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Phytochemial and Antimicrobial Studies of the Methanol Extract and Less Polar Solvent Fractions of *Pterocarpus santalinoides* Leaves

Benjamin E. Ezema*; Ezeofor, C.C.; Eze F.U.

Department of Pure and Industrial Chemistry (Organic Chemistry Unit) Faculty of Physical Sciences, University of Nigeria

Abstract: The methanol extract of *Pterocarpus santalinoides* leaves were investigated for phytochemical studies and antibacterial assay using *Staphylococcus aureus* and *Escherichia coli*. The leaves were extracted with 7.0 L methanol by cold maceration at room temperature for seven day sand the extract used for the phytochemical analysis and antibiotic assay. Phytochemical analysis of the methanol extract revealed the presence of alkaloids and terpenoids in high abundance; while carbohydrates are in moderate abundance. Saponins and tannins are present in little abundance. The antimicrobial assay of the Methanol Extract of the n-hexane fraction showed that the extract could not inhibit the growth of *Escherichia coli* only. The Minimum Inhibitory Concentration of the Methanol Extract of n-hexane fraction against *Staphylococcus aureus is* 4.58 mg/mL, and the Minimum Inhibitory Concentration of the Methanol Extract of CHCl₃ fraction against *Staphylococcus aureus and Escherichia coli* are 2.9559 mg/mL and 2.7478 mg/mL respectively.

Keywords: *Pterocarpus santalinoides;* methanol extract; minimal inhibitory concentration, E. coli: *Escherichiacoli*. S. aureus: *Staphylococcus aureus*.

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