

Efek Pemberian Sari Markisa Ungu (*Passiflora edulis var edulis*) Berbagai Dosis Terhadap Kadar Hematokrit Dengan Menggunakan Tikus (*Rattus norvegicus*) Galur Wistar

Studi Uji Toksisitas Subkronis

ABSTRAK

Latar Belakang: Obat tradisional yang tergolong fitofarmaka ini masih sedikit jumlahnya sedangkan potensinya sangat banyak. Markisa ungu yang kaya antioksidan dan banyak tumbuh di Indonesia dapat dijadikan opsi. Perlu dilakukan uji toksisitas untuk mengetahui batas kadar toksik markisa ungu agar dapat dikembangkan menjadi fitofarmaka. **Tujuan:** Penelitian ini bertujuan untuk mengetahui pengaruh pemberian sari markisa ungu berbagai dosis terhadap kadar hematokrit pada studi uji toksisitas subkronis tikus (*Rattus norvegicus*) Galur Wistar. **Metode:** Penelitian ini merupakan penelitian eksperimental dengan *post test only with control group design*. Menggunakan 50 tikus putih jantan Galur Wistar dan terbagi dalam 5 kelompok; kelompok I (kontrol), kelompok II, III, IV, V (kelompok perlakuan dengan dosis berurutan 4,2 ml/200gBB/hari; 8,4 ml/200gBB/hari; 12,6 ml/200gBB/hari; 16,8 ml/200gBB/hari). Pemberian sari markisa ungu dilakukan secara penyondean oral selama 28 hari. Setelah perlakuan selesai, darah tikus diambil menggunakan *microhematocrit tube* melalui vena retro-orbitalis lalu dimasukkan ke dalam tabung dan dianalisis menggunakan *hematoanalyzer*. **Hasil:** Rerata kadar hematokrit kelompok I=46,4%, II=43,2%, III=41,1%, IV= 46,4%, V=46,9%. Hasil analisis uji nonparametrik *Kruskal-Wallis* menunjukkan nilai $p=5,46$ ($p>0,05$). **Kesimpulan:** Pemberian sari markisa ungu (*Passiflora edulis var edulis*) berbagai dosis tidak berpengaruh secara signifikan terhadap kadar hematokrit tikus putih (*Rattus norvegicus*) Galur Wistar pada uji toksisitas subkronis.

Kata kunci: hematokrit, *Passiflora edulis var edulis*, sari markisa ungu, uji toksisitas subkronis

The Effect of Purple Passion Fruit (*Passiflora edulis var edulis*) Juice Various Doses on Level of Hematocrit Using Rats (*Rattus norvegicus*) Wistar Strain

Subchronic Toxicity Test

ABSTRACT

Background: Traditional medicines which are classified as phyto-pharmaceuticals are still few in number while the potential for development is very large. Purple passion fruit widely grown in Indonesia and it's rich antioxidants. We need a toxicity test to determine the limit of the toxic levels of purple passion fruit so that it can be developed into a phytopharmaceutical. **Objective:** This study aimed to determine the effect of giving purple passion fruit juice at various doses on hematocrit levels in the subchronic toxicity test of Wistar rats (*Rattus norvegicus*). **Methods:** This research was an experimental study with post test only with control group design. Used 50 male white rats Wistar strain and divided into 5 groups; group I (control), group II, III, IV, V (treatment group with sequential doses of 4.2 ml/200gBW/day; 8.4 ml/200gBW/day; 12.6 ml/200gBW/day; 16.8 ml/200gBW/day). Purple passion fruit juice was administered by oral decoding for 28 days. After that, the rat blood was taken using a microhematocrit tube through the retro-orbital vein and then put into a tube and analyzed using a hematoanalyzer. **Results:** The mean hematocrit level in group I=46.4%, II=43.2%, III=41.1%, IV=46.4%, V=46.9%. The results of the Kruskal-Wallis nonparametric test analysis showed the value of $p=5.46$ ($p>0.05$). **Conclusion:** The administration of purple passion fruit (*Passiflora edulis var edulis*) extract at various doses had no effect on the hematocrit levels of Wistar rats (*Rattus norvegicus*) in the subchronic toxicity test.

Keywords: hematocrit, *Passiflora edulis var edulis*, purple passion fruit juice, subchronic toxicity test