

ABSTRACT

THE ACTIVITY ANDROGRAPHOLIDE ISOLAT FROM *Andrographis paniculata* Nees. AGAINST THE BACTERIA *Enteroinvasive Escherichia coli (EIEC) in vitro*

Nikmah Madjid

This research is to find out the activity of the compound Andrographolide isolat from *Andrographis paniculata* Nees. against the bacteria *Enteroinvasive Escherichia coli (EIEC) in vitro*.

This research is a True Experiment Design using Completely Randomized Design with the pattern The Post Test-Only Control Group Design. The sample of Andrographolide which was tested in 4 concentrated treatments namely $A_1 = 10.000 \mu\text{g/ml}$, $A_2 = 5000 \mu\text{g/ml}$, $A_3 = 2500 \mu\text{g/ml}$, and $A_4 = 1250 \mu\text{g/ml}$. Treatment Andrographolide (A) was done respectly 8 (eight) times of replication so that the total number of treatments is 32. The function of the Minimal Inhibited Concentration (MIC) and Minimal Bactericide Concentration (MBC) *EIEC* bacteria was tested by using dilution method which was continued by counting the number of living bacteria (Viable Count) growing on media "agar" using dropt methods.

By observing the data model of the findings of the research which was between concentration 1250 up to 5000 $\mu\text{g/ml}$ on the average it shows that the number of bacteria was too many to count (TBUD) that is the number of living bacteria is over 300, so the quantitative data was not obtained. Whereas the treatment on the 10.000 $\mu\text{g/ml}$ shows that the number of living bacteria was smaller than 30 so that we can say that the data was not statistically computed. It can be concluded that "the compound Andrographolide isolat from *A. paniculata* Nees. functions as antibacteria against the bacteria *EIEC in vitro*". The activity (MIC) of the compound Andrographolide against the bacteria *EIEC* is at concentration 10.000 $\mu\text{g/ml}$.

Key Words: Activity, Andrographolide, *EIEC*, *in vitro*

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