

PRELIMINARY DATA ON INVERTEBRATES ASSOCIATED TO *CYSTOSEIRA* COMMUNITIES FROM THE MEDITERRANEAN SEA

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Abstract

The present paper aims to provide first information about invertebrates (bryozoans, serpulids, spirorbids, ostracods and foraminifers) associated to selected *Cystoseira* communities, from the Ciclopi Islands Marine Protected Area, also contributing knowledge on distribution patterns.

Keywords: *Bryozoa, Polychaeta, Foraminifera, Algae, Ionian Sea*

Knowledge on epibiont communities on *Cystoseira* are scarce (Campisi et al., 1973). First information on bryozoans, serpuloids, ostracods and foraminifers from shallow-water communities sampled in the frame of the CIMPA-BioChange Project (Biodiversity and spatio-temporal variations of *Cystoseira* communities of the Biocoenosis of the Infralittoral Algae from the Ciclopi Islands Marine Protected Area, Ionian Sea) is presented. Samples were collected in June 2015, in two sites (three stations each), few km N of Catania: Punta Aguzza (Acicastello), within the Ciclopi Islands MPA, S. Maria La Scala and S. Tecla (Acireale), outside the CIMPA. Communities in the *Cystoseira brachycarpa*, *C. sauvageauana* and *C. spinosa*, were sampled at 5, 9, and 25 m depth, respectively. Bryozoans are present with more than 50 species, consisting mostly of cheilostomes (41 species) and subordinate cyclostomes and ctenostomes. However, several cyclostome species (particularly *Crisia* spp. and *Patinella radiata*) are dominant, with a high number of colonies. Cheilostomes, instead, are represented by single or few colonies, except for *Aetea* spp., *Copidozoum tenuirostre* and some celleporiids. Among serpuloids, 20 species (14 serpulids and 6 spirorbids) have been detected. Spirorbids are greatly dominant in terms of specimens, mainly belonging to *Pileolaria* spp., *Janua* spp. and *Spirorbis cuneatus*. Serpulids are mostly represented by *Josephella marenzelleri* and *Pomatoceros triqueter*, followed by *Vermiliopsis straticeps* and *Serpula vermicularis*. Ostracods include some 25 species, that are all known from shallow-water vegetate bottoms. Species belonging to the genera *Xestoleberis* (especially *X. dispar*) and *Paradoxostoma* largely prevail. Foraminifers are represented by more than 30 species. Miliolids dominate (mostly with some *Quinqueloculina* species) followed by *Elphidium* representatives. Nearly all species were found on the algal thalli. Overall, invertebrate communities show low cover values. A general trend of increasing species diversity can be traced from the shallowest to the deepest communities. The number of specimens/colonies for each of the taxonomic group analysed appears to be related to the availability of suitable microhabitats and substrata created by the hosting algal species. Differences are also evident between the two sites, with samples collected within the CIMPA, characterised by a lower species diversity and specimen/colony abundance, in relation to those collected outside the MPA. Patterns of distribution were also evident for encrusting bryozoans, with some species restricted to, or preferentially colonising the basal or the top parts of the algal thalli. Adult serpuloid specimens were mostly localised on the axial thicker algal portions that provide a relatively firm substratum. Bryozoan colonies are invariably small but fertile, thus pointing to dominant r-strategy, as a special adaptation to the ephemeral substratum offered by the algae.

spirorbid *Pileolaria pseudomilitaris* on *H. scoparia*. Scale bar: 1mm. Sample CPA.1.Z26. F. The serpulids *Josephella marenzelleri* (left) and *Serpula concharum* (right). Scale bar: 5 mm. Sample SM.1.Z25.

References

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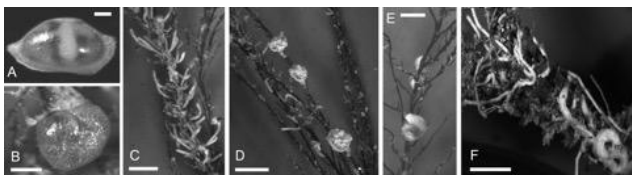


Fig. 1. A. The ostracod *Bairdia longevaginata*. Scale bar: 200 mm. Sample SM.1.S9. B. The foraminifer *Cibicides advenum*. Scale bar: 200 mm. Sample CPA.1.Z26. C. The bryozoan *Aetea anguina* on *Halopteris scoparia*. Scale bar: 1 mm. Sample ST.1.Z9. D. The bryozoan *Patinella radiata* on *H. scoparia*. Scale bar: 2 mm. Sample ST.1.Z9. E. The