

INTISARI

BUDI DSS., 2018, PENGARUH EKSTRAK ETANOL DAUN PETAI (*Parkia speciosa*) TERHADAP PENURUNAN KADAR GLUKOSA DARAH DAN AKTIVITAS ENZIM GLUTATION PEROKSIDASE PADA TIKUS DIABETES. SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Daun petai (*Parkia speciosa*) merupakan tanaman yang berkhasiat sebagai antioksidan dan antidiabetes. Penelitian ini bertujuan untuk mengetahui efek antidiabetes dan peningkatan aktivitas enzim glutathione peroxidase dari ekstrak daun petai pada tikus DM yang diinduksi aloksan.

Penelitian ini menggunakan 6 kelompok tikus wistar jantan, yaitu kelompok I (kelompok normal); kelompok II (kontrol negatif); kelompok III (kontrol positif) dan kelompok IV-VI berturut-turut (ekstrak daun petai dosis 50 mg/ kg bb; 100 mg/ kg bb; 200 mg/ kg bb. Semua diinduksi aloksan dengan dosis 30mg/ 200g bb tikus kecuali pada kontrol normal. Setelah 14 hari perlakuan, kadar glukosa darah diukur menggunakan metode GOD-PAP dan aktivitas enzim glutathione peroxidase diukur pada jaringan hati tikus. Data yang telah diperoleh dianalisa dengan metode *one way anova* ($p < 0,05$) dilanjutkan uji *Tukey*.

Hasil penelitian menunjukkan bahwa ekstrak etanol daun petai menurunkan kadar glukosa darah dan meningkatkan aktivitas enzim glutathione peroxidase Dosis paling efektif untuk penurunan kadar glukosa darah dan peningkatan aktivitas enzim glutathione peroxidase yaitu 200 mg/kg BB dimana terjadi penurunan kadar glukosa darah hingga 119,76 mg/dl dan peningkatan kadar enzim glutathione peroxidase sebesar 71,61 U/mg, tidak berbeda signifikan dengan kontrol positif ($p < 0,05$).

Kata kunci : daun petai, kadar glukosa darah, glutathione peroxidase, antioksidan.

ABSTRACT

BUDI DSS., 2018, EFFECT OF ETHANOLIC EXTRACT PETAI LEAF (*Parkia speciosa*) TO DECREASE IN BLOOD GLUCOSE LEVELS AND ACTIVITY OF GLUTATHIONE PEROXIDASE ENZYME IN DIABETIC MICE. THESIS, PHARMACY FACULTY, SETIA BUDI UNIVERSITY, SURAKARTA.

Petai leaf (*Parkia speciosa*) is the plant that have an antidiabetic and antioxidant strong effects. This study aims to determine the effects of antidiabetic and increased activity of glutathione peroxidase enzyme from petai leaf extract in alloxan-induced DM rats.

This study was used 6 groups of male wistar rats. Control I (normal group); Group II (negative control); group III (positive control) and group IV-VI consecutively (petai leaf extract dose 50 mg / kg bw; 100 mg / kg bw; 200 mg / kg bw) All induced alloxan with doses of 30mg / 200g bw rat except in control. After 14 days of treatment, blood glucose levels were measured using GOD-PAP method and glutathione peroxidase enzyme activity was measured in mouse liver tissue The data were analyzed by one way anova method ($p < 0.05$) followed by Tukey test.

The results of study should that petai leaf extract has the activity to decrease blood glucose levels and increased glutathione peroxidase enzyme levels. The most effective dose of petai leaf extract is on the dose of 200 mg / kg BW which there is an decreased of blood glucose levels, with last blood glucose levels of 119,76 mg/dl and increased glutathione peroxidase enzyme level of 71,61 U / mg, it has not significant difference with positive control.

Keywords : petai leaf, decrease blood glucose levels, glutathione peroxidase, antioxidant.