

ABSTRAK

Telah dilakukan penelitian mengenai uji efek antidiabetes beberapa fraksi tumbuhan tali putri (*Cassytha filiformis* L.) pada mencit putih jantan diabetes yang diinduksi dengan aloksan dengan dosis 150 mg/KgBB secara intraperitoneal. Penelitian ini menggunakan 45 ekor mencit jantan yang berumur \pm 2-3 bulan dengan berat badan 25-30 gram yang memiliki kadar glukosa darah puasa \geq 126 mg/dL. Mencit dibagi ke dalam 5 kelompok, kelompok I, II, III masing-masingnya adalah hewan uji yang diberi fraksi etil asetat, fraksi butanol, fraksi air dengan dosis 10 mg/KgBB, kelompok IV, V merupakan kelompok kontrol positif glibenklamid 1,26 mg/KgBB dan kontrol negatif NaCMC 1%. Kelima kelompok tersebut dibagi lagi menjadi 3 subkelompok, subkelompok pertama diberi obat selama 1 hari, subkelompok kedua selama 3 hari dan subkelompok ketiga selama 7 hari. Obat diberikan secara intraperitoneal. Parameter yang diuji adalah persentase penurunan kadar glukosa darah, rasio berat organ hati dan ratio berat organ pankreas. Data hasil penelitian diolah menggunakan ANOVA Dua Arah dan Uji Duncan. Hasil penelitian menunjukkan bahwa pemberian fraksi dan lamanya waktu pemberian menurunkan kadar glukosa darah dengan sangat bermakna ($P < 0,01$) dibandingkan hewan uji kontrol negatif terutama pada pemberian fraksi butanol, sedangkan pada hewan uji kontrol positif tidak berbeda nyata, kecuali fraksi butanol memiliki efek yang lebih besar dibandingkan kontrol positif. Ratio organ hati hewan uji yang diberikan fraksi tidak dipengaruhi secara bermakna ($P > 0,05$) dibandingkan hewan uji kontrol negatif dan kontrol positif, dan rasio organ pankreas dipengaruhi secara bermakna ($P < 0,05$) dibandingkan hewan uji kontrol positif, namun tidak berbeda nyata dengan hewan uji kontrol negatif. Dari penelitian ini dapat disimpulkan bahwa fraksi ekstrak tumbuhan tali putri memiliki efek antidiabetes.

ABSTRACT

Had been done the research about the anti-diabetic effects of some fraction of *Cassytha filiformis* L., to the white male mice induced by alloxan at a dose of 150 mg / KgBW intraperitoneally. The research used 45 male mice, aged \pm 2-3 months with 25-30 grams in body weight that had fasting blood glucose levels \geq 126 mg/dL. Mice divided into 5 groups. Group I, II, III each the test group were given the fraction of ethyl acetate, buthanol fraction, and water fraction at a dose of 10 mg/KgBW, Group IV was positive control group (glibenclamide 1.26 mg / KgBW) and Group V was negative control group (NaCMC 1%). All of the group were divided into three subgroups, the first subgroup was given drugs for 1 day, second subgroup were given drugs for 3 days and the third subgroup were given drugs 7 days. Drugs were administered intraperitoneally to the mice. The parameters of this research were the percentage of decreasing blood glucose levels, the weight ratio of the liver and the weight ratio of pancreas organ. Data were analyzed by Two Way ANOVA and Duncan Test. The results showed that the administration and duration of giving the fraction with the reduction of the blood glucose levels significantly different ($P < 0.01$) compared to negative control group, especially observed in the buthanol fraction. whereas the positive control were not significantly different, except buthanol fraction had greater effect than the positive control. The weight ratio of the liver was given the fraction was not significantly different ($P > 0.05$) compared to positive control group and negative group and the weight ratio of the pancreas is affected significantly ($P < 0.05$). From this study it can be conclude that the fraction of *Cassytha filiformis* L, extracts have anti-diabetic activity.

