

## ABSTRACT

### **THE INFLUENCES OF ADMINISTRATION OF EXTRACTED DOGFRUIT SEED (*Pithecellobium lobatum* Benth.) ETHANOL TO REDUCE BLOOD GLUCOSE LEVEL AND UREUM AND CREATININE LEVEL INCREASES OF MALE WHITE RAT (*Rattus norvegicus*) OF *Sprague Dawley* STRAIN INDUCED WITH ALOXANE**

By

**FRISCA FEBE LUMBAN GAOL**

Diabetes Mellitus (DM) is a chronic disease caused by body inability to produce or properly use insulin hormone effectively. DM is marked with polyuria, polydipsia, polyphagia, followed with blood glucose increase. DM patients Indonesia in 2000 were 8.4 million people, and it was the fourth ranks in the world. Dogfruit is one of plants able to reduce blood sugar content, but it may cause acute renal failure because it contains djenkolic acid. To diagnose acute renal failure, renal function examination is conducted by measuring urea and creatinine levels.

This was an experimental research with *Post Test Only Control Group Design*. Samples were 25 male white rats (*Rattus norvegicus*) from *Sprague Dawley* strain with 200 - 250 grams body weights, 3 - 4 months, and they were divided into 5 groups.

The results showed that oneway ANOVA test derived  $p < 0,05$  to the rat blood glucose level and  $p > 0,05$  for urea and creatinine levels. This indicated that the administration of ethanol from extract of dogfruit seed influenced reduced reduce blood glucose level, but did not influence the increased urea and creatinine levels of male white rat from *Sprague Dawley* strain induced with aloxane. However, to be seen from average of creatinine level, dosage of 1200 mg/kg body weight of ethanol extract from dogfruit seed caused increased creatinine level with group average value of 0.86 mg/dl.

Keywords : Aloxane, Creatinine, Dogfruit, Glucose, Urea