Antibacterial Activity of Polar and Non Polar Fraction Methanol Extract from *Hibiscus tiliaceus* to *Staphylococcus aureus* and *Pseudomonas aeruginosa* Antibiotic Multiresistance

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ABSTRACT

Bacteria resistance to antibiotic has increased mortality on human beeing. Many strains from *Staphylococcus* and *Pseudomonas* have the character of multi drug resistance. Anti-bacterial substances come from research on medicinal crops are needed. Ethanol extract of waru (*Hibiscus tiliaceus*) leaf has anti-bacteria activity. This research was aimed to know anti-bacteria activity and MBC (Minimum Bactericide Concentration) from fraction of methanol extract of waru leaf (*Hibiscus tiliaceus*) to *S. aureus* and *P. aeruginosa* multi drug resistance bacteria. Research showed that fraction A and B (non polar fraction) didn't have antibacterial activity to antibiotic multi-resistance of *Staphylococcus aureus* and *Pseudomonas aeruginosa* up to 2% concentration. Fraction C and D (polar fraction) have antibacterial activity to *S. aureus* at MBC 2 % (fraction C) and MBC 1 % (fraction D), and up to concentration of 2% unable to kill antibiotic multi-resistance of *P. aeruginosa*. The conclusion is polar fraction from methanol extract of *H. tiliaceus* leaf has potency antibacterial activity than non polar fraction. Polar fraction more active to Gram positive bacteria (*S.aureus*) than Gram negative (*P. Aeruginosa*).

Keyword: methanol extract, *Hibiscus tiliaceus*, *S. aureus* antibiotic multi-resistance, *P. Aeruginosa* multi-resistance

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