

INTISARI

Pengobatan tradisional untuk mengobati Diabetes Mellitus sudah banyak digunakan di seluruh dunia termasuk Indonesia. Buah pisang ambon (*Musa paradisiaca* var. *sapientum* (L.) Kunt.) saat ini sudah digunakan oleh masyarakat secara tradisional untuk menurunkan kadar glukosa darah. Penelitian ini dilakukan untuk mengetahui efek pemberian jus *Musa paradisiaca* var. *sapientum* (L.) Kunt. terhadap kadar glukosa darah dan mengetahui dosis jus *Musa paradisiaca* var. *sapientum* (L.) Kunt. yang paling efektif untuk menurunkan kadar glukosa darah pada tikus yang terbebani glukosa.

Penelitian ini termasuk penelitian eksperimental murni rancangan acak lengkap pola searah menggunakan 25 ekor tikus putih jantan galur Wistar 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 dan V diberi jus *Musa paradisiaca* var. *sapientum* (L.) Kunt. dengan dosis 5; 10 dan 20 ml/kgBB, semua pemberian dilakukan secara per-oral. Efek hipoglikemik jus *Musa paradisiaca* var. *sapientum* (L.) Kunt. 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 setelah UTGO dari hewan uji yang sebelumnya telah mendapatkan preperlakuan kontrol negatif, kontrol positif dan jus *Musa paradisiaca* var. *sapientum* (L.) Kunt.. Kadar glukosa darah akan ditetapkan dengan metode enzimatis GOD-PAP. Data LDDK⁰⁻²⁴⁰ tiap kelompok dianalisis secara statistik menggunakan metode *One Way ANOVA* dan uji *Post-Hoc Scheffe* bertaraf kepercayaan 95%.

Hasil penelitian menunjukkan bahwa jus buah *Musa paradisiaca* var. *sapientum* (L.) Kunt. dapat menurunkan kadar glukosa darah pada tikus yang terbebani glukosa. Dosis *Musa paradisiaca* var. *sapientum* (L.) Kunt. yang paling efektif dalam menurunkan kadar glukosa darah adalah pada dosis 5ml/kgBB.

Kata Kunci: jus buah pisang ambon (*Musa paradisiaca* var. *sapientum* (L.) Kunt.), penurunan kadar glukosa darah, UTGO, GOD-PAP

ABSTRACT

Traditional medicine for Diabetes Mellitus are now widely used in Indonesia. *Musa paradisiaca* var. *Sapientum* (L.) Kunt. is now used by people traditionally to lower blood glucose levels. This research is to know the effect of giving *Musa paradisiaca* var. *sapientum* (L.) Kunt. juice to the blood glucose levels and to know the most effective of giving *Musa paradisiaca* var. *sapientum* (L.) Kunt. dose to lower the blood glucose levels in rats burdened glucose.

This research was experimental study with one way-complete-random design using 25 male rats were divided into five groups. The rats in group I (negative control) were given of CMC 1%, the group II rats were given 0,64mg/kgBW doses of Glibenclamide (positive control), and group III,IV and V were given 5, 10 and 20 ml/kgBW doses of *Musa paradisiaca* var. *sapientum* (L.) Kunt. juice. The hypoglycemic effect of *Musa paradisiaca* var. *sapientum* (L.) Kunt. juice was tested by following the Oral Glucose Tolerance Test (OGTT) method. The blood-glucose contents were taken, at 0 minutes before OGTT, and also taken at minutes of 15, 20, 45, 60, 90, 120, 180, and 240 after OGTT, from the tested animal that had been gotten the pre-treatment of negative control, positive control and *Musa paradisiaca* var. *sapientum* (L.) Kunt. juice. The blood glucose levels was determined by using enzymatis GOD-PAP method. The AUC^{0-240} was statistically analyzed using one way ANOVA and Scheffe test with 95% confidence level.

The result of this research showed that *Musa paradisiaca* var. *sapientum* (L.) Kunt. can lower on rats in burdened glucose. The most effective dose of *Musa paradisiaca* var. *sapientum* (L.) Kunt. juice can lower glucose blood levels at 5ml/kgBW.

Keywords : *Musa paradisiaca* var. *sapientum* (L.) Kunt. juice, lowering blood glucose levels, OGTT, GOD-PAP