

ABSTRAK

Latar Belakang: Bunga Rosella (*Hibiscus sabdariffa*) mengandung antosianin, polifenol, niasin, pektin. Pemberian ekstrak bunga rosella dapat mencegah terjadinya stres oksidatif karena mengandung flavonoid, antosianin yang berefek sebagai antioksidan. Tujuan penelitian untuk membuktikan pengaruh pemberian ekstrak bunga rosella terhadap penurunan kadar trigliserida, kadar kolesterol total dan kadar malondialdehid (MDA).

Metode: Penelitian eksperimental dengan rancangan *Posttest Only Control Group Design*. Jumlah sampel 24 ekor tikus wistar jantan yang berusia 10-12 minggu dan dilakukan adaptasi selama 1 hari, dibagi menjadi 4 kelompok secara acak yaitu kelompok 1, 2, 3, 4, perlakuan untuk P1 diberikan pakan standar, P2 diberikan pakan hiperkolesterolemia dan pakan standar, P3 diberi pakan hiperkolesterolemia dan ekstrak bunga rosella dosis 300 mg/KgBB/hari, P4 diberi pakan hiperkolesterolemia dan ekstrak bunga rosella 600mg/KgBB/hari. Pada hari ke 31 perlakuan diambil darah vena melalui pleksus retroorbitalis kemudian dilakukan pemeriksaan kadar trigliserida dengan metode pengukuran GPO-PAP, kadar kolesterol total menggunakan metode pengukurannya CHOD-PAP dan kadar malondialdehida (MDA) menggunakan metode pengukuran TBA, data dianalisis dengan uji Anova.

Hasil: Rerata kadar trigliserida (dosis 300mg/KgBB/hari adalah $101,79 \pm 2,56$, dosis 600 mg/KgBB/hari adalah $84,95 \pm 3,03$), rerata kadar kolesterol total (dosis 300mg/KgBB/hari sebesar $136,87 \pm 2,92$, dosis 600 mg/KgBB/hari adalah $114,37 \pm 3,72$) dan rerata kadar malondialdehida (MDA) dosis 300mg/KgBB/hari adalah $4,23 \pm 0,28$, dosis 600mg/KgBB/hari adalah $2,42 \pm 0,42$). Hasil uji Anova diperoleh Pvalue $< 0,001$ dan hasil uji LSD antar kelompok diperoleh Pvalue $< 0,001$ ($< 0,05$).

Kesimpulan: Pemberian ekstrak bunga rosella yang diberikan selama 6 minggu mampu menurunkan kadar trigliserida, kadar kolesterol total dan kadar malondialdehida (MDA), semakin tinggi dosis yang diberikan semakin rendah kadar trigliserida, kadar kolesterol total dan kadar malondialdehida (MDA).

Kata kunci: Bunga Rosella (*Hibiscus sabdariffa*), trigliserida, kolesterol total, malondialdehida (MDA).

ABSTRACT

Background: Rosella flowers (*Hibiscus sabdariffa*) contain anthocyanins, polyphenols, niacin, pectin. Giving rosella flower extract can prevent the occurrence of oxidative stress because it contains flavonoids, anthocyanins that have an antioxidant effect. The objective of the study was to demonstrate the effect of rosella flower extract on decreased triglyceride levels, total cholesterol and malondialdehyde (MDA) levels.

Methods: Experimental research with Posttest Only Control Group Design design. Number of samples 24 male wistar rats aged 10-12 weeks and 1 day adaptation, divided into 4 groups at random ie group 1, 2, 3, 4, treatment for P1 given standard feed, P2 given feed hypercholesterolemia and feed standard , P3 fed hypercholesterolemia and rosella flower extract dose 300 mg / KgBB / day, P4 fed hypercholesterolemia and rosella flower extract 600mg / KgBB / day. On the 31st day treatment was taken by venous blood through the retroorbital plexus and then examined the triglyceride level by GPO-PAP measurement method, total cholesterol level using the method of measurement CHOD-PAP and the malondialdehyde (MDA) using TBA measurement method, the data were analyzed by Anova test.

Results: The mean triglyceride level (dose 300mg / KgBB / day was 101.79 ± 2.56 , dose 600 mg / KgBB / day was 84.95 ± 3.03), mean total cholesterol cadr (dose 300mg / KgBB / day $136,87 \pm 2,92$, dose 600 mg / KgBB / day was $114,37 \pm 3,72$) and mean of malondialdehyde (MDA) dose 300mg / KgBB / day was $4,23 \pm 0,28$, dose 600mg / KgBB / day is 2.42 ± 0.42). Anova test results obtained Pvalue <0.001 and LSD test results between groups obtained Pvalue <0.001 (<0.05).

Conclusion: Administration of rosella flower extract given for 6 weeks was able to decrease triglyceride level, total cholesterol and malondialdehyde (MDA), the higher the dose given the lower triglyceride level, total cholesterol and malondialdehyde (MDA).

Keywords: Rosella flower (*Hibiscus sabdariffa*), triglycerides, total cholesterol, malondialdehyde (MDA).