

INTISARI

Pengobatan alami untuk penderita Diabetes Mellitus di seluruh dunia termasuk Indonesia mengalami perkembangan yang cukup pesat. *Musa paradisiaca* forma *typica* merupakan salah satu alternatif obat tradisional yang digunakan masyarakat untuk menurunkan kadar glukosa darah. Penelitian ini bertujuan untuk mengetahui efek pemberian jus *Musa paradisiaca* forma *typica* terhadap kadar glukosa darah dan mengetahui berapakah dosis jus *Musa paradisiaca* forma *typica* yang paling efektif untuk menurunkan kadar glukosa darah pada tikus yang terbebani glukosa.

Penelitian ini termasuk penelitian eksperimental murni dengan rancangan acak lengkap pola searah yang menggunakan 25 ekor tikus putih jantan galur Wistar yang dibagi secara acak dalam lima kelompok. Kelompok I (kontrol negatif) diberi CMC 1%, kelompok II (kontrol positif) diberi Glibenklamida dosis 0,64 mg/kgBB dan kelompok III,IV,V diberi jus *Musa paradisiaca* forma *typica* berturut-turut dengan dosis 5; 10; 20 mL/kgBB, semua pemberian dilakukan secara per-oral. Efek hipoglikemik jus buah *Musa paradisiaca* forma *typica* diuji dengan menggunakan 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 setelah UTGO dari hewan uji yang sebelumnya telah mendapatkan pra-perlakuan kontrol negatif, kontrol positif dan jus *Musa paradisiaca* forma *typica*. Data kadar glukosa darah tiap kelompok dianalisis secara statistik menggunakan metode *One Way ANOVA* dan uji *Scheffe* dengan taraf kepercayaan 95%.

Hasil penelitian menunjukkan bahwa jus *Musa paradisiaca* forma *typica* dapat menurunkan kadar glukosa darah pada tikus yang terbebani glukosa. Dosis jus *Musa paradisiaca* forma *typica* yang paling efektif dalam menurunkan kadar glukosa darah adalah pada dosis 10 mL/kgBB

Kata kunci: *Musa paradisiaca* forma *typica*, kadar glukosa darah, GOD-PAP, UTGO

ABSTRACT

Natural Treatment for Diabetes Mellitus in the world, including Indonesia, has developed quite rapidly. *Musa paradisiaca* forma *typica* is one alternative to traditional medicine by the public is used to lower blood glucose levels. This research aimed to determine the effects of administration of *Musa paradisiaca* forma *typica* juice on blood glucose levels and determine what dose of *Musa paradisiaca* forma *typica* juice which is most effective for lowering blood glucose levels in rats burdened glucose.

This research was experimental with study with one way complete design using 25 male rats were divided into five groups. Group I (negative control) were given CMC 1%, group II (positive control) were given Glibenclamide dose of 0,64 mg/kgBW and group III, IV, V the rats were given 5; 10; 20 mL/kgBW dose of *Musa paradisiaca* forma *typica* juice, all of the processes were given through the oral method. Hypoglycemic effect of *Musa paradisiaca* forma *typica* juice was tested by following the Oral Glucose Tolerance Test (OGTT) method. The blood-glucose contents were taken, at the 0 minutes before the OGTT and also taken at minutes of 15, 30, 60, 90, 120, 180, and 240 after the OGTT, from the tested animal that had been gotten the pre-treatment of the negative control, positive control and *Musa paradisiaca* forma *typica* juice before. Data of blood glucose levels was statistically analyzed using *one way* ANOVA and *Scheffe* test with 95% confidence level.

The result of this research showed that *Musa paradisiaca* forma *typica* juice can lowering blood glucose levels on rats in burdened glucose Dose *Musa paradisiaca* forma *typica* juice are most effective in lowering blood glucose levels in a dose was 10 mL/kgBW.

Keywords: *Musa paradisiaca* forma *typica*, blood glucose levels, GOD-PAP, OGTT