

Marine Algae of Northern Greece*

by

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Summary

The distribution of 166 different species of marine algae, along the Northern Greek coasts is examined (37 Chlorophyceae, 35 Phaeophyceae and 94 Rhodophyceae). On the 41 studied biotopes we noticed pure communities of *Cystoseiretum strictae*, *Cystoseiretum crinitae* and *Lithothamnio-Lithophylletum*. Also we mentioned populations of *Ulva lactuca*, *Corallina officinalis* and *Padina pavonia*.

Résumé

On a examiné la distribution de 166 espèces différentes d'algues marines le long des côtes de la Grèce du Nord (37 Chlorophycées, 35 Phéophycées, 94 Rhodophycées). Parmi les 41 biotopes étudiés, on a pu observer des communautés pures de *Cystoseiretum strictae*, *Cystoseiretum crinitae* et *Lithothamnio-Lithophylletum*. On a aussi rapporté des populations d'*Ulva lactuca*, *Corallina officinalis* et *Padina pavonia*.

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The present study was undertaken at first to investigate the medio- and infralittoral marine flora of Northern Greece. Perhaps it is going to help a future research on these coasts or a comparison with other regions of Greece.

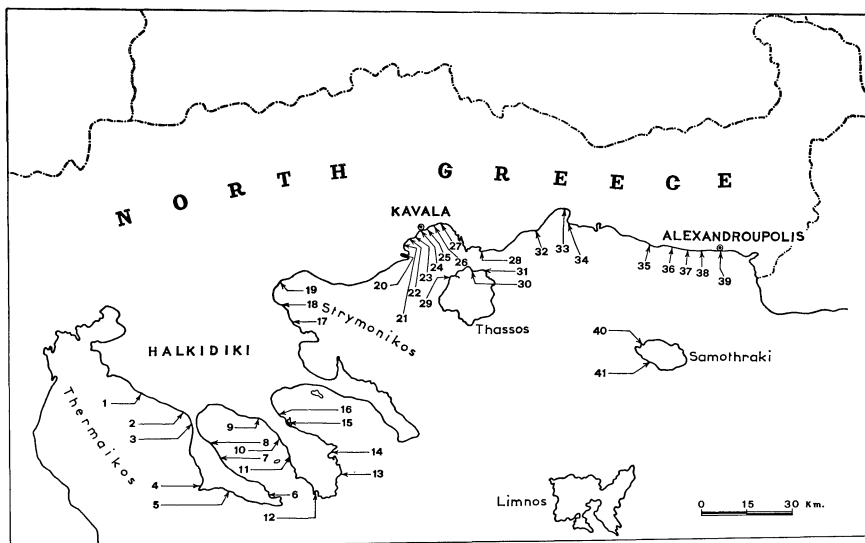


FIG. 1. : Map of Northern Greece showing the studied biotopes.

* Extensive text of this communication is to be published in « Botanica Marina ».

The marine algae flora of Northern Greece is almost unknown and only few collections took place on these coasts several years ago [POLITIS 1925, KATSIKOPOULOS 1939]. HARITONIDIS and TSEKOS [1974], studied marine alga flora from Thassos island and there were distinguished about 117 species.

Now we have chosen 41 different biotopes along the coasts of Macedonia and Thraki (Fig. 1). On Halkidiki we noticed 16 different biotopes (8 on each peninsula of Kassandra and Sithonia), 3 biotopes on Strymonikos gulf. On Kavala and Thassos island we made more detailed collections (12 biotopes), due to the new submarine deposits of petroleum and to the possibility of the alteration of this flora in few years time. Afterwards at Thraki and Samothraki island we noticed 10 biotopes. The coasts of Northern Greece represent very peculiar formation. One can see sheltered and exposed coasts, with sandy, rocky cliffs, pools and in a few areas muddy substrate. We made our collections during the months May-September 1974. The number of species which we found were 166. Among them there were 37 Chlorophyceae, 35 Phaeophyceae and 94 Rhodophyceae. From these above, the cosmopolitic species occur almost in all biotopes. Even the number of the Phaeophyceae species is considerably lower from that of the Rhodophyceae, the occurrence of the former being more outstanding. The great Phaeophyceae constitute sometimes pure communities, as i.e. *Cystoseiretum strictae*, *Cystoseiretum crinitae* and cover great surfaces in quite a lot of biotopes. Also we distinguished in a few rocky biotopes a community of *Lithothamnio-Lithophylletum* in 1 m depth. On sandy and muddy biotopes, and almost near the harbours on shallow waters, we distinguished populations of *Ulva lactuca* and *Corallina officinalis*. At the end of flat rocks and in 0,5 - 1 m depth, on exposed coasts, we noticed a population on *Padina pavonia*. The characteristic point of the marine flora of the Greek coasts is, that each biotope is composed of a mixture of a great number of marine algae species. Only in a few areas one can distinguish pure communities.

The R/P ratio was found 2,7, the same as on the island of Rhodos [TSEKOS and HARITONIDIS 1974], and also similar to that of GERLOFF and GEISSLER [1974]. It is lower than in other places of the Mediterranean sea [FELDMANN 1938, GIACCONE 1968]. This lead to the view that the vegetation on the Greek coasts isn't clearly subtropical, and is due to the number of the Rhodophyceae species, which is lower in the littoral zone of Greek coasts. We agree also with GÜVEN and ÖZTIG [1971] for the Turkish coasts in which the R/P ratio is about 2,0. GIACCONE [1968], mentions an R/P ratio 3,7 - 4,0 for Greek waters but almost all the collections took place in great depths.

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