

**POTENSI PEMBERIAN EKSTRAK DAUN BAKUNG PUTIH (*Crinum asiaticum*
L.) SEBAGAI ANTIDIABETES PADA TIKUS PUTIH JANTAN YANG
TERINDUKSI ALOKSAN**

ABSTRAK

Diabetes mellitus ialah menyebabkan kasus kematian dan kesakitan tertinggi di beberapa negara pada sekelompok manusia diseluruh dunia. Penelitian ini untuk mengetahui potensi antidiabetes dari ekstrak daun bakung putih (*Crinum asiaticum L.*). pengujian ini menggunakan metode Post test only group desain. Uji skrining fitokimia dilakukan terlebih dahulu terhadap ekstrak daun bakung kemudian pengujian antidiabetes dilakukan menggunakan 30 ekor tikus wistar Jantan dengan dosis ekstrak 200,400,600 mg/kgBB dan kelompok control positif diberikan metformin 45mg/KgBB sedangkan untuk kelompok control negative diberikan CMC Na 0,25 ml.

Tikus diinduksi dengan aloksan 125 mg/KgBB dilarutkan dalam 0,2 ml NaCl, kemudian diamati peningkatan kadar gula darah tikus selama 3 hari. Setelah 3 hari tikus dipuasakan dan dibagi menjadi 6 kelompok dan diberi perlakuan uji. Dilakukan pengukuran kadar gula darah setiap 3 hari sekali untuk mengetahui efek antidiare ekstrak terhadap kadar gula darah tikus.

Analisis data dilakukan dengan SPSS IBM 25. Hasil Analisa kadar gula darah tikus menunjukkan adanya penurunan kadar gula darah tikus yang signifikan terhadap pemberian ekstrak daun bakung putih (*Crinum asiaticum L.*) penurunan kadar gula darah sejalan dengan besar dosis ekstrak yang diberikan. Semakin besar dosis ekstrak semakin besar pula penurunan kadar gula darah yang diperoleh. Dengan hasil penurunan terbaik diperoleh pada kelompok Berdasarkan hasil tersebut disimpulkan bahwa ekstrak etanol daun bakung putih (*Crinum asiaticum L.*) memiliki potensi antidiabetes terhadap tikus putih wistar Jantan.

Potential of White Daffodil Leaf Extract (*Crinum asiaticum L.*) as an Antidiabetic Agent in Male White Rats Induced by Alloxan

ABSTRACT

Diabetes mellitus is the leading cause of death and morbidity in several countries among certain population groups worldwide. This study aimed to investigate the antidiabetic potential of white lily leaf extract (*Crinum asiaticum L.*). The study employed a post-test only group design. A phytochemical screening test was first conducted on the lily leaf extract, followed by antidiabetic testing using 30 male Wistar rats. The extract was administered at doses of 200, 400 and 600 mg/kg body weight. The positive control group was given 45 mg/kg body weight of metformin, whilst the negative control group was given 0.25 ml of sodium carboxymethylcellulose (CMC Na).

The rats were induced with alloxan at 125 mg/kg body weight dissolved in 0.2 ml of NaCl, and the increase in blood glucose levels was observed over a period of 3 days. After 3 days, the rats were fasted, divided into 6 groups, and subjected to the test treatments. Blood glucose levels were measured every 3 days to determine the antidiabetic effect of the extract on the rats' blood glucose levels.

Data analysis was performed using IBM SPSS 25. The results of the analysis of blood glucose levels in rats showed a significant reduction in blood glucose levels following administration of white lily leaf extract (*Crinum asiaticum L.*); the reduction in blood glucose levels was proportional to the dose of extract administered. The higher the dose of extract, the greater the reduction in blood glucose levels observed. The greatest reduction was observed in group Based on these results, it is concluded that ethanol extract of white crinum leaves (*Crinum asiaticum L.*) possesses antidiabetic potential in male Wistar rats.