

**PENGARUH PEMBERIAN EKSTRAK BUAH PIDADA MERAH
(*Sonneratia caseolaris*) TERHADAP KADAR KOLESTEROL TOTAL
TIKUS GALUR WISTAR DIABETIK**

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ABSTRAK

Dislipidemia pada diabetes berhubungan dengan gangguan kardiovaskuler yang menyebabkan kematian tertinggi di Indonesia. Pengobatan alternatif menggunakan buah pidada merah (*Sonneratia caseolaris*) mengandung flavonoid, triterpenoid, fenolik, alkaloid, saponin, dan tanin. Tujuan penelitian untuk mengetahui pengaruh pemberian ekstrak buah pidada merah (EBPM) terhadap kadar kolesterol total tikus galur Wistar diabetik. Desain penelitian sesungguhnya dengan *pre and post test control group design*. Sampel tikus (*Rattus norvegicus*) galur Wistar 30 ekor, jantan, berat badan 150-200 gram, usia 2-3 bulan, diberikan pakan tinggi lemak selama 28 hari. Setelah itu dipuaskan 10 jam kemudian diberikan aloksan 125 mg/kgBB secara intraperitoneal. Setelah 3 hari, ambil darah dari ekor untuk periksa kolesterol total dengan spektrofotometer ($\lambda = 546 \text{ nm}$). Tikus dikelompokkan menjadi kelompok 1 (pakan standar, akuades), kelompok 2 (aloksan), kelompok 3 (aloksan, simvastatin), dan kelompok 4, 5, 6 (aloksan, EBPM dosis (200; 400; 800) mg/kgBB), perlakuan 14 hari, kemudian dikorbankan dengan ketamin xylazin, ambil darah masukkan dalam tabung EDTA, periksa kolesterol total. Hasil uji *one way ANOVA* terdapat pengaruh EBPM terhadap kadar kolesterol total ($p=0,001$) dan hasil *post hoc Bonferroni* terdapat perbedaan bermakna dengan kontrol negatif, namun tidak dengan kontrol positif ($p=1,000$). Ekstrak buah pidada merah berpengaruh terhadap kolesterol total dengan konsentrasi terbaik 200 mg/kgBB.

Kata Kunci: Buah Pidada Merah, Diabetes Melitus, Kolesterol Total

EFFECT OF EXTRACTS FROM RED PIDADA FRUIT (*SONNERATIA CASEOLARIS*) ON CHOLESTEROL TOTAL DIABETIC WISTAR RATS

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ABSTRACT

*Dyslipidemia in diabetes is related to cardiovascular disorders which cause the highest mortality in Indonesia. Alternative medicine using red pidada fruit (*Sonneratia caseolaris*) contains flavonoids, triterpenoids, phenolics, alkaloids, saponins, and tannins. The purpose of the research was to find out the effect of giving red pida fruit extract (EBPM) on total cholesterol levels in diabetic Wistar rats. A real research design with a pre-test and post-test control group design. A sample *Rattus norvegicus* Wistar strain 30, male, 150-200 grams, 2-3 months, given high fat feed for 28 days. After fasting for 10 hours, alloxan 125 mg/kgBW was given intraperitoneally. After 3 days, take blood from the tail to check total cholesterol with a spectrophotometer ($\lambda = 546$ nm). Rats were grouped into group 1 (standard feed, aquades), group 2 (alloxan), group 3 (alloxan, simvastatin), and groups 4, 5, 6 (alloxan, EBPM dose (200; 400; 800) mg/kgBW), treatment for 14 days, then sacrificed with ketamine xylazine, take blood and put it in an EDTA tube, check total cholesterol. One way ANOVA test results have effect of EBPM on total cholesterol levels ($p=0,001$) and Bonferroni post hoc results have a significant difference with the negative control, but not with the positive control ($p=1,000$). Red kidney extract has an effect on total cholesterol with the best concentration of 200 mg/kgBB.*

Keywords: *Diabetic Mellitus, Red Pidada Fruit, Total Cholesterol*