## ABSTRACT

## SUBCHRONIC TOXICITY STUDIES OF ETHANOL 70% **EXTRACT OF** Justicia gendarussa Burm. F. LEAVES **FRACTIONATED FOR 90 DAYS** (Observation of Spleen and Lung Histopathology on Rat)

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Justicia gendarussa Burm. f. leaves was found to be traditionally used as male contraceptive agent by several ethnic groups in central part of Papua, Indonesia. Previous study showed that J. gendarussa. It was found that J. gendarussa could be developed as contraceptive medicine. Hence, it is necessary to conduct research on its toxicity. One of the premedical researches which have carried on this research was subchronic toxicity test. The aim of this research was to observe the influence of ethanol 70% estract of J. gendarussa Burm. f. leaves on rat spleen and lung histopathology. The parameters used on this research were white pulp diameter on spleen and thick alveoli wall on lung. Research was carried out by administrating the treatment groups with oral preparation of ethanol 70% exstract of J. gendarussa Burm. f. leaves once daily for 90 days. The doses of ethanol 70% exstract of J. gendarussa for each treatment groups were 40; 200 and 1000 mg/kg BW. Data then were analyzed by one-way anova test. Result showed that ethanol 70% exstract of J. gendarussa leaves in the three doses did not influence on spleen histopathology, but on lung histopathology showed significant modification at a dose of 1000 mg/kg BW.

**Keywords** : Justicia gendarussa Burm. F; subchronic toxicity; Histopathology; spleen; lung