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**STRUCTURE AND ZONATION OF THE ALGAL
COMMUNITIES ON THE BAY OF SÃO VICENTE
(SÃO MIGUEL, AZORES)**

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An appraisal of the benthic marine algal communities of the bay of São Vicente (São Miguel island, Azores) was undertaken in July 1996 and July 1997 as part of the project "Biodiversidade no Arquipélago dos Açores".

A permanent transect was laid down across the intertidal and subtidal zones. Quadrats were sampled and the percentage cover of the algal populations was determined at pre-determined intervals along the transect from the upper littoral to deep sublittoral levels, down to 30m depth. Qualitative collections were made over all the transect area. The relative importance of each species was determined using a DAFOR scale (D: dominant; A: abundant; F: frequent; O: occasional; R: rare).

The transect revealed the occurrence of distinct and well established zones on the intertidal, although some overlapping was present between the different zones. The upper shore was dominated by *Caulacanthus ustulatus*. On the eulittoral the more abundant species were *Ulva rigida*, *Gelidium pusillum* and *Gelidium microdon*. *C. ustulatus* was again important at the lower level of this zone. Some algae were growing in a dense and short turf externally uniform in appearance comprising principally filamentous and filiform Chlorophyta, Phaeophyta and Rhodophyta. Immediately below this zone, the algae were larger and frondose, *Pterocladia capillacea* being the dominant species and extending its presence to the adjacent subtidal area. At this last zone, the algal community changed along the depth gradient. *Pterocladia*, *Ulva* spp., *Strypocaulon scoparia*, *Hypnea musciformis* and *Asparagopsis armata* dominated the shallow levels, while *Zonaria tournefortii*, *Acrosorium* spp. and *Dictyota dichotoma* dominated the deep ones.

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