

INTISARI

Diabetes Mellitus ditandai adanya kenaikan kadar gula darah dan berkurangnya sekresi insulin. Salah satu pengobatan tradisional yang dapat menurunkan kadar glukosa darah yaitu dengan menggunakan daun pandan wangi (*Pandanus amaryllifolius* Roxb.). Tujuan penelitian ini adalah mengetahui pengaruh air rebusan daun pandan wangi (*Pandanus amaryllifolius* Roxb.) terhadap kadar glukosa darah tikus jantan galur Wistar yang terbebani glukosa.

Jenis penelitian ini adalah eksperimental murni rancangan acak lengkap pola searah. Sampel yang digunakan adalah 30 ekor tikus jantan galur Wistar dibagi menjadi enam kelompok, yaitu kontrol normal CMC 1%; kontrol positif glibenklamida 0,45 mg/kgBB; kontrol negatif glukosa 15% b/v; 1,75 g/kgBB; perlakuan I, II, dan III diberi air rebusan daun pandan wangi dengan dosis 540; 1744,2; dan 5625 mg/kgBB sebelum pemberian glukosa. Pengujian menggunakan Uji Toleransi Glukosa Oral dan kadar glukosa darah ditetapkan pada menit ke-0, 15, 30, 45, 60, 90, 120, 180, dan 240 menggunakan metode enzimatis GOD-PAP. Data LDDK⁰⁻²⁴⁰ tiap kelompok dianalisis secara statistik menggunakan uji *Kolmogorov-Smirnov*, *Homogeneity of Variance*, *One Way ANOVA* dan *Post Hoc Scheffe*.

Hasil penelitian menunjukkan bahwa air rebusan daun pandan wangi dapat menurunkan kadar glukosa darah tikus jantan galur Wistar yang terbebani glukosa. Dosis air rebusan daun pandan wangi yang dapat menurunkan kadar glukosa darah adalah 1744,2 mg/KgBB dan 5625 mg/KgBB.

Kata Kunci: air rebusan daun pandan wangi (*Pandanus amaryllifolius* Roxb.), glukosa darah, UTGO, GOD – PAP.

ABSTRAK

Diabetes Mellitus is characterized by increase of blood glucose levels and decrease of insulin secretion. One of traditional medication which can lower blood glucose levels is using Fragrant pandan leaves (*Pandanus amaryllifolius* Roxb.) The aim of this research is to find out the effect of boiled water of fragrant pandan leaves (*Pandanus amaryllifolius* Roxb.) to blood glucose levels of Wistar strain male rats which were burdened by glucose.

It is a pure experimental design completely randomized unidirectional research, using 30 Wistar strain male rats which divided into six groups, such as normal control CMC 1%; positive control glibenclamide 0,45 mg/kgBB; negative control glucose 15% w/v; 1.75 g/KgW; treatment I, II and III which burdened by glucose and boiledwater of Fragrant pandan leaves 540; 1744.2; and 5625 mg/KgW before burdened by glucose. It was tested using Oral Glucose Tolerance Test and the blood glucose levels were appointed on 0, 15, 30, 45, 60, 90, 120, 180, and 240 minutes using GOD – PAP enzymatic method. LDDK⁰⁻²⁴⁰ results of each groups were analyzed statistically using *Kolmogorov-Smirnov*, *Homogeneity of Variance*, *One Way ANOVA* dan *Post Hoc Scheffe* test.

The result shows that boiled water of fragrant pandan leaves can lower blood glucose levels on Wistar strain male rats which burdened by glucose. Boiled water of fragrant pandan leaves' dosages which can lower the blood glucose levels are 1744.2 mg/KgW and 5625 mg/KgW.

Keywords: boiled water of fragrant pandan leaves (*Pandanus amaryllifolius* Roxb.), blood glucose levels, UTGO, GOD – PAP.