



XIII Simposio Ibérico
de Estudios del Bentos Marino

RESÚMENES DE COMUNICACIONES ORALES



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Las Palmas de Gran Canaria

genus *Lecithochirium* (Digenea: Hemiuridae). Strong aggregated distributions were found for both the digenean and cestode parasites, with variance to mean ratios and index of discrepancy (D), 12.233 and 0.572 (for digeneans) and 4.462 and 0.865 for *Sphyriocephalus* sp. respectively. Differences in both prevalence, intensity and abundance values of the parasites found in Madeira and the Atlantic coasts of the Iberian Peninsula are discussed.

Photosynthetic performance characteristics of seaweed species from Canary Islands with potential interest for intensive culture applications

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Photobiological changes in relation to irradiance and pH of the medium were studied for five green and red macroalgal species (*Ulva rigida*, *Halopitys incurva*, *Hypnea spinella*, *Grateloupia dichotoma* and *Gracilaria cornea*) in order to optimize intensive culture conditions. Algae adapted to tank culture under greenhouse conditions were used to determine photosynthetic rates by oxygen evolution measurements at the different established conditions. Light-saturated photosynthetic rates (P_{max}), photosynthetic efficiency (α) and saturating irradiance (I_k) were derived from photosynthesis-irradiance (P-E) curves. Results from experiments provided optimum photosynthesis at pH values between 6 and 7 for all species and similar P_{max} values for pH 5 and 8. Different photobiological characteristics were found among species. *Ulva rigida* revealed higher P_{max} and α and lower I_k than red algal species under similar conditions, with the exception of *Halopitys incurva* which showed lowest I_k . For *Grateloupia dichotoma*, better efficiencies at pH 4 and 5 than at pH 8 were detected. Photoinhibition or negative slope of the P-E curves were observed at pH 4 for all the species tested, except for *Halopitys incurva* and *Ulva rigida* which shown no photoinhibition and photoinhibition at pH 5 respectively. Results suggest that these species, in most of the cases, can utilize CO_2 in a more efficient way than HCO_3^- .