

Aprian, M. K. (2012). Pengaruh Pemberian Serbuk Biji Alpukat (*Persea americana* Mill.) Terhadap Kadar Glukosa Darah tikus Putih (*Rattus norvegicus*) diinduksi aloksan

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INTISARI

Penelitian ini dilakukan untuk membuktikan pengaruh pemberian serbuk biji alpukat (*Persea americana* Mill.) terhadap kadar glukosa darah dan mencari dosis efektif pemberian serbuk biji alpukat yang mampu menurunkan kadar glukosa darah tikus putih (*Rattus norvegicus*) yang diinduksi aloksan.

Penelitian ini adalah *quasi eksperimen* dengan *pretest posttest control group design*. Obyek penelitian adalah tikus putih, *strain wistar*, berjumlah 25 ekor, berusia 2-3 bulan, berat badan 150-250 gram, dan diinduksi aloksan 150 mg/gBB secara intraperitoneal. Tikus dibagi secara acak dalam 5 kelompok, masing-masing kelompok terdiri dari 5 ekor tikus. Kelompok kontrol negatif (diberi NaCl 0.9%), kelompok kontrol positif (diberi glibenklamid 0.9 mg/kgBB), kelompok I (diberi serbuk biji alpukat 0.63 g/kgBB), kelompok II (diberi serbuk biji alpukat 1.26 g/kgBB) dan kelompok II (diberi serbuk biji alpukat 2.52 g/kgBB). Perlakuan dilakukan satu kali sehari selama 7 hari. Pengukuran kadar glukosa darah dilakukan 4 kali dengan menggunakan metode *colorimetric test* menggunakan spektrofotometer. Hasil pengukuran dianalisa dengan *wilcoxon* dan *kruskal wallis*.

Hasil penelitian menunjukkan pemberian serbuk biji alpukat dengan dosis 2.52 g/kgBB mampu menurunkan kadar glukosa darah tikus diinduksi aloksan. Penurunan kadar glukosa setelah pemberian serbuk biji alpukat 2.52 g/kgBB sebanding dengan penurunan kadar glukosa darah (kontrol positif) setelah pemberian glibenklamid 0.9 mg/kgBB. ($p < 0.05$)

Kesimpulan penelitian yaitu ada pengaruh pemberian serbuk biji alpukat terhadap penurunan kadar glukosa darah tikus putih diinduksi aloksan

Kata kunci: Aloksan, Glibenklamid, Serbuk Biji Alpukat, Glukosa Darah

Aprian, M.K. (2012). *The Effect of Avocado Seed Powder (Persea americana Mill.) on Blood Glucose Levels of White rat (Rattus norvegicus) induced alloxan*

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ABSTRACT

The study was conducted to prove the effect of giving avocado seed powder on blood glucose levels and finding out the effective dose delivery avocado seed powder capable of lowering blood glucose levels of white rats (Rattus norvegicus) induced alloxan.

This study was quasi experiment with a pretest posttest control group design. Object of this study were 25 white rats, with the wistar strain, aged 2-3 months, weight 150-250 grams, and induced alloxan 150 mg /gBW through intraperitoneally. The white rats were divided randomly into 5 groups, each of these groups consisted of 5 rats. Negative control group (given the 0.9% NaCl), the positive control group (given glibenclamide 0.9 mg / kg), group I (given the avocado seed powders 0.63 g / kg), group II (given the avocado seed powders 1.26 g / kg) and group III (avocado seed powders was given 2.52 g / kg). The treatment were implemented only once daily for 7 days. Measurement of blood glucose levels implemented for 4 times, using a colorimetric test method using a spectrophotometer. The measurement results were analyzed by Wilcoxon and Kruskal Wallis.

The results showed an avocado seed powder administration at a dose of 2.52 g / kgBW can lower blood glucose levels of white rats induced alloxan. Decrease in glucose levels after administration of avocado seed powder 2.52 g / kgBW comparable to the decrease in blood glucose levels (positive control) after administration of glibenclamide 0.9 mg / kgBW. ($p < 0.05$)

The Conclusion of This study shows that, there is the effect of giving the avocado seed powder to the decline in blood glucose levels of white rats induced alloxan.

Key words: *Alloxan, glibenclamide, avocado seed powder, Blood Glucose.*