

Abstract

The work focuses on the study of two brown algae *Dictyota dichotoma* and *Dictyopteris membranacea*. Extracts obtained by different organic solvents (dichloromethane, hexane, acetone, methanol, chloroform) were screened for their DPPH antiradical activity, whereas essential oils obtained by steam distillation were chemically characterized by GC-MS. Steam distillation yielded 0.07 and 0.095% of the essential oils for *Dictyota dichotoma* and *Dictyopteris membranacea*, respectively. The chemical screening of the essential oils of *Dictyopteris membranacea* and *Dictyota dichotoma* showed similar chemical profiles. Namely, trans-anethole showed to be the main component in both studied oils, yielding 12.28% and 10.70% for *Dictyopteris membranacea* and *Dictyota dichotoma*, respectively. Antioxidant activity of extracts was expressed by IC₅₀ values and was in the range 0.375-1.72 mg/ml