PARALLEL SESSION :

Subject :
Chemistry in Life Sciences and Chemical Biology
IDENTIFICATION OF BIOACTIVE ALKALOID FROM JELLY FISH Bougainvillia SP

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ABSTRACT

Isolation and identification of alkaloid compounds from jelly fish Bougainvillia sp had been done. First detection (Mayer and Dragendorf test) showed alkaloid compound was contained in the Jellyfish sample. Lipid compound was eliminated from sample using petroleum benzene before isolation. Afterwards, the sample was extracted using ethanol and the solution was separated by centrifuge. Ethanolic extract was acidified with 0.5 N HCl followed by centrifugation to separate solid constituent. The acid solution was basified with 15% NaOH to pH 10, the it was extracted with chloroform. Chloroform extract was runned in TLC using a mixture solution of chloroform: methanol (2:8) and it was compared with Rf 0.84. The isolate was identified using GC-MS, spectroscopy UV-Vis, IR and 'H-NMR. The character of alkaloid compound in Bougainvillia sp extract based on UV-Vis spectrum showed electronic transition \(\pi^*\) of aromatic molecule and electronic transition \(\pi^*\) of N-C=C. Result from 'H-NMR showed peak corresponding to proton of methyl, methylene, -OH, cyclic molecule with N atom and aromatic molecule. IR spectra performed stretching of O-H, C-H, C=C aromatic, bending C=C and C-N terti of amine. No peak was obtained from GC-MS chromatogram. The alkaloid compound approximates to N-1-(benzylalcohol)-4-octyl-2,5-pyperidine.

Keywords: Bioactive, Bougainvillia sp, N-1-(benzylalcohol)-4-octyl-2,5-pyperidine.