UJI EFEKTIVITAS PENURUNAN GLUKOSA DARAH PADA MENCIT JANTAN (*Mus musculus)* DENGAN SEDIAAN INFUSA DAN DEKOKTA DAUN KUCAI *(Allium tuberosum*)

Indah Fitria (2025)

Program Studi Sarjana Farmasi

Institut Kesehatan Mitra Bunda

Dosen Pembimbing

Apt. Suci Fitriani Sammulia, S. Farm.,M. Sc

Dhia Suhaila, M.Farm

ABSTRAK

Kucai (Allium tuberosum) merupakan tanaman pangan sekaligus obat herbal yang dipercaya dapat membantu mengontrol kadar glukosa darah. Penelitian ini bertujuan mengetahui efektivitas infusa dan dekokta daun kucai dalam menurunkan kadar glukosa darah mencit jantan (Mus musculus). Daun kucai diperoleh dari Nongsa, Kota Batam, Kepulauan Riau. Penelitian eksperimental dilakukan di Laboratorium Farmakologi menggunakan 32 ekor mencit berbobot 20–30 gram yang dibagi menjadi delapan kelompok (masing-masing 4 ekor). Kelompok I sebagai kontrol negatif diberi aquades, kelompok II kontrol positif diberi teh kulit manggis, kelompok III–V diberi infusa dosis 10, 20, dan 40 mg/kgBB, serta kelompok VI–VIII diberi dekokta dengan dosis sama. Setelah aklimatisasi dan puasa delapan jam, kadar glukosa darah diukur pada awal dan menit ke-30 hingga 150. Hasil menunjukkan infusa dosis 40 mg/kgBB menurunkan 26,54%, sedangkan dekokta 29,01%. Analisis *two way* ANOVA membuktikan dekokta dosis 40 mg/kgBB lebih efektif dibandingkan infusa.

Kata Kunci : Kucai (*Allium tuberosum*), Infusa, Dekokta, Glukosa Darah, Mencit

Effectiveness Test of Blood Glucose Reduction in Male Mice (Mus musculus) Using Infusion and Decoction Preparations of Chive Leaves (Allium tuberosum)

Indah Fitria (2025)
Mitra Bunda Institut Of Health
Pharmacy Undergraduate Study Program

Supervisors
Apt. Suci Fitriani Sammulia, S. Farm., M. Sc
Dhia Suhailah, M.Farm

ABSTRACT

Chives (Allium tuberosum) are widely known as both food and herbal medicine believed to help control blood glucose levels. This study aimed to determine the effectiveness of infusion and decoction preparations of chive leaves in reducing blood glucose levels in male mice (Mus musculus). The chive leaves were collected from Nongsa, Batam City, Riau Islands. An experimental study was conducted in the Pharmacology Laboratory using 32 male mice weighing 20–30 grams, divided into eight groups (four mice each). Group I as the negative control was given distilled water, Group II as the positive control was given mangosteen peel tea, Groups III–V received infusion at doses of 10, 20, and 40 mg/kgBW, while Groups VI–VIII received decoction at the same doses. After acclimatization and eight hours of fasting, blood glucose levels were measured at baseline and at 30–150 minutes post-treatment. The results showed that infusion at 40 mg/kgBW reduced blood glucose by 26.54%, while decoction reduced it by 29.01%. Two-way ANOVA analysis confirmed that decoction at 40 mg/kgBW was more effective than infusion.

Keywords : A*llium tuberosum*, infusion, decoction, blood glucose, mice

INDAH HASIOL TURNITIN

ORIGINALITY REPORT

23%	23%	%	%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	elispot.biz Internet Source	1%
2	repository.ub.ac.id Internet Source	1%
3	repository.usd.ac.id Internet Source	1%
4	repository.stikes-kartrasa.ac.id Internet Source	1%
5	repository.unfari.ac.id Internet Source	1%
6	www.seirei.or.jp Internet Source	1%
7	www.vosanalyses.com Internet Source	<1%
8	repo.upertis.ac.id Internet Source	<1%
9	repositori.uin-alauddin.ac.id Internet Source	<1%
10	journal.ummat.ac.id Internet Source	<1%
11	123dok.com Internet Source	<1%
12	repository.ucb.ac.id Internet Source	<1%
13	education-bloger.blogspot.com Internet Source	<1%