

ABSTRACT

TOXICITY OF SAMBUNG NYAWA (*Gynura Procumbens*) LEAF ETHANOL EXTRACT ON RENAL HISTOPATOLOGICAL ANALYSIS OF *Sprague dawley* RATS

By

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Sambung nyawa leaf used by Indonesian as a herbal drug. This leaf used as prevention or as co-chemotherapy so the side effect of chemical drugs that used during chemotherapy can be minimalized and made the healing process faster. This study suggested whether sambung nyawa leaf has side effect which could damage renal histopatological structure in rats.

This study used experimental method which samples used randomized controlled design. 25 rats were broadly divided into 5 groups and treated for 14 days. First group (K1) was a negative control group which aquadest given as treatment, and the rest of it (2nd, 3rd, 4th, and 5th group) were treated with ethanol extract of sambung nyawa's leaf with each dose 500 mg/kg body weight, 1000 mg/kg body weight, 1500 mg/kg body weight, 2000 mg/kg body weight.

The result of this study showed the mean score of renal's damage were K1 $3,50 \pm 0,577$; K2 $3,80 \pm 0,837$; K3 $3,40 \pm 0,548$; K4 $5,60 \pm 0,548$; K5 $5,50 \pm 1,000$. Result of *Kruskal Wallis* test obtained p value=0,005. It means that there was an effect of ethanol extract of sambung nyawa leaf on histopathological analysis on 2 groups minimal. Next test was *Post Hoc Mann-Whitney* test and showed that there were significant differences between first group as negative control group and 4th and 5th group. This result showed that increasing the dose until 1500 mg/kg body weight and 2000 mg/kg body weight of ethanol extract sambung nyawa leaf could damage renal's histopathological structure of *Sprague dawley* rats

Key words: chemotherapy, renal's histopathological structure, sambung nyawa's leaf, toxicity test.