DISTRIBUTION OF CHTHAMALUS MONTAGUI (CRUSTACEA CIRRIPEDIA)

IN THE MEDITERRANEAN SEA

Giulio RELINI Istituto di Anatomia Comparata - Università di Genova - Italia

- Summary *Chthamalus montagui* has been collected in several mediterranean sites, but seems absent in eastern and southern zones of this sea.
- Résumé *Chthamalus montagui* a été récolté dans plusieures localités méditerranéennes, mais il semble être absent des côtes les plus orientales et meridionales du bassin.
- Riassunto *Chthamalus montagui* è stato rinvenuto in molte località mediterranee, ma sembra assente dalle coste più orientali e meridionali del bacino.

Since the initial report of *Chthamalus montagui* Southward in the lagoon of Venice (DANDO, SOUTHWARD & CRISP 1979) I have examined samples from various sites in Italy and the Mediterranean area in general, collected both by myself and by colleagues from other countries.

The family Chthamalidae is represented in the Mediterranean sea by four species: Pachylasma giganteum (Philippi), found only between 100 and 200 m depth near Messina, Euraphia depressa (Poli) (Chthamalus depressus) which occurs in the upper levels of the supralittoral zone (above MHWS), and Chthamalus montagui and Chthamalus stellatus (Poli) which occur generally in the middle and lower levels of the supralittoral zone and throughout the intertidal zone. Less commonly the latter two species are found sublittorally as, for example, in the intakes and artificial channels of Electric Power Stations; in this environment the shape is guite different, as in the hypobiotic form of *Euraphia depressa* (KENSLER et al. 1965). Chthamalus montagui often occurs mixed with E. depressa and C. stellatus, in proportions which differ from one locality to another. On the Atlantic coast, when the two Chthamalus species are both abundant at one site, C. montagui is always dominant between MHWS and MHWN, while C. stellatus is dominant at MTL and below (SOUTHWARD 1976). I am not able to confirm this vertical distribution pattern in the Mediterranean, having observed that C. stellatus may be abundant either in the upper zone or in the lower zone or both; on adjacent rocks C. montagui may be abundant or completely absent; I have found no correlation between the distribution of these species and exposure to waveaction or competition.

On the basis of the present records, *C. montagui* appears to be confined to the western and northern parts of the Mediterranean sea and to north Morocco (Tetuan, Cap Negro); it is very common near Barcelona and Marseille but very sparse on the Island of Majorca. Its distribution along the Italian coasts is very interesting because of the geographical position of Italy. The species is very common in the northern part of Italy and in the Ligurian Sea, where unfortunately in the past I overlooked it (RELINI 1979).

In the Tyrrhenian sea *C. montagui* becomes rare and sparse south of Naples; it is absent in Sardinia (except on the north coast) and in Sicily. Along the Adriatic sea it is common from Rijeka and Trieste to Bari, but very rare at S. Maria di Leuca; it seems to be absent from the Jonian sea. I have not found *C. montagui* in samples collected previously from Malta (La Valletta, St. Julian), Greece (Pyreus, Cap Sunion, Mykonos) or Turkey * (Antalya, Side). In addition SOUTHWARD (1976) has recorded only *C. stellatus* in samples from the Aegean Islands, Israel and the Black sea. I have presented my data on the distribution of *C. montagui* because, although they are incomplete, I would like to invite all the Colleagues of this species in the Mediterranean.

REFERENCES

- DANDO P. R., SOUTHWARD A. J. and CRISP D. J., 1979. Enzyme variation in Chthamalus stellatus and C. montagui (Crustacea Cirripedia): evidence for the presence of C. montagui in the Adriatic.
 J. mar. biol. Ass. U. K., 59, 307 320.
- KENSLER C. B., BHATNAGAR K. M. and CRISP D. J., 1965. Distribution and ecological variation of Chthamalus species in the Mediterranean area. Vie et Milieu, ser. B, 16 (1B), 271 - 294.
- RELINI G., 1979. Remarks on Cirripedes of the Ligurian sea. Rapp. Comm. inter. Médit., 25/26 (4), 131 - 132.
- SOUTHWARD A. J., 1976. On the taxonomic status and distribution of Chthamalus stellatus (Cirripedia) in the north-east Atlantic region: with a key to the common intertidal barnacles of Britain. J. mar. biol. Ass. U. K., 56, 1007 - 1028.

Samples and records of C. montagui will be welcome; please send to: Prof. Giulio RELINI Istituto di Anatomia Comparata dell'Università 16126 GENOVA - ITALIA

* During the Congress held in Cagliari Dr. A. KOKATAS has given me samples of Chthamalus from Smirne. All the individuals (about 60) are C. montagui.

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