

ABSTRACT

**THE ANTIBACTERIAL ACTIVITY OF THE ETHANOLIC
EXTRACT OF MARINE SPONGE *Agelas cavernosa***

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The aim of the current study is to investigate the antibacterial activity of the ethanolic extract of the marine sponge *Agelas cavernosa*. The antibacterial activity of the extract was determined by using microdilution method against *Escherichia coli* ATCC 25922, *Staphylococcus aureus* ATCC 6538, *Pseudomonas aeruginosa* ATCC 27853. *P-iodonitrotetrazolium chloride* reagent was added in the microdilution method to visualize the presence of living organism. The antibacterial activity was defined as minimum inhibitory concentration (MIC). The results showed that the ethanolic extract of sponge *Agelas cavernosa* inhibited the growth of *Escherichia coli* ATCC 25922, *Staphylococcus aureus* ATCC 6538, and *Pseudomonas aeruginosa* ATCC 27853 at MIC 200 ppm, 250 ppm, 150 ppm, respectively.

Keyword : Antibacterial agent, Microdilution, Sponge, *Agelas cavernosa*