

**PRELIMINARY PHYTOCHEMICAL SCREENING AND ANTIBACTERIAL STUDIES  
OF MANGO (*Mangifera indica*) SEED EXTRACT**

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## Abstract

*Mangifera indica* is a species of mango in the Anacardiaceae family. It is found in the wild in tropical regions and cultivated varieties have been introduced to other warm regions of the world. This present study aims to investigate the in vitro antibacterial activities of chloroform, petroleum ether and ethanol extracts of mango seed against four representatives gram positive and gram negative bacteria. Mango fruit seed were extracted by maceration using chloroform, petroleum ether and ethanol as solvents. The extracts were tested against the microorganisms using disc diffusion method at different concentrations: 0.3 mg/ml, 0.15 mg/ml, 0.075 mg/ml and 0.0375 mg/ml. In vitro antibacterial activities of ethanol extracts of mango seed kernel showed inhibitions to tested organisms with variable inhibition zones. Extracts of chloroform and petroleum ether did not show any antibacterial activity against any of the strains. The mean zone of inhibition produced ranged between 4 mm and 8 mm with 10 mm/*Mycobacterium Salmonella typhi* showing the highest zone of inhibition. In most test strains comparable zones of inhibitions were noted for all the extract. The ethanol extracts of mango seed showed good inhibitory effects against all tested strains. The inhibition zones produced by mango extract were less than those produced by standard positive control drug. This could be due to low diffusion rate of mango extract in the medium, a thing needed to be further investigated. The products are potential new antibacterial therapy in the ethno pharmacology domain.