IDENTIFICATION OF

PHENYL PROPANOID COMPOUND ISOLATION RESULTS FROM ROOT BARK DATUAN(*Ficus vasculosa* Wall. Ex Miq) AND ANTIBACTERIAL ACTIVITY TEST ON *Escherichia coli*

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Abstract

The purpose of this research was to identify phenyl propanoid compounds found in the root bark of Datuan (*Ficus vasculosa* Wall. Ex Miq) and to test the activity of *Escherichia coli*. Isolation was carried out by maceration method using methanol as a solvent. Then the extract was fractionated by Vacuum Liquid Chromatography and Gravity Column Chromatography methods using n-hexane, ethyl acetate, and methanol eluents. The result was obtained a yellow crystal needle orange weighing 20 mg with a melting point of 137oC - 140oC. Separation by TLC method showed that this compound had an Rf value of 0.56 with n-hexane: acetone eluent (6: 4). UV-Vis spectra showed three peaks on 310 nm, 228 nm and 200 nm. IR spectra showed that the isolated compound have unsaturated ester carbonyl groups conjugated with double bonds, aromatic substituted aromatic rings, and hydroxy groups. GC-MS analysis obtained molecular ions M+ = 178. The data of UV-Vis, IR and GC-MS analysis can be concluded that the isolated phenyl propanoid compound is a cinnamic derivative that is methyl p-hydroxycinamic. The results of bioactivity tests on *E. Coli* showed that the isolated compounds did not have antibacterial activity which was marked by the absence of a clear zone around the paper disk.

Keywords: phenyl propanoid, Vicus vasculosa wall Ex. Miq. Methyl-p-hydroxycinamic