

**PENGARUH PEMBERIAN SEDUHAN GETAH BUAH OKRA  
(*Abelmoschus esculentus*) TERHADAP KADAR ASAM URAT TIKUS  
WISTAR MODEL GOUT**

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**INTISARI**

Peningkatan kadar asam urat dalam darah dapat disebabkan oleh peningkatan produksi asam urat maupun pengurangan ekskresi asam urat. Penyakit *gout* adalah penyakit yang diakibatkan gangguan metabolise purin yang ditandai dengan hiperurisemia dan serangan synovitis akut berulang-ulang. Penyakit ini berkaitan dengan penimbunan kristal monosodium urat pada persendian, jaringan lunak dan organ visceral seperti ginjal. Okra yang mengandung senyawa flavonoid quercetin, merupakan antioksidan yang diduga memiliki aktivitas inhibitor enzim xanthine oksidase yang dapat menurunkan kadar asam urat. Penelitian ini bertujuan untuk mengetahui perbandingan efek terapi seduhan getah buah okra dengan allopurinol sebagai obat standar kasus *gout* terhadap kadar asam urat menggunakan tikus wistar sebagai hewan model *gout*. Sebanyak dua puluh ekor tikus Wistar jantan berumur 3 bulan dibagi menjadi 4 kelompok. Kelompok kontrol sehat yang diberi injeksi larutan CMC-Na (*Sodium Carboxymethyl Cellulose*) 0,3% sebanyak 2ml, kelompok kontrol *gout* diberi injeksi potassium oksonat dengan dosis 250 mg/kg BB dalam larutan CMC-Na 0,3%, kelompok perlakuan okra diberi injeksi potassium oksonat dengan dosis 250 mg/kg BB dalam CMC-Na 0,3% dan diberi seduhan getah buah okra sebanyak 2 ml sehari sekali selama satu minggu, kelompok kontrol pembanding diberi injeksi potassium oksonat dengan dosis 250 mg/kg BB dalam CMC-Na 0,3% dan diberi allopurinol 0,18 g/kg BB sehari sekali selama satu minggu. Pengambilan sampel darah pertama dilakukan dua jam setelah induksi potassium oksonat dan pengambilan sampel darah kedua dilakukan tujuh hari setelah pemberian perlakuan. Pengukuran kadar asam urat dilakukan dengan metode Dyasis. Hasil uji secara statistika menunjukkan tidak adanya perbedaan yang signifikan antara pemberian larutan getah buah okra dengan allopurinol ( $p > 0,05$ ), sedangkan hasil analisis secara deskriptif menunjukkan pemberian seduhan getah buah okra memiliki pengaruh menghambat kenaikan kadar asam urat lebih baik jika dibandingkan dengan pemberian allopurinol. Disimpulkan pada penelitian ini bahwa pemberian getah buah okra dapat menurunkan kadar asam urat hewan model *gout*.

Kata kunci : asam urat, okra, *quercetin*, allopurinol

**THE EFFECT OF INFUSION OKRA (*Abelmoschus esculentus*)  
ON THE URIC ACID LEVELS IN WISTAR RATS AS  
ANIMAL MODELS *GOUT***

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**ABSTRACT**

The increased levels of uric acid in blood can be caused by increased uric acid production and reduced uric acid excretion. *Gout* is a disease caused by impaired purine metabolism characterized by hyperuricemia and acute synovitis attacks over and over again. This disease is associated with accumulation of monosodium urate crystals in joints, soft tissues and visceral organs such as kidney. Okra the contains quercetin flavonoid compounds is an antioxidant that suspected have the activity of canthine oxidase enzyme inhibitors that can reduce uric acid levels. This study aims to determine the effect of therapeutic effect of infusion okra with allopurinol as a standard medication for *gout* based on uric acid levels using wistar rats as animal *gout* model. Twenty male wistar rats aged 3 month were divided into 4 groups. The first group were the control group which was given CMC-Na 0,3% solution 2ml. The second group was *gout* control which was injected with potassium oxonate 250mg/kg BB in CMC-Na solution 0,3% intraperitoneally. The trird groups was treatment okra group which was injected with potassium oxonate 250mg/kg BB in CMC-Na solution 0,3% intraperitoneally and was given infusion okra 2ml for once a day for one week. The fourth group was treatment allopurinol group which was injected with potassium oxonate 250mg/kg BB in CMC-Na solution 0,3% intraperitoneally and was given allopurinol 0,18g/kg BB for once a day for one week. The first blood sampling were done two hours after inducing potassium oxonat and the second blood sampling were done seven days after medication. Uric acid level were measured using Dyasis method. The statistic test showed no significant difference between treatment using infusion okra and allopurinol ( $p > 0,05$ ). The descriptive analysis showed that the group was given treatment using infusion okra has influence to inhibit the increase of uric acid level better than allopurinol. It concluded in this research there was treatment using infusion okra can be decreased uric acid level in animal model *gout*.

Keyword : uric acid, okra, *quercetin*, allopurinol