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RESEARCH ARTICLE

Phytochemical Investigation and Antimicrobial Activity of fruit rinds *of Garcinia indica (*Guttiferae*)*

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Abstract

The present study describes phytochemical investigation and anti-microbial activity studies of aqueous extract of fruit rinds of *Garcinia indica* (Guttiferae). The anti-microbial activity was determined by agar-well diffusion method against Gram-positive bacteria including *S. aureus*, *B. subtilis* and *P. aeruginosa*, Gram-negative bacteria including *E. coli* and *A. tumifeciens* and yeast *C. albicans*. Different concentrations of the aqueous extract were found to be active against bacteria and were completely ineffective against yeast. The order of efficacy of the aqueous extract was found to be: Gram negative > Gram positive > yeast. Detection of essential bioactive compounds such as alkaloids, carbohydrates and flavonoids was also performed. HCA [(-) Hydroxy Citric Acid] was isolated from aqueous extract through solvent-solvent extraction method. The isolated HCA was characterized by chromatographic and spectroscopic methods.

Keywords: HCA, *G.indica, C. albicans, S. aureus, B. subtilis.*