SCREENING OF ANTIBACTERIAL ACTIVITY OF THE ESSENTIAL OIL FROM SEED OF *ARTOCARPUS HETEROPHYLLUS*

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ABSTRACT

The objective of this work is to investigate the antibacterial activity of *Artocarpus heterophyllus plant.* The antibacterial activity of essential oil obtained from plant was examined. To evaluate the antibacterial activities of these extracts; their in vitro antibacterial activities were determined by disk diffusion testing and minimum inhibitory concentration (MIC). Escherichia coli, Pseudomonas aeruginosa and Staphylococcus aureus were used as test bacterial strains.

The analysis of seed part resulted in representing 93.21% of the total oil and the yield were 2.34%. The bacterial strains tested were found to be sensitive to essential oils studied and showed a very effective bactericidal activity with minimum inhibitory concentration (MIC) ranging from 1.50 to 5.20 mg/mL.

KEYWORDS: *Artocarpus heterophyllus*, Essential oil, Antibacterial activity, Gram- positive, Gram-negative.