A Survey of the Marine Algae of the Ionian Sea Coasts, West Greece

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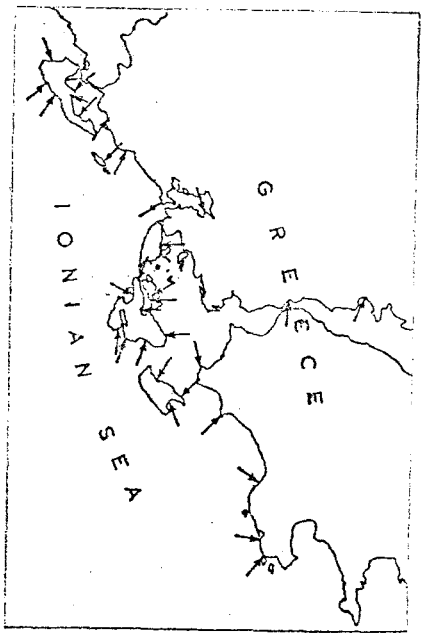
The distribution of 197 different species of marine algae from the west coasts and islands of Greece was studied (34 Chlorophyceae, 41 Phaeophyceae, 116 Rhodophyceae, 2 Cyanophyceae and 4 marine phanerogams). The study concerns the systematic classification and geographical distribution of the marine algae in 32 biotopes (21 in the islands and 11 on the coasts of the mainland). A comparison with the flora of the Aegean Sea is made.

La distribution de 197 espèces différentes des algues marines des côtes d' Ouest et des îles de Grèce était étudiée (34 Chlorophycées, 41 Phaeophycées, 116 Rhodophycées, 2 Cyanophycées et 4 phanérogames marines). L' étude concerne la classification systématique et la distribution géographique des algues marines dans 32 biotopes (21 des îles et 11 des côtes du continent). Une comparaison est faite avec la flore de la Mer Égée.

The main purpose of this study is to investigate the so far unknown marine flora of the west coasts and islands of Greece, from the point of systematic classification and geographical distribution.

So far, the marine flora of the west Greek coasts has been studied only occasionally by Levring (1942), Sordina (1951) and Giaccone (1968). The study was made from May to July of 1975 and there were selected 11 biotopes from the coasts and 21 from the 6 islands (Fig. 1). The collections cover the upper midlittoral up to a depth of 4-5 m. In total 197 different taxa were found and classified both systematically and phytogeographically. These are analytically as follows: 34 Chlorophyceae, 41 Phaeophyceae and 116 Rhodophyceae. Moreover, 2 Cyanophyceae and 4 marine phanerogams are noted. In each biotope there has been an effort for the phytosociological classification of the flora in algal populations and therefore, the prevalence of the various phaeophyceae as concerns the abundance and sociability is obvious. Only some biotopes show a relative prevalence of Rhodophyceae (e.g. Nafpaktos, Py-



los). Also, some caves of small spaciousness and depth, which are, nevertheless, found quite often in the Ionian Islands because of their original geomorphology, are of special interest. The vegetation on the latter is limited to the sciophilous species of rhodophyceae, chlorophyceae and calcareous algae. The great prevalence of phaeophyceae in most biotopes results in the presence of various phaeophyceae as main species in the existing communities. Thus, we meet the common communities of *Cystoseiretum crinitae* and *Cyst. spinosae* in many biotopes. We can also meet pure communities of *Padina pavonia*, *Dictyopteris membranacea* and *Halopteris scoparia* in many biotopes. The rhodophyceae always follow as accompanying species. The comparison of the marine flora with that of the Aegean Sea coasts shows similarities as well as differences. There are initially some species which were first observed in the west coasts. Among these *Cystoseira adriatica* - *Cyst. baccata* - *Sargassum vulgare* v. *megalophyllum* - *Chrysimenia ventricosa* - *Dumontia incrassata* - *Delesseria sanguinea* - *Halopitys incurvus* - *Naccaria whigghii* - *Neurocaulon reniforme* are distinguished. There are also some species which, though very rarely observed in the Aegean Sea coasts (Haritonidis and Tsekos, 1975), are often found in the west coasts in great abundance, such as *Gigartina acicularis*, *Laurencia obtusa* v. *pyramidica*, *Lithophyllum tortuosum*, *Cladophora dalmatica*, *Cystoseira mediterranea*. From the marine phanerogams we observed *Cymodocea nodosa* and *Posidonia oceanica* in most biotopes. *Halophila stipulacea* was observed at a depth of 2.5 m in Methoni together with *Caulerpa prolifera*. Also, floating parts of *Halophila stipulacea* were observed in the port of Porto-Gaios in Paxi, but we do not know their actual origin because no fixed parts were found. The average vegetation ratio is equal to 2.83. It is almost similar to that of the Aegean Sea coasts and can be characterized as boreal rather than subtropical type of vegetation.