ANTIMICROBIAL SUSCEPTIBILITY AND TOXICITY TEST FOR CRUDE EXTRACT OF Terminalia catappa

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ABSTRACT

The extracts of leaves and bark for *Terminalia catappa* are being use as worldwide popular folk medicine or dietary additive supplement recently. This study was aimed at investigating the antimicrobial properties of *n*-hexane, methanol extracts of the leaves of *Terminalia catapap* obtained by successive soxhlet and liquid-liquid extraction. It was followed by prescreening of its antimicrobial activities by standardized antimicrobial susceptibility test by using agar diffusion method and further screening or examine its minimum inhibition concentration (MIC) after serial dilution. One way ANOVA and nonparameter Kruskal-Wallis Test has been applied to examine possible differences of inhibition zone with different microorganisms used and different concentration of the crude extract used. The MIC values are predicted by using linear regression analysis in SPSS. Toxicity test could estimated the LC₅₀ values (50% of naupli *Artemia salina* in the experiment are expected to die or median lethal concentration) of different concentration of methanol extract to determine the essential concentration for its safety use as dietary supplement.

