

ABSTRAK

Gelagah (*Saccharum spontaneum L.*) merupakan rumput tahunan yang tinggi dengan akar dan rimpang yang dalam, daun dan batang mengandung lignin, karbohidrat, protein dan asam amino. Akar dan batang bawah mengandung pati dan senyawa polifenol. Diabetes melitus merupakan penyakit kelainan metabolisme yang di tandai dengan hiperglikemia karena kekurangan insulin, resistensi insulin atau keduanya. Pengaruh ekstrak batang gelagah (*Saccharum spontaneum L.*) terhadap kadar glukosa darah yang di induksi aloksan pada hewan Tikus putih jantan telah di lakukan penelitian. Hewan percobaan dibagi menjadi 6 kelompok, Kelompok Kontrol normal tidak diberi perlakuan, kelompok kontrol negatif diberi aloksan 100 Mg/KgBB, kelompok kontrol positif diberikan larutan glibenclamide 5mg/KgBB, kelompok perlakuan diberikan ekstrak batang gelagah dengan dosis masing-masing 100 mg/KgBB, 200mg/KgBB dan 400 mg/KgBB. Berdasarkan hasil uji ekstrak batang gelagah (*saccharum spontaneum L.*), Dosis 100 mg/KgBB, 200mg/KgBB dan 400 mg/KgBB mampu menurunkan kadar gula darah tikus putih (*rattus norvegicus*). Hasil yang di peroleh dari uji SPSS yaitu uji *Post hoc lsd* menunjukkan bahwa pemberian ekstrak batang gelagah memberikan pengaruh terhadap penurunan kadar glukosa darah tikus ($p < 0,05$).

Kata Kunci: Diabetes, Gelagah (*Saccharum Spontaneum L.*), Uji glukosa aloksan

ABSTRACT

Gelagah (Saccharum spontaneum L.) is a tall annual grass with deep roots and rhizomes, leaves and stems contain lignin, carbohydrates, proteins and amino acids. The roots and rootstock contain starch and polyphenolic compounds. Diabetes mellitus is a metabolic disorder characterized by hyperglycemia due to insulin deficiency, insulin resistance or both. Research has been conducted on the effect of giving reed stem extract on the blood glucose levels of male white rats induced by alloxan. This research used the Alloxan Glucose Test method with male white rats (Rattus Norvegicus) as research subjects. Experimental animals were divided into 6 groups. The normal control group was given no treatment, the negative control group was given alloxan 100 Mg/KgBB, the positive control group was given glibenclamide solution 5mg/KgBB, the treatment group was given reed stem extract at doses of 100 mg/KgBB, 200mg/KgBB and 400 mg/BB respectively. KgBB. Based on the test results of reed stem extract (saccharum spontaneum L.) showed that doses of 100 mg/KgBB, 200mg/KgBB and 400 mg/KgBB resulted in reducing blood sugar levels in white rats (rattus norvegicus). The results obtained from the test results using SPSS, namely the Post hoc LSD test, showed that administration of reed stem extract could influence the reduction in blood glucose levels in mice ($p < 0.05$)

Keywords: *Diabetes, Gelagah (Saccharum spontaneum L.), Alloxan glucose test*