

## The distribution of Chitons (Polyplacophora) in Greece

Hermann L. Strack

Nobelstraat 101b, 3039 SL Rotterdam, The Netherlands

KEY WORDS : Polyplacophora, distribution, Greece.

MOTS CLEFS : Polyplacophores, distribution, Grèce.

RESUME : L'auteur a étudié la distribution géographique des Chitons en Grèce. Douze espèces ont été trouvées dont deux nouvelles pour la faune grecque; *Leptochiton scabridus* (Jeffreys, 1880) et *Lepidochitona monterosatoi* Kaas & Van Belle, 1981. L'abondance et la distribution des espèces en Grèce, ainsi que la distribution des chitons dans la Méditerranée orientale, est commentée.

### INTRODUCTION

Greece has one of the most extensive coastlines of Europe (about 15.000 km in all); its main part is rocky and is a very suitable habitat for chitons. Although an abundant chiton fauna is expected to occur, very little research has been done in this area. Consequently the knowledge on the Greek chiton fauna is very poor.

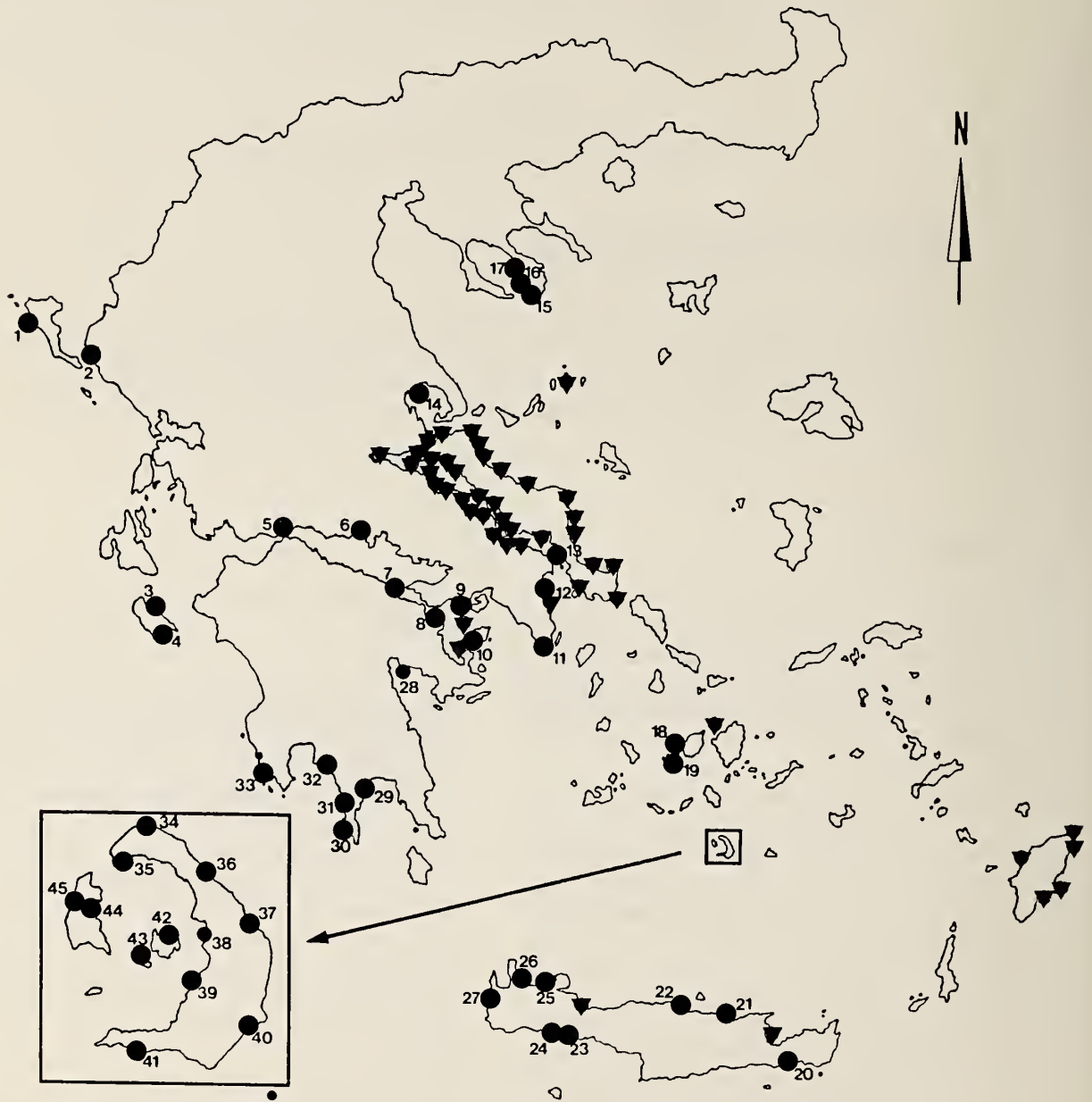
DESHAYES (1832) was the first to mention chitons from Greece. He reported three species from the Peloponissos (or Peloponnesus), one of which is a Leptochitonoid species which cannot be attributed with certainty to any member of the Leptochitonidae living in Greece. Later in 1844, FORBES, who searched the Aegean waters, added several species. So far there is only one paper (KATTOULAS et al., 1973) exclusively on Greek chitons, but is restricted to the coasts of Evia (or Evvoia) and the Evia Gulf. In my opinion the sampling methods of KATTOULAS et al. are not very accurate. One of their sampling stations (no. E.30 = Panagia, near Almiropotamos, Evia) was resampled by me (station no. 13) during a three days visit in 1986. At this locality, KATTOULAS et al. found two chiton species, whereas my research revealed the existence of nine species. In almost all other stations they found only one or two chiton species. My experience is that there are at least three

species to be found in most localities only by brief sampling.

The nucleus of this publication is formed by the samples I took at 32 stations in the years 1983, 1986 and 1987. In total, about 1500 specimens of chitons were collected (all stored in my private collection). In addition, I have included and studied about 300 other specimens found by several collectors. Altogether, 12 species were found, two of which are recorded from Greece for the first time. Stations 21 and 38 were only very briefly sampled, so it is not unlikely that additional species might be found when these localities are examined more closely. This also applies to all localities (except for stations 18 and 19) sampled by the other collectors acknowledged in this paper.

Except for a few specimens dredged by fishermen, all sampling was restricted to the littoral zone (from high tide level up to a depth of 5 m).

Special attention was paid to the Island of Thira (= Santorini) with the adjacent islands Thirassia, Nea Kameni and Palea Kameni. These were thoroughly sampled to obtain a better understanding of the distribution of chitons in a restricted area.



Map 1. Greece with Thira enlarged in the left bottom corner. Survey of all localities shown on the maps. Black circles indicate localities studied by the author; triangles are literature records.

To amplify my information on the studied chiton material, records from literature are given with each species. These are also shown on the maps, but only when the exact locality was known.

Knowledge about the distribution of chitons in eastern Greece remains insufficient. There are a few records from Rhodos, but nothing is known from other large islands like Thasos, Limnos, Lesvos, Khios and Samos.

#### COLLECTING STATIONS. (map 1)

1. Kerkira, Georgis Pagon (near Afionas), 2/5.VII.1983, H.L. Strack leg.
2. Thesprotia, Igoumenitsa, 28.VIII.1982, J.P. Buis leg.
3. Zakynthos, Alikes, 30.VII.1977, J.W. Biekart leg.
4. Zakynthos, Limni Keriou, 27.VII.1977, J.W. Biekart leg.
5. Etolia, 2 km E of Andirio, 19.VIII.1986 & VII.1987, H.L. Strack leg.
6. Fokida, Itea, 4.VII.1986 & 21.VIII/12.IX.1986, H.L. Strack leg.
7. Peloponissos, 5 km W of Korinthos, 8.VII.1983, H.L. Strack leg.
8. Peloponissos, Almiri, 3.VIII.1976, P. Hoogerwerf leg.
9. Atiki, Pahi (near Megara), 16.VII.1977, J.W. Biekart leg.
10. Egina, Moni, 1-2.IX.1987, H.L. Strack leg.
11. Atiki, Sounio, 5.IX.1986, H.L. Strack leg.
12. Atiki, Rafina, 22-23.VI.1986, H.L. Strack leg.
13. Evia, Panagia (near Almiropotamos), 18/20.VI.1986, H.L. Strack leg.
14. Thessalia, 2 km S of Volos, 27.VII.1976, P. Hoogerwerf leg.
15. Halkidiki, Koufos, 9.VIII.1976, P. Hoogerwerf leg.
16. Halkidiki, between Koufos and Neos Marmaras, 8.VIII.1976 P. Hoogerwerf leg.
17. Halkidiki, Neos Marmaras, 8.VIII.1976, P. Hoogerwerf leg.
18. Andiparos, Andiparos, 10/15.VIII.1987, J.P. Buis leg.
19. Andiparos, Agios Georgios, 10/25.VIII.1987, J.P. Buis leg.
20. Kriti, Koutsouras, 4.IV.1981, J.W. Biekart leg.
21. Kriti, Limani Hersonissou, 9.X.1985, J. de Kubber leg.
22. Kriti, Pantanassa, 1.VIII.1987, H.L. Strack leg.
23. Kriti, Sfakia, 20.VIII.1987, H.L. Strack leg.
24. Kriti, Loutro, 10.VII.1986 & 18.VI.1987, H.L. Strack leg.
25. Kriti, Hania, 1/3.VI.1986 & 5/VI.1987, H.L. Strack leg.
26. Kriti, Afrata, 26.V.1987, H.L. Strack leg.
27. Kriti, Sfinarion, 15.VI.1987, H.L. Strack leg.
28. Peloponissos, Tolo, 24.V.1986 & 6.IX.1986, H.L. Strack leg.
29. Peloponissos, Githio, 17.V.1987 & 19.VII.1987, H.L. Strack leg.
30. Peloponissos, Gerolimenas, 26.V.1986, H.L. Strack leg.
31. Peloponissos, Pirgos Dirou, 8.VI.1987, H.L. Strack leg.
32. Peloponissos, Kardamili, VII.1987, H.L. Strack leg.
33. Peloponissos, Methoni, 30.VI.1986 & 10.VIII.1987, H.L. Strack leg.
34. Thira, Mavropetra, 23.VI.1987, H.L. Strack leg.
35. Thira, Ia, 22.VI.1987, H.L. Strack leg.
36. Thira, near Analipsis, 13.VII.1987, H.L. Strack leg.
37. Thira, near Katsekies, 1.VI.1987, H.L. Strack leg.
38. Thira, Thira, 3.VIII.1987, H.L. Strack leg.
39. Thira, Ormos Athinou, 3.VIII.1987, H.L. Strack leg.
40. Thira, Perissa, 18.VI.1987, H.L. Strack leg.
41. Thira, Akrotiri, 2.IX.1986, H.L. Strack leg.
42. Thira, Nea Kameni, 22.VI.1987, H.L. Strack leg.
43. Thira, Palea Kameni, 22.VI.1987, H.L. Strack leg.
44. Thira, Thirassia, Manolas, 1.IX.1986, H.L. Strack leg.
45. Thira, Thirassia, Potamos, 21.IX.1987, H.L. Strack leg.

#### SYSTEMATICS.

Under the heading "material", the first number refers to the locality (station number), the second (between brackets) refers to the number of specimens found in the locality.



Map 2. *Lepidopleurus cajetanus* (Poli, 1791). Black circles indicate localities studied by the author; triangles are literature records.



Map 3. *Leptochiton scabridus* (Jeffreys, 1880). Black circles indicate localities studied by the author.



Map 4. *Leptochiton bedullii* Dell'Angelo & Palazzi, 1986. Black circles indicate localities studied by the author; triangles are literature records.



Map 5. *Callochiton septemvalvis euplaeae* (O.G.Costa, 1829). Black circles indicate localities studied by the author; triangles are literature records.



Map 6. *Lepidochitona cinerea* (Linnaeus, 1767). Black circles indicate localities studied by the author; triangles are literature records.



Map 7. *Lepidochitona corrugata* (Reeve, 1848). Black circles indicate localities studied by the author; triangles are literature records.



Map 8. *Lepidochitona monterosatoi* Kaas & Van Belle, 1981. Black circles indicate localities studied by the author.



Map 9. *Ischnochiton rissoi* (Payraudeau, 1826). Black circles indicate localities studied by the author; triangles are literature records.



Map 10. *Chiton (Rhyssoplax) olivaceus* Spengler, 1797. Black circles indicate localities studied by the author; open circles are literature records.



Map 11. *Chiton (Rhyssoplax) corallinus* (Risso, 1826). Black circles indicate localities studied by the author; triangles are literature records.





Map 12. *Acanthochitona fascicularis* (Linnaeus, 1767). Black circles indicate localities studied by the author; triangles are literature records.



Map 13. *Acanthochitona crinita* (Pennant, 1777). Black circles indicate localities studied by the author; triangles are literature records.

*Lepidopleurus cajetanus* (Poli, 1791) (map 2).

FORBES, 1844: 135, 156; KATTOULAS et al., 1973: 21; BARASH & DANIN, 1977: 5; KAAS & VAN BELLE, 1985a: map 1.

Material: 4(1)-5(2)-10(2)-11(29)-12(4)-13(17)-15(1)-16(2)-18(18)-19(6)-22(1)-24(1)-27(8)-28(3)-31(5)-33(8)-35(1)-44(7).

*L. cajetanus* is not rare in Greece. It lives generally in depths ranging from one to four meters, with the exception of station 33 where it can be found in extreme shallow water (0.2-0.4 m). They are mostly found under stones embedded in sand, the underside colours of these stones matching those of the animals (yellow or whitish in most cases).

*Leptochiton scabridus* (Jeffreys, 1880) (map 3).

Material: 12(1)-44(1).

Only two specimens (4 and 4.2 mm in length) of this species were found at a depth of 1.5-2 meters. It occurs under stones embedded in sand, together with *L. cajetanus* and/or *Leptochiton bedullii*. It seems to be rare and has a very patchy distribution pattern throughout Europe and West Africa. As this is a small and inconspicuous species, it can be easily overlooked by fieldworkers.

This record of *L. scabridus* is the first for Greece and extends the known range of distribution considerably into the eastern Mediterranean Sea.

*Leptochiton bedullii* Dell'Angelo & Palazzi, 1986 (map 4).

DELL'ANGELO & PALAZZI, 1986: 7.

Material: 12(2)-13(6)-18(2).

*L. bedullii* was described only recently and consequently little is known about this species. I found it together with *L. cajetanus* and *L. scabridus*, sharing the same habitat. *L. bedullii* is easily recognizable in the field and can then be separated from *L. cajetanus* by a darker coloured and relatively broader girdle, while the valves are less wide. Furthermore, it is smaller and lacks the concentric ridges which are so typical for *L. cajetanus*. Most specimens showed a red coloured foot when alive, similar tissue colouring was also observed in *L. cajetanus*.

The three lots were found at depths varying between one and four meters, under rough, somewhat yellow coloured stones partly buried in sand. The specimens of station 12 vary in length from 7.5 to 10.4 mm, those of station 13 from 3.7 to 8 mm and those of station 18 from 7.5 to 8.1 mm.

Up to now only one loose valve was collected in Kriti (= Crete). The above material includes the first live collected specimens from Greece. Although I tried to collect this species in other localities, no more specimens were found. It seems to be a scarce species with a local occurrence, probably caused by specialized habitat preferences.

*Leptochiton (Parachiton) africanus* (Nierstrasz, 1906).

KAAS & VAN BELLE, 1987: 27-28.

This rare species was not observed during my research. So far only one specimen is known from the isle of Yioura in the Aegean Sea.

*Callochiton septemvalvis euplaeae* (O.G. Costa, 1829) (map 5).

FORBES, 1844: 135, 162, 164-165, 167, 181, 183; VAMVAKAS, 1971: 247, 260; KATTOULAS et al., 1973: 22-24; KAAS & VAN BELLE, 1985b: map 3.

Material: 4(1)-6(9)-13(1)-18(2)-25(1)-29(2)-30(1)-33(1)-40(5)-42(1)-44(2).

A species that is regularly found in small numbers in shallow water (1-2m), but which becomes more common in deeper water. The specimens of stations 6, 30 & 40 were dredged by coastal fishermen in depths ranging from 20 to 100 meters. This species is generally associated with red encrusting algae.

KATTOULAS et al. (1973) described *Callochiton achatinus euboecus* from Panagia (near Almiropotamos), Evia, as a new distinct subspecies of *C. achatinus* (= *C. septemvalvis*). I collected a topotype and compared it with specimens of *A. septemvalvis euplaeae* from the western Mediterranean. No important differences were found to exist between the two nominal taxa. I therefore support the conclusion of KAAS (1977: 74) that *C. achatinus euboecus* is a junior synonym of *C. septemvalvis euplaeae*.

*Lepidochitona cinerea* (Linnaeus, 1767) (map 6).

VAN BELLE, 1978: pl. 4.

Material: 10(1)-12(1)-13(1)-33(2)-34(31)-36(1).

*L. cinerea* is rare in Greece except for one locality (station 34) where I found it to be the most common chiton. This species generally lives in very shallow waters (0.2 to 1.5 m), but was occasionally found at depths up to 3 meters.

*Lepidochitona corrugata* (Reeve, 1848) (map 7).

FORBES, 1844: 135, 158; BARASH & DANIN, 1977:10; VAN BELLE, 1980: pl.18.

Material: 1(6)-2(12)-10(29)-12(6)-13(1)-20(10)-22(3)-25(34)-26(5)-27(12)-28(18)-29(22)-30(27)-39(2)-40(20).

The *L. corrugata* recorded by FORBES (under the name *Chiton polii* Philippi, 1836) probably refer to *Lepidochitona monterosatoi* Kaas & Van Belle, 1980. According to FORBES (1844: 135), his specimens were found in about 4 fathoms (about 7.3 m), a depth that is not exceptional for *L.monterosatoi* but is rather extraordinary for *L. corrugata* as this is a (solid)rockdwelling species living in the intertidal zone. Rarely specimens can be found under stones in very shallow water. They prefer sedimentary rocks with many encroached small holes or crevices.

*Lepidochitona monterosatoi* Kaas & Van Belle, 1981 (map 8).

Material: 44(2).

Another rare species of which only two specimens were collected under stones at a depth of 1.5 to 2 meters. These specimens measured 4.7 and 8.2 mm in length. As long as FORBES's record of *C. polii* (which could be this species, see discussion under *L. corrugata*) is not verified, I regard this species as new to the Greek fauna.

*Ischnochiton rissoi* (Payraudeau, 1826) (map 9).

FORBES, 1844: 135, 158, 183; KATTOULAS et al.,1973: 22; BARASH & DANIN, 1977: 8; VAN BELLE, 1979: pl.13.

Material: 1(2)-3(1)-5(4)-6(1)-7(2)-9(2)-10(18)-11(3)-12(41)-13(11)-16(1)-18(39)-19(5)-22(1)-24(1)-25(11)-26(1)-27(31)-28(5)-29(4)-31(2)-33(12)-40(1)-41(3)-44(8).

A common species living under stones mostly well embedded in sand. Bathymetrical range observed during my research: 0.2 to 5 meters.

*Chiton (Rhyssoplax) olivaceus* Spengler, 1797 (map 10).

DESHAYES, 1833: 132; FORBES, 1844: 135, 155-156; ISSEL, 1878: 32; BISACCHI, 1928: 369; TONENESE, 1947: 16; KATTOULAS et al., 1973: 20-21; BARASH & DANIN, 1977: 11-12; VAN BELLE, 1978: pl.8.

Material: 1(9)-4(10)-5(18)-6(27)-7(40)-8(4)-9(10)-10(43)-11(32)-12(51)-13(109)-14(4)-15(7)-16(2)-18(103)-19(6)-21(10)-22(8)-23(3)-24(12)-25(125)-26(20)-27(31)-28(19)-29(32)-30(6)-31(27)-32(3)-33(70)-34(9)-35(9)-36(14)-37(6)-38(10)-39(15)-40(27)-41(13)-42(4)-43(2)-44(37)-45(24).

The most common chiton in Greece. Found under stones at depths ranging from 0.2 to 5 meters.

*Chiton (Rhyssoplax) corallinus* (Risso, 1826) (map 11).

FORBES, 1844: 135, 162, 164, 183, 188; VAMVAKAS, 1971: 247, 261.

Material: 30(3)-40(3).

A sublittoral species that was not encountered during my fieldwork in shallow water (up to 5 m). Depths of at least 20 meters are preferred by this species, consequently all studied specimens were dredged by coastal fishermen at depths ranging from 20 to 100 meters. They are mostly found together with *C. septemvalvis euplaeae* on stones with red encrusting algae.

FORBES very probably described it as a new species under the name *Chiton freelandi* and reported it from Caria, Delos and Crete. In my opinion, *C. freelandi* must be regarded as a junior synonym of *C. corallinus*, although examination of the type material is needed before a final conclusion can be drawn.

*Acanthochitona fascicularis* (Linnaeus, 1767) (map 12).

DESHAYES, 1833: 132; FORBES, 1844: 135, 156, 183; ISSEL, 1878: 32; BELLOC, 1948: ?; VAMVAKAS, 1971: 246, 260; KATTOULAS et al., 1973: 19-20.

Material: 1(2)-5(3)-6(9)-7(4)-10(15)-11(6)-12(44)-13(3)-15(6)-17(1)-18(20)-19(8)-25(8)-27(2)-28(25)-29(1)-31(1)-33(6)-44(5).

During my research, *A. fascicularis* was found under stones in 0.2-4 m water.

*Acanthochitona crinita* (Pennant, 1777) (map 13).

KATTOULAS et al., 1973: 18-19.

Material: 1(1)-7(1)-13(1)-24(1)-34(6).

*A. crinita* appears to be rather rare in Greece. It is always found in very shallow water, normally in 0.3-0.5 m depth, occasionally up to 1 meter. No specimens were observed intertidally on (solid)rocks, although this is a common habitat for Atlantic populations of *A. crinita*.

#### DISCUSSION.

*C. olivaceus* is by far the most common chiton in Greece. More than 50% of all studied specimens belong to this species (see table 1). It can easily adapt itself to different environments and is therefore abundant in almost all studied localities (41 out of 45 stations). It is even very probable that *C. olivaceus* is present in all studied localities, as the four stations (2, 3, 17 & 20) where it was not found, were not sampled thoroughly enough. *C. olivaceus* seems to occur abundantly in the whole eastern Mediterranean. At least, it is confirmed by BARASH & DANIN (1977: 20) for Israel, Cyprus and Rhodes and by I. TUMTURK (in litt.) for Turkey (not including the Sea of Marmara and the Black Sea).

In some localities, other species are abundant too, or even more common than *C. olivaceus*, as in the case of *A. fascicularis* in st. 12 & 13, *I. rissoi* in st. 13 & 19, *L. cajetanus* in st. 18, *L. cinerea* in st. 34 and *L. corrugata* in several stations.

Two mediterranean shallow water species: *Chiton (Rhyssoplax) phaseolinus* Di Monterosato, 1879 and *Leptochiton algosirensis* (Capellini, 1859), were not found in Greece and do not occur in other parts of the eastern Mediterranean. Very likely, this also applies to *Lepidochitona furtiva* (Di

Monterosato, 1879). KAAS and VAN BELLE informed me (in litt., see also KAAS & VAN BELLE, 1987: 30-31) about the recently discovered, remarkable habitat of *L. furtiva*. This species lives between the leaves, just above the roots of *Posidonia oceanica* (L.). All my efforts to find *L. furtiva* in Greece have failed, although many fresh *Posidonia* plants from different localities were examined. Apparently, the three species mentioned above cannot penetrate further into the eastern Mediterranean than Sicily-Tunisia.

All Mediterranean records of *Leptochiton cancelatus* (Sowerby, 1840) need further confirmation (DELL'ANGELO & PALAZZI, 1987: 10). This applies especially to the only known eastern Mediterranean record from Cyprus (DEMETROPOULAS, 1971:15).

No chitons are known with a strict eastern Mediterranean distribution pattern. Although species like *L. bedullii* and *L. monterosatoi* seem to have a primarily eastern and central distribution.

The situation on Thira (= Santorini) and its satellite islands is basically much the same as in the other studied localities in Greece. A striking difference however is the volcanic origin of the majority of the substrata. There is a relation between the abundance of chitons (and other molluscs) and the kind of rock on which they are living. The nature of the rocky substratum seems to be a very important abiotic factor, probably due to chemical composition and the morphology of the rock surface. This phenomenon was already reported by FORBES (1844: 153) who asserted that in Greece a remarkable negative influence was exercised by serpentine. HULL (1925: 9) observed the influence of rock composition on Australian chitons, and makes the following remark: "the sedimentary rocks favoured a profusion of both species and individuals, while the igneous rocks were very sparsely populated by these interesting multivalves". I also observed the negative influence of igneous rock on mollusc life (although basalt seems to be an exception). Sedimentary rock is likewise preferred by Greek chitons. As only very few remnants of the old limestone layers are present on the littoral of Thira (for instance the Profitis Ilias massif near Perissa), this results in a poor chiton fauna.

| Species                                   | nr. of spec.<br>Thira | percent<br>Thira | nr.of stat.<br>Thira | nr. of spec.<br>Greece | percent<br>Greece | nr. of stat.<br>Greece |
|---|-----------------------|------------------|----------------------|------------------------|-------------------|------------------------|
| <i>L. cajetanus</i>                       | 8                     | 3                | 2                    | 116                    | 6.4               | 18                     |
| <i>L. scabridus</i>                       | 1                     | 0.4              | 1                    | 2                      | 0.1               | 2                      |
| <i>L. bedullii</i>                        | -                     | -                | -                    | 10                     | 0.6               | 3                      |
| <i>C. s. euplaeae</i>                     | 8                     | 3                | 3                    | 26                     | 1.4               | 11                     |
| <i>L. cinerea</i>                         | 32                    | 11.9             | 2                    | 37                     | 2                 | 6                      |
| <i>L. corrugata</i>                       | 22                    | 8.2              | 2                    | 207                    | 11.5              | 15                     |
| <i>L. monterosatoi</i>                    | 2                     | 0.8              | 1                    | 2                      | 0.1               | 1                      |
| <i>I. rissoi</i>                          | 12                    | 4.5              | 3                    | 210                    | 11.6              | 25                     |
| <i>C. olivaceus</i>                       | 170                   | 63               | 12                   | 1011                   | 56                | 41                     |
| <i>C. corallinus</i>                      | 3                     | 1.1              | 1                    | 6                      | 0.3               | 2                      |
| <i>A. fascicularis</i>                    | 5                     | 1.9              | 1                    | 169                    | 9.4               | 19                     |
| <i>A. crinita</i>                         | 6                     | 2.2              | 1                    | 10                     | 0.6               | 5                      |
| total                                     | 269                   | 100              | 29                   | 1806                   | 100               | 147                    |
| number of different<br>localities studied |                       |                  | 12                   |                        |                   | 45                     |

Table 1. For each species, the total number of specimens that were found is given, as well as the percentage represented by these specimens and the number of stations in which these species were found, first for Thira and the adjacent islands and then for the entire country (including Thira)

Here again, we can see that *C. olivaceus* is an extremely adaptive animal, as some localities were "chiton deserts" except for small populations of *C. olivaceus*! Two sites however have an exceptionally interesting chiton fauna. In Mavropetra (st.34), in the north of the main island of Thira, two species: *L. cinerea* and *A. crinita*, which are rare in Greece, are found in reasonable numbers. But the richest chiton fauna can be found in Manolas (st.44) on the island Thirassia. Seven species were found here, of which one is only known from this locality and was not found in the rest of Greece. Why these two localities differ from other localities on these islands needs further explanation. At first sight, no major differences could be noticed between them.

Perissa should have an interesting chiton fauna as this is the only studied locality in Thira where sedimentary rock and stones are present. Nevertheless, no important differences could be found be-

tween this locality and the other localities, except that Perissa houses the only thriving population of *L. corrugata*. An explanation for this situation could be the very exposed position of this locality. This is not a problem for *L. corrugata* which is able to resist an important degree of surf force, but has a strong negative influence on other species.

The minimal depth in which species start to occur varies considerably between different localities. For instance, in a reasonable sheltered area like Methoni (st.33), most species can be found at a depth of 20-30 cm, while the same species are found in depths of at least 1.5 meters in a more exposed locality like Rafina (st.12). In my opinion, these differences of minimal settling depth between localities are primarily connected with surf force and the nature of the available substrata (small or large stones, whether or not embedded in sand).

### Acknowledgements

I wish to thank Mr. J.W. Biekart, Mr. J.P. Buis, Mr. P. Hoogerwerf, Mr. J. de Kubber and Mr. R.A. Van Belle for giving material and/or information on Greek chitons. Acknowledgements are also due to Mr. T. Schuurmans and Mr. G. van den Ende for critically reading the English text.

### REFERENCES.

- BARASH, A.I. & Z. DANIN, 1977 - Polyplacophora (Mollusca) from the Eastern Mediterranean. *J. Conch. Paris*, 114(1-2): 3-28.
- BELLOC, G., 1948 - Inventory of fishery resources of Greek waters. Appendix B (not seen).
- BISACCHI, I., 1928 - Ricerche faunistiche nelle Isole Italiane dell'Egeo. Molluschi marini. *Arch. Zool. Ital. Napoli*, 12: 369-378.
- DELL'ANGELO, B. & S. PALAZZI, 1986 - Considerazioni sulla Famiglia Leptochitonidae Dall, 1889 (Mollusca: Polyplacophora) con descrizione di due nuovi taxa. *Boll. malac. ital.*, 22(1-4): 1-36.
- DEMETROPOULOS, A., 1971 - Marine Molluscs of Cyprus. *Fish. Bull. Min. Agr. Nat. Res., Fisheries Dept., Rep. of Cyprus*, no. 3: 15, 18 (not seen).
- DESHAYES, M.G.P., 1833 - Expédition scientifique de Moree. Mollusques. Vol. 3(1): 81-203.
- FORBES, E., 1844 - Report on the Mollusca and Radiata of the Aegean Sea, and on their distribution, considered as bearing on geology. *Report 13th Meeting Brit. Assoc. Adv. Sci. London*, 13: 130-193.
- HULL, A.F.B., 1925 - A Naturalist in North Queensland. *Austr. Zool.*, 4(1): 9-16, pls 3-5.
- ISSEL, A., 1878 - Crociera del Violante comandato dal capitano-armatore Enrico d'Albertis durante l'anno 1876. Testacei. *Ann. Mus. Civ. Stor. Nat. Genova*, 11: 413-456.
- KAAS, P., 1978 - Notes on Loricata, 10. On the European Callochiton species. *Basteria*, 42(4-6): 73-75.
- KAAS, P. & R.A. VAN BELLE, 1985a - Monograph of Living Chitons (Mollusca: Polyplacophora). Vol. 1. E.J. Brill/Dr.W. Backhuys, Leiden, 240 pp.
- KAAS, P. & R.A. VAN BELLE, 1985b - Monograph of Living Chitons (Mollusca: Polyplacophora). Vol. 2. E.J. Brill/Dr.W. Backhuys, Leiden, 198 pp.
- KAAS, P. & R.A. VAN BELLE, 1987 - Monograph of Living Chitons (Mollusca: Polyplacophora). Vol. 3. E.J. Brill/Dr.W. Backhuys, Leiden, 302 pp.
- KATTOULAS, M., A. KOUKOURAS & P. ECONOMIDIS, 1973 - Benthic Fauna of the Evvoia Coast and Evvoia Gulf. II. Polyplacophora (Mollusca). *Sci. Ann. Fac. Phys. & Mathem., Univ. Thessaloniki*, 13(17): 17-27.
- TORTONESE, E., 1947 - Note intorno alla fauna e flora marine dell'Isola di Rodi (Mar Egeo). *Bollettino di pesca, piscicoltura e idrobiologia*, (N.S.)2(1): 13-20.
- VAMVAKAS, K.N.E., 1971 - A study of Marine soft Bottom Benthic Biocoenoses of Greek Waters (W. Saronic). *Hellenic oceanol. Limnol.* 10: 129-272 (in Greek).
- VAN BELLE, R.A., 1978a - De Europese Polyplacophora. Deel 4. *Gloria Maris*, 17(6): 21-24, 1 pl.
- VAN BELLE, R.A., 1978b - De Europese Polyplacophora. Deel 8. *Gloria Maris*, 17(11): 45-48, 1 pl.
- VAN BELLE, R.A., 1979 - De Europese Polyplacophora. Deel 13. *Gloria Maris*, 18(8): 79-82, 1 pl.
- VAN BELLE, R.A., 1980 - De Europese Polyplacophora. Deel 18. *Gloria Maris*, 19(5): 109-114, 1 pl.

