

Lipophylic Compounds from *Euphorbia peplis* L. – a Halophytic Plant from the Bulgarian Black Sea Coast

Albena Ivanova^a, Inna Khozin-Goldberg^b, Zornitsa Kamenarska^c, Jordan Nechev^c, Zvi Cohen^b, Simeon Popov^c, and Kamen Stefanov^{c*}

^a Institute of Plant Physiology, Bulgarian Academy of Sciences, Sofia 1113, Bulgaria

^b Microalgal Biotechnology Laboratory, The Albert Katz Department for Drylands Biotechnologies, The Jacob Blaustein Institute for Desert Research, Ben Gurion University of Negev, Beer Sheva, Israel

^c Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences, Sofia 1113, Bulgaria. Fax: 003592-8700-225. E-mail: kamen@orgchm.bas.bg

* Author for correspondence and reprint requests

Z. Naturforsch. **58c**, 783–788 (2003); received March 20/May 19, 2003

The chemical composition of the lipophylic fraction from the halophytic plant *Euphorbia peplis* L. was investigated. Compared to other terrestrial higher plants an increase of triacylglycerols and especially of glycolipids was observed. The main phospholipid was phosphatidyl choline, followed by almost equal concentrations of phosphatidyl ethanolamine and phosphatidyl glycerol. A relatively high concentration of phosphatidic acids (6.5% of the total phospholipids) was found. The main sterol appeared to be sitosterol and significant amounts of tetracyclic triterpene alcohols were found. The composition of the volatile compounds is relatively simple and only one chlorinated compound, identified as 2,2-diethoxy-1-chloroethane, was found. There was a strong toxicity of the total lipophylic extract towards *Artemia salina*.

Key words: *Euphorbia peplis*, Lipids, Secondary Metabolites