THE EFFECT OF LEAVES EXTRACT OF SAMBILOTO (*Andrographis paniculata*) AS A NEPHROPROTECTOR ON WHITE RAT (*Rattus norvegicus*) INDUCED BY GENTAMICIN TOXIC DOSE ON BUN LEVEL AND CREATININE SERUM

Alifiyah Nur Iqlimah

ABSTRACT

The aims of this research was to determine the effect of leaves extract of sambiloto as a nephroprotector on renal function evaluated by *Blood Urea Nitrogen* (BUN) level and creatinine serum on white rat after gentamicin toxic dose induction. The effect of leaves extract of sambiloto was tested in 25 rats. Twenty five male white rat were randomly divided into five groups; K^- was given carboxy methyl cellulosa in 15 days, P0 was given carboxyl methyl cellulosa in 15 days, P1 was given leaves extract of sambiloto of 177 mg/kg bw/day/po in 15 days, P2 was given leaves extract of sambiloto of 189 mg/kg bw/day/po in 15 days, P3 was given leaves extract of sambiloto of 239.5 mg/kg bw/day/po in 15 days. On the 15 day of experimental, P0; P1; P2; P3 was given 200 mg/kg bw of gentamicin. Gentamicin solutions on P0; P1; P2 and P3 treated through intramuscular injection. After 24 hours of gentamicin induced, blood sample was taken through intracardiac, then BUN and creatinine test using Automatic Biochemistry Analyzer. The result of data were analyzed by ANOVA (Analysis of Variance) and showed significant difference ($p<0.05$), continued by Duncan range test. Based on the result of Duncan range test obtain average value and standard deviation BUN levels of 19.5±2.93(P1); 17.2±1.88(P2); 9.7±0.91(P3) and creatinine levels of 0.76±0.09(P1); 0.68±0.09(P2); 0.42±0.09(P3), which is P3 group have BUN and creatinin levels is closer with K^- group than the other group. The result showed that sambiloto leaves extract dose of 239,5mg/kg bw could provided optimal effect that can be seen with the hampered of *Blood Urea Nitrogen* (BUN) and creatinine level increasing on white rat after gentamicin toxic dose induced.

Keyword : Sambiloto extract, gentamicin, BUN, creatinine.