Biological Activities of Artocarpus Lanceifolius and Artocarpus Maingayi

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The crude extracts and isolated compounds of *Artocarpus lanceifolius* and *Artocarpus maingayi* were examined for their antimirobial and antioxidant activities. Most of the compounds and crude extracts showed significant activities against the Gram-positive bacteria, i.e *Bacillus subtilis* and *Staphylococcus aureus* and Gram-negative bacteria, i.e *Escherichia coli* and *Pseudomonas aeruginosa*. These crude extracts and isolated compounds inhibited the growth of almost all tested microorganisms with inhibition zone diameter between 8-15 mm. 2', 4', 5', 5-tetrahydroxy-7, 8-(2,2-dimethylchromeno)flavone showed the most significant antimicrobial activity compared to other isolated compounds and crude extracts followed by cycloartobiloxanthone and acetone crude extract from the stem bark of *Artocarpus lanceifolius* with the MIC values between 31.3 μg/mL and 125 μg/mL. While the antioxidant activity against crude extracts and pure compounds from both species showed potential free radical scavenging action against DPPH. Artonin E possessed the highest ability as free radical scavenger with the highest SC₅₀ value at 46.9 μg/mL. The ethyl acetate of crude extract from stem bark *Artocarpus maingayi* showed significant scavenging activity against DPPH with IC₅₀ 60.1 μg/mL.

Keywords: Artocarpus, Flavonoid, Antimicrobial, Antioxidant.