ANTIBACTERIAL EFFECT of MANGO’S LEAVES (*Mangifera indica*)

EXTRACT AGAINST *Staphylococcus aureus* and *Escherichia coli*

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ABSTRACT

Increasing in antimicrobial therapeutics and the discovering of new members of the classes of antimicrobials through chemical synthetic or fermentation, will expanding the production of antibiotic resistance. Many researchers focused on the investigation of natural products as source of new bioactive molecules to overcome this resistance problem. Mango (*Mangifera indica*) is Indonesian plant, contains magiferin, tannin, flavonoid, atsiri oil in its leaves. The leaves can be extracted and has potency as antibacterial. The purpose of this study was to know and determine effective concentration of Mango’s leaves extract as antibacterial effect against *S. aureus* and *E. coli*.

Antibacterial effect of Mango’s leaves extract were determined by Kirby-Bauer Diffusion Methods. Mango’s leaves extract devided to several concentration as follows; P0: 0% extract as negative Control, P1: 10% extract, P2: 20% extract, P3: 30% extract, P4: 40% extract, P5: 50% extract, P6: 60% extract, P7: 70% extract, P8: 80% extract, P9: 90% extract, P10: 100% extract, and P11: Chloramphenicol as positive control. They were absorbed in paperdisc (Ø: 6 mm) and placed on the MHA which had been swab with *S. aureus* and *E.coli* with separated plates was then examined after 24 hours under illuminated magnifiers.

The result showed that mango’s leaves extract at 100% concentration gave effect of inhibition zone and was not significantly difference with Chloramphenicol for both *S. aureus* (means 16.6667 mm) and *E. coli* (means 14.6667 mm).

**Key Word:** mango’s leaves extract, inhibition zone, antibacterial effect