

ANTIOXIDANT ACTIVITY OF EXTRACTS FROM SELECTED MARINE SPONGE SPECIES IN THE SEA OF VIETNAM

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Summary

This study was conducted to evaluate *in vitro* antioxidant properties and identify antioxidants of the extracts from eighteen marine sponge samples collected from the sea of Vietnam. Antioxidant properties were evaluated by 2,2-diphenyl-1-picrylhydrazyl (DPPH) radical scavenging activity, total reducing power ability and hydrogen peroxide scavenging activity. All of the extracts exhibited DPPH radical scavenging activity, total reducing power ability and hydrogen peroxide scavenging activity. Antioxidant activity of extracts from marine sponge depends on the species, seasons and geographical locations. The remarkable level of antioxidant activity was observed for extracts from *Spongia sp.* and *Ircinia mutans*. These results showed that marine sponges in the sea of Vietnam are promising sources of natural antioxidants.

Keywords: *Antioxidant, marine sponge, bioactive compound, radical scavenging.*