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PROGRAM AND ABSTRACTS

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SUBTIDAL ALGAL COMMUNITIES AND THEIR ASSOCIATED MOLLUSCAN FAUNA IN SÃO VICENTE BAY (SÃO MIGUEL, AZORES)

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The subtidal communities of São Vicente bay (São Miguel, Azores) were surveyed in July 1997, under the project "Biodiversity of the archipelago of the Azores". Quantitative collections were made at two depth levels (10 and 30m depth) by scraping all the algae (and the associated fauna) inside a 2500 cm² quadrat into a fine mesh net bag. Laboratory techniques involved sieving and weighing the samples with posterior sorting of all the invertebrates larger than 1 mm. The algae and molluscs were sorted into species. The former were weighed on a top-pan balance and the molluscs were counted. Different algal communities were found at each depth level: the 10m community was dominated by *Dictyota dichotoma*, *Stypocaulon scoparia* and *Asparagopsis armata*, while *Zonaria tournefortii* with its epiphyte *Acrosorium* were dominant at 30m depth. Besides the overall dominance of *Bittium*, differences in the molluscan fauna were also observed. Multivariate analyses was conducted in order to identify the biological associations between the algae and the molluscs present in the samples.

ALGAL CHARACTERISED ROCKY-SHORE BIOTOPES IN THE AZORES AND THEIR AFFINITIES

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Rocky sea-shores in the Azores archipelago support locally distinct animal and plant characterised biotopes (habitats and their associated communities). Recent detailed studies on the marine flora in the archipelago has yielded further information on community structure allowing provisional definition of plant characterised biotopes. Although the Azores shares algal biotopes with the Atlantic coast of mainland Europe, intertidal and subtidal sea-shores in the archipelago mostly lack the functionally important 'leathery macrophyte' communities of fucoids and laminarians widespread in the north Atlantic (*Fucus spiralis* is sporadic in the Azores while *Laminaria ochroleuca* is known from only one location). Other large brown algae (*Cystoseira* spp., *Sargassum* spp.) characterise sheltered deep pool, lagoon or some subtidal biotopes. Intertidal biotopes often include a turf comprising a mixture of algal species (a feature more typical of other parts of Macronesia and Africa than northern Europe), or distinct vertically zoned communities of *Gelidium microdon*, *Corallina* spp., *Pterocladia capillacea*, *Asparagopsis armata*,