

Biological activity of two red algae, *Gracilaria salicornia* and *Hypnea flagelliformis* from Persian Gulf.

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ABSTRACT

Among marine organisms, algae are a large and diverse group of organisms from which a wide range of secondary metabolites have been isolated. A number of these compounds possess biological activity. In this study, we aim to evaluate the cytotoxic, antibacterial and antifungal activity of two red algae, *Gracilaria salicornia* and *Hypnea flagelliformis*, collected from Persian Gulf. Ethyl acetate extracts of both algae showed a potent cytotoxic effect against *Artemia salina* nauplii ($LC_{50} = 3$ and 4 mug.ml^{-1} , respectively). Aqueous methanol (50%) extracts were also effective. None of the methanol and aqueous methanol extracts of the algae showed antifungal and antibacterial activity against *Staphylococcus aureus*, *Escherichia coli*, *Candida albicans* and *Aspergillus niger* by the Broth-dilution method. Only the ethyl acetate extracts exhibited antibacterial activity ($MIC = 2 \text{ mug.ml}^{-1}$) on *S. aureus*. In conclusion, *G. salicornia* and *H. flagelliformis* could be a promising source of cytotoxic components.

KEYWORDS

antibacterial . antifungal . cytotoxic . *Gracilaria salicornia* . *Hypnea flagelliformis*

REFERENCES