

Consideration on Benthic Marine Algae (except the Diatoms) along the Romanian Black Sea Coast

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More than a century has passed since seaweeds were studied for the first time on the Romanian Black Sea coast by SCHAARSCHMIDT (in KANITZ, 1879-1881). The first works consist only of the identification of marine algae. The period of rigorous scientific study of the Romanian marine algal flora was begun by EODORESCU (1907) and carried on by CELAN over a period of five decades between 1935-1983.

TARNAVSCHI and OLTEAN (1956, 1958) published a review in two parts on terrestrial and marine alga groups identified in Romania.

Following contributions related to Cyanophyta (GRUIA, 1968) and macrophytes (SKOLKA, 1969), complete lists of benthic marine algae in Romania were compiled by BAVARU, concerning the Cyanophyta, Chlorophyta, Phaeophyta and Rhodophyta (1977a), and the Phaeophyta and Rhodophyta with the publication of the second volume of the "Treatise on Algology" (1977b).

Recent contributions on the marine macrophytobenthos have been reviewed by BOLOGA (1987).

Several decades ago the algal flora showed a much higher number of species, subspecies and varieties compared to those found in coastal waters. The most abundant genera are Enteromorpha, Cystoseira, Ceramium and Laurencia. A continual decrease in algal diversity and biomass becomes evident upon analyses of the literature. This result is most dramatically illustrated by the almost complete disappearance of the formerly productive plants of the perennial brown alga Cystoseira barbata (Good. et Good.) J.Ag. which formerly played an important ecological role.

These taxonomic studies represent the known inventory of marine macrophytes in Romania. They revealed the presence of numerous new species both along the Romanian coast and in other locations in the Black Sea. In addition Gelidiella antipae Celan was identified as a new species.

Some species were erroneously considered as new taxa. These include Ectocarpus caliacrae Celan (actually a development stage of Desmotrichum undulatum (J.Ag.) Reinke), or Laurencia lacustris Skolka (= L. caspica A. Zin. et Zaberzh.).

According to the present requirements of botanical nomenclature (BOUDOURESQUE and PERRET-BOUDOURESQUE, 1987) a synthesis of the inventory of benthic marine algae has been prepared. Compared to the total of 36 Cyanophyta, 47 Chlorophyta, 2 Xanthophyta, 30 Phaeophyta and 75 Rhodophyta observed along the Romanian shore beginning in 1935, only about 18, 21, 1, 13, and 41, respectively, remained after 1960. Since 1980 even fewer taxa have been found, although it is possible that, as in the case of marine molluscs, new species may have recently entered the region.

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