

Antioxidant activity of extract from a red Alga

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Background and Aims: The present study was conducted to evaluate the antioxidant activity of methanol extract (ME), as well as the phenolic compounds of red algae *Hypnea cornuata* in three different sites of Ghesm Island, Iran.

Methods: Amount of total phenolic compounds in ME was measured using Folin-Ciocalteu assay. Antioxidant activity (the free radical scavenging activity) of algae extract was measured by the 2, 2-Diphenyl-1-picrylhydrazyl (DPPH) method.

Results: Amount of total phenolic compounds in ME was on average about 5.6 ± 0.3 $\mu\text{g/g}$ of dry sample among three stations. This alga showed high radical scavenging activity (RSA). The antioxidant effects of the extracts were compared with those of commercial antioxidants, such as butylated hydroxytoluene (BHT), butylated hydroxyanisole (BHA) and ascorbic acid (AA).

Conclusions: The phenolic constituent appears to be responsible at least in part, for the observed antioxidant activity of the algal extract. The results suggest that this alga could be a potential source of natural antioxidant.

Keywords: Antioxidant activity; Phenolic compounds; *Hypnea cornuata*