ANTIBACTERIA ACTIVITY OF INFUSA NUT GRASS (*Cyperus rotundus*L) ROOT TO *Escherichia coli* in vitro

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ABSTRACT

The purpose of this research was knowing the antibacteria activity of infusa nut grass (*Cyperus rotundus*L) root to *Escherichia coli* in vitro. The effectivity of nut grass (*Cyperus rotundus*L) root have several substances such as alkaloid, flavoid, tanin, minyak atsiri, saponin, and tanin. Those substances were indicated as antibacteria against *Escherichia coli*. This research used dilution method with six concentrations to determine Minimum Inhibitory Concentration (MIC) and Minimum Bactericidal Concentration (MBC). The concentrations were used 0%, 10%, 20%, 30%, 40%, 50% and each concentration was repeated with 4 repetitions. The parameters were measured based on the lowest concentration that was not any bacterial growth. The result showed that infusa nut grass be able as antibacteria. The MBC result showed concentration of 40% was a lowest concentration can kill *Escherichia coli* in vitro. The result showed that there were a real difference (p <0,05).

Key words : Nut grass root, *Escherichia coli*, antibacteria, dilution method.