# A COMPARATIVE STUDY OF PHYTOCHEMICAL SCREENING AND ANTIBACTERIAL ACTIVITY OF CRUDE LEAVES EXTRACTS *Mangifera pajang* Kosterm. AND *Mangifera caesia* Jack ex Wall.

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## ABSTRACT

### A COMPARATIVE STUDY OF PHYTOCHEMICAL SCREENING AND ANTIBACTERIAL ACTIVITY OF CRUDE LEAVES EXTRACTS *Mangifera pajang* Kosterm. AND *Mangifera caesia* Jack ex Wall.

*Mangifera pajang* Kosterm. and *Mangifera caesia* Jack ex Wall. are plant species from the mango Family Anacardiaceae. These fruits are edible and have been reported have high antioxidant content. However, the study related to *Mangifera pajang* and *Mangifera caesia* were not well-documented. This study investigates the phytochemical screening and antibacterial activity of *Mangifera pajang* and *Mangifera caesia* leaves. These plant samples were extracted with methanol as the solvent to obtain the crude extracts. The phytochemical screening of these samples were obtained using standard phytochemical test to detect alkaloid, steroid, saponin, phenolic, flavonoid, tannin, terpenoid and cardiac gylcosides constituents. The antibacterial tests were carried out by using disc diffusion method and tested against the *Staphyloccus aureus* ATCC 43300, *Bacillus subtilis* ATTC 6633, *Escherichia coli* ATCC 11229 and *Salmonella entertica* ATCC 14028. The alkaloids , steroid, saponin, phenolic, flavonoid, tannin, terpenoids are the components that presence on *Mangifera pajang* and *Mangifera caesia* leaves extract , and phytochemical constituents present more on dried extracts compare to fresh extracts of *Mangifera pajang* and *Mangifera caesia* leaves extracts. However, the antibacterial activity shows no inhibition towards the selected pathogens bacteria. On top of that, further study should be done to evaluate the antibacterial activity using different solvent against different types of bacteria.