

PENGARUH AIR REBUSAN DAN EKSTRAK DAUN SELEDRI (*Apium graveolens* Linn) TERHADAP PENURUNAN KADAR ASAM URAT

Studi Eksperimental pada Tikus Putih Jantan Galur Wistar yang Diinduksi Kafein dan Jus Hati Ayam

*Effect of Extract and Boiled Celery (*Apium graveolens* Linn) Leaf on Serum Uric Acid Level in Rats Fed with Caffeine and Chicken Liver Juice.*

Experimental Study on Wistar-induced Wistar Male Rats Induced Caffeine and Chicken Liver Juice

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ABSTRAK

Latar Belakang: Tanaman seledri (*Apium graveolens* Linn) merupakan tumbuhan herbal yang sering digunakan untuk mengobati beberapa penyakit salah satunya asam urat. Belum ada yang membandingkan pengaruh sediaan daun seledri antara bentuk ekstrak dan air rebusan terhadap kadar asam urat serum. Tujuan penelitian ini mengetahui pengaruh ekstrak dan air rebusan daun seledri terhadap kadar asam urat tikus putih jantan *galur wistar* yang diinduksi kafein dan jus hati ayam.

Metode : Penelitian ini menggunakan rancangan *post test only control group design*. Sebanyak 24 ekor tikus putih jantan *galur wistar* dibagi 4 kelompok. Kelompok 1 diinduksi kafein, jus hati ayam dan ekstrak daun seledri, kelompok 2 diinduksi kafein, jus hati ayam dan rebusan daun seledri, kelompok 3 diinduksi kafein dan jus hati ayam, kelompok 4 diberi jus hati ayam. Kafein diberikan 36 mg/ekor 2x sehari selama 6 hari, dilanjutkan induksi jus hati ayam 72 mg/ekor 2x sehari selama 3 hari. Ekstrak atau air rebusan daun seledri diberikan dalam dosis 80 mg/ekor dan 3,6 mg/ekor 3x sehari selama 7 hari. Kadar asam urat serum diukur dengan spektrofotometer, dan dianalisis dengan uji *One Way Anova*.

Hasil : Nilai rerata kadar asam urat di $K1=1,07\pm0,23$ mg/dl; $K2=1,28\pm0,24$ mg/dl; $K3=1,56\pm0,57$ mg/dl; dan $K4=1,50\pm0,36$ mg/dl. Uji *One Way Anova* nilai $p=0,134$ menunjukkan tidak terdapat perbedaan kadar asam urat yang bermakna diantara keempat kelompok. Disimpulkan bahwa pemberian ekstrak dan air

rebusan daun seledri berpengaruh terhadap kadar asam urat serum tikus putih jantan *galur* wistar yang di induksi kafein dan jus hati ayam.

Kata Kunci : Ekstrak, Air Rebusan, Daun Seledri, Kadar Asam Urat.

ABSTRACT

Background : Crop celery (*Apium graveolens Linn*) is an herb that is often used to treat some disease like gout. There has been few studies on the study comparing the effect of celery leaf extract and the boiled celery on serum uric acid levels. The purpose of this study was to compare the effect of extract and boiled celery (*Apium graveolens Linn*) leaf on serum uric acid level in rats fed with caffeine and chicken liver juice.

Methods : In this post test only control group stud, a total of 24 white male wistar rats were divided into 4 groups. Group 1 was given caffeine, chicken liver juice and celery leaf extract, group 2 induced caffeine, chicken liver juice and celery stew, group 3 induced caffeine and chicken liver juice, group 4 was given chicken liver juice. Caffeine was given 36 mg/rats 2x daily for 6 days, followed by chicken liver juice 72 mg /rats 2x daily for 3 days. Extracts or boiled water of celery leaves were given in doses of 80 mg/rats and 3,6 mg/rats, 3x daily for 7 days. Serum uric acid levels were measured by spectrophotometers. The data were analyzed using One Way Anova test.

Results : Mean uric acid level in K1, K2, K3, K4 were 1.07 ± 0.23 mg/dl, 1.28 ± 0.24 mg/dl; 1.56 ± 0.57 mg/dl, 1.50 ± 0.36 mg/dl respectively. There was no significant difference in uric acid levels among the four groups ($p>0,05$).

Conclusion: The administration of celery extract and and boiled celery has no effect on the serum uric acid level in rats fed with caffeine and chicken liver.

Keywords : Extract, Decomposition Water, Celery Leaf, Uric Acid Level.