

ABSTRAK

Nyeri merupakan perasaan sensorik dan emosional yang tidak menyenangkan dan bersifat subjektif. Rasa nyeri dapat dihilangkan dengan penggunaan analgesik. Penelitian ini merupakan penelitian eksperimental murni dengan rancangan acak lengkap pola searah yang bertujuan untuk menguji efek analgesik dari infusa daun *Cymbopogon citratus* dan menghitung persen proteksi geliatnya pada mencit betina terinduksi asam asetat 1%. Sebanyak 25 ekor mencit dibagi secara acak dalam 5 kelompok, yaitu kelompok kontrol negatif aquades, kelompok kontrol positif asetosal dosis 91 mg/KgBB, dan kelompok perlakuan yang diberikan 3 peringkat dosis infusa daun *Cymbopogon citratus*, yaitu 833,3; 1666,7; dan 3333,3 mg/KgBB. Aquades, asetosal, dan infusa daun *Cymbopogon citratus* diberikan secara per oral, 10 menit kemudian diberikan asam asetat 1% dosis 50 mg/KgBB secara intraperitoneal. Pengamatan dilakukan dengan menghitung geliat mencit setiap 5 menit selama 1 jam. Hasil geliat, persen proteksi, dan perubahan persen proteksi dianalisis dengan uji *Shapiro-Wilk*, dilanjutkan dengan uji ANOVA satu arah dan uji *Post-Hoc Scheffe test* dengan taraf kepercayaan 95%. Hasil penelitian yang diperoleh adalah persen proteksi pada dosis 833,3; 1666,7; dan 3333,3 mg/KgBB secara berturut-turut $9,4 \pm 1,8$; $52,5 \pm 2,2$; dan $67,7 \pm 1,6$ % menunjukkan bahwa infusa daun *Cymbopogon citratus* dosis 1666,7; dan 3333,3 mg/KgBB memberikan efek analgesik.

Kata kunci : analgesik, infusa, *Cymbopogon citratus*, mencit, asam asetat

ABSTRACT

Pain is subjective which cause an unpleasant sensory and emotional experience. Analgesic drug has been used to treat the pain. This research was an experimental study with one-way-complete-random design which the aim was to investigate analgesic effect of the infusion preparation of *Cymbopogon citratus* leaves and calculate the percent protection of the writhing response on the female mice which has induced by acetic acid 1%. Twenty-five mice have been randomly divided into five group, which are negative control aquadest, positive control with 91 mg/kgBW dose of asetosal, and treatment group of *Cymbopogon citratus* infusion dose 833.3; 1666.7; and 3333.3 mg/kgBW. Aquadest, asetosal, and infusion of *Cymbopogon citratus* leaves were given by orally, then acetic acid 1% with 50 mg/kgBW was given intraperitoneally with 10 minutes interval administration. Observation of the writhing test was done by counting the writhing response for a period of 5 min for 1 hour. The results of writhing response, percent protection and change of percent protection were analysed by Shapiro Wilk test, followed by One Way ANOVA test and Post-Hoc Scheffe test with 95% confidence level. The results of percent protection at dose 833.3; 1666.7; and 3333.3 mg/kgBW were 9.4 ± 1.8 ; 52.5 ± 2.2 ; dan 67.7 ± 1.6 %, respectively and it showed that the infusion preparation of *Cymbopogon citratus* leaves with 1666.7; and 3333.3 mg/kgBW dose have given an analgesic effect.

Keywords: Analgesic, infusion, *Cymbopogon citratus*, mice, acetic acid