

INTISARI

PENGARUH PEMBERIAN SEDUHAN GETAH BUAH OKRA (*Abelmoschus esculentus*) TERHADAP HISTOPATOLOGIS GINJAL DAN HATI TIKUS WISTAR SEBAGAI HEWAN MODEL *GOUT*

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Penelitian ini bertujuan untuk mengetahui pengaruh seduhan getah buah okra terhadap gambaran histopatologis ginjal dan hati tikus wistar model *gout*. Sebanyak 24 tikus Wistar jantan usia tiga bulan dibagi menjadi empat kelompok masing-masing terdiri enam ekor, kelompok pertama diberi CMC-Na 0,3% secara intraperitoneal, kelompok dua, tiga, dan empat diberi potasium oksonat 250mg/kgBB dalam CMC-Na 0,3% secara intraperitoneal, Kelompok tiga diberi perlakuan seduhan getah buah okra sebanyak 2 ml sehari 1 kali pada sore hari selama satu minggu. Kelompok empat diberi perlakuan allopurinol 0,18mg/kgBB secara peroral sehari satu kali pada sore hari selama satu minggu. Nekropsi dilakukan satu minggu setelah pemberian perlakuan seduhan getah buah okra. Pemeriksaan histopatologis tikus kelompok kontrol *gout* memperlihatkan kerusakan paling parah dengan ditemukannya adanya *multifocal tubulus cyst* yang diduga berisi kristal urat, serta ditemukan sel radang, dan nekrosis pada glomerulus dan tubulus. Pemeriksaan histopatologis pada kelompok perlakuan seduhan okra dan pemberian allopurinol memperlihatkan ginjal normal tanpa ditemukannya kristal urat. Pemeriksaan organ hati pada semua kelompok tidak ditemukan adanya perubahan spesifik. Pemberian seduhan buah okra dapat mencegah terjadinya kerusakan organ ginjal dan hati pada tikus model *gout* yang diinduksi potasium oksonat.

Kata kunci: *Abelmoschus esculentus*, tikus wistar, asam urat, allopurinol, ginjal, hati.

ABSTRACT

THE EFFECT OF OKRA (*Abelmoschu sesculentus*) FRUIT SAP BASED ON HISTOPATHOLOGICAL FEATURES OF KIDNEY AND LIVER ON WISTAR RAT AS A GOUT ANIMAL MODEL

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This study aimed to determine the effect of okra fruit sap on rats on histopathological features of kidney and liver in wistar rat as a gout animal model. A total of 24 male Wistar rats as three month old were divided into four groups, each consisted of six rats. The first group was given 0.3% CMC-Na intraperitoneally and the second group was given potassium oxonate 250 mg/kg in 0.3% CMC-Na intraperitoneally. The second, third, and fourth group was also induced using potassium oxonate. The third group then treated using okra fruit sap 2 ml daily once a day for a week. The fourth group treated using allopurinol 0,18 mg/kg daily once a day for a week. The rats were necropsied a week after giving treatments of okra fruit sap were started. The histopathological finding in liver and kidney of rats on the second group showed that the tissues were severely damaged. Multifocal tubular cyst containing urate crystals, inflammatory cells, and necrosis in glomeruli and tubules of ren were discovered. Histopathological examination of the third and the fourth group showed that both groups had a recovery of organ likely to normal kidney with no further discovery of urate crystals. Histopathological examination of the liver in all groups did not show specific change. Thus, it can be concluded that fruit sap of okra plants could protect the kidney and liver failure in the gout-model rats.

Keywords: *Abelmoschus esculentus*, wistar rat, gout, allopurinol, kidney, liver.