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Extract Ethanol of Poguntano as Anti Diabetic in Alloxan induced Diabetic Rats

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Abstract : Background. Diabetes mellitus is a group of metabolic disease with high blood glucose level above 150 mg/dl over a prolonged period, if left untreated can cause both micro and macro complications. The diabetes causes the increased of both morbidity and mortality rate, also the budget of health insurance. Poguntano (Picria fel-terrae Merr) from family Scrophulariaceae found in most part of Indonesia has been used as traditional plant and proved empirically for treatment of fever, malaria, cancer and anti diabetes.
Methods. This is an experimental study using five groups of rats, each group contained three rats. Twelve rats were induced with 150 mg/kg Alloxan given intraperitoneal. Three rats got normal saline injection. This five groups were divided as control normal, control diabetic , group treated with insulin, group treated with extract Poguntano 200 and 300 mg.
Results. Extract ethanol of Poguntano 200 mg and 300 mg showed significant results ($p<0.001$) in lowering blood glucose in Alloxan induced diabetic rats at four week after treatment compared to control diabetic group without treatment, but did not show superior to insulin group ($p=0.566$ and 0.303). Extract Poguntano 200 mg and 300 mg show similar effect in lowering blood glucose in diabetic rats.
Conclusions. In our study we have found that extract ethanol of Poguntano showed significant hypoglycemic activity in diabetic rats.
Keywords : diabetes, hyperglycemia, extract ethanol, Poguntano, anti diabetic.

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