

PENGARUH PEMBERIAN SARI BUAH MARKISA UNGU (*Passiflora edulis var edulis*) TERHADAP KADAR TRIGLISERIDA TIKUS (*Rattus norvegicus*) JANTAN GALUR WISTAR MODEL HIPERKOLESTEROLEMIA

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ABSTRAK

Latar Belakang: Hiperkolesterolemia dapat menyebabkan aterosklerosis yang berisiko menimbulkan penyakit kardiovaskular. Markisa mengandung berbagai senyawa aktif yang dapat menghambat hiperkolesterolemia sehingga risiko penyakit kardiovaskular dapat dikurangi.

Tujuan: Mengetahui pengaruh pemberian sari buah markisa ungu (*Passiflora edulis var. edulis*) dosis bertingkat terhadap kadar trigliserida serum tikus (*Rattus norvegicus*) jantan galur Wistar model hiperkolesterolemia.

Metode: Penelitian ini merupakan penelitian ekperimental murni *pre and post test with control group design*. Perlakuan dibagi menjadi 5 kelompok (K) uji; K1 (kontrol tanpa induksi hiperkolesterolemia), K2 (kontrol dengan induksi hiperkolesterolemia selama 10 hari), K3 (perlakuan dosis 1,1 mL/200gBB/hari), K4 (perlakuan dosis 2,1 mL/200gBB/hari), dan K5 (perlakuan dosis 4,2 mL/200gBB/hari). Setelah 14 hari perlakuan dilakukan pengambilan sampel darah untuk mengetahui kadar trigliserida.

Hasil: Kadar trigliserida K1 *posttest* (55,87±20,77), K2 *posttest* (139,82±77,10), K3 *posttest* (93,73±28,65), K4 *posttest* (79,22±26,54), dan K5 *posttest* (57,63±15,53) menunjukkan kadar yang berbeda pada setiap kelompok. Hasil uji parametrik *One Way ANOVA* menunjukkan perbedaan yang signifikan ($p=0,002$), hasil uji *Post Hoc Tukey* menyatakan bahwa K5 menunjukkan perbedaan paling signifikan dibandingkan kelompok lain.

Kesimpulan: Terdapat pengaruh pemberian sari buah markisa ungu (*Passiflora edulis var edulis*) dosis bertingkat terhadap kadar trigliserida serum tikus (*Rattus norvegicus*) jantan galur Wistar model hiperkolesterolemia.

Kata Kunci: kadar trigliserida, markisa ungu, hiperkolesterolemia

THE EFFECT OF PURPLE PASSION FRUIT (*Passiflora edulis var edulis*) ON TRIGLYCERIDES LEVEL OF HYPERCHOLESTEROLEMIC MALE WISTAR RATS (*Rattus norvegicus*)

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ABSTRACT

Background: Hypercholesterolemia can cause atherosclerosis which can lead to cardiovascular disease. Purple passion fruit contains bioactive compounds that can detain cardiovascular disease risks through degradation of hypercholesterolemia.

Objective: This study was conducted to know the effect of graded dose purple passion fruit's juice (*Passiflora edulis var edulis*) to triglycerides level of hypercholesterolemic male wistar rats (*Rattus norvegicus*).

Method: This study was a true experimental pre and post test with control group design. Treatment divided into 5 groups (K). K1 and K2 served as control group. K3 were administered with 1,1 mL/200g/day, 2,1 mL/200g/day, and 4,2 mL/200g/day of purple passion fruit's juice for 14 days. Blood sample was taken to measure triglycerides level.

Result: Triglycerides level of K1 posttest (55,87±20,77), K2 posttest (139,82±77,10), K3 posttest (93,73±28,65), K4 posttest (79,22±26,54), and K5 posttest (57,63±15,53) showed that there was significant difference between groups. The result of parametric test One Way ANOVA shown significant difference ($p=0,002$), Post Hoc Tukey showed that K5 contrast had the most significant value than the others group.

Conclusion: There was effect of graded dose passion fruit juice (*Passiflora edulis var edulis*) on triglycerides level of hypercholesterolemic male wistar rats (*Rattus norvegicus*).

Keywords: triglycerides level, passion fruit juice, hypercholesterolemia.