

Chemical Composition of *Corallina mediterranea* Areschoug and *Corallina granifera* Ell. et Soland

Salvatore De Rosa^{a*}, Zornitsa Kamenarska^b, Kamen Stefanov^b,
Stefka Dimitrova-Konaklieva^b, Chavdar Najdenski^c, Iva Tzvetkova^c,
Valeria Ninova^b, and Simeon Popov^b

^a Istituto di Chimica Biomolecolare, CNR, Via Campi Flegrei, 34, 80078 Pozzuoli, Naples, Italy. Fax: +390818041770. E-mail: sderosa@icmib.na.cnr.it

^b Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences, Sofia 1113, Bulgaria

^c Institute of Microbiology, Bulgarian Academy of Sciences, Sofia 1113, Bulgaria

* Author for correspondence and reprint requests

Z. Naturforsch. **58c**, 325–332 (2003); received December 6, 2002/January 8, 2003

The composition of sterols, volatiles and some polar compounds from three *Corallina* samples (*C. granifera* and *C. mediterranea* from the Black Sea and *C. mediterranea* from the Mediterranean Sea) was established. The sterol composition of the Black Sea samples was similar but it differs from that of the Mediterranean sample. The composition of the volatiles was very complex. The main groups of constituent were hydrocarbons, alcohols, carbonyl compounds, acids and their esters, terpenes. The composition of the polar components, soluble in *n*-butanol, was also established. There were some differences in the chemical composition of the two Black Sea species, which may be due to the biodiversity between them, while the differences in the composition of the two *C. mediterranea* samples could be due to the differences in the environment (salinity, temperature, pollution, etc.).

Key words: *Corallina granifera*, *Corallina mediterranea*, Sterols