

**EFEKTIFITAS ANTIDIABETES
KOMBINASI VCO-EKSTRAK BUAH MENGGUDU (*Morinda citrifolia* .L)
PADA MENCIT JANTAN HIPERGLIKEMIK**

Swadarus Eliza, 2007

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ABSTRAK

Pada penelitian ini dilakukan uji antidiabetes minyak kelapa murni/*Virgin Coconut Oil* (VCO), ekstrak buah mengkudu (*Morinda citrifolia*.L) serta kombinasi VCO dan ekstrak buah mengkudu. Hewan coba yang digunakan adalah mencit jantan (*Mus musculus*). Sebelum diberi bahan uji semua hewan diperiksa kadar glukosa darahnya. Hewan dibagi ke dalam 4 kelompok secara acak untuk masing-masing perlakuan yaitu kelompok I diberi aquadem 30,9mL/kgBB secara per oral (po), kelompok II diberi VCO 0,9mL/kgBB secara po, kelompok III diberi ekstrak buah mengkudu 30mg/kgBB secara po, serta kelompok IV diberi VCO 0,9mL/kgBB dan ekstrak buah mengkudu 30mg/kgBB. Dua jam kemudian semua hewan diinjeksi dengan larutan epinefrin 4,8mg% sebanyak 12,5mL/kgBB secara intraperitoneal. Satu jam setelah diinjeksi larutan epinefrin, hewan coba diperiksa dan dicatat kadar glukosa darahnya. Darah diambil secara intrakardiak. Data yang diperoleh kemudian dianalisis secara statistik dengan uji *anova one way*, dan diuji lebih lanjut dengan uji Beda Nyata Terkecil (BNT). Analisis statistik dengan $\alpha = 5\%$. Hasil yang didapat menunjukkan bahwa kedua bahan uji (VCO dan ekstrak buah mengkudu) dapat bertindak sebagai antidiabetes, namun kelompok II (VCO 0,9mL/kgBB) dapat menurunkan kadar glukosa darah lebih baik daripada kelompok III (ekstrak buah mengkudu 30mg/kgBB). Kelompok IV (VCO 0,9mL/kgBB dan ekstrak buah mengkudu 30mg/kgBB) juga dapat menurunkan kadar glukosa, namun tidak berbeda secara bermakna dibanding dengan kelompok II (VCO 0,9mL/kgBB).

Kata kunci: *Virgin Coconut Oil* (VCO), Mengkudu (*Morinda citrifolia*.L)

EXPERIMENT OF ANTIDIABETIC EFFECTIVITY COMBINATION VCO AND NONI EXTRACT (*Morinda citrifolia. L*) IN HIPERGLYCEMIC MALE MICE

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ABSTRACT

In this experiment, antidiabetic effectivity of Virgin Coconut Oil (VCO), noni extract (*Morinda citrifolia,L*), and the combination of VCO and noni extract. The applied test animals were male mice (*Mus mucus*). Before the administration of the sample, each of the animal's blood glucose were checked, than divide the animal into 4 random groups. The first group was control group that was administrated with normal saline 12,5mL/kgBW po, the second group was administrated with VCO 0,9mL/kgBW po, the third group was administrated with noni extract 30mg/kgBW, and the fourth group was administrated with VCO and noni extract. Two hour after the administration, each of the animal was injected by 4,8mg% epinephrine solution 12,5mL/kgBW ip. One hour later, check and note the blood glucose concentration. Blood was taken by intracardiac. The data analyzed statistically used one way anova and continued with BNT method ($\alpha = 5\%$). The results indicated that the sample (VCO and noni extract) had antidiabetic activity, however the second group (VCO 0,9mL/kgBW po) could lower blood glucose better than the third group (noni extract 30mg/kgBW). The fourth group (VCO and noni extract) could also lowered blood glucose concentration but not significantly different if compared with the second group.

Key word: *Virgin Coconut Oil (VCO), Noni (Morinda citrifolia.L)*