

ABSTRAK

Dalam dunia kesehatan, terdapat beberapa penyakit yang proses pencegahannya maupun penyembuhannya memerlukan proses ekskresi urin yang lebih dari biasanya. Salah satu tanaman rempah yang secara empiris berkhasiat sebagai diuretik yaitu jahe merah (*Zingiber officinale* var. *rubrum*). Tujuan penelitian ini adalah untuk mengetahui efek diuretik yang ditimbulkan oleh pemberian ekstrak etanol rimpang jahe merah pada tikus putih jantan galur *wistar*. Hewan uji sebanyak 25 ekor tikus putih jantan dipuasakan selama 12 jam tanpa makan namun tetap diberi minum. Kelompok I diberi suspensi Na-CMC 0,5% b/v, kelompok II diberi suspensi furosemide 3,6 mg/kgBB, kelompok III diberi dosis 250 mg/kg BB, kelompok IV diberi dosis 300 mg/kg BB, kelompok V diberi dosis 350 mg/kg BB. Ekstrak etanol rimpang jahe merah diberikan secara per oral dengan volume pemberian 2,5 ml/200g BB. Hewan uji ditampung dan diukur volume urinnya pada jam ke- 1, 2, 3, 4, 5, dan 6, dilanjutkan dengan analisis kadar NaCl dalam urin. Data dianalisis menggunakan metode *One Way Anova* dilanjutkan dengan menggunakan uji Duncan untuk melihat perbedaan nyata perlakuan ($p < 0,05$). Hasil penelitian menunjukkan bahwa kelompok kontrol negatif berbeda makna dengan kelompok kontrol positif dan kelompok dosis perlakuan. Hal ini menunjukkan bahwa ekstrak etanol rimpang jahe merah mampu meningkatkan volume urin selama 6 jam pengamatan. Hasil analisis kadar NaCl menunjukkan pemberian suspensi furosemide dan ekstrak etanol rimpang jahe merah pada berbagai tingkat dosis berpengaruh nyata terhadap perubahan rata-rata urin tikus putih jantan pada 6 jam pengamatan. Sehingga dapat dikatakan bahwa ekstrak etanol rimpang jahe merah berkhasiat sebagai diuretik.

Kata kunci : Diuretik, Rimpang Jahe Merah (*Zingiber officinale* var. *rubrum*), NaCl, Urin.

ABSTRACT

In the world of health, there are several diseases whose prevention process or cure requires more than normal urine excretion.usually. One spice plant that is empirically efficacious as a diuretic is red ginger (*Zingiber officinale* var. *rubrum*). Objective of this study was to determine the diuretic effect caused by administration of ethanol extract of red ginger rhizome in male white rats wistar strain. Test animals as many as 25 male white rats were fasted for 12 hours without food but still given a drink. Group I was given a suspension of NaCMC 0.5% b/v, group II was given a suspension of furosemide 3,6 mg/kg BW, group III was given a dose of 250 mg/kg BW, group IV was given a dose of 350 mg/kg BW, group V was given a dose of 300 mg/kg BW. Ethanol extract of ginger rhizome was administered orally with a volume of 2.5 ml/200g BW. Animal The test animals were collected and measured the volume of urine at the 1st, 2nd, 3rd, 4th, 5th, and 6th hours, followed by analysis of NaCl content in urine. Data were analyzed using *One Way Anova* method then continued with Duncan's test to see the real difference in treatment ($p<0.05$). Results The results showed that the negative control group was significantly different from positive control group and treatment dose group. This shows that the ethanol extract group of red ginger rhizome were able to increase urine volume during 6 hours of observation. Analysis of NaCl content NaCl levels analysis showed that the administration of furosemide suspension and ethanol extract of red ginger rhizome The results of the analysis of NaCl levels showed that the administration of furosemide suspension and ethanol extract of red ginger rhizomes at various dose levels had a significant effect on changes in the average urine of male white rats at 6 hours of observation. So it can be said that ethanol extract of red ginger rhizome is efficacious as a diuretic.

Keywords: Diuretic, Red Ginger rhizome (*Zingiber officinale* var. *rubrum*), NaCl, Urine.