

# PLAGIAT MERUPAKAN TINDAKAN TIDAK TERPUJI

## INTISARI

Tujuan penelitian ini adalah untuk melihat seberapa besar daya hipoglikemik produk jamu antidiabetes “AD” pada tikus putih jantan yang dibebani glukosa. Jenis penelitian adalah eksperimental murni dan dikerjakan mengikuti rancangan acak lengkap pola searah.

Penelitian menggunakan 30 ekor tikus yang terbagi enam kelompok perlakuan, yaitu kontrol negatif yang diberi perlakuan aquades, kontrol negatif yang diberi perlakuan CMC-Na 1%, perlakuan glibenklamida sebagai kontrol positif dan kelompok perlakuan produk jamu antidiabetes dengan 3 peringkat dosis. Daya hipoglikemik produk jamu antidiabetes diuji mengikuti metode uji toleransi glukosa oral (UTGO). Kadar glukosa darah ditetapkan pada menit ke-0 sebelum UTGO dan menit ke-15, 30, 45, 60, 90, 120, 180, 240, dan 300 setelah UTGO. Kadar glukosa darah ditetapkan dengan metode enzimatik *Glucose Oxidase Phenol Antipirin* (GOD-PAP)

Data kadar glukosa darah pada tiap kelompok dianalisis secara statistik menggunakan metode *GLM Repeated Measure*, sedangkan nilai LDDK<sup>0-300</sup> glukosa darah dianalisis secara statistik menggunakan uji *Kruskal Wallis* dan dilanjutkan dengan uji *Mann Whitney* bertaraf kepercayaan 95%.

Hasil penelitian menunjukkan bahwa ketiga peringkat dosis dari hasil saring seduhan produk jamu antidiabetes “AD” ini dapat memberikan penurunan kadar glukosa darah secara bermakna terhadap kontrol negatif aquades, tetapi tidak sebanding dengan kontrol positif glibenklamida. Perbedaan prosentase hasil saring seduhan produk jamu antidiabetes “AD” dengan dosis 16,2 ml/kgBB dari penyeduhan serbuk jamu sebanyak 7 gram/200ml, dosis 12,6 ml/kgBB dari penyeduhan serbuk jamu sebanyak 21 gram/200ml dan dosis 6,84 ml/kgBB dari penyeduhan serbuk jamu sebanyak 63 gram/200ml terhadap kontrol positif glibenklamida, berturut-turut sebesar 87,83%; 70,86% dan 59,00%.

Kata kunci: produk jamu antidiabetes “AD”, GOD-PAP, efek hipoglikemik

**ABSTRACT**

The purpose of this research is to know the hypoglycemic ability of “AD” antidiabetic jamu product on white male rat which had been given glucose. This research was purely experimental with complete random pattern design.

Thirty rat were divided into six groups with six different kinds of treatment for each group. Aquadest as negative control for jamu, CMC-Na 1% as negative control for glibenclamide, glibenclamide 0,45 mg/kg bw as positive control, and groups which treated by filtrate of antidiabetic jamu product which poured by boiling water in 3 dosage level orally. The hypoglycemic effect on male rat which had been given glucose was tested through Oral Glucose Tolerance Test (OGTT). Blood glucose level were measured on zero minute before OGTT and the 15<sup>th</sup>, 30<sup>th</sup>, 45<sup>th</sup>, 60<sup>th</sup>, 90<sup>th</sup>, 120<sup>th</sup>, 180<sup>th</sup>, 240<sup>th</sup>, dan 300<sup>th</sup> minutes after OGTT. Blood glucose level was assayed with Glucose Oxidase Phenol Antipirin (GOD-PAP) enzymatic method.

The data of blood glucose level from each group was statistically analyzed using GLM Repeated Measure design. The AUC<sup>0-300</sup> of blood glucose was statistically analyzed using Kruskal Wallis test and then continued with Mann Whitney test with 95% level of confidence.

The result indicated that the three level dosages filtrate of “AD” antidiabetic jamu product can decreased the concentration of blood glucose significantly to aquadest, but not comparable to glibenclamide. The percentage of different between the filtrate of antidiabetic jamu product with dosage level 16,2 ml/kg bw (from 7 gram antidiabetic jamu which poured by 200 ml boiling water), 12,6 ml/kg bw (from 21 gram antidiabetic jamu which poured by 200 ml boiling water) and 6,84 ml/kg bw (from 63 gram antidiabetic jamu which poured by 200 ml boiling water) to positive control group is 87,83%; 70,86% dan 59,00%.

Keyword : “AD” antidiabetic jamu product, GOD-PAP, hypoglycemic effect