

DE LA SALLE UNIVERSITY

ISOLATION, STRUCTURE ELUCIDATION, AND ANTIMICROBIAL SCREENING OF A TERPENE FROM A SOFT CORAL *SARCOPHYTON* sp.

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ABSTRACT

A cembranoid diterpene was isolated from a Philippine soft coral of genus *Sarcophyton*. The terpene was obtained from the chloroform extract of the soft coral by Vacuum Liquid Chromatography (vlc). The structure of the isolate was elucidated by analyses of its spectral data from infrared (IR) and High Field Nuclear Magnetic Resonance (NMR) spectroscopy such as ^1H , ^1H Decoupling, ^{13}C , and DEPT- ^{13}C . The molecular formula of the isolate is $\text{C}_{20}\text{H}_{30}\text{O}_2$. It is a new stereoisomer of known terpenes previously obtained from *Sarcophyton*.

The isolate showed different levels of antimicrobial activity against seven microorganisms: *Staphylococcus aureus*, *Bacillus subtilis*, *Pseudomonas aeruginosa*, *Mycobacterium avium*, *Escherichia coli*, *Saccharomyces cerevisiae*, and *Aspergillus niger*

