud bottom.

Greece: Coasts of Peloponnesus (Guerin 1832, Holthuis & Gottlieb 1958). We have not been able to find any other records about this species in any other part of Greece.

**Lysmata seticaudata** (Risso, 1815)

*Lysmata seticaudata*, Carus, 1885, p. 484. - Pesta, 1918, p. 107, fig. 35. - Zariquiey Alvarez, 1968, p. 128-130, fig. 4a, 53b, 54-56.

Material: E.$_{1}$, 2 ♀. Lm of carapace, 16 mm. Collected from the Infralittoral zone, at a depth of 8 m, from a bottom consisting of sand and large stones covered with vegetation.

Greece: It is recorded for the first time in Greece. In East Mediterranean it has been recorded to be found in the coasts of Israel, the sea of Marmara and the west coasts of Turkey (Lewinsohn & Holthuis 1964, Geldiay & Kocatas 1968b).

**ALPHEIDAE**

**Athanas nitescens** (Leach, 1814)

*Athanas nitescens*, Heller, 1863, p. 281, pl. 9 fig. 21-23. -Holthuis & Gottlieb, 1958, p. 27, fig. 2-3. - Caspers, 1968, p. 112. - Zariquiey Alvarez, 1968, p. 137-140, fig. 3d, 59a, 60.

Material: E.$_{43}$, 1 ♀. L of carapace, 9 mm. Collected from the Mediolittoral zone, at a depth of 0.30 m, from a bottom consisting of small pebbles, sand, and a little mud.

Greece: Close to the Island of Kea, 37°36′ N 24°16′05″ E and the cape of Kafireus (Evvoia) 38°09′40″ N 24°37′ E, «Calypso» st. 788 & 794 (Peres & Picard 1958). Gulf of Thessaloniki (Thermaikos) (Koukouras 1972, Georgiadis & Georgiadis 1974).

Remarks: Basides the specimen which has been found at st. E.$_{43}$, at st. E.$_{2}$ (1 ♂ 3 ♀) and st. E.$_{51}$ (1 ♂ 1 ♀) has been found specimens which appear to belong to the *Athanas nitescens* var. *laevirhincus* (Risso 1816),

as it is given by ZARIQUIE ALBARE (1968). The specimens in question were collected from a bottom of the same consistance as that in the case of $E._{43}$, at a depth of 5-6 m and their Lm of carapace ♂ and Lm of carapace ♀ are 5 mm and 6 mm respectively.

**Synalpheus hululensis** Coutière, 1908

*Synalpheus hululensis*, Lewinsohn & Holthuis, 1964, p. 49-52, fig. 2.

Material: $E._{15}$, 1 ♀. L of carapace, 11 mm. Collected from the Infralittoral zone, at a depth of 2 m, from a bottom consisting of large stones joined by means of various plant and animal organisms, in water of low salinity.

Greece: This is the first time that it has been found in Greece, and its discovery in the area mentioned is an interesting extension of its distribution, when we think that it has been previously recorded to be found in the Mediterranean Sea only in the coasts of Israel (LEWINSOHN & HOLTHUIS 1964).

**Synalpheus gambarelloides** (Nard , 1847)

*Alpheus laevimanus*, Heller, 1863, p. 272, pl. 9 fig. 14-16.

*Synalpheus laevimanus*, Pesta, 1918, p. 84, fig. 27. - Santucci, 1928, p. 345.

*Synalpheus gambarelloides*, Zariquiey Alvarez, 1968, p. 141-143, fig. 2a, 61-62.

Material: $E._{2}$, 2 ♀; $E._{24}$, 1 ♂ 1 ♀; $E._{42}$, 1 ♀. L of carapace ♂, 12 mm. Lm of carapace ♀, 11 mm. One ♀ ovigerous, with approximately 600 eggs. Collected from the Infralittoral zone, at a depth of 5-10 m, from a bottom consisting of large pebbles with a little sand and mud and abundant flora, in water of low salinity in two of the stations.

Greece: Cape Bove, Rhodes (SANTUCCI 1928). By the Islet of Trizonia, in the gulf of Corinth, «Calypso» st. 849 (PERES & PICARD 1958).

**Alpheus macrocheles** (Hailst ne, 1835)

*Alpheus platyrhynchus*, Heller, 1863, p. 276, pl. 9 fig. 18-19.

*Alpheus megacheles*, Pesta, 1918, p. 90, fig. 28.

*Alpheus macrocheles*, Holthuis & Gottlieh, 1958, p. 113. - Zariquiey Alvarez, 1968, p. 144, fig. 2b, 3c.

Material: $E._{34}$, 1 ♂; $E._{59}$, 1 ♀; $V._{66}$, 2 ♀. L of carapace ♂, 13 mm. Lm of carapace ♀, 12 mm. One ♀ ovigerous, with approximately 500 eggs. Collected from the Infralittoral zone, at a depth of 5-15 m, from a bot-

tom consisting of small pebbles, sand, and a little mud, and with abundant flora. At st. $F._{59}$, in water of low salinity.

Greece: Island of Samos, 37°37′ N 26°58′ E (Holthuis & Gottlieb 1958). West Saronikos Gulf (Vamvakas 1971).

**Alpheus deutipes** Guérin, 1832

*Alpheus dentipes* Guérin, 1832, p. 39-41, pl. xxvii fig. 3. - Pesta, 1918, p. 87, fig. 28. - Zariquiey Alvarez, 1968, p. 145-147, fig. 63. - Holthuis, 1961, p. 22.

Material: $E._{15}$, 2 ♂; $E._{28}$, 1 ♂ 3 ♀; $E._{39}$, 1 ♂ 1 ♀; $E._{46}$, 2 ♀; $E._{52}$, 2 ♂ 1 ♀. Lm of carapace ♂, 15 mm. Lm of carapace ♀, 13 mm. Two of the ♀, ovigerous, with approximately 700 eggs. Collected from the Mediolittoral and Infralittoral zones, at a depth of 0.5-10 m, from a bottom consisting of pebbles, sand and a little mud, with abundant vegetation. The salinity of the water in all the stations except $E._{52}$ was low.

Greece: The only previously known report of this species in connection with Greece placed it by the Island of Sapientza and the cape of Tainaro in the Peloponnesus coasts (Guerin 1832), but it has been also reported in the Turkish coasts (Geldiay & Kocatas 1968b, 1972, etc.).

**Alpheus glaber** (Olivi, 1792)

*Alpheus ruber*, Heller, 1863, p. 274, pl. 9 fig. 17. - Pesta, 1918, p. 91, fig. 30.

*Alpheus glaber*, Zariquiey Alvarez, 1968, p. 147-148, fig. 59b.

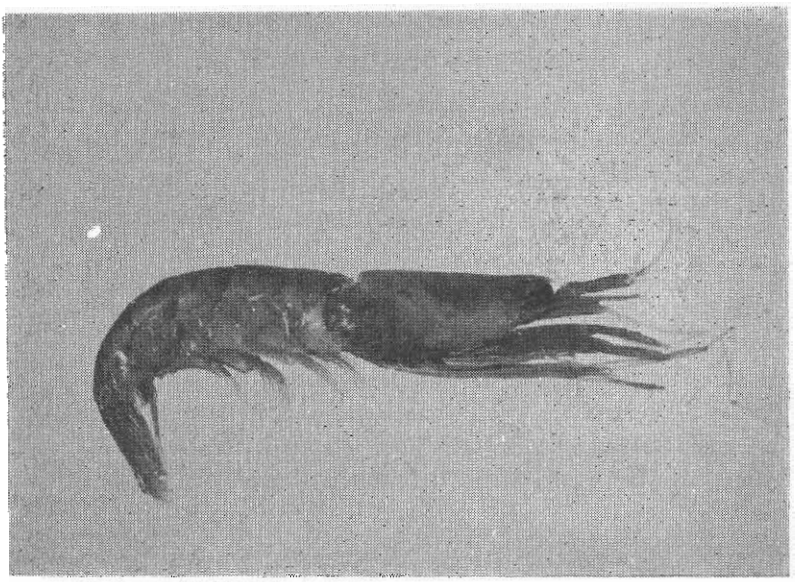
Material: $M._{57}$, 1 ♂1♀; $S.E._{77}$, 2 ♂ ; $S.E._{78}$, 2 ♂ 3 ♀; $N.E._{79}$, 1 ♂;$N.E._{80}$, 2 ♂ 1 ♀; $N.E._{81}$, 2 ♂; $N.E._{82}$, 1 ♂ 2 ♀. Lm of carapace ♂, 18 mm. Lm of carapace ♀, 19 mm. Collected from the Infralittoral and the Circalittoral zones, at a depth of 16-18 m, from a mud bottom.

Greece: North Aegean, 40°02′ N 25°55′ E and 38°49′ N 25°09′ E; Between Corinth and Aegina, 37°52′ N 23°09′ E and 37°51′ N 23°14′ E; West of Crete, 35°50′ N 21°30′ E (Stephensen 1923). Near Samos, 37°37′ N 26°58′ E (Holthuis & Gottlieb 1958). Near Kalamata 36° 59′30″ N 22°06′30″ E, «Calypso» St. 728; Gulf of Patra, 38°19′10″ N 21°42′30″ E & 38°20′35″ N 21°41′ E, «Calypso» st. 851 and 852 (Peres & Picard 1958). Aegean Sea (Makkavieva 1963). West Saronikos Gulf (Vamvakas 1970, 1971). Gulf of Thessaloniki (Thermaikos) (Koukouras 1972).

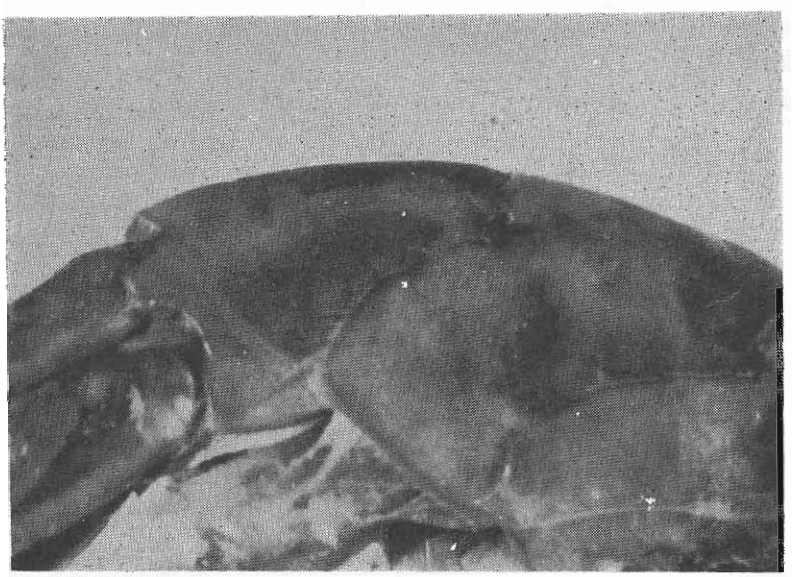
**PROCESSIDAE**

**Processa mediterranea** *(fig. 1a, b)*

*Processa mediterranea*, Nouvel & Holthuis, 1957, p. 2, 5, 6, 10, 41, fig.



*a*



*b*

*Fig. 1. Processa mediterranea: a, A specimen from the st. N.E.*$_{79}$*; L 51 mm. b, Posterior part of the body in lateral view*

205-220. - Zariquiey Alvarez, 1968, p. 158-159, fig. 67j-l.

Material: N.E.$_{79}$, 1 ♂ 2 ♀. L of carapace ♂, 24 mm. Lm of carapace ♀, 21 mm. Collected from the Circalittoral zone, at a depth of 80 m, from a mud bottom.

Greece: This is the first time that this species had been recorded in Greece, and as far as we know, it has not been reported anywhere in East Mediterranean either.

**Processa canaliculata** Leach, 1815

*Processa canaliculata*, Nouvel & Holthuis, 1957, p. 3-7, 10, 33, fig. 149-173. - Zariquiey Alvarez, 1968, p. 158, fig. 67e,f.

Material: S.E.$_{77}$, 1 ♀. L of carapace, 15 mm. Collected from the Circalittoral zone, at a depth of 60 m, from a mud bottom.

Greece: Koroni in the gulf of Messinia, 36°46′15″ N 21°59′20″ E, «Calypso» st. 725 (Peres & Picard 1958). Northwest of Heraklion (Crete), 35°21′24″ N 25°06′30″ E (Holthuis & Gottlieb 1958). Aegean Sea (Vamvakas 1970).

**PALAEMONIDAE**

**Palaemon adspersus** Ratbke, 1837

*Leander adspersus*, Zariquiey Cenarro, 1942, p. 257, fig. 1.
*Leander adspersus fabricii*, Zariquiey Cenarro, 1942, p. 258, fig. 2-3.
*Palaemon adspersus*, Holthuis, 1961, p. 11.

Material: E.$_{17}$, 1 ♂ 1 ♀; E.$_{18}$, 1 ♂ 2 ♀; E.$_{20}$, 1 ♂ 3 ♀; E.$_{22}$, 2 ♂ 3 ♀; E.$_{30}$, 4 ♂ 3 ♀; E.$_{40}$, 3 ♂ 2 ♀; E.$_{55}$, 1 ♂ 3 ♀. Lm of carapace ♂, 24 mm. Lm of carapace ♀, 22 mm. Three of the ♀ ovigerous with a maximum number of eggs approximately 700. Collected from the Mediolittoral zone, at a depth of 0.1-0.3 m, from a bottom consisting of small pebbles, and a little sand and mud. The water in the station E.$_{55}$ presents a low salinity.

Greece: Porto Lagos, Thraki (Holthuis 1961). Gulf of Thessaloniki (Georgiadis & Georgiadis 1974).

**Palaemon (Palaeander) elegans** Rathke, 1837

*Pelaemon squilla*, Guérin, 1832, p. 43. - Heller, 1863, p. 267 (non *Cancer squilla L.*, 1758).
*Leander squilla elegans*, Pesta, 1918, p. 113, fig. 36-37. - Zariquiey Cenarro, 1942, p. 291.
*Palaemon (Palaeander) elegans*, Zariquiey Alvarez, 1968, p. 169, fig. 72a.

Material: Specimens were collected from stations E.$_{1}$ to E.$_{34}$, E.$_{39}$ to

$E._{44}$, $E._{47}$, $E._{49}$, $E._{50}$, $E._{56}$, $F._{58}$, $F._{60}$, $V._{66}$, $V._{69}$ and $A._{72}$ to $A_{76}$; 69 ♂ and 127 ♀, in total. Lm of carapace ♂, 16 mm. Lm of carapace ♀, 15 mm. 18 among the ♀ ovigerous with a maximum number of eggs of approximately 800. The above were collected from the Mediolittoral and Infralittoral zones, at a depth of 0.05-1 m, from a bottom consisting of small pebbles and sand with a little mud. The salinity of the water in a number of the stations was low.

Greece: Coasts of Peloponnesus (Guerin 1832). Phaleron, Saronikos Gulf (Athanassopoulos 1917, 1921). Rhodes; Astypalaea; Syme; Kos; Carpathos (Santucci 1928). Rhodes (Tortonese 1947). Porto Lagos, Thraki (Holthuis 1961). Thermaikos and Evvoia Gulfs (Koukouras 1972).


*Map showing the sampling stations of the Evvoia coast and Evvoia gulf*

**Pontonia pinnophylax** (Ott , 1821)

*Pontonia custos*, Guérin, 1832, p. 36-39, pl. xxxvii fig. 1. - Pesta, 1918, p. 128, fig. 43.

*Pontonia tyrrhena*, Heller, 1863, p. 251, pl. 8 fig. 10-11.

*Pontonia pinnophylax*, Zariquiey Alvarez, 1968, p. 174, fig. 2c, 6c, 8c, 11b, 12d, 15b, 73a,b, 74.

Material: $E._{23}$, 1 ♀; $E._{42}$, 2 ♂. ♀ was found to contain approximately 1, 300 eggs. Lm of carapace ♂, 12 mm. L of carapace ♀, 13 mm. All of the above were collected within *Pinna sp.*, at a depth of 2-4 m.

Greece: Island of Sapienza (Messinia) (GUERIN 1832). Rhodes (SANTUCCI 1928). Islet of Nata (near Syros), «Calypso» St. 807 (PERES & PICARD 1958). Aegean Sea (HOLTHUIS & GOTTLIEB 1958). Island of Milos (HOLTHUIS 1961).

**CRANGONIDAE**

**Pontocaris cataphracta** (Olivi, 1792)

*Egeon loricatus*, Guérin, 1832, p. 33.

*Crangon cataphractus*, Heller, 1863, p. 230, pl. 7 fig. 12-15.

*Aegeon cataphractus*, Pesta, 1918, p. 157, fig. 52.

*Pontocaris cataphracta*, Holthuis & Gottlieb, 1958, p. 53. - Zariquiey Alvarez, 1968, p. 188, fig. 79.

Material: $S.E._{78}$, 1 ♂; $N.E._{82}$, 2 ♀. L of carapace ♂, 12 mm. Lm of carapace ♀, 11 mm. One ovigerous with approximately 1,300 eggs. Collected from the Infralittoral zone, at a depth of 30 m, from a bottom consisting mainly of mud.

Greece: Coasts of Peloponnesus (GUERIN 1832). Gulf of Thessaloniki (Thermaikos) (KOUKOURAS 1972).

**Philocheras echinulatus** (Sars, 1861) *(fig. 2)*

*Pontophilus echinulatus*, Balss, 1926, p. 375-376.

*Philocheras echinulatus*, Zariquiey Alvarez, 1968, p. 194, fig. 82 a-c.

Material: $S.E._{77}$, 7 ♂ 10 ♀; $S.E._{78}$, 6 ♂ 5 ♀; $N.E._{79}$, 6 ♂ 10 ♀; $N.E._{80}$, 6 ♂ 9 ♀; $N.E._{81}$, 8 ♂ 7 ♀. Five of the ♀, ovigerous with a maximum number of eggs approximately 500. Lm of carapace ♂, 10 mm. Lm of carapace ♀, 15 mm. Collected from the Circalittoral zone, at a depth of 80-150 m, from a bottom consisting mainly of mud.

Greece: The species in question has never been recorded in Greece, and to the best of our knowledge, it has not been known to exist in any other part of East Mediterranean either. The records we do know-about

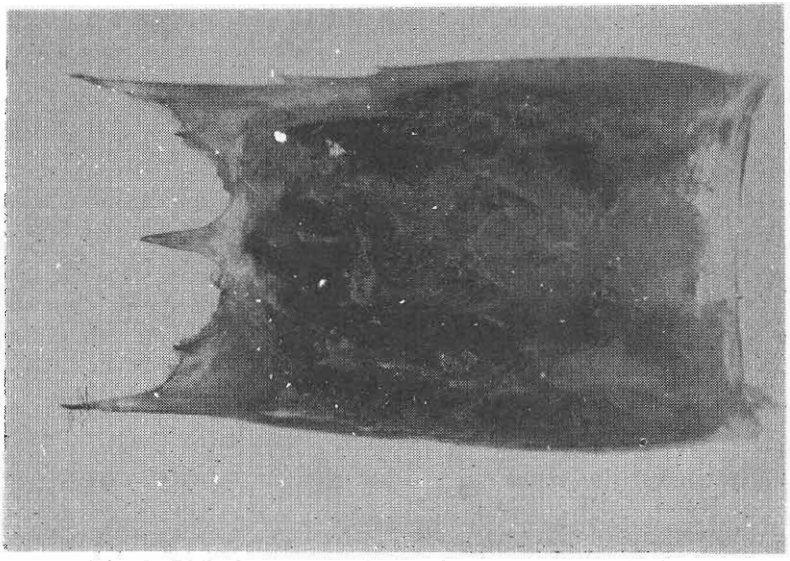


*Fig. 2. Philocheras echinulatus: Carapace in dorsal view of a specimen from the st. S.E.$_{78}$; L 29 mm*

in connection with the Mediterranean-mention the species to be found in the Gulf of Napoli (Balss 1926), in the Mediterranean coasts of Spain and Spanish Marocco, and in the Adriatic (Zariquiey Alvarez 1968, Bombace & Froglia 1973).

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ΠΕΡΙΛΗΨΙΣ

# ΒΕΝΘΙΚΗ ΠΑΝΙΣ ΤΩΝ ΑΚΤΩΝ ΤΗΣ ΕΥΒΟΙΑΣ ΚΑΙ ΤΟΥ ΕΥΒΟΪΚΟΥ ΚΟΛΠΟΥ

## III. NATANTIA (CRUSTACEA, DECAPODA)

ὑπὸ

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'Εξετάζονται τὰ NATANTIA (Crustacea, Decapoda) τῆς βενθικῆς πανίδος τῶν ἀκτῶν τῆς Εὐβοίας καὶ τοῦ Εὐβοϊκοῦ κόλπου, ἐντὸς τῶν πλαισίων τῆς ἐρεύνης τὴν ὁποίαν διενεργεῖ τὸ 'Εργαστήριον Ζωολογίας τοῦ Πανεπιστημίου Θεσσαλονίκης ἀπὸ τοῦ ἔτους 1970. 'Εκ τῶν 82 ἐν συνόλῳ γενομένων σταθμῶν, ἁλιεύθησαν 232 ἄτομα, ἀνήκοντα εἰς 24 εἴδη. Πέντε ἐκ τῶν εἰδῶν τούτων ἦσαν πρότερον ἄγνωστα διὰ τὴν πανίδα τῆς 'Ελλάδος, διὰ δύο δὲ ἐξ αὐτῶν, ἤτοι τῶν: Processa mediterranea (Parisi) καὶ Philocheras echinulatus (Sars), δὲν γνωρίζωμεν ἄλλας ἀναφορὰς διὰ τὴν 'Ανατολικὴν Μεσόγειον. "Εν σημαντικὸν μέρος ἐκ τῶν ἀνευρεθέντων εἰδῶν ἦσαν πολὺ ὀλίγον γνωστὰ ὡς στοιχεῖα τῆς πανίδος τῆς 'Ελλάδος, ὡς συνάγεται ἐκ τῆς λεπτομεροῦς παραθέσεως ὅλων τῶν περιοχῶν ποὺ κατὰ καιροὺς ἔχουν εὑρεθῆ τὰ ἐν λόγῳ εἴδη ἐντὸς τοῦ 'Ελλαδικοῦ χώρου. Τὴν παρουσίασιν ἑκάστου εἴδους συνοδεύουν οἰκολογικαὶ τιναὶ καὶ βιολογικαὶ πληροφορίαι.