

Antibacterial activity of the ethanol extract *Pluchea indica less* leaves against *Escherichia coli* by *in vitro*

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ABSTRACT

The aim of this study was to investigate the antibacterial activity of the ethanol extract *Pluchea indica less* leaves against *Escherichia coli* by *in vitro*. The method using broth dilution test was determined *Minimum Bactericidal Concentration* (MBC) with a broth extract cultures into *Eosin Methylen Blue Agar* (EMBA) medium. The twice tubes of concentration extract of 25% and 50% was showed no visible turbidity, and then inoculated into *Eosin Methylen Blue Agar* medium. After 24 h of incubation at 37 °C, *Minimum Bactericidal Concentration* (MBC) was determined which no viable growth of *Escherichia coli* at *Eosin Methylen Blue Agar* (EMBA) medium. The result showed that *Minimum Bactericidal Concentration* (MBC) of the extract of 25% and 50% had been similar ($X^2 < 0.05$) on the growth of *Escherichia coli*. Based on this result, *Minimum Bactericidal Concentration* (MBC) of the extract was used 25% concentration.

Key words: antibacterial, *Pluchea indica less*, *Escherichia coli*